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[IMAGE]

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2020 2019 2018 2017 2016 2015 2014 2013 2012 2011 2010 2009 2008 2007
2006 2005 2004 2003 2002 2001 2000 1999 1998 1997 1996 1995 1994 1993
1992 1991 1990 1989 1988 1987 1986 1985 1984 1983 1982 1981 1967

2020

... zum Anfang der Seite

Haisch, C., (2020). Spark discharge-generated soot: Varying nanostructure and reactivity against oxidation with molecular oxygen by synthesis conditions. Journal of Aerosol Science, 143, 105530.(doi:10.1016/j.jaerosci.2020.105530)

- Koch, Sergej; Kubach, Heiko; Velji, Amin; Koch, Thomas; Hagen, Fabian P.; Bockhorn, Henning; Loukou, Alexandra; Trimis, Dimosthenis; Suntz, Rainer, (2020). Impact of Injection Strategy on Soot Reactivity and Particle Properties of a GDI Engine. SAE International Technical Paper, (2020-01-0392),

- Sentko, Matthias Martin; Schulz, Sebastian; Stelzner, Björn; Anderlohr, Christopher; Vicari, Maximilian; Trimis,Dimosthenis, (2020). Determination of temperature and water-concentration in fuel-rich oxy-fuel methane flames applying TDLAS. Combustion and Flame, 214, 336-245.(doi:10.1016/j.combustflame.2020.01.003)

2019

... zum Anfang der Seite

- Alomar, O. R.; Mohammed, R. R.; Mendes, M. A. A.; Ray, S.; Trimis, D., (2019). Numerical investigation of two-phase flow in anisotropic porous evaporator. International Journal of Thermal Sciences, 135, 1-16.(doi:10.1016/j.ijthermalsci.2018.08.026)

- Bhagwan, R.; Schwagerus, A.; Weis, C.; Habisreuther, P.; Zarzalis, N.; Huth, M.; Koestlin, B.; Dederichs, S., (2019). Combustion Characteristics of Natural Gas Fueled, Premixed Turbulent Jet Flame Arrays Confined in a Hexagonal Combustor, in *Proceedings of the ASME Turbo Expo 2019: Turbomachinery Technical Conference and Exposition (GT2019)*, ASME, June 17-21, Phoenix Convention Center, Phoenix, AZ, USA, (doi:10.1115/GT2019-90286).

- Bockhorn, Henning, (2019). Why soot is not alike soot: A molecular/nanostructural approach to soot oxidation rates on particulate filters, in *International Workshop on Clean Combustion: Principles and Applications*, DFG, SFB/TRR 150 and SFB/TRR 129, September, 25th-26th, Darmstadt, Germany, .

- Denev, J. A.; Naydenova, I.; Zhang, F.; Zirwes, T.; Bockhorn, H., (2019). Unsteady pure straining effects on lean premixed flames of different Lewis numbers, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S4_AIII_37, .

- Dinkov, I.; Vetter, M.; Schelb, D.; Trimis, D., (2019). Experimental and numerical study on the interaction between sprinkler water spray, fire plume and smoke layer, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S2_R1_89, .

- Dinkov, I.; Bockhorn, H.; (2019). Vortrag: *Prediction of burning velocities and super-adiabatic flame temperatures during the combustion in porous inert media*. Seventeenth International Conference on Numerical Combustion, 06-08 May, Aachen, Germany, MS3-198 .

- Fedoryk, M.; Zhang, F.; Heidarifatasmi, H.; Zirwes, T.; Sebbar, N.; Harth, S.; Trimis, D.; Poster: *Entwicklung von Schwefelbrennern mit hohen Leistungsdichten*. Jahrestreffen der ProcessNet Fachgruppe Hochtemperaturtechnik, 2.-3. April, P5, 2019.

- Galeazzo, F. C. C.; Fukumasu, N. K.; Denev, J. A.; Weis, C.; Habisreuther, P.; Krieger Filho, G. C., (2019). Change in Flame Geometry of an Ethanol Spray Flame by Varying the Spray Characteristics. Combustion, Science and Technology, 191, 1693-1710.(doi:10.1080/00102202.2019.1639682)

- Goßmann, Ann-Kathrin; Müller, Thomas; Kühn, Johannes; Etzold, Mathias; Stelzner, Björn, (2019). A Low-power Liquid-fuelled Burner Using a Novel Atomization Concept. Combustion, Science and Technology, 191, (9), 1711-1723.(doi:10.1080/00102202.2019.1639683)

- Habisreuther, P.; Stelzner, B.; Loukou, A.; Vlavakis, P.; Trimis, D., (2019). Structure transition from oxygen-enhanced to oxy-fuel methane non-premixed flames near extinction. Fuel, 239, 357-364.(doi:10.1016/j.fuel.2018.11.028)

HRTEM-Bildauswertungsalgorithmus zur Quantifizierung der geometrischen und Nano-Struktur von Rußpartikeln. Jahrestreffen der ProcessNet Fachgruppen Partikelmesstechnik und Aerosoltechnologie, Frankfurt am Main, 6.7. März 2019,

- Hagen, F.; Hardock, F.; Bockhorn, H.; Loukou, A.; Suntz, R.; Trimis, D., (2019). Soot particle nanostructure from HRTEM images and reactivity towards oxidation, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S1_R1_90, .

- Hagen, F.; Hardock, F.; Bockhorn, H.; Loukou, A.; Suntz, R.; Trimis, D., (2019). Soot Particles: Nanostructure from HRTEM Images, Optical Properties and Reactivity, in *Proceeding of the Eleventh Mediterranean Combustion Symposium - MCS11*, June, 16-20, Tenerife, Spain, .

- Horn, H.; Kolb, T.; Trimis, D.; Klinger, J., (2019). Engler-Bunte-Institut des Karlsruher Instituts für Technologie (KIT) im Jahre 2018; DVGW-Forschungsstelle am EBI, Forschungsstelle für Brandschutztechnik und TZW: DVGW-Technologiezentrum Wasser, Teil 1. gwf Gas Energie, 160, (06),

- Häber, Thomas; Suntz, Rainer; Bockhorn, Henning; Poster: *Two-Dimensional Tomographic Simultaneous Multi-Species Visualization in Laminar and Turbulent Flames*. International Workshop on Clean Combustion: Principles and Applications, September, 25th-26th, Darmstadt, Germany, 2019.

- Koch, S.; Hagen, F. P.; Kubach, H.; Velji, A.; Koch, T.; Bockhorn, H.; Loukou, A.; Trimis, D.; Poster: *Reactivity of Particles from Gasoline Direct Injection Engine: Correlation of Engine Parameters and Particle Characteristics*. 23rd ETH Conference on Combustion Generated Nanoparticles, Zürich, Schweiz, June, 17-20, 2019.

- Lukas G. Becker; Thomas von Langenthal; Stefan Pielsticker; Benjamin Böhm; Reinhold Kneer; Andreas Dreizler, (2019). Experimental investigation of particle-laden flows in an oxy-coal combustion chamber for non-reacting conditions. Fuel, 235, 753-762.(doi:10.1016/j.fuel.2018.08.076)

- Martinos, A.; Palanti, L.; Harth, S.; Andreini,A.; Zarzalis, N.; Trimis, D.; Vitale, I., (2019). Analysis of ignition processes at combustors for aero engines at high altitude conditions, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S2_R1_83, .

- Max, Dominique; Dinkov, Ilian; Schelb, Dietmar; Trimis, Dimosthenis, (2019). Überprüfung und Erweiterung des Anwendungsbereichs von Plume-Formeln mit CFDMethoden, in *29. Deutscher Flammentag*, Deutsche Sektion des Combustion Institutes und DVV/VDI-Gesellschaft Energie und Umwelt, September, 17-18, Bochum., .

- Pausch, K; Sohel Herff, S.; Zhang, F.; Bockhorn, H.; Schröder, W., (2019). Noise Sources of Lean Premixed Flames. Flow, Turbulence and Combustion, 103, (3), 773-796.(doi:10.1007/s10494-019-00032-0)

- Pausch, K.; Herff, S.; Zhang, F.; Bockhorn, H.; Schröder, W.; Poster: *Analysis of Thermoacoustic Sources of Lean Premixed Flames*. International Workshop on Clean Combustion: Principles and Applications, September, 25th-26th, Darmstadt, Germany, 2019.

- Rau, F.; Herrmann, A.; Krause, H.; Fino, D.; Trimis, D., (2019). Efficiency of a pilot-plant for the autothermal reforming of biogas. International Journal of Hydrogen Energy, 44, (35), 19135-19140.(doi:10.1016/j.ijhydene.2018.04.014)

- N. Sebbar; J.W. Bozzelli; H. Bockhorn; D. Trimis, (2019). A thermochemical study on the primary oxidation of sulfur. Combust. Sci. Technol., 191, (1), (doi:10.1080/00102202.2018.1455134)

- Sebbar, N.; Harth, S.; Fedoryk, M.; Heidarifatasmi, H.; Zhang, F.; Bozzelli, J. W.; Bockhorn, H.; Trimis, D.; (2019). Vortrag: *Sulfur combustion as closing step in a sulfur based solar-thermal cycle*. COST Action SMARTCATS 1st international conference on smart energy carriers, January 21-23, Napoli, Italy, invited lecture.

influence of functional groups, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S1_AII_11, .

- Sebbar, N.; Bozzelli, J. W.; Bockhorn, H.; Trimis, D., (2019). Thermochemical study for species and reactions occurring in the S-N-O system, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S1_AII_10, .

- Sebbar, N.; Bozzelli, J. W.; Trimis, D.; Bockhorn, H., (2019). Thermochemistry and kinetics of the 2‐butanone‐4‐yl CH3C(=O)CH2CH2• O2 reaction system. Int. J. Chem. Kinet., 51, (8), 541-562.(doi:10.1002/kin.21276)

- Sebbar, N.; Bozzelli, J. W.; Bockhorn, H.; Trimis D., (2019). A Thermochemical Study of Reactions Occuring in the S-N-O System, in *Proceeding of the Eleventh Mediterranean Combustion Symposium - MCS11*, June, 16-20, Tenerife, Spain, .

- Sentko, M.; Schulz, S.; Stelzner, B.; Anderlohr, C.; Vicari, M.; Trimis, D.; (2019). Vortrag: *Ermittlung von Temperatur- und Wasserkonzentrationsprofilen mittels TDLAS in brennstoffreichen Methan/Sauerstoff Flammen bei erhöhten Drücken*. Jahrestreffen der ProcessNet Fachgruppe Hochtemperaturtechnik, KIT Karlsruhe, 2.-3. April 2019, V2.

- Sentko, M.; Schulz, S.; Stelzner, B.; Anderlohr, C.; Vicari, M.; Trimis, D., (2019). Experimental investigation of synthesis gas production in fuel-rich oxy-fuel methane flames, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S3_AIII_46, .

- Sentko, M.; Habisreuther, P.; Vourliotakis, G.; Keramiotis, C.; Stelzner, B.; Founti, M.; Trimis, D., (2019). Analysis of CH2O x OH as marker for fuel-rich air to pure oxy-fuel flames under higher preheat temperature and elevated pressure, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S3_AIII_33, .

- Sentko, M.; Schulz, S.; Stelzner, B.; Anderlohr, C.; Vicari, M.; Trimis, D., (2019). Determination of temperature and water-concentration in fuel-rich oxy-fuel methane flames applying TDLAS, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S3_AIII_45, .

- Sentko, M.; Habisreuther, P.; Vourliotakis, G.; Keramiotis, C.; Stelzner, B.; Founti, M.; Trimis, D.; Poster: *Analysis of CH2OxOH as Marker for Fuel-Rich Air to Pure Oxy-Fuel Flames under Higher Preheat Temperature and Elevated Pressure and Strain*. International Workshop on Clean Combustion: Principles and Applications, September, 25th-26th, Darmstadt, Germany, 2019.

- Soysal, M.; Berghoff, M.; Zirwes, T.; Vef, M.A.; Oeste, S.; Brinkman, A.; Nagel, W.E.; Streit, A. , (2019). Using On-demand File Systems in HPC Environments, Proceedings of the International Conference on High Performance Computing and Simulation, in *(HPBench∂HPCS)*, 15.19. July, Dublin, Ireland, .

- Tavakkol, Salar; Zirwes, Thorsten; Denev, Jordan; Weber, Niklas; Bockhorn, Henning, (2019). Development and validation of an Euler-Lagrange method for the numerical simulation of wet-biomass carbonization in a rotary kiln reactor, in *29. Deutscher Flammentag*, Deutsche Sektion des Combustion Institutes und DVV/VDI-Gesellschaft Energie und Umwelt, September, 17-18, Bochum., .

- Tavakkol, S.; Weber, N.; Zirwes, T.; Denev, J.; Bockhorn, H.; (2019). Vortrag: *Performance of large scale Eulerian-Lagrangian numerical simulation for particulate flow in rotating reactors*. bwHPC Symposium, Karlsruhe, Germany, 30. September ,

- Valencia-López, A., M.; Bustamente, F.; Loukou, A.; Stelzner, B.; Trimis, D.; Frenklach M.; Slavinskaya, N., A., (2019). Effect of benzene doping on soot precursors formation in non-premixed flames of Producer Gas (PG). Combustion and Flame, 207, 265-280.(doi:10.1016/j.combustflame.2019.05.044)

- Vin, Nicolas; Battin-Leclerc, Frédérique; Le Gall, Hervé; Sebbar, Nadia; Bockhorn, Henning; Trimis, Dimosthenis; Herbinet, Olivier, (2019). A study of chlorobenzene pyrolysis. Proceedings of the Combustion Institute, 37, (1), 399-407.(doi:10.1016/j.proci.2018.05.067)

characteristics in isooctane counterflow non-premixed flames, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S1_R1_88, .

- Weinbrecht, Petra; Wieland, Christoph; Weis, Christof; Stelzner, Björn; Trimis, Dimosthenis; Poster: *Entwicklung eines Porenbrenners mit breitem Leistungsspektrum für niederkalorische, wasserstoffhaltige Gase*. 29. Deutscher Flammentag, Bochum, 17.-18. September, 2019.

- Weis, C.; Cameron, F.; Weinbrecht, P.; Trimis, D.; (2019). Vortrag: *Entwicklung einer Pilotstrecke zur Demonstration eines innovativen Ofenkonzeptes für die Stahlbandbeschichtung im Rahmen des europäischen Verbundprojektes: Energy Efficient Coil Coating - ECCO*. Jahrestreffen der ProcessNet Fachgruppe Hochtemperaturtechnik, KIT Karlsruhe, 2.-3. April 2019,

- Weis, C.; Schwagerus, A.; Faller, S.; Bhagwan, R.; Habisreuther, P.; Zarzalis, N., (2019). Determination of a correlation for predicting lean blow off limits of gaseous fueled, premixed turbulent jet flame arrays enclosed in a hexagonal dump combustor, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S5_AIII_48, .

- Wieland, C.; Weinbrecht, P.; Weis, C; Habisreuther, P.; Trimis, D., (2019). Development of a porous burner for low calorific gaseous fuels offering a wide operating range, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S3_AIII_53, .

- Wieland, C.; Zhou, J.; Weis, C.; Habisreuther, P.; Trimis, D.; (2019). Vortrag: *Determination of dispersion coefficients of heat and mass for porous media by detailed numerical simulation*. Seventeenth International Conference on Numerical Combustion, 06-08 May, Aachen, Germany, MS3-199.

- Zhang, F.; Heidarifatasmi, H.; Zirwes, T.; Fedoryk, M.; Harth, S.; Sebbar, N.; Habisreuther, P.; Trimis, D.; Bockhorn, H., (2019). Numerical simulation of sulfur combustors with high-power-density, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S2_AIII_57, .

- Zhang, F.; Zirwes, T.; Habisreuther, P.; Bockhorn, H.; Trimis, D.; (2019). Vortrag: *Spectral response of heat release in LES combustion modeling*. Seventeenth International Conference on Numerical Combustion, 06-08 May, Aachen, Germany, MS8-208.

- Zhang, F.; Zirwes, T.; Habisreuther, P.; Bockhorn, H.; Trimis, D.; (2019). Vortrag: *LES of combustion noise from a turbulent premixed jet flame*. Seventeenth International Conference on Numerical Combustion, 06-08 May, Aachen, Germany, MS8-210.

- Zhang, F.; Zirwes, T.; Habisreuther, P.; Zarzalis, N.; Bockhorn, H.; Trimis, D., (2019). Numerical Simulation of Turbulent Flame Propagation in a Fan-Stirred Combustion Bomb at Elevated Pressures, in *27th International Colloquium on Detonation, Explosion and Reactive Systems (ICDERS)*, Juli 28.- August 2., Beijing, China, p. 1-6, .

- Zhang, Feichi; Zirwes, Thorsten; Habisreuther, Peter; Zarzalis, Nikolaos; Bockhorn, Henning; Trimis, Dimosthenis, (2019). Numerical Computation of Turbulent Flows in a Fan-stirred Combustion Bomb. Combustion, Science and Technology, (online), (doi:10.1080/00102202.2019.1665520)

- Zhang, Feichi; Hosein, Heidarifatasmi; Harth, Stefan; Zirwes, Thorsten; Sebbar, Nadia; Fedoryk, Michal; Habisreuther, Peter; Trimis, Dimosthenis; Bockhorn, Henning, (2019). Numerical Investigation of a Sulfur Combustor, in *29. Deutscher Flammentag*, Deutsche Sektion des Combustion Institutes und DVV/VDI-Gesellschaft Energie und Umwelt, September, 17-18, Bochum., .

- Zhang, Feichi; Müller, Thomas; Zirwes, Thorsten; Wachter, Simon; Jakobs, Tobias; Habisreuther, Peter; Zarzalis, Nikolaos; Trimis, Dimosthenis; Kolb, Thomas, (2019). Effect of elevated pressure on primary jet-breakup: Basic research for entrained flow gasification, in *29. Deutscher Flammentag*, Deutsche Sektion des Combustion Institutes und DVV/VDI-Gesellschaft Energie und Umwelt, September, 17-18, Bochum., .

- Zhang, Feichi; Zirwes, Thorsten; Wachter, Simon; Jakobs, Tobias; Habisreuther, Peter; Zarzalis, Nikolaos; Trimis, Dimosthenis; Kolb, Thomas, (2019). Numerical and Experimental Investigations of Primary Breakup of High-Viscous Fluid at Elevated Pressure, in *29th European Conference on Liquid Atomization and Spray*

- Zirwes, T.; Zhang, F.; Häber, T.; Bockhorn, H., (2019). Ignition of combustible mixtures by hot particles at varying relative speeds. Combustion, Science and Technology, 191, (1), 178-195.(doi:10.1080/00102202.2018.1435530)

- Zirwes, Thorsten; Zhang, Feichi; Habisreuther, Peter; Bockhorn, Henning; Trimis, Dimosthenis, (2019). Large-Scale Quasi-DNS of Mixed-Mode Turbulent Combustion, in *Book of Abstracts of the 90th Annual Meeting of the International Association of Applied Mathematics and Mechanics (GAMM2019)*, vol. **90**, Vienna, Austria, February 18-20, p. 325, (ISBN 978-3-903024-84-7), .

- Zirwes, T.; Häber, T.; Zhang, F.; Kosaka, H.; Bockhorn, H.; Suntz, R.; Dreizler, A.; Janicka, J., (2019). 2D and 3D numerical simulation of chemiluminescent radical concentrations during side-wall quenching of premixed methane and propane flames, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S3_AIII_47, .

- Zirwes, T.; Zhang, F.; Habisreuther, P.; Denev, J. A.; Bockhorn, H.; Trimis, D.; (2019). Vortrag: *HPC Impementation of Flame Particle Tracking for Studying Laminar and Turbulent Flame Dynamics*. Seventeenth International Conference on Numerical Combustion, 06-08 May, Aachen, Germany, 242.

- Zirwes, T.; Zhang, F.; Denev, J. A.; Habisreuther, P.; Bockhorn, H.; Trimis, D.; Improved Vectorization for Efficient Chemistry Computations in OpenFOAM for Large Scale Combustion Simulations. In *High Performance Computing in Science and Engineering 18*, Nagel W., Kröner D., Resch M. (ed.), Springer, Cham, p. 209-224, (doi:10.1007/978-3-030-13325-2_13) 2019.

- Zirwes, T.; Sebbar, N.; Habisreuther, P.; Harth, S.; Zhang, F.; Bockhorn, H.; Trimis, D., (2019). Ignition Behaviour of Sulfur in Air Based on Modified Reaction Kinetics, in *Proceeding of the Eleventh Mediterranean Combustion Symposium - MCS11*, June, 16-20, Tenerife, Spain, .

- Zirwes, Thorsten; Zhang, Feichi; Habisreuther, Peter; Bockhorn, Henning; Trimis, Dimosthenis, (2019). Large-Scale Quasi-DNS of Mixed-Mode Turbulent Combustion. Proceedings in Applied Mathematics & Mechanics, 19, (1), (doi:10.1002/pamm.201900420)

- Zirwes, Thorsten; Zhang, Feichi; Habisreuther, Peter; Bockhorn, Henning; Trimis, Dimosthenis, (2019). Quasi-DNS Dataset of a Piloted Flame with Inhomogeneous Inlet Conditions. Flow, Turbulence and Combustion, (online), 1-31.(doi:10.1007/s10494-019-00081-5)

- Zirwes, T.; Häber, T.; Zhang, F.; Steinhausen, M.; Kosaka, H.; Bockhorn, H.; Stuntz, R.; Hasse, C.; Dreizler, A.; Poster: *Numerical and Experimental Investigation of Chemiluminescent Radical Concentrations during Side-Wall Quenching*. International Workshop on Clean Combustion: Principles and Applications, September, 25th-26th, Darmstadt, Germany, 2019.

- Zirwes, T.; Zhang, F.; Habisreuther, P.; Hansinger, M.; Bockhorn, H.; Pfitzner, M.; Trimis, D.; Poster: *Identification of Flame Regimes in Partially Premixed Combustion from a Quasi-DNS Dataset*. International Workshop on Clean Combustion: Principles and Applications, September, 25th-26th, Darmstadt, Germany, 2019.

- Zirwes, T.; Zhang, F.; Denev, J. A.; Habisreuther, P.; Bockhorn, H.; Trimis, D.; Enhancing OpenFOAMs Performance on HPC Systems. In *High Performance Computing in Science and Engineering '19*, Nagel, W.E.; Kröner, D.H.; Resch, M.M. (ed.), Springer, p. accepted, 2019.

- Zirwes, T.; Zhang, F.; Habisreuter, P.; Bockhorn, H.; Trimis, D.; (2019). Vortrag: *Effect of Transient Flame Stretch*. Simulation of reactive Thermo-Fluid Systems (STFS). Technical University Darmstadt. Germany, 22. September,

- Zirwes, T.; Zhang, F.; Habisreuter, P.; Bockhorn, H.; Trimis, D.; (2019). Vortrag: *Quasi-DNS of the Partially Premixed Sydney Flame*. Simulation of reactive Thermo-Fluid Systems (STFS), Technical University Darmstadt, Germany , 22. September,

and particle size inside premixed kerosene flames, in *Proceedings of the European Combustion Meeting 2019*, April 14-17, Lisboa, Portugal, p. S1_R1_81, .

- von Langenthal, T.; Konle, M.; Zarzalis, N., (2019). Experimental and Numerical Investigation of Different Flame Types Inside a Laboratory Scale RQL Combustion Chamber, in *Proceedings of the ASME Turbo Expo 2019: Turbomachinery Technical Conference and Exposition (GT2019)*, ASME, June 17-21, Phoenix Convention Center, Phoenix, AZ, USA, (doi:10.1115/GT2019-90127).

2018

... zum Anfang der Seite

- Alomar, O.R.; Mendes, M.A.A.; Ray, S.; Trimis, D., (2018). Numerical investigation of complete evaporation process inside porous evaporator using staggered and non-staggered grid arrangements. International Journal of Thermal Sciences, 129, 56-72.(doi:10.1016/j.ijthermalsci.2018.02.022)

- Bhagwan, R.; Habisreuther, P.; Zarzalis, N., (2018). Experimental and Numerical Investigations of Characteristics of an Axial Jet in the Vicinity of a Confined Concentric Swirl Flow in a Model Combustor, in *Proceedings of the ASME Turbo Expo 2018: Turbomachinery Technical Conference and Exposition (GT2018)*, ASME, June 11-15, Oslo, Norway, p. GT2018-75028, (doi:10.1115/GT2018-75028).

- Dominik Schollenberger, Siegfried Bajohr, Manuel Gruber, Rainer Reimert, Thomas Kolb, (2018). Scale‐Up of Innovative Honeycomb Reactors for Power‐to‐Gas Applications The Project Store&Go. Chem. Ing. Tech., 90, (5), 696-702.(doi:10.1002/cite.201700139)

- Emanuele Giglio; Fabio Alessandro Deorsola; Manuel Gruber; Stefan Raphael Harth; Eduard Alexandru Morosanu; Dimosthenis Trimis; Samir Bensaid; Raffaele Pirone, (2018). Power-to-Gas through High Temperature Electrolysis and Carbon Dioxide Methanation: Reactor Design and Process Modeling. Ind. Eng. Chem. Res., 57, 4007-4018.(doi:10.1021/acs.iecr.8b00477)

- Fruhstorfer, J.; Demuth, C.; Goetze, P.; Aneziris, C.G.; Ray, S,; Gross, U.; Trimis, D., (2018). How the coarse fraction influences the microstructure and the effective thermal conductivity of alumina castables - An experimental and numerical study. Journal of the European Ceramic Society, 38, (1), 303-312.(doi:10.1016/j.jeurceramsoc.2017.07.038)

- M. Gruber, P. Weinbrecht, S. Harth, D. Trimis, D. Schollenberger, S. Bajohr, R. Blumentritt, O. Posdziech, J. Brabandt; Poster: *Power-to-Gas Effizienz > 75 % durch thermische Integration von Hochtemperatur Dampfelektrolyse und CO2-Methanisierung - das HELMETH Projekt*. Jahrestreffen der ProcessNet-Fachgruppe Energieverfahrenstechnik, Frankfurt a.M., 2018.

- M. Gruber; C. Wieland; P. Habisreuther; D. Trimis; D. Schollenberger; S. Bajohr; O. von Morstein and S. Schirrmeister, (2018). Modeling and Design of a Catalytic Wall Reactor for the Methanation of Carbon Dioxide. Chem. Ing. Tech., 90, (5), 615-624.(doi:10.1002/cite.201700160)

- M. Gruber, P. Weinbrecht, L. Biffar, S. Harth, D. Trimis, J. Brabandt, O. Posdziech, R. Blumentritt, (2018). Power-to-Gas through thermal integration of high-temperature steam electrolysis and carbon dioxide methanation - Experimental results. Fuel Processing Technology, 181, 61-74.(doi:10.1016/j.fuproc.2018.09.003)

- Habisreuther, P.; Stelzner, B.; Vlavakis, P.; Loukou, A.; Zarzalis, N.; Trimis, D.; (2018). Vortrag: *Structure transition from oxygen-enhanced to oxy-fuel methane non-premixed flames near extinction*. 2nd International Workshop on Oxy-Fuel Combustion, February 14.-15., Bochum, Germany,

- Hagen, F.; Loukou, A.; Häber, T.; Vlavakis, P.; Bockhorn, H.; Suntz, R.; Trimis, D.; Poster: *Correlations of Reactivity with Structural and Optical Properties of Soot Particles for Application in Gasoline Direct Injection Engine Exhaust Gas Aftertreatment.*. International Symposium on Combustion, Dublin, Ireland, July 29.-August 3., WIPP 4P069, 2018.

- Harth, S.; (2018). Vortrag: *Power-to-SNG mit hohem Wirkungsgrad: Das HELMETH Projekt*. Jahrestagung "10 Jahre KIT-Zentrum Energie", Karlsruhe, 26. Juni,

Process by Integration of High-Temperature Electrolysis and CO2 Methanation. 13th European SOFC & SOE Forum, Lucerne Switzerland, 3 6 July 2018,

- Horn, H.; Kolb, T.; Trimis, D.; Klinger, J., (2018). Engler-Bunte-Institut des Karlsruher Instituts für Technologie (KIT) und TZW: DVGW-Technologiezentrum Wasser im Jahre 2017, Teil 1. gwf Gas + Energie, 159, (06),

- Horn, H.; Kolb, T.; Trimis, D.; Klinger, J., (2018). Engler-Bunte-Institut des Karlsruher Instituts für Technologie (KIT) und TZW: DVGW-Technologiezentrum Wasser im Jahre 2017, Teil 2. gwf Gas + Energie, 159, (07/08),

- Montenegro Camacho, Y.S.; Bensaid, S.; Lorentzou, S.; Vlachos, N.; Pantoleontos, G.; Konstandopoulos, A.; Luneau, M.; Meunier, F.C.; Guilhaume, N.; Schuurman, Y.; Werzner, E.; Herrmann, A.; Rau, F.; Krause, H.; Rezaei, E.; Ortona, A.; Gianella, S.; Khinsky, A.; Antonini, M.; Marchisio, L.; Vilardo, F.; Trimis, D.; Fino, D, (2018). Development of a robust and efficient biogas processor for hydrogen production. Part 2: Experimental campaign. International Journal of Hydrogen Energy, 43, (1), 161-177.(doi:10.1016/j.ijhydene.2017.10.177)

- Mätzing, H.; Baumann, W.; Bologa, A.; Loukou, A.; Teuscher, N.; Vlavakis, P.; Gehrmann, H.-J.; Paur, H. R.; Trimis, D.; Stapf, D., (2018). Deconvolution of nanoparticle size distributions measured in combustion processes, in *International Aerosol Conference (IAC 2018)*, St.Louis, MO, September 2-7, .

- Mätzing, H.; Vlavakis, P.; Sentko, M.; Loukou, A.; Stelzner, B.; Trimis, D.; Stapf, D., (2018). Deconvolution of soot particle size distributions, in *Proceedings of the Joint Meeting German and Italian Sections of the Combustion Institute. 41st Meeting of the Italian Section of the Combustion Institute*, Sorronto, Italy, May 23-26, .

- Mätzing, H.; Baumann, W.; Bologa, A.; Loukou, A.; Teuscher, N.; Vlavakis, P.; Gehrmann, H.-J.; Paur, H.-R.; Trimis, D.; Stapf, D., (2018). Deconvolution of nanoparticle size distributions measured in combustion processes, in *Aerosol Technology (AT2018)*, Bilbao, Spain, June 18-20, .

- Mätzing, H.; Vlavakis, P.; Sentko, M.; Loukou, A.; Stelzner, B.; Trimis, D.; Stapf, D., (2018). Deconvolution of Soot Particle Size Distributions, in *Proceedings of Joint Meeting of the German and Italian Sections of the Combustion Institute*, Sorrento, Italy, 23-26 May, p. IV4, (ISBN 978-88-88104-22-5), .

- Müller, T.; Goßmann, A.; Kühn, J.; Etzold, M.; Stelzner, B.; Zarzalis, N.; Durst, F.; Trimis, D., (2018). A Low Power Liquid Fueled Burner using a Novel Atomization Concept, in *Proceedings of Joint Meeting of the German and Italian Sections of the Combustion Institute*, Sorrento, Italy, 23-26 May, p. X2, (ISBN 978-88-88104-22-5), .

- Müller, T.; Kadel, K.; Habisreuther, P.; Trimis, D.; Zarzalis, N.; Sänger, A.; Jakobs, T.; Kolb, T., (2018). Influence of Reactor Pressure on the Primary Jet Breakup of High-Viscosity Fuels: Basic Research for Simulation-Assisted Design of Low-Grade Fuel Burner, in *Proceedings of the ASME Turbo Expo 2018: Turbomachinery Technical Conference and Exposition (GT2018)*, ASME, June 11-15, Oslo, Norway, p. GT2018-75950, (doi:10.1115/GT2018-75950).

- Müller, T.; Kadel, K.; Habisreuther, P.; Trimis, D.; Zarzalis, N.; Sänger, A.; Jakobs, T.; Kolb, T., (2018). Simulation of the Primary Jet Breakup of Non-Newtonian Fuels: Basic Research for Simulation-Assisted Design of Low-Grade Fuel Burner, in *Proceedings of the ASME Turbo Expo 2018: Turbomachinery Technical Conference and Exposition (GT2018)*, ASME, June 11-15, Oslo, Norway, p. GT2018-75945, (doi:10.1115/GT2018-75945).

- Rau, F.; Herrmann, A.; Krause, H.; Fino, D.; Trimis, D., (2018). Efﬁciency of a pilot-plant for the autothermal reforming of biogas. International Journal of Hydrogen Energy, (online, in press), (doi:10.1016/j.ijhydene.2018.04.014)

- Sebbar, N.; Zirwes, T.; Habisreuther, P.; Bockhorn, H.; Trimis, D., (2018). Investigation of S2 + Air Combustion, in *Proceedings of Joint Meeting of the German and Italian Sections of the Combustion Institute*, Sorrento, Italy, 23-26 May, p. VI10, (ISBN 978-88-88104-22-5), .

Combustion. Reaction Kinetics, Flame Structure and Laminar Flame Behavior. Energy Fuels, 32, (10), 10184-10193.(doi:10.1021/acs.energyfuels.8b01019)

- Vlavakis, P.; Loukou, A.; Trimis, D.; Poster: *Experimental Investigation on the Influence of Premixing on Soot Formation in Isooctane Counterflow Flames*. International Symposium on Combustion, Dublin, Ireland, July 29.-August 3., WIPP 4P055, 2018.

- Weis, C.; Faller, S.; Zarzalis, N.; (2018). Vortrag: *Bestimmung der mageren Verlöschgrenze hochturbulenter vorgemischter Strahlflammen*. Jahrestreffen der ProcessNet-Fachgruppen Mehrphasenströmungen (MPH), Wärmeund Stoffübertragung (WSUE), Computional Fluid Dynamics (CFD), Hochtemperaturtechnik (HTT), Abfallbehandlung und Wertstoffrückgewinnung (AuW), Kristallisation (KRI) und Partikelmesstechnik (PMT), Bremen, 6.9. März 2018,

- Zhang, F.; Zirwes, T.; Nawroth, H.; Li, N.; Habisreuther, P.; Bockhorn, H.; Trimis, D.; Paschereit, C.O., (2018). Spectral Response of Different Combustion Models in LES of Direct Combustion Noise, in *Proceedings of Joint Meeting of the German and Italian Sections of the Combustion Institute*, Sorrento, Italy, 23-26 May, p. I8, (ISBN 978-88-88104-22-5), .

- Zhang, F.; Zirwes, T.; Habisreuther, P.; Zarzalis, N.; Trimis, D.; Bockhorn, H., (2018). Large Eddy Simulation of Turbulent Flow in a Fan-Stirred Combustion Vessel, in *Proceedings of Joint Meeting of the German and Italian Sections of the Combustion Institute*, Sorrento, Italy, 23-26 May, p. I10, (ISBN 978-88-88104-22-5), .

- Zhang, F.; Zirwes, T.; Habisreuther, P.; Bockhorn, H., (2018). Towards reduction of computational cost for large-scale combustion modelling with a multi-regional concept. Progress in Computational Fluid Dynamics, 18, (6), 333-346.(doi:10.1504/PCFD.2018.096616)

- Zhang, F; Zirwes, T.; Habisreuther, P.; Bockhorn, H.; Trimis, D.; Nawroth, H; Paschereit, C.O., (2018). Impact of Combustion Modeling on the Spectral Response of Heat Release in LES. Combustion, Science and Technology, (online).(doi:10.1080/00102202.2018.1558218)

- Zirwes, T.; Zhang, F.; Denev, J.A.; Habisreuther, P.; Bockhorn, H.; Automated Code Generation for Maximizing Performance of Detailed Chemistry Calculations in OpenFOAM. In *High Performance Computing in Science and Engineering '17*, Nagel W., Kröner D., Resch M. (ed.), Springer, Cham, p. 189-204, (doi:10.1007/978-3-319-68394-2_11) 2018.

- Zirwes, T.; Zhang, F.; Habisreuther, P.; Denev, Jordan A.; Bockhorn, H.; Trimis, D.; Poster: *Highly Resolved Numerical Simulation of Regime Transition in Mixed-Mode Flames*. International Symposium on Combustion, Dublin, Ireland, July 29. - August 2., WIPP 1P116, 2018.

- T. Zirwes; F. Zhang; J. A. Denev; P. Habisreuther; H. Bockhorn; D. Trimis; Poster: *Generation of a Database with Detailed Numerical Simulation of Mixed-Mode Combustion*. NIC Symposium 2018, February 22-23, ST 6, 2018.

- Zirwes, T.; Zhang, F.; Habisreuther, P.; Denev, J.A.; Bockhorn, H.; Trimis, D.; Poster: *A Reliability Assessment of Highly Resolved Numerical Simulation for Turbulent Combustion*. Combustion-DNS Strategy & Data Analysis Workshop, Sorrento, Italy, 22-23 May, 2018.

- Zirwes, T.; Zhang, F.; Habisreuther, P.; Denev, J.A.; Bockhorn, H.; Trimis, D.; Poster: *Database and Prediction of the Regime Transition for the Sandia/Sydney Mixed-Mode Flame*. Combustion-DNS Strategy & Data Analysis Workshop, Sorrento, Italy, 22-23 May, 2018.

- Zirwes, Thorsten; Zhang, Feichi; Denev, Jordan A.; Habisreuther, Peter; Bockhorn, Henning; Trimis, Dimosthenis, (2018). Optimized Chemistry and Detailed Transport for Massively Parallel Simulations of Turbulent Combustion with OpenFOAM, in *The 13th OpenFOAM Workshop (OFW13)*, vol. **13**, June 24-29, Shanghai, China, .

- Zirwes, T.; Zhang, F.; Habisreuther, P.; Denev, J.A.; Bockhorn, H., (2018). Automated Code Generation for Maximizing Performance of Detailed Chemistry Calculations in OpenFOAM. InSIDE, Innovatives Supercomputing in Deutschland, (Spring 2018),

Balancing of Reacting Flow Solvers in OpenFOAM for High Performance Computing, in *Proc. of 6th ESI OpenFOAM User Conference*, ESI-OpenCFD, Oct. 17-19, Hamburg, Germany , p. 1-13, .

- Zirwes, T.; Zhang, F.; Denev, J. A.; Habisreuther, P.; Bockhorn, H.; Trimis, D., (2018). Detailed Transport and Performance Optimization for Massively Parallel Simulations of Turbulent Combustion with OpenFOAM, in *The 13th OpenFOAM Workshop*, 24.29. June, Shanghai, China, p. 20-041 , .

2017

... zum Anfang der Seite

- Sommerwärme chemisch speichern - KIT Forschungsprojekt "Pegasus" untersucht Energiespeicherung mit Schwefel, 2017.
  Fuchs, Stefan [InterviewerIn] ; Trimis, Dimosthenis [InterviewteR]; Engler-Bunte-Institut. Lehrstuhl und Bereich Verbrennungstechnik; Karlsruhe, KIT-Bibliothek Süd;
  1 Online-Ressource (3 min); (doi:10.5445/DIVA/2017-307)

- Alomar, Omar Rafae; Mendes, Miguel A.A.; Trimis, Dimosthenis; Ray, Subhashis, (2017). Numerical simulation of complete liquidvapour phase change process inside porous media: A comparison between local thermal equilibrium and non-equilibrium models. International Journal of Thermal Sciences, 112, 222-241.(doi:10.1016/j.ijthermalsci.2016.09.014)

- Battista, F.; Montenegro Camacho, Y. S.; Hernández, S.; Bensaid, S.; Herrmann, A.; Krause, H.; Trimis, D.; Fino, D., (2017). LCA evaluation for the hydrogen production from biogas through the innovative BioRobur project. International journal of hydrogen energy, 42, (19), 14030-14043.(doi:10.1016/j.ijhydene.2016.12.065)

- Baust, Tobias M.; Habisreuther, Peter; Zarzalis, Nikolaos, (2017), Schlussbericht Entwicklung von Verbrennungstechnologien für die klimaschonende Energieerzeugung - Einzelvorhaben Projekt 1F : Verbrennungsmodell für die Verbrennung von Flüssigbrennstoff-Wasser-Emulsionen.
  Engler-Bunte-Institut, Abschlussbericht, (doi:10.2314/GBV:896385272).

- Bedoya, Cesar; Habisreuther, Peter; Zarzalis, Nikolaos, (2017). Experimental and Theoretical Study of Combustion under Elevated Pressure Condition within Porous Inert Media. Energy Technology, (5), 1124-1133.(doi:10.1002/ente.201700131)

- Bockhorn, Henning; (2017). Vortrag: *Some notes on challenges of combustion in future energy systems*. Tenth Mediterranean Combustion Symposium, Naple, September, 17-21,

- Demuth, C.; Werzner, E.; Mendes, M. A. A.; Krause, H.; Trimis, D.; Ray, S., (2017). Document Non-Isothermal Simulations of Aluminum Depth Filtration. Advanced Engineering Materials, 19, (9), 1700238.(doi:10.1002/adem.201700238)

- Denev, Jordan A.; Dinkov, Ilian; Bockhorn, Henning, (2017). Burner design for an industrial furnace for thermal post-combustion. Energy Procedia, 120, 484-491.(doi:10.1016/j.egypro.2017.07.171)

- Dinkov, I.; Menzel, C.; Schelb, D.; Trimis, D., (2017). Experimental investigation on the effect of the ventilating conditions during a compartment fire, in *Proceedings of the European Combustion Meeting 2017*, April 18-21, Dubrovnik, Croatia, p. ECM2017.0396, .

- Dinkov, I.; Bockhorn, H., (2017). Premixed Combustion in Porous Inert Media Effects of the Air Equivalence Ratio and Transport Properties on the Temperature Distribution and the Peak Flame Temperature, in *Proceedings of the European Combustion Meeting 2017*, April 18-21, Dubrovnik, Croatia, p. ECM2017.0398, .

- Dorn, C.; Behrend, R.; Uhlig, V.; Trimis, D.; Krause, H., (2017). A technology comparison concerning scale dependencies of industrial furnaces. A case study of glass production. Energy Procedia, 120, 388-394.(doi:10.1016/j.egypro.2017.07.230)

Henning Bockhorn, (2017). Impact of infinite thin flame approach on the evaluation of flame speed using spherically expanding flames. Energy Technology, 5, (7), 1055-1063.(doi:10.1002/ente.201600573)

- Frenzel I.; Krause H.; Trimis D., (2017). Study on the influence of ethanol and butanol addition on soot formation in iso-octane flames. Energy Procedia, 120, 721-728.(doi:10.1016/j.egypro.2017.07.203)

- Goßmann, A.; Müller, T.; Etzold, M.; Stelzner, B.; Zarzalis, N.; Durst, F.; Trimis, D., (2017). Novel Atomization Approach for low Liquid Fuel Mass Flows, in *Proceedings of the European Combustion Meeting 2017*, April 18-21, Dubrovnik, Croatia, p. ECM2017.0226, .

- M. Gruber, P. Weinbrecht, S. Harth, D. Trimis, D. Schollenberger, S. Bajohr, O. Posdziech, J. Brabandt, R. Blumentritt; (2017). Vortrag: *Efficiency increase of the power to gas technology by thermally integrating high-temperature steam electrolysis with CO2-methanation - the HELMETH project*. The 7th World Hydrogen Technology Convention, Prague, Czech Republic,

- M. Gruber, S. Harth, D. Trimis, D. Schollenberger, S. Bajohr, R. Blumentritt, O. Posdziech, J. Brabandt; (2017). Vortrag: *Effizienzsteigerung der Power to Gas Technologie durch thermische Integration von Hochtemperatur Dampfelektrolyse und CO2-Methanisierung das HELMETH Projekt* . Jahrestreffen der ProcessNet-Fachgruppen Abfallbehandlung und Wertstoffrückgewinnung, Energieverfahrenstechnik, Gasreinigung, Hochtemperaturtechnik, Rohstoffe und Kreislaufwirtschaft, Frankfurt a.M.,

- Habisreuther, P.; Loukou, A.; Zarzalis, N.; Trimis, D., (2017). Combined Influence of Strain and Heat Loss in Lean Fresh-To-Burned Counterflow Flames at Elevated Pressure, in *Proceedings of the European Combustion Meeting 2017*, April 18-21, Dubrovnik, Croatia, p. ECM2017.0275, (ISBN 978-953-59504-1-7), .

- Haeber, T.; Suntz, R.; Bockhorn, H., (2017). Flame-Wall Interaction of Premixed Methane and Propane Flames, in *Proceedings of the European Combustion Meeting 2017*, April 18-21, Dubrovnik, Croatia, p. ECM2017.0501, .

- Horn, Harald; Kolb, Thomas; Trimis, Dimosthenis; Klinger, Josef, (2017). Engler-Bunte-Institut des Karlsruher Instituts für Technologie (KIT) im Jahre 2016, DVGW-Forschungsstelle am EBI, Forschungsstelle für Brandschutztechnik und Technologiezentrum Wasser, Karlsruhe (TZW). gwf - Gas Energie, 158, (06), 48-75.

- Häber, T.; Zirwes, T.; Roth, D.; Zhang, F.; Bockhorn, H.; Maas, U.:, (2017). Numerical Simulation of the Ignition of Fuel/Air Gas Mixtures Around Small Hot Particles. Zeitschrift für Physikalische Chemie, (doi:10.1515/zpch-2016-0933)

- Krasselt, C.; Voss, S.; Trimis, D.; Krause, H., (2017). Laserinduzierte Fluoreszenz an nicht-vorgemischten chlorhaltigen Flammen, in *28. Deutscher Flammentag, Verbrennung und Feuerung*, vol. **VDI-Berichte 2302**, VDI, 6.- 7. Sept., Darmstadt, Deutschland, p. 457-467, (ISBN 978-3-18-092302-4), .

- Kraus, Christian; Selle, Laurent; Poinsot, Thierry; Arndt, Christoph M.; Bockhorn, Henning, (2017). Influence of heat transfer and material temperature on combustion instabilities in a swirl burner. J. Eng. Gas Turbines Power, 139, (5), 051503.(doi:10.1115/1.4035143)

- Leicher, Jörg; Giese, Anne; Görner, Klaus; Werschy, Matthias; Krause, Hartmut; Dörr, Holger, (2017). Natural gas quality fluctuations - surveys and statistics on the situation in Germany. Energy Procedia, 120, 165-172.(doi:10.1016/j.egypro.2017.07.161)

- Lindner, K.; Ströbele, M.; Schlick, S.; Webering, S.; Jenckel, A.; Kopf, J.; Danov, O.; Sewald, K.; Buj, C.; Creutzenberg, O.; Tillmann, T.; Pohlmann, G.; Ernst, H.; Ziemann, C.; Hüttmann, G.; Heine, H.; Bockhorn, H.; Hansen, T.; König, P.; Fehrenbach, H., (2017). Biological effects of carbon black nanoparticles are changed by surface coating with polycyclic aromatic hydrocarbons. Particle and fibre toxicology, 14, (1), 8.(doi:10.1186/s12989-017-0189-1)

- Loukou, A.; Mendes, M., A., A.; Frenzel, I.; Pereira, J., M., C.; Ray, S.; Pereira, J., C., F.; Trimis, D., (2017). Experimental and numerical investigation of methane thermal partial oxidation in a small-scale porous media reformer. International Journal of Hydrogen Energy, 42, (1),

- Montenegro Camacho, Y.S.; Bensaid, S.; Lorentzou, S.; Vlachos, N.; Pantoleontos, G.; Konstandopoulos, A.; Luneau, M.; Meunier, F.C.; Guilhaume, N.; Schuurman, Y.; Werzner, E.; Herrmann, A.; Rau, F.; Krause, H.; Rezaei, E.; Ortona, A.; Gianella, S.; Khinsky, A.; Antonini, M.; Marchisio, L.; Vilardo, F.; Trimis, D.; Fino, D., (2017). Document Development of a robust and efficient biogas processor for hydrogen production. Part 1: Modelling and simulation. International Journal of Hydrogen Energy, 42, (36), 22841-22855.(doi:10.1016/j.ijhydene.2017.07.147)

- Müller, T.; Dullenkopf, A.; Sänger, A.; Habisreuther, P.; Jakobs, T.; Zarzalis, N.; Kolb, T., (2017). Influence of Nozzle Design upon the Primary Jet Breakup of High-viscosity Fuels for Entrained Flow Gasification, in *Proceedings of the ASME Turbo Expo 2017: Turbomachinery Technical Conference and Exposition (GT2017)*, ASME, June 26-30, Charlotte, NC, USA, p. GT2017-63198, (doi:10.1115/GT2017-63198).

- Oddos, R.; Lhuillier, C.; Zander, L.; Habisreuther, P.; Zarzalis, N.; Djordjevic, N., (2017). Experimental and Numerical Study on Diluted Laminar Hydrogen-Enriched Premixed Methane/Air Flames, in *Proceedings of the European Combustion Meeting 2017*, April 18-21, Dubrovnik, Croatia, p. ECM2017.0286, .

- Rau, F.; Herrmann, A.; Krause, H.; Fino, D.; Trimis, D., (2017). Production of hydrogen by autothermal reforming of biogas. Energy Procedia, 120, 294-301.(doi:10.1016/j.egypro.2017.07.218)

- Roth, David; Häber, Thomas; Bockhorn, Henning, (2017). Experimental and numerical study on the ignition of fuel/air mixtures at laser heated silicon nitride particles. Proceedings of the Combustion Institute, 36, (1), 1475-1484.(doi:10.1016/j.proci.2016.05.054)

- Schmitt, Manuel, (2017), Stochastische Modellierung der Bildung von Nanopartikeln in reaktiven Strömungen, Dissertation, Karlsruher Institut für Technologie (KIT).

- Sebbar, N.; Bozzelli, J. W.; Bockhorn, H.; Trimis, D., (2017). A DFT and ab-initio study on the primary oxidation mechanism of S_2, in *Proceedings of the European Combustion Meeting 2017*, April 18-21, Dubrovnik, Croatia, p. ECM2017.0373, .

- N. Sebbar; J.W. Bozzelli; H. Bockhorn and D. Trimis, (2017). A thermochemical study on the primary oxidation of sulfur, in *Proceeding of the Thenth Mediterranean Combustion Symposium - MCS10,*, Flegrea Area, Napoli, Italy, September 17-21, .

- Sentko, M.; Mendes, M. A. A.; Stelzner, B.; Voss, S.; Trimis, D., (2017). On the Accuracy of Determining the Laminar Burning Velocity using the Heat-Flux Method, in *Proceedings of the European Combustion Meeting 2017*, April 18-21, Dubrovnik, Croatia, p. ECM2017.0413, .

- Sentko, M. M.; Vlavakis, P.; Loukou, A.; Stelzner, B.; Trimis, D., (2017). Soot formation in premixed fuel-rich oxygen-enhanced methane-flames, in *13th International Conference on Energy for a Clean Environment*, San Miguel, P, July 2-6, 2017, .

- Stelzner, Björn; Weis, Christof; Habisreuther, Peter; Zarzalis, Nikolaos; Trimis, Dimosthenis, (2017). Super-adiabatic flame temperatures in premixed methane flames: A comparison between oxy-fuel and conventional air combustion. Fuel, 201, 148-155.(doi:10.1016/j.fuel.2017.01.025)

- Ströbele, M.; Bockhorn, H., (2017). Thermal desorption of polycyclic aromatic hydrocarbons (PAHs) from carbon black: Influence of PAH type and carbon black nanoparticle properties, in *Proceedings of the European Combustion Meeting 2017*, April 18-21, Dubrovnik, Croatia, p. ECM2017.0207, .

- Volz, M.; Habisreuther, P.; Zarzalis, N., (2017). Correlation for the Sauter Mean Diameter of a Prefilmer Airblast Atomizer at Varying Operating Conditions. Chemie Ingenieur Technik, 89, (3), 320-327.(doi:10.1002/cite.201600007)

- Weinbrecht, P.; Stelzner, B.; Dinkov, I.; Trimis, D., (2017). Burning characteristics of grill lighters, in *Proceedings of the European Combustion Meeting 2017*, April 18-21, Dubrovnik, Croatia, p. ECM2017.0432, .

Foam Morphology on Effective Properties Related to Metal Melt Filtration. Advanced Engineering Materials, 19, (9), 1700240.(doi:10.1002/adem.201700240)

- Wollgarten, J. Christopher; Zarzalis, Nikolaos; Turrini, Fabio; Peschiulli, Antonio, (2017). Experimental Investigations of Ion Current in Liquid Fuelled Gas Turbine Combustors. International Journal of Spray and Combustion Dynamics, 9, (3), 172-185.(doi:10.1177/1756827716688477)

- Zhang, Feichi; Zirwes, Thorsten; Habisreuther, Peter; Bockhorn, Henning; A DNS Analysis of the Correlation of Heat Release Rate with Chemiluminescence Emissions in Turbulent Combustion. In *High Performance Computing in Science and Engineering ´16*, Nagel, Wolfgang E.; Kröner, Dietmar H.; Resch, Michael M. (ed.), Springer International Publishing, p. 229-243, (doi:10.1007/978-3-319-47066-5_16) 2017.

- F. Zhang; T. Zirwes; P. Habisreuther; H. Bockhorn, (2017). Effect of unsteady stretching on the flame local dynamics. Combustion and Flame, 175, 170-179.(doi:10.1016/j.combustflame.2016.05.028)

- F. Zhang; T. Zirwes; H. Nawroth; P. Habisreuther; H. Bockhorn; C.O. Paschereit, (2017). Combustion generated noise: an environment related issue for future combustion systems. Energy Technology, 5, (7), 1045-1054.(doi:10.1002/ente.201600526)

- Zhang, F.; Zirwes, T., (2017). Numerische Simulation turbulenter Verbrennung auf Hochleistungsrechnern des SCC. SCC News, Ausgabe 1 2017, 18 - 20.

- Zirwes, T.; Zhang, F.; Denev, J.; Habisreuther, P.; Bockhorn, H.; Zarzalis, N., (2017). Response of Local and Global Consumption Speed to Stretch in Laminar Steady-State Flames, in *Proceedings of the European Combustion Meeting 2017*, April 18-21, Dubrovnik, Croatia, p. ECM2017.0379, .

- Zirwes, T.; Zhang, F.; Häber, T.; Roth, D.; Bockhorn, H.:, (2017). Direct numerical simulation of ignition by hot moving particles, in *International Colloquium on the Dynamics of Explosions and Reactive Systems*, 26th , July 07 - August 04, Boston, USA, .

- Zirwes, T.; Zhang, F.; Jordan A.D.; Habisreuther, P; Bockhorn, H.; Zarzalis, N, (2017). Effect of Elevated Pressure on the Flame Response To Stretch of Premixed Flames, in *28. Deutscher Flammentag*, vol. **VDI-Berichte 2302**, VDI, 6.- 7. Sept., Darmstadt, Deutschland, p. 549-561, (ISBN 978-3-18-092302-4), .

- Zirwes, T.; Zhang, F.; Denev, J. A.; Habisreuther, P.; Bockhorn, H.; (2017). Vortrag: *Automated Code Generation for Maximizing Performance of Detailed Chemistry Calculations in OpenFOAM*. 20th Results and Review Workshop of the HLRS, Stuttgart, Germany, Oct. 05-06,

2016

... zum Anfang der Seite

- Baust, Tobias; Habisreuther, Peter; Zarzalis, Nikolaos, (2016). Determination of Laminar Flame Speed and Markstein Numbers Deduced From Turbulent Flames Using the Bomb Method, in *Proceedings of ASME Turbo Expo 2016: Power for Land, Sea and Air*, ASME, June 14-16, Seoul, South Korea, p. GT2016-57305, (doi:10.1115/GT2016-57305).

- Christian Kraus; Stefan Harth; Henning Bockhorn, (2016). Experimental Investigation of Combustion Instabilities in Lean Swirl-Stabilized Partially-Premixed Flames in Single- and Multiple-Burner Setup. International Journal of Spray and Combustion Dynamics, 8, (1), 4-26.(doi:10.1177/1756827715627064)

- Demuth, Cornelius; Mishra, Shekhar; Mendes, Miguel A.A.; Ray, Subhashis; Trimis, Dimosthenis, (2016). Application and accuracy issues of TRT lattice Boltzmann method for solving elliptic PDEs commonly encountered in heat transfer and fluid flow problems. International Journal of Thermal Sciences, 100, (4), 185-201.(doi:10.1016/j.ijthermalsci.2015.09.023)

- Demuth, C.; Hubalkova, J.; Mendes, M.A.A.; Ballani, F.; Trimis, D.; Ray S., (2016). Prediction of effective thermal conductivity of refractory materials at high temperatures based on synthetic geometry generation. Journal of Ceramic Science and Technology, 7, (2), 183-192.(doi:10.4416/JCST2016-00006)

Founti, M.; Trimis, D.; (2016). A Systematic LCA-enhanced KPI Evaluation towards Sustainable Manufacturing in Industrial Decision-making Processes. A Case Study in Glass and Ceramic Frits Production. Procedia CIRP, 48, 158-163.(doi:10.1016/j.procir.2016.03.146)

- Feichi Zhang; Thorsten Zirwes; Peter Habisreuther; Henning Bockhorn; Holger Nawroth; Christian Oliver Paschereit; (2016). Vortrag: *LES and DNS of Combustion and Combustion Generated Noise*. 2nd Colloquium Combustion Dynamics and Noise, Villa Vigoni, Menaggio, Italy, Sept. 19-22,

- Horn, Harald; Kolb, Thomas; Trimis, Dimosthenis; Klinger, Josef, (2016). Engler-Bunte-Institut des Karlsruher Instituts für Technologie (KIT) im Jahre 2015, DVGW-Forschungsstelle am EBI, Forschungsstelle für Brandschutztechnik und Technologiezentrum Wasser, Karlsruhe (TZW). gwf - Gas Energie, 157, (06), 498-521.

- Kraus, Christian; Selle, Laurent; Poinsot, Thierry; Arndt,Christoph M.; Bockhorn, Henning, (2016). Influence of Heat Transfer and Material Temperature on Combustion Instabilities in a Swirl Burner, in *Proceedings of ASME Turbo Expo 2016: Power for Land, Sea and Air*, ASME, June 14-16, Seoul, South Korea, p. GT2016-56368, (doi:10.1115/GT2016-56368).

- Mendes, Miguel A.A.; Goetze, Pitt; Talukdar, Prabal; Werzner, Eric; Demuth, Cornelius; Rössger, Philip; Wulf, Rhena; Gross, Ulrich; Trimis, Dimosthenis; Ray, Subhashis, (2016). Measurement and simplified numerical prediction of effective thermal conductivity of open-cell ceramic foams at high temperature. International Journal of Heat and Mass Transfer, 102, (3), 396-406.(doi:10.1016/j.ijheatmasstransfer.2016.06.022)

- Müller, T.; Sänger, A.; Habisreuther, P.; Jakobs, T.; Zarzalis, N.; Kolb, T., (2016). Investigation on Jet Breakup of High-viscous Fuels for Entrained Flow Gasification, in *Proceedings of the ASME Turbo Expo 2016: Turbine Technical Conference and Exposition*, ASME, June 14-16, Seoul, South Korea, p. GT2016-56371, (doi:10.1115/GT2016-56371).

- Müller, T.; Sänger, A.; Habisreuther, P.; Jakobs, T.; Trimis, D.; Kolb, T.; Zarzalis N., (2016). Simulation of the Primary Breakup of a High-viscosity Liquid Jet by a Coaxial Annular Gas Flow. International Journal of Multiphase Flow, 87, 212-228.(doi:10.1016/j.ijmultiphaseflow.2016.09.008)

- Müller, T.; Sänger, A.; Habisreuther, P.; Jakobs, T.; Kolb, T.; Zarzalis, N.; (2016). Vortrag: *Investigation on the Jet Breakup of High-Viscous Fuels for Entrained Flow Gasification*. Jahrestreffen der ProcessNet-Fachgruppe Hochtemperaturtechnik, 10.-11. März, Universität Erlangen-Nürnberg,

- Oluwoye, Ibukun; Altarawneh, Mohammednoor; Gore, Jeff; Bockhorn, Henning; Dlugogorski, Bogdan Z., (2016). Oxidation of Polyethylene under Corrosive NOx Atmosphere. J. Phys. Chem. C, 120, (7), 3766-3775.(doi:10.1021/acs.jpcc.5b10466)

- Parthasarathy P.; Habisreuther P.; Zarzalis N., (2016). A study of Pressure Drop in Reticulated Ceramic Sponges using Direct Pore Level Simulation. Chemical Engineering Science, 147, (22 June 2016), 91-99.(doi:10.1016/j.ces.2016.03.015)

- Reznik, B.; Denev, J.; Bockhorn, H., (2016). Adaptive silicon oxycarbide coatings with controlled hydrophilic or hydrophobic properties. Advanced Engineering Materials, 18, (5), 703-710.(doi:10.1002/adem.201500364)

- Schreiber, Nicole; Ströbele, Michael; Hochscheid, Renate; Kotte, Elke; Weber, Petra; Bockhorn, Henning; Müller, Bernd, (2016). Modifications of carbon black nanoparticle surfaces modulate type II pneumocyte homoeostasis. Journal of Toxicology and Environmental Health, Part A, 79, (4), 153-164.(doi:10.1080/15287394.2015.1124819)

- Sebbar, N.; Appel, J.; Bockhorn, H.; Poster: *Rate Constants Study for Primary Reactions of Acetic Acid Decomposition to Ketene Formation Catalyzed with P2O3/P2O5*. 36th International Symposium on Combustion, COEX, Seoul, Korea, July 31.-August 5., 2016.

P2O3/P2O5/CH3C(=O)OH Pyrolysis. Combust. Sci. Technol., 188, (4-5), 745-758.(doi:10.1080/00102202.2016.1139376)

- Sebbar, Nadia; Habisreuther, Peter; Bockhorn, Henning; Auzmendi-Murua, Itsaso; Bozzelli, Joseph, (2016). Di-Tertiary-Butyl Peroxide Decomposition and Combustion with Air: Reaction Mechanism, Ignition, Flame Structures, Laminar Flame Velocities. Energy & Fuels, 31, (3), 2260-2273.(doi:10.1021/acs.energyfuels.6b02201)

- Sentko, M.; Vlavakis, P.; Loukou, A.; Stelzner, B.; Trimis, D.;; Poster: *Soot formation in premixed rich oxygen-enhanced methane-flames*. 36th International Symposium on Combustion, Seoul, Korea, July 31 - August 5, 2016.

- B. Stelzner; C. Weis; P. Habisreuther; N. Zarzalis; D. Trimis; (2016). Vortrag: *Super-adiabatic flame temperatures (SAFT) in premixed methane flames: A comparison between oxy-fuel and conventional combustion*. 1st International Workshop on Oxy-Fuel-Combustion, February 10th, Montabaur, Germany,

- Volz, Melanie; Nittel, Lena; Habisreuther, Peter; Zarzalis, Nikolaos, (2016). Numerical Study of Liquid Film Characteristics at Varying Operating Conditions in Prefilmer Airblast Atomizer. Chemie Ingenieur Technik, 88, (1-2), 192-198.(doi:10.1002/cite.201500011)

- F. Zhang; T. Zirwes; P. Habisreuther; H. Bockhorn; Numerical Simulation of Turbulent Combustion with a Multi-Regional Approach. In *High Performance Computing in Science and Engineering ´15*, Nagel, Wolfgang E.; Kröner, Dietmar H.; Resch, Michael M. (ed.), Springer International Publishing, Cham, p. 267280, (doi:10.1007/978-3-319-24633-8_18) 2016.

- F. Zhang; T. Zirwes; P. Habisreuther; H. Bockhorn; Poster: *Identification of Correlation between OH* Chemiluminescence and Heat Release Rate with Direct Numerical Simulation*. NIC Symposium 2016, 11-12 February 2016, Forschungszentrum Jülich, 2016.

- Q. Zhao; F. Zhang; L. Zhang; H. Bockhorn; W. Xu; L. Liu, (2016). Multi-Regional Large Eddy Simulation of Turbulent Combustion. Journal of Propulsion Technology, 37, (2), 324 331.(doi:10.13675/j.cnki.tjjs.2016.02.017)

- Zirwes, T.; Zhang, F.; Habisreuther, P.; Bockhorn, H.; (2016). Vortrag: *A DNS Analysis of the Correlation of Heat Release Rate with Chemiluminescence Emissions in Turbulent Combustion*. 19th Results and Review Workshop of the HLRS, Stuttgart, Deutschland, 13.14. Oktober,

- Zirwes, Thorsten; Zhang, Feichi; Habisreuther, Peter; Bockhorn, Henning; Poster: *Flame Response to Unsteady Stretching*. 36th International Symposium on Combustion, Seoul, Korea, July 31.-August 5., 36, 2016.

2015

... zum Anfang der Seite

- A. Aleksandrov; H. Bockhorn, (2015). Experimental Investigation of the impact of imposed air inlet velocity oscillations on Soot Formation and Oxidation using an advanced 2-Colour-TIRE-LII, in *Proceedings of the European Combustion Meeting 2015*, Paper P4-48, March 30April 2, 2015, Budapest, Hungary, (ISBN 978-963-12-1257-0), .

- Aleksandrov, A.; Suntz, Rainer; Bockhorn, Henning, (2015). Investigation of the impact of imposed air inlet velocity oscillations on the formation and oxidation of soot using simultaneous 2-Colour-TIRE-LII. Applied Physics B: Lasers and Optics, 119, (4), 777-795.(doi:10.1007/s00340-015-6117-x)

- Alomar, Omar Rafae; Mendes, Miguel A.A.; Trimis, Dimosthenis; Ray, Subhashis, (2015). Simulation of complete liquidvapour phase change process inside porous evaporator using local thermal non-equilibrium model. International Journal of Thermal Sciences, 94, 228-241.(doi:10.1016/j.ijthermalsci.2015.03.007)

study, 1D volume-averaged calculations and 3D direct pore level simulations of the flame stabilization in porous inert media at elevated pressure. Combust. Flame, 162, (10), 37403754.(doi:10.1016/j.combustflame.2015.07.012)

- S. Benekos; A. Loukou; I. Frenzel; G. Skevis; M. Founti; D. Trimis, (2015). Experimental and numerical investigation of a novel non-catalytic reformer for methane partial oxidation, in *Proceedings of the European Combustion Meeting 2015*, P5-65, March 30April 2, 2015, Budapest, Hungary, (ISBN 978-963-12-1257-0), .

- J. Christopher Wollgarten; Nikolaos Zarzalis; Fabio Turrini; Antonio Peschiulli, (2015). Ion Current Measurements as a Method for the Detection of the Reaction Rate in Combustion With Swirl Stabilized Airblast Injection Systems, in *Proceedings of ASME Turbo Expo 2015: Power for Land, Sea and Air*, ASME, June 15-19, Montréal, Canada, p. GT2015-42357, (ISBN 978-0-7918-5678-9), (doi:10.1115/GT2015-42357).

- I. Dinkov; P. Habisreuther; H. Bockhorn, (2015). Direct pore level simulation of premixed gas combustion in porous inert media using detailed chemical kinetics, in *Proceedings of the European Combustion Meeting 2015*, Paper P5-66, March 30April 2, 2015, Budapest, Hungary, (ISBN 978-963-12-1257-0), .

- I. Dinkov; P. Habisreuther; H. Bockhorn, (2015). Flame stabilization within a radial-flow porous burner a detailed numerical study, in *INFUB - 10th European Conference on Industrial Furnaces and Boilers*, April, 7-10, Gaia (Porto), Portugal, (ISBN 978-972-99309-7-3), .

- I. Dinkov; P. Habisreuther; H. Bockhorn, (2015). The effect of the threedimensionality of the flame front inside a radial-flow porous burner a detailed DPLS numerical study, in *15th International Conference on Numerical Combustion*, SIAM, Avignon, France, April, 19-22, .

- C. Dorn; D. Giannopoulos; R. Behrend; V. Uhlig; M. Founti; D. Trimis, (2015). An integrated methodology towards a comparison of conventional combustion technology with microwave technology in energy intensive firing processes, in *Proceedings of the European Combustion Meeting 2015*, Paper P2-71, March 30April 2, 2015, Budapest, Hungary, (ISBN 978-963-12-1257-0), .

- Dorn, C.; Behrend, R.; Giannopoulos, D.; Napolano, L.; Baños, B. García; James, V.; Uhlig, V.; Catalá, J. M.; Founti, M.; Trimis, D., (2015). KPI and LCA Evaluation of Integrated Microwave Technology for High Temperature Processes. Procedia CIRP, 29, 492497.(doi:10.1016/j.procir.2015.02.033)

- Fabian Eiberger; Peter Habisreuther; Nikolaos Zarzalis; Fabio Turrini, (2015). Evaluation of the Turbulence Radiation Interaction and the Validity of the Optically Thin Fluid Approximation in a High Turbulent Premixed Methane Flame, in *Proceedings of ASME Turbo Expo 2015: Power for Land, Sea and Air*, ASME, June 15-19, Montréal, Canada, p. GT2015-42478, (ISBN 978-0-7918-5678-9), (doi:10.1115/GT2015-42478).

- I. Frenzel; D. Trimis, (2015). Study on the influence of ethanol addition on exhaust gas composition and soot formation in iso-octane flames, in *Proceedings of the European Combustion Meeting 2015*, Paper P3-53, March 30April 2, 2015, Budapest, Hungary, (ISBN 978-963-12-1257-0), .

- B. Garten; F. Hunger; D. Messig; B. Stelzner; D. Trimis; C. Hasse, (2015). Detailed radiation modeling of a partial-oxidation flame. International Journal of Thermal Sciences, 87, 68-84.

- Goetze, Pitt; Mendes, Miguel A. A.; Asad, Amjad; Jorschick, Holger; Werzner, Eric; Wulf, Rhena; Trimis, Dimosthenis; Gross, Ulrich; Ray, Subhashis, (2015). Sensitivity analysis of effective thermal conductivity of open-cell ceramic foams using a simplified model based on detailed structure. Special Topics Rev Porous Media, 6, (1), 1-10.(doi:10.1615/SpecialTopicsRevPorousMedia.v6.i1.10)

- M. Gruber; S. Harth; D. Trimis; O. Posdziech; J. Brabandt; W. Köppel; Poster: *Integrated High-Temperature Electrolysis and Methanation for Effective Power to Gas Conversion*. Gasfachliche Aussprachetagung, Essen, 2015.

Dimosthenis, Peuker, Urs Alexander, (2015). Viscous force An important parameter for the modeling of deep bed filtration in liquid media. Powder Technology, 283, 190198.(doi:10.1016/j.powtec.2015.05.018)

- Horn, Harald; Kolb, Thomas; Trimis, Dimosthenis; Klinger, Josef, (2015). Engler-Bunte-Institut des Karlsruher Instituts für Technologie (KIT) und TZW: DVGW-Technologiezentrum Wasser im Jahre 2014. gwf - Gas Energie, 156, (678-693), 06.

- F. Hunger; B. Stelzner; D. Trimis; C. Hasse, (2015). Direct numerical prediction of OH-LIF Signals in the simulation of a laminar partial oxidation flame, in *Proceedings of the European Combustion Meeting 2015*, Paper P3-74, March 30April 2, 2015, Budapest, Hungary, (ISBN 978-963-12-1257-0), .

- Häber, Thomas; Gebretsadik, Mulubrhan; Bockhorn, Henning; Zarzalis, Nikolaos, (2015). The effect of total reflection in PLIF imaging of annular thin films. International Journal of Multiphase Flow, 76, 6472.(doi:10.1016/j.ijmultiphaseflow.2015.06.009)

- T. Jakobs; N. Djordjevic; A. Sänger; N. Zarzalis; T. Kolb, (2015). Influence of Reactor Pressure on Twin-Fluid Atomization: Basic Investigations on Burner Design for High-Pressure Entrained Flow Gasifier. Atomization and Sprays, 25, (12), 10811105.(doi:10.1615/AtomizSpr.2015011558)

- J. Keller; M. Gebretsadik; P. Habisreuther; F. Turrini; N. Zarzalis; D. Trimis, (2015). Numerical and experimental investigation on droplet dynamics and dispersion of a jet engine injector. International Journal of Multiphase Flow, 75, 144-162.(doi:10.1016/j.ijmultiphaseflow.2015.05.004)

- A. Loukou; J. Reiter; R. Gehmlich; C. Hasse; D. Trimis; E. Pucher; K. Seshadri, (2015). Autoignition and Extinction of Mixtures of Ethanol and Dimethyl Ether, in *Proceedings of the European Combustion Meeting 2015*, Paper P3-70, March 30April 2, 2015, Budapest, Hungary, (ISBN 978-963-12-1257-0), .

- Melanie Volz; Marco Konle; Mulubrhan Gebretsadik; Peter Habisreuther; Nikolaos Zarzalis, (2015). Investigation of a Prefilming Airblast Atomizer With Respect to Surface Stripping, in *Proceedings of ASME Turbo Expo 2015: Power for Land, Sea and Air*, ASME, June 15-19, Montréal, Canada, p. GT2015-42576, (ISBN 978-0-7918-5678-9), (doi:10.1115/GT2015-42576).

- Rau, F.; Hartl, S.; Voss, S.; Still, M.; Hasse, C.; Trimis, D., (2015). Laminar burning velocity measurements using the Heat Flux method and numerical predictions of iso-octane/ethanol blends for different preheat temperatures. Fuel, 140, 10-16.

- F. Rau; B. Schoen; S. Hartl; S. Voss; C. Hasse; D. Trimis, (2015). The laminar burning velocity of iso-octane, ethanol and iso-butanol using the Heat Flux burner and the closed combustion vessel, in *Proceedings of the European Combustion Meeting 2015*, Paper P3-43, March 30April 2, 2015, Budapest, Hungary, (ISBN 978-963-12-1257-0), .

- Ray, Subhashis; Eder, Robert; Wittenschlaeger, Thomas M.; Jaeger, Ingolf; Uhlig, Volker; Trimis, Dimosthenis, (2015). Numerical and experimental investigation of heat transfer augmentation potential of wire-loop structures. International Journal of Thermal Sciences, 90, 370384.(doi:10.1016/j.ijthermalsci.2014.12.008)

- Reznik, Boris; Denev, Jordan; Bockhorn, Henning, (2015). Adaptive Silicon Oxycarbide Coatings With Controlled Hydrophilic or Hydrophobic Properties. Advanced Engineering Materials, 18, (5), 703-710.(doi:10.1002/adem.201500364)

- D. Roth; T. Häber; H. Bockhorn; P. Sharma; R. Schiessl; U. Maas, (2015). Ignition at sub-millimeter sized hot particles, in *Proceedings of the European Combustion Meeting 2015*, Paper P4-09, March 30April 2, 2015, Budapest, Hungary, (ISBN 978-963-12-1257-0), .

- D. Roth; T. Häber; H. Bockhorn, (2015). Ignition at sub-millimeter sized hot particles: a numerical and experimental study, in *15th International Conference on Numerical Combustion*, SIAM, Avignon, France, April, 19-22, .

Decomposition and Product Reaction Pathways. Int J Chem Kinet, 47, (3), 133-161.(doi:10.1002/kin.20899)

- M. M. Sentko; C. Weis; S. Harth; P. Habisreuther; N. Zarzalis; D. Trimis, (2015). Temperature dependency of the laminar burning velocity of fuel-rich methane oxygen measurements, in *Proceedings of the European Combustion Meeting 2015*, Paper P3-44, March 30April 2, 2015, Budapest, Hungary, (ISBN 978-963-12-1257-0), .

- M. M. Sentko; C. Weis; P. Habisreuther; N. Zarzalis; D. Trimis, (2015). Bestimmung der laminaren Flammengeschwindigkeit von Methan/Sauerstoff-Gemischen im POX Bereich, in *27. Deutscher Flammentag, Verbrennung und Feuerungen, VDI-Berichte 2267*, VDI, Clausthal-Zellerfeld, 16.-17. September, p. 491-500, (ISBN 978-3-18-092267-6), .

- Simon Christie; Simon Blakey; Patrick Le Clercq; Sigrun Matthes; Hans Schlager; David Lee; David Raper; Peter Wiesen; Nikolaos Zarzalis; Thrassos Pandis; Paul Brok, (2015). Research strategies for developing alternative fuels in aviation, in *4th Conference on Transport, Atmosphere and Climate (TAC4)*, Bad Kohlgrub, Germany, June, 15th, .

- Stefan Dederichs; Nikolaos Zarzalis; Christian Beck, (2015). Validation of a Novel LES Approach Using Tabulated Chemistry for Thermoacoustic Instability Prediction in Gas Turbines, in *Proceedings of ASME Turbo Expo 2015: Power for Land, Sea and Air*, ASME, June 15-19, Montréal, Canada, p. GT2015-43502, (ISBN 978-0-7918-5678-9), (doi:10.1115/GT2015-43502).

- B. Stelzner; C. Keramiotis; S. Voss; M. Founti; D. Trimis, (2015). Analysis of the flame structure for lean methane-air combustion in porous inert media by resolving the hydroxyl radical. Proceedings of the Combustion Institute, 35, 3381-3388.

- B. Stelzner; C. Weis; P. Habisreuther; N. Zarzalis; D. Trimis, (2015). Super-adiabatic flame temperatures in premixed methane-oxygen flames, in *Proceedings of the European Combustion Meeting 2015*, Paper P3-62, March 30April 2, 2015, Budapest, Hungary, (ISBN 978-963-12-1257-0), .

- B. Stelzner; F. Hunger; S. Voss; C. Hasse; D. Trimis, (2015). Analysis of structure, extinction and broadening in oxygen-enhanced non-premixed flames. Zeitschrift für Physikalische Chemie, 229, (6), 857879.(doi:10.1515/zpch-2014-0613)

- B. Stelzner; C. Weis; P. Habisreuther; N. Zarzalis; D. Trimis, (2015). Numerische Untersuchung von super-adiabaten Flammentemperaturen in vorgemischten Methan-Sauerstoff-Flammen, in *27. Deutscher Flammentag, Verbrennung und Feuerungen, VDI-Berichte 2267*, VDI, Clausthal-Zellerfeld, 16. - 17. September, p. 491 - 500, (ISBN 978-3-18-092267-6), .

- M. Ströbele; T. Häber; H. Bockhorn, (2015). Kinetic analysis of the thermal release of pyrene from commercial Carbon Black nanoparticles using a distributed activation energy model, in *Proceedings of the European Combustion Meeting 2015*, Paper P1-32, March 30April 2, 2015, Budapest, Hungary, (ISBN 978-963-12-1257-0), .

- Thorsten Zirwes, (2015). Optimierung einer Simulationssoftware für Verbrennungsprozesse. DVGW energie | wasser-praxis, wvgw Wirtschafts- und Verlagsgesellschaft Gas und Wasser mbH, 03/15, 70-72.

- F. Zhang; H. Bonart; T. Zirwes; P. Habisreuther; H. Bockhorn; N. Zarzalis; Direct Numerical Simulation of Chemically Reacting Flows with the Public Domain Code OpenFOAM. In *High Performance Computing in Science and Engineering 14*, Nagel, Wolfgang E. and Kröner, Dietmar H. and Resch, Michael M. (ed.), Springer International Publishing, p. 221-236, (doi:10.1007/978-3-319-10810-0_16) 2015.

- F. Zhang; T. Zirwes; H. Nawroth; P. Habisreuther; C.O. Paschereit; H. Bockhorn, (2015). Direct combustion noise of premixed flames: experiments and simulation using compressible LES and DNS, in *15th International Conference on Numerical Combustion*, Avignon, France, April, 19-22, .

2014

... zum Anfang der Seite

Kathrin Kreusel and Dimosthenis Trimis; Engler-Bunte-Institut. Lehrstuhl und Bereich Verbrennungstechnik; Karlsruhe, KIT-Bibliothek Süd;
Online-Ressource (00:07:41 Std.);

- Riesenspeicher für Solarstrom - Forscher am KIT optimieren die Umwandlung von Strom in Erdgas, 2014. Fuchs, Stefan [Red.] and Dimosthenis Trimis; Engler-Bunte-Institut. Lehrstuhl und Bereich Verbrennungstechnik; Karlsruhe, KIT-Bibliothek Süd;
Online-Ressource (00:02:36 Std.);

- Alomar, Omar Rafa; Mendes, Miguel A. A.; Trimis, Dimosthenis; Ray, Subhashis, (2014). Simulation of Complete Liquid-Vapor Phase Change inside Divergent Porous Evaporator. IJMMM (International Journal of Materials, Mechanics and Manufacturing), 2, (3), 223229.(doi:10.7763/IJMMM.2014.V2.132)

- Alomar, O.R. and Mendes, M.A.A. and Trimis, D. and Ray, S., (2014). Numerical simulation of complete liquid-vapour phase change process inside porous media using smoothing of diffusion coefficient. International Journal of Thermal Sciences, 86, 408-420.(doi:10.1016/j.ijthermalsci.2014.08.003)

- Amos, N.J. and Widyawati, M. and Kureti, S. and Trimis, D. and Minett, A.I. and Harris, A.T. and Church, T.L., (2014). Design and synthesis of stable supported-CaO sorbents for CO2 capture. Journal of Materials Chemistry A, 2, (12), 4332-4339.

- Bhagwan, R.; Zarzalis, N.; Habisreuther, P.; Turrini F., (2014). An Experimental Comparison of the Emissions Characteristics of Standard Jet A-1 and Synthetic Jet Fuels. Flow Turbul. Combust., 92, (APPL-D-13-00073R1), 865-884.(doi:10.1007/s10494-014-9528-6)

- Bhagwan, R.; Wollgarten, J. C.; Habisreuther, P.; Zarzalis, N., (2014). Experimental Investigation on Lean Blow Out of a Piloted Aero-Engine Burner, in *Proceedings of ASME Turbo Expo 2014: Power for Land, Sea and Air*, ASME, June 16-20, Düsseldorf, Germany, p. GT2014-25199, (doi:10.1115/GT2014-25199).

- H. Bockhorn, A. Schönbucher, H.-D. Wehrstedt, (2014), Abschätzung des Gefahrenpotentials von wechselwirkenden Bränden. AIF, Abschlussbericht, IGF Vorhaben Nr.396 ZN/1-3 der Forschungsvereinigung DECHEMA e.V., .

- Dahiya, J.B. and Kumar, N. and Bockhorn, H., (2014). Fire performance and thermal stability of polypropylene nanocomposites containing organic phosphinate and ammonium polyphosphate additives. Fire and Materials, 38, (1), 1-12.

- David Roth, Pratyush Sharma, Thomas Häber, Robert Schiessl, Henning Bockhorn, Ulrich Maas, (2014). Ignition by Mechanical Sparks: Ignition of Hydrogen/Air Mixtures by Submillimeter-Sized Hot Particles. Combustion, Science and Technology, 186, (10-11), 1606-1617.(doi:10.1080/00102202.2014.935606)

- Demuth, C. and Mendes, M.A.A. and Ray, S. and Trimis, D., (2014). Performance of thermal lattice Boltzmann and finite volume methods for the solution of heat conduction equation in 2D and 3D composite media with inclined and curved interfaces. International Journal of Heat and Mass Transfer, 77, 979-994.

- Denev, J.A.; I. Naydenova; H. Bockhorn, (2014). Lean Premixed Flames - a Direct Numerical Simulation Study of the Effect of Lewis Number at Large Scale Turbulence, in *Transactions of the High Performance Computing Center, Stuttgart (HLRS), W.E Nagel, D.B.Kroener and M. Resh (Eds.)*, High Performance Computing in Science and Engineering ‘14, p. 237-250, (doi:10.1007/978-3-319-10810-0_17).

- Denev, J.A.; I. Naydenova; H. Bockhorn, (2014). Quantification of the local heat release rate during flame-vortex interactions at different Lewis numbers and equivalence ratios. Eurasian Chemico-Technological Journal, 16 (2-3), pp. 195-207.

- Denev, J.A.; I. Naydenova; H. Bockhorn, (2014). Unsteady Pure Straining Effects of Lean Premixed Flames of Different Lewis Numbers. Submitted to CTM.

radiation calculation. 9th OpenFOAM® Workshop in Zagreb, Croatia, 25.06.2014,

- G. Geiser; A. Hosseinzadeh; H. Nawroth; F. Zhang; H. Bockhorn; P. Habisreuther; J. Janicka; C.O. Paschereit; W. Schroeder, (2014). Thermoacoustics of a turbulent premixed flame, in *AIAA Paper*, vol. **44**, p. 2014-2476, (doi:10.2514/6.2014-2476).

- Horn, Harald; Klinger, Josef; Kolb, Thomas; Trimis, Dimosthenis, (2014). Engler-Bunte-Institut des Karlsruher Instituts für Technologie (KIT) und TZW: DVGW-Technologiezentrum Wasser, Karlsruhe im Jahre 2013. gwf-Gas Energie, 155, 400-418.

- Julia Sedlmaier; Peter Habisreuther; Nikolaos Zarzalis and Peter Jansohn, (2014). Influence of Liquid and Gaseous Fuel on Lifted Flames at Elevated Pressure Stabilized by Outer Recirculation, in *Proceedings of ASME Turbo Expo 2014: Power for Land, Sea and Air*, ASME, June 16-20, Düsseldorf, Germany, p. GT2014-25823, (doi:10.1115/GT2014-25823).

- Keller J., Volz M., Eiberger F., Gebretsadik M., Habisreuther P., Turrini F. and Zarzalis N.; (2014). Vortrag: *Implementation of a new injection model in OpenFOAM® for an aero engine injector*. 9th OpenFOAM® Workshop in Zagreb, Croatia, 25.06.2014,

- Mendes, Miguel A.A.; Pereira, José M.C.; Pereira, José C.F., (2014). Numerical study of methane TPOX within a small scale Inert Porous Media based reformer. International Journal of Hydrogen Energy, 39, (9), 43114321.(doi:10.1016/j.ijhydene.2013.12.192)

- Mendes, M.A.A. and Ray, S. and Trimis, D., (2014). Evaluation of effective thermal conductivity of porous foams in presence of arbitrary working fluid. International Journal of Thermal Sciences, 79, 260-265.

- Mendes, M.A.A. and Talukdar, P. and Ray, S. and Trimis, D., (2014). Detailed and simplified models for evaluation of effective thermal conductivity of open-cell porous foams at high temperatures in presence of thermal radiation. International Journal of Heat and Mass Transfer, 68, 612-624.

- Mendes, M.A.A. and Ray, S. and Trimis, D., (2014). An improved model for the effective thermal conductivity of open-cell porous foams. International Journal of Heat and Mass Transfer, 75, 224-230.

- Mendes, M.A.A. and Skibina, V. and Talukdar, P. and Wulf, R. and Gross, U. and Trimis, D. and Ray, S., (2014). Experimental validation of simplified conduction-radiation models for evaluation of Effective Thermal Conductivity of open-cell metal foams at high temperatures. International Journal of Heat and Mass Transfer, 78, 112-120.

- Micha&#322 Majcherczyk; Nikolaos Zarzalis and Fabio Turrini, (2014). Influence of the Turbulence Length Scale and Intensity on Spark Ignition of Kerosene Jet-A1-Air Mixtures at High Altitude Relight Conditions, in *Proceedings of ASME Turbo Expo 2014: Power for Land, Sea and Air*, ASME, June 16-20, Düsseldorf, Germany, p. GT2014-25332, (doi:10.1115/GT2014-25332).

- Ortona, A. and Trimis, D. and Uhlig, V. and Eder, R. and Gianella, S. and Fino, P. and D'Amico, G. and Boulet, E. and Chazelas, C. and Grömer, T. and Cresci, E. and Wünning, J.G. and Altena, H. and Beneke, F. and Debier, M., (2014). SiSiC heat exchangers for recuperative gas burners with highly structured surface elements. International Journal of Applied Ceramic Technology, 11, (5), 927-937.

- Sebbar, N. and Bozzelli, J.W. and Bockhorn, H., (2014). Thermochemistry and kinetics for 2-butanone-1-yl radical (CH 2Â·C(. Journal of Physical Chemistry A, 118, (1), 21-37.

- B. Stelzner; C. Keramiotis; S. Voss; M. Founti; D. Trimis, (2014). Analysis of the Flame Structure for lean Methane-Air Combustion in Porous Inert Media by resolving the Hydroxyl Radical, 35th International Symposium on Combustion, August, San Francisco, USA, .

- Volz M., Keller J., Eiberger F., Habisreuther P., Zarzalis N; (2014). Vortrag: *Extension of the standard k-epsilon-turbulence model for two-phase flows*. 9th OpenFOAM® Workshop in Zagreb, Croatia, 23.06.2014,

burning velocities of fuel-rich methane-oxygen mixtures. 3rd Heat Flux Burner Workshop, Berlin, September 25th, 2014,

- Wulf, R. and Mendes, M.A.A. and Skibina, V. and Al-Zoubi, A. and Trimis, D. and Ray, S. and Gross, U., (2014). Experimental and numerical determination of effective thermal conductivity of open cell FeCrAl-alloy metal foams. International Journal of Thermal Sciences, 86, 95-103.

- Zehmisch, R. and Demuth, C. and Al-Zoubi, A. and Mendes, M.A.A. and Ballani, F. and Ray, S. and Trimis, D., (2014). Numerical prediction of effective thermal conductivity of refractory materials: Methodology and sensitivity analysis. Journal of Ceramic Science and Technology, 5, (2), 145-154.

- F. Zhang; H. Bonart; P. Habisreuther; H. Bockhorn, (2014). Impact of Grid Refinement on Turbulent Combustion and Combustion Noise Modeling with Large Eddy Simulation, in *High Performance Computing in Science and Engineering '13*, vol. **16**, Editors: Wolfgang E. Nagel, Dietmar H. Kröner, Michael M. Resch, p. 259 274, (doi:10.1007/978-3-319-02165-2_19).

- F. Zhang; H. Bonart; P. Habisreuther; H. Bockhorn, (2014). Direct Numerical Simulation for an Assessment of the Correlation Between Heat Release Rate and Chemiluminescent Species in Turbulent Primixed Flames, in *Joint meeting of the British and Scandinavian-Nordic Sections of the Combustion Institute*, vol. **7**, p. 23-24, .

- Zhang, F.; Bonart, H.; Zirwes, T.; Habisreuther, P.; Bockhorn, H.; Poster: *On Direct Numerical Simulation of Turbulent Combustion with OpenFOAM*. NIC Symposium, Forschungszentrum Jülich, Germany, 12.13. February, 2014.

2013

... zum Anfang der Seite

- Aleksandar Aleksandrov, C. Kraus, H. Bockhorn, (2013). Verbrennung, Stabilität und Schadstoffbildung in Brennkammern mit Mehrfachbrenneranordnung, in *Chancen der Energiewende: Wissenschaftliche Beiträge des KIT zur 1. Jahrestagung des KIT-Zentrums Energie, 19.06.2012*, KIT-Zentrum Energie, p. 1-8, (ISBN 978-3-86644-985-5), (doi:10.5445/KSP/1000032863).

- Aleksandar Aleksandrov; Henning Bockhorn, (2013). Experimental Investigation of Soot Formation and Oxidation in Non-stationary Turbulent Flames in Technical Combustion Chambers, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P4-51, (ISBN 978-91-637-2151-9), .

- Anikin NB; Suntz R; Bockhorn H, (2013). Fast Optical Tomography for the Detection of OH star Distributions in Flames. Chemie Ingenieur Technik, 85, (5), 696-704.(doi:10.1002/cite.201200161)

- H. Bockhorn, Th. Häber, A. Liefke, (2013), Photokatalytische CO2-Reduktion mit Farbstoff-sensibilisierten Halbleitern (Solar2Fuel-II) - Modellreaktor, Simulation und Gesamtsystem. BMBF, Abschlussbericht, 13N11794, .

- Cesar Bedoya; Nikolaos Zarzalis; Peter Habisreuther, (2013). Pressure Effect on the Flame Stabilization in Porous Inert Media at Ultra Lean Conditions, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P3-81, (ISBN 978-91-637-2151-9), .

- Christian Kraus; Henning Bockhorn, (2013). Experimental and Numerical Investigation of Combustion Instabilities in Swirl-stabilized Flames Operated in Partially-premixed Mode, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P5-26, (ISBN 978-91-637-2151-9), .

- David Roth; Thomas Häber; Henning Bockhorn; Pratyush Sharma; Robert Schiessl; Ulrich Maas, (2013). Ignition of Explosive Gas Mixtures by Small Hot Particles, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P3-44, (ISBN 978-91-637-2151-9), .

ignition by mechanical sparks - Ignition temperatures of hydrogen/air mixtures ignited by small metal/ceramic particles, in *Proceedings of the 24th ICDERS*, IDERS, Taipei, Taiwan, .

- S. Dederichs; N. Zarzalis; P. Habisreuther; C. Beck; B. Prade; W. Krebs, (2013). Assessment of a Gas Turbine NOx Reduction Potential Based on a Spatiotemporal Unmixedness Parameter, in *Proceedings of ASME Turbo Expo 2013: Power for Land, Sea and Air*, ASME, June 3-7, San Antonio, USA, p. GT2013-94404, (doi:10.1115/GT2013-94404).

- Dederichs S.; Zarzalis N.; Habisreuther P.; Beck C.; Prade B. and W. Krebs, (2013). Assessment of a Gas Turbine NOx Reduction Potential Based on a Spatiotemporal Unmixedness Parameter. J. Eng. Gas Turbines Power, 135, (111504), 1-8.(doi:10.1115/1.4025078)

- Denev, J.A.; Vukadinovic, V.; Naydenova I.; Zarzalis, N.; Bockhorn, H., (2013). Experimental and Numerical Characterization of H2/Air Spherically Expanding Laminar Flame at Lean Conditions, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P1-69, (ISBN 978-91-637-2151-9), .

- Denev, J. A.; H. Bockhorn, (2013). DNS of Lean Premixed Flames, in *Transactions of the High Performance Computing Center, Stuttgart (HLRS), W.E Nagel, D.B.Kroener and M. Resh (Eds.)*, High Performance Computing in Science and Engineering ‘13, p. 245-258, (doi:10.1007/978-3-319-02165-2_18).

- Denev, J.A.; Bockhorn, H., (2013). A local look into the unsteady premixed combustion phenomena, in *26. Deutscher Flammentag, Verbrennung und Feuerungen, VDI-Berichte 2161*, VDI, Duisburg-Essen, 11.-12. September, p. 601-612, .

- Denev, J.A.; Bockhorn, H., (2013). Turbulent burning velocity in premixed combustion, in *Proceedings of The spark ignition engine of the future International conference and exhibition*, December 4&5, Strasbourg, France, p. 7, .

- I. Dinkov, M. Bauer, H. Bockhorn, (2013). Flammenstabilisierung in einem radial-durchströmten Porenbrenner, in *Chancen der Energiewende : wissenschaftliche Beiträge des KIT zur 1. Jahrestagung des KIT-Zentrums Energie, 19.06.2012. (KIT Scientific Reports ; 7640)*, KIT-Zentrum Energie (Energie) Zentrale Einrichtungen (Zentrale Einrichtungen), p. 9-17, (ISBN 978-3-86644-985-5), (doi:10.5445/KSP/1000032863).

- Drehmann, R. and Rupprecht, C. and Wielage, B. and Lampke, T. and Gilbert, M. and Uhlig, V. and Trimis, D., (2013). Thermally sprayed diffusion barrier coatings on C/C light-weight charging racks for furnace applications. Surface and Coatings Technology, 214, 144-152.

- Galeazzo F C C, Donnert G, Cárdenas C, Sedlmaier J, Habisreuther P, Zarzalis N, Beck C and Krebs W, (2013). Computational Modeling of Turbulent Mixing in a Jet in Crossflow. Int. J. Heat Fluid Flow, 41, 55-65.(doi:10.1016/j.ijheatfluidflow.2013.03.012)

- Habisreuther P.; Galeazzo F.C.C.; Prathap P.; and N. Zarzalis, (2013). Structure of Laminar Premixed Flames of Methane near the Auto-Ignition Limit. Combust. Flame, 160, (12), 2770-2782.(doi:10.1016/j.combustflame.2013.06.023)

- S. Harth, N. Zarzalis, H.-J. Bauer, F. Turrini, (2013). Evaluation of a Piloted Lean Injection System in Terms of Emission Performance and Flame Structure at Elevated Pressure, in *Proceedings of ASME Turbo Expo 2013: Power for Land, Sea and Air*, ASME, June 3-7, San Antonio, USA, p. GT2013-94371, (doi:10.1115/GT2013-94371).

- Hartl S.; Hasse C.; Rau F.; Voss S.; Trimis D., (2013). Numerische und experimentelle Untersuchungen der laminaren Brenngeschwindigkeit von ethanolhaltigen Brennstoffen - Vergleich von Iso-Oktan/Ethanol basierten Reaktionsmechanismen mit ausgewählten Messungen am Heat Flux Modellbrenner, in *26. Deutscher Flammentag, Verbrennung und Feuerungen, VDI-Berichte 2161*, VDI, Duisburg-Essen, 11.-12. September, p. 827-832, .

Effects in a Partial Oxidation Flame Including Optically Thin and Dense Regions, SIAM International Conference on Turbulent Combustion, April, San Antonio, USA, .

- F. Hunger; B. Stelzner; D. Trimis; C. Hasse, (2013). Flamelet-modeling of inverse rich diffusion flames. Flow, Turbulence and Combustion, 90, (4), 833-857.

- Ilian Dinkov; Peter Habisreuther; Henning Bockhorn, (2013). Numerical Prediction of Burning Velocity and Flame Thickness in a Radial-flow Porous Burner, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P5-78, (ISBN 978-91-637-2151-9), .

- Kasabov, P.; Habisreuther, P.; Zarzalis, N., (2013). Experimental Study on Lifted Flames Operated with Liquid Kerosene at Elevated Pressure and Stabilized by Outer Recirculation. Flow, Turbulence and Combustion, 90, (3), 605-619.(doi:10.1007/s10494-013-9444-1)

- Lehmann, H. and Werzner, E. and Mendes, M.A.A. and Trimis, D. and Jung, B. and Ray, S., (2013). In situ data compression algorithm for detailed numerical simulation of liquid metal filtration through regularly structured porous media. Advanced Engineering Materials, 15, (12), 1260-1269.

- Mancini M.; Weber R.; Weigand P.; Leuckel W.; Kolb T., (2013). Design of the entrained flow reactor for gasification of biomass based slurry, in *26. Deutscher Flammentag, Verbrennung und Feuerungen, VDI-Berichte 2161*, VDI, Duisburg-Essen, 11.-12. September, p. 625-634, .

- Mendes, M.A.A. and Ray, S. and Trimis, D., (2013). A simple and efficient method for the evaluation of effective thermal conductivity of open-cell foam-like structures. International Journal of Heat and Mass Transfer, 66, 412-422.

- Messig D., Hunger F., Keller J., Hasse C., (2013). Evaluation of radiation modeling approaches for non-premixed flamelets considering a laminar methane air flame. Combustion and Flame, Volume 160, (Issue 2), 251264.(doi:10.1016/j.combustflame.2012.10.009)

- Michael Ströbele; Henning Bockhorn, (2013). Effect of Synthesis Conditions on the Content of Polycyclic Aromatic Hydrocarbons on Carbon Black Nanoparticles, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P5-52, (ISBN 978-91-637-2151-9), .

- Michal Majcherczyk; Nikolaos Zarzalis; Fabio Turrini; Ignazio Vitale, (2013). Spark Ignition of Flowing Kerosene Jet-A1 - Air Mixtures at High Altitude Relight Conditions, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P1-83, (ISBN 978-91-637-2151-9), .

- Nadia Sebbar; Henning Bockhorn; Jörg Appel, (2013). Kinetics Development for the P_2O_3/P_2O_5 -catalyzed Pyrolysis of Acetic Acid to Ketene Formation, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P5-6, (ISBN 978-91-637-2151-9), .

- Navalho, J.E.P. and Frenzel, I. and Loukou, A. and Pereira, J.M.C. and Trimis, D. and Pereira, J.C.F., (2013). Catalytic partial oxidation of methane rich mixtures in non-adiabatic monolith reactors. International Journal of Hydrogen Energy, 38, (17), 6989-7006.(doi:10.1016/j.ijhydene.2013.02.141)

- H. Nawroth; C. O. Paschereit; F. Zhang; P. Habisreuther; H. Bockhorn, (2013). Flow Investigation and Acoustic Measurements of an Unconfined Turbulent Premixed Jet Flame, in *AIAA Paper*, vol. **43**, AIAA, p. 2013-2459, (doi:10.2514/6.2013-2459).

- Nikolay B. Anikin; Thomas Häber; Daniel Schwamberger; Rainer Suntz; Henning Bockhorn, (2013). 2-dimensional Tomographic Mapping of OH*-chemiluminescence and Thermal Radiation of Soot in Laminar Diffusion Flames, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P1-20, (ISBN 978-91-637-2151-9), .

- Orkun Ovez Nalcaci; Henning Bockhorn, (2013). Effect of Oxygen to Fuel Ratio on the Formation of Nano Silicon Dioxide Particles in a Low Pressure Hydrogen Flame, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P3-50, (ISBN 978-91-637-2151-9), .

26. Deutscher Flammentag, Verbrennung und Feuerungen, VDI-Berichte 2161, VDI, Duisburg-Essen, 11.-12. September, p. 845-851, .

- P. Parthasarathy, P. Habisreuther, N. Zarzalis, (2013). Evaluation of Longitudinal Dispersion Coefficient in Open-Cell Foams Using Transient Direct Pore Level Simulation. Chemical Engineering Science, 90, 242-249.(doi:10.1016/j.ces.2012.12.041)

- Preise O.; Voss S.; Trimis D., (2013). Verbrennung von chlorierten Kohlenwasserstoffen - Laserdiagnostische Untersuchungen der Flammenstruktur von chlorierten Kohlenwasserstoffen, in *26. Deutscher Flammentag, Verbrennung und Feuerungen, VDI-Berichte 2161*, VDI, Duisburg-Essen, 11.-12. September, p. 819-822, .

- Robbin Bhagwan; Nikolaos Zarzalis; Peter Habisreuther; Fabio Turrini; An Experimental Comparison of the Combustion Characteristics of Standard Jet A-1 and Synthetic Jet Fuels. In *Impulse für die Zukunft der Energie. Wissenschaftliche Beiträge des KIT zur 2. Jahrestagung des KIT-Zentrums Energie*, Breh, Wolfgang; Sauer, Dominique (ed.), KIT Scientific Publishing, 13.06.2013, p. 97-102, (doi:10.5445/KSP/1000036425) 2013.

- Robbin Bhagwan; Peter Habisreuther; Fabio Turini; Nikos Zarzalis, (2013). Effect of Blending of Hexanol and Naphthenic Cut on Combustion Characteristics of Fisher Tropsch Synthetic Paraffinic Kerosene, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P3-88, (ISBN 978-91-637-2151-9), .

- Robbin Bhagwan; Peter Habisreuther; Fabio Turini; Nikos Zarzalis; Poster: *An Experimental Comparison of the Combustion Characteristics of Standard Jet A-1 and Synthetic Jet Fuels*. FTU-North Campus KIT, 13.06.2013, 2013.

- Robbin Bhagwan; Peter Habisreuther; Fabio Turini; Nikos Zarzalis, (2013). An Experimental Comparison of the Combustion Characteristics of Standard Jet A-1 and Synthetic Jet Fuels, in *Energietag 2013*, KIT-Zentrums Energie, FTU-North Campus KIT, .

- Salenbauch S.; Hasse C.; Frenzel I.; Trimis D., (2013). Numerische und Experimentelle Untersuchung der Rußbildung und Partikelgrößenverteilung in laminaren Vormischflammen, in *26. Deutscher Flammentag, Verbrennung und Feuerungen, VDI-Berichte 2161*, VDI, Duisburg-Essen, 11.-12. September, p. 881-884, .

- Sedlmaier J.; Cárdenas C.; Habisreuther P.; Zarzalis N., (2013). Untersuchung des Mischungsverhaltens einer Jet-in-Crossflow Anordnung in Abhängigkeit der Reynolds-Zahl, in *26. Deutscher Flammentag, Verbrennung und Feuerungen, VDI-Berichte 2161*, VDI, Duisburg-Essen, 11.-12. September, p. 433-444, .

- Steffen Waglöhner; Dirk Reichert; Henning Bockhorn; Sven Kureti, (2013). Studies on the Effect of Physico‐Chemical Soot Properties and Feed Gas Composition on the Kinetics of Soot Oxidation on Fe_2O_3 Catalyst. Chemie Ingenieur Technik, 85, (5), 686695.(doi:10.1002/cite.201200218)

- B. Stelzner; F. Hunger; S. Voss; C. Hasse; D. Trimis, (2013). Flame structure analysis of oxygen-enhanced flames, 6th European Combustion Meeting, June, Lund, Sweden, .

- B. Stelzner; D. Trimis, (2013). Temperature measurements in oxy-fuel non-premixed combustion using laser-induced fluorescence, 5th GERG, May, Paris, France, .

- B. Stelzner; S. Voss; D. Trimis, (2013). Temperature measurements in oxy-fuel non-premixed combustion using laser-induced fluorescence, GRC: Laser Diagnostics in Combustion , August, Waterville (N.H.), USA, .

- B. Stelzner; F. Hunger; S. Voss; C. Hasse; D. Trimis, (2013). Untersuchung einer Modellflamme für Vergasungsprozesse von schwierigen Kohlen unter erhöhtem Druck - Experimentelle und numerische Untersuchung der Flammenzone an einer inversen CH_4/CO_2-O_2-Diffusionsflamme, in *26. Deutscher Flammentag, Verbrennung und Feuerungen, VDI-Berichte 2161*, VDI, 11.-12. September, Duisburg-Essen, Germany, p. 527-536, .

of rich inverse diffusion flame structure. Proceedings of the Combustion Institute, 34, (1), 1045-1055.

- B. Stelzner; F. Hunger; A. Laugwitz; M. Gräbner; S. Voss; K. Uebel; M. Schurz; R. Schimpke; S. Weise; S. Krzack; D. Trimis; C. Hasse; B. Meyer, (2013). Development of an inverse diffusion partial oxidation flame and model burner contributing to the development of 3rd generation coal gasifiers. Fuel Processing Technology, 110, 33-45.

- Sänger A.; Jacobs T.; Djordjevic N.; Zarzalis N.; Kolb T, (2013). Basic investigations on burner design for high pressure entrained flow gasifier: Influence of pressure and fluid viscosity on twin fluid atomization, in *26. Deutscher Flammentag, Verbrennung und Feuerungen, VDI-Berichte 2161*, VDI, Duisburg-Essen, 11.-12. September, p. 321-332, .

- Talukdar, P. and Mendes, M.A.A. and Parida, R.K. and Trimis, D. and Ray, S., (2013). Modelling of conduction-radiation in a porous medium with blocked-off region approach. International Journal of Thermal Sciences, 72, 102-114.

-

- Tobias Kessler; Christoph Schneider; Dietmar Kuhn; Henning Bockhorn; Andreas G. Class, (2013). Laser Induced Ignition of Methane Free Jets, in *Proceedings of the European Combustion Meeting 2013*, June 25-28, 2013, Lund, Sweden, p. Paper P5-16, (ISBN 978-91-637-2151-9), .

- Voss, S. and Mendes, M.A.A. and Pereira, J.M.C. and Ray, S. and Pereira, J.C.F. and Trimis, D., (2013). Investigation on the thermal flame thickness for lean premixed combustion of low calorific H2/CO mixtures within porous inert media. Proceedings of the Combustion Institute, 34, (2), 3335-3342.

- V. Vukadinovic; N. Zarzalis; P. Habisreuther; R. Suntz, (2013). Influence of Pressure on Markstein Number Effects in Turbulent Flame Front Propagation , in *Proceedings of ASME Turbo Expo 2013: Power for Land, Sea and Air*, ASME, June 3-7, San Antonio, USA, p. GT2013-94307, (doi:10.1115/GT2013-94307).

- V. Vukadinovic; P. Habisreuther and N. Zarzalis, (2013). Influence of pressure and temperature on laminar burning velocity and Markstein number of kerosene Jet A-1: Experimental and numerical study. Fuel, 111, 401-410.(doi:10.1016/j.fuel.2013.03.076)

- Werzner, E. and Mendes, M.A.A. and Ray, S. and Trimis, D., (2013). Numerical investigation on the depth filtration of liquid metals: Influence of process conditions and inclusion properties. Advanced Engineering Materials, 15, (12), 1307-1314.

- Wollgarten J.C., Gebretsadik M., Zarzalis N., Nuri Sara O., Turrini F., DiMartino P., (2013). Experimental Investigation of Airblast Atomization by Variation of Dynamic Pressure and a Geometrical Scaling Factor. Proceedings of the ILASS Europe 2013, 25th European Conference on Liquid Atomization and Spray Systems, Chania, Greece, 1-4 September 2013,

- F. Zhang; H. Bonart; P. Habisreuther; H. Bockhorn, (2013). Direct Numerical Simulations of Turbulent Combustion with OpenFOAM, in *Proceedings of the 26. Deutscher Flammentag*, vol. **26**, p. 867-872, .

- F. Zhang; P. Habisreuther; H. Bockhorn, (2013). Application of the UTFC model to numerical simulation of turbulent combustion, in *Chancen der Energiewende : wissenschaftliche Beiträge des KIT zur 1. Jahrestagung des KIT-Zentrums Energie, 19.06.2012. (KIT Scientific Reports ; 7640)*, vol. **1**, p. 35-40, (ISBN 978-3-86644-985-5), (doi:http://dx.doi.org/10.5445/KSP/1000032863).

- F. Zhang; P. Habisreuther; H. Bockhorn, (2013). Application of the unified turbulent flame-speed closure (UTFC) combustion model to numerical computation of turbulent gas flames, in *High Performance Computing in Science and Engineering '12*, Editors: Wolfgang E. Nagel, Dietmar H. Kröner, Michael M. Resch, p. 187-205, (ISBN 978-3-642-33374-3, online), (doi:10.1007/978-3-642-33374-3_16).

- F. Zhang; H. Bonart; P. Habisreuther; H. Bockhorn; (2013). Vortrag: *On Prediction of Combustion Generated Noise with help of Direct Numerical Simulation*. Euromech Colloquium 546:Combustion Dynamics and Combustion Noise. Villa Vigoni, Menaggio, Italy, May 13-16, 2013,

of DTBP Pool Fires. In *Wissenschaftliche Beiträge des KIT zur 2. Jahrestagung des KIT-Zentrums Energie, Doktorandensymposium*, Breh, Wolfgang; Sauer, Dominique (ed.), KIT Scientific Publishing, 13.06.2013, p. 103-108, (doi:10.5445/KSP/1000036425) 2013.

- F. Zhang; P. Habisreuther; H. Bockhorn; H. Nawroth; C. O. Paschereit, (2013). On Prediction of Combustion Generated Noise with the Turbulent Heat Release Rate. ACTA ACUSTICA UNITED WITH ACUSTICA, 99, (6), 940-951.

2012

... zum Anfang der Seite

- A. Aleksandrov, C. Kraus, M. Charwath, R. Suntz, H. Bockhorn, (2012), Experimental Investigation and Modeling of Soot Formation and Oxidation in Non-adiabatic, Non-stationary Laminar and Turbulent Flames in Technical Combustion Chambers. 3rd Annual Meeting of the COST Action CM0901 Detailed Chemical Kinetic Models for Cleaner Combustion, .

- Camilo Cárdenas , Jordan A. Denev , Rainer Suntz , Henning Bockhorn, (2012). Study of parameters and entrainment of a jet in cross-flow arrangement with transition at two low Reynolds numbers. Experiments in Fluids, 53, (4), 965-987.(doi:10.1007/s00348-012-1333-1)

- Cesar Bedoya, Peter Habisreuther, Nikolaos Zarzalis, Chockalingam Prathap and Hadi Ebrahimi, (2012). Study on the Influence of Pressure on the Flame Stabilization in Porous Inert Media (PIM), in *Proceedings of ASME Turbo Expo 2012: Power for Land, Sea and Air*, ASME, June 11-15, Copenhagen, Denmark, p. GT2012-68234, (doi:10.1115/GT2012-68234).

- J. A. Denev, C. J. Falconi, H. Bockhorn, (2012). Wavelet Decomposition of Turbulent Velocity and its Application to Subgrid Scale Modeling, in *Proceedings of ICCFD7, International Conference on Computational Fluid Dynamics, Mauna Lani Bay Hotel, Island of Hawaii, July 9-13*, p. 10, .

- I. Dinkov, C. Bedoya, N. Zarzalis, H. Bockhorn, (2012), 3D direct pore level simulations of the flame stabilization in porous inert media. 3rd Annual Meeting of COST, 5.-7.9.2012, Scientific Report, ISBN 978-619-036-6, .

- Djordjevic N., Habisreuther P. and N. Zarzalis, (2012). Porous Burner for Application in Stationary Gas Turbines: An Experimental Investigation of the Flame Stability, Emissions and Temperature Boundary Condition. Flow Turbulence and Combustion, 89, (2), 261-274.(doi:10.1007/s10494-011-9381-9)

- N. Djordjevic, P. Habisreuther, N. Zarzalis, (2012). Experimental study on the basic phenomena of flame stabilization in a porous burner for a premixed combustion application. Energy Fuels, 26, (11), 6705-6719.(doi:10.1021/ef3013008)

- Flavio Cesar Cunha Galeazzo, Chockalingam Prathap, Matthias Kern, Peter Habisreuther, Nikolaos Zarzalis, Christian Beck, Werner Krebs and Bernhard Wegner, (2012). Investigation of a Flame Anchored in Crossflow Stream of Vitiated Air at Elevated Pressures, in *Proceedings of ASME Turbo Expo 2012: Power for Land, Sea and Air*, ASME, June 11-15, Copenhagen, Denmark, p. GT2012-69632, (doi:10.1115/GT2012-69632).

- Frenzel, I. and Loukou, A. and Trimis, D. and Schroeter, F. and Mir, L. and Marin, R. and Egilegor, B. and Manzanedo, J. and Raju, G. and De Bruijne, M. and Wesseling, R. and Fernandes, S. and Pereira, J.M.C. and Vourliotakis, G. and Founti, M. and Posdziech, O., (2012). Development of an SOFC based micro-CHP system in the framework of the European project FC-DISTRICT, vol. **28**, p. 170-181, .

- Galeazzo F. C. C., Donnert G., Habisreuther P., Zarzalis N., Beck C. and W. Krebs, (2012). Computational Modeling of Turbulent Mixing in a Jet In Crossflow, in *9th International ERCOFTAC Symposium on Engineering Turbulence Modelling and Measurements, ETMM9*, ERCOFTAC, June 5-8, Thessaloniki, Greece, p. 1-6, CDROM, .

- Gilbert, M. and Eder, R. and Uhlig, V. and Trimis, D., (2012). Tribological examination of modern charging racks: Investigations of friction between bearing steel and rack materials [Tribologische Betrachtung moderner Chargiergestelle: Untersuchungen zur Reibung zwischen Lagerstahl und Gestellwerkstoffen].

- S. Harth, N. Zarzalis, H.-J. Bauer; Poster: *Ultra-Low NOx (ULN) Injection System*. KIAI & TECC-AE Public Workshop, Florence / Italy, 17-18 September, 2012.

- F. Hunger; B. Stelzner; S. Voss; D. Trimis; C. Hasse, (2012). Simulation of a Laminar Partial Oxidation Flame, 11th TNF Workshop, July, Darmstadt, Germany, .

- Jacobi A; Bucharsky EC; Schell KG; Habisreuther P; Oberacker R; Hoffmann MJ; Zarzalis N and C Posten, (2012). The Application of Transparent Glass Sponge for Improvement of Light Distribution in Photobioreactors. J Bioproces Biotechniq, 2, (113), 1-8.(doi:10.4172/2155-9821.1000113)

- Keller J., Volz M., Eiberger F., Habisreuther P. and Zarzalis N; (2012). Vortrag: *Modeling Swirl Stabilized Turbulent Diffusion Flames with Tabulated Chemistry in OpenFOAM®*. 7th OpenFOAM® Workshop in Darmstadt, 27 Juni,

- C. Keramiotis; B. Stelzner; D. Trimis; M. Founti, (2012). Porous burners for low emission combustion: An experimental investigation. Energy, 45, (1), 213-219.

- Kreutzmann, D. and Möntmann, D. and Pohland Vom Schloß, H. and Lucka, K. and Teneva-Kosseva, G. and Uhlig, V. and Trimis, D., (2012). Monitoring and prediction of the degradation of insulating materials in thermal processing equipments [Überwachung und Prognose der Degradation von Wärmedä mmmaterialien in Thermoprozessanlagen]. Chemie-Ingenieur-Technik, 84, (1-2), 54-62.

- Lampke, T. and Drehmann, R. and Rupprecht, C. and Trimis, D. and Gilbert, M. and Uhlig, V., (2012). Combined diffusion barrier and wear-resistant thermal spray coatings on light-weight charging racks in furnace applications, p. 87-92, .

- Loukou, A. and Frenzel, I. and Klein, J. and Trimis, D., (2012). Experimental study of hydrogen production and soot particulate matter emissions from methane rich-combustion in inert porous media. International Journal of Hydrogen Energy, 37, (21), 16686-16696.

- Marinov S., Kern M., Zarzalis N. and P. Habisreuther, (2012). Similarity Issues of Kerosene and Methane Confined Flames Stabilized by Swirl in regard to the Weak Extinction Limit. Flow, Turbulence and Combustion, 89, (1), 73-95.(doi:10.1007/s10494-012-9392-1)

- Mendes, M.A.A. and Ray, S. and Pereira, J.M.C. and Pereira, J.C.F. and Trimis, D., (2012). Quantification of uncertainty propagation due to input parameters for simple heat transfer problems. International Journal of Thermal Sciences, 60, 94-105.

- Messig D., Keller J., Hasse C.; (2012). Vortrag: *Modeling of laminar partially premixed dimethyl ether flames*. TNF11 Eleventh International Workshop on Measurement and Computation of Turbulent Flames" Darmstadt, 26-28 July,

- Messig D., Keller J., Fuest F., Dreizler A. and Hasse C.; (2012). Vortrag: *Modeling of laminar partially premixed dimethyl ether flames using detailed chemistry and transport approaches*. 7th OpenFOAM® Workshop in Darmstadt, 27 Juni,

- S. Montenegro; B. Stelzner; R. Pirone; D. Fino; D. Trimis, (2012). Experimental Determination of Heat Release in an Inverse Diffusion Flame Using Laser Induced Fluorescence Spectroscopy, XXXV Meeting of the Italian Section of the Combustion Institute, October, Milano, Italy, .

- Nadia Sebbar, Leonhard Rutz, Thomas Finke, and Henning Bockhorn, (2012). Numerical Study of the Zirconium Oxide System. Soft Materials, 10(13), 344368.

- Nadia Sebbar, Leonhard Rutz and Henning Bockhorn, (2012). Thermochemical Properties for Hydrogenated and Oxy-hydrogenated Aluminium Species. Soft Materials, 10(13), 313343.

- Nadia Sebbar, Leonhard Rutz, and Henning Bockhorn, (2012). Prediction of Thermodynamic and Kinetics Parameters for Interfacial Reactions of the SiO2 System by Quantum Chemistry Methods. Soft Materials, 10(13), 285312.

and Numerical Investigation of a Turbulent Premixed Flame in an Anechoic Environment, in *AIAA Paper*, vol. **42**, AIAA, p. 2012-3072, .

- P. Parthasarathy, P. Habisreuther, N. Zarzalis., (2012). Identification of Radiative Properties of Reticulated Ceramic Porous Inert Media using Ray-tracing Technique. Journal of Quantitative Spectroscopy & Radiative Transfer, 113, 1961-1969.(doi:10.1016/j.jqsrt.2012.05.017)

- Prathap, C.; Galeazzo, F.C.C.; Kasabov, P.; Habisreuther, P.; Zarzalis, N; Beck, C; Krebs, W; Wegner, B, (2012). Analysis of NO X formation in an axially staged combustion system at elevated pressure conditions. Journal of Engineering for Gas Turbines and Power, 134, (3), 031507.(doi:10.1115/1.4004720)

- Ray, S. and Loukou, A. and Trimis, D., (2012). Evaluation of heat conduction through truncated conical shells. International Journal of Thermal Sciences, 57, 183-191.

- B. Stelzner; F. Hunger; S. Voss; C. Hasse; D. Trimis, (2012). Experimental and numerical study of rich inverse diffusion flame structure, 34th International Symposium on Combustion, July/August, Warsaw, Poland, .

- Trimis, D. and Anger, S. and Otto, B. and Nitzsche, J. and Grosser, K. and Krause, H., (2012). Decentralized production of hydrogen for fuel cells [Dezentrale wasserstoffproduktion für brennstoffzellen]. BWK - Energie-Fachmagazin, 64, (1-2), 58.

- Vlade Vukadinovic, Peter Habisreuther and Nikolaos Zarzalis, (2012). Experimental Study on Combustion Characteristics of Conventional and Alternative Liquid Fuels, in *Proceedings of ASME Turbo Expo 2012: Power for Land, Sea and Air*, ASME, June 11-15, Copenhagen, Denmark, p. GT2012-69449, (doi:10.1115/GT2012-69449).

- Voigt T.; Habisreuther P.; Zarzalis, (2012). Vortex-flame interaction leading to flame flashback in a premixed combustion system - A numerical study, in *Proceedings of the Seventh International Symposium on Turbulence, Heat and Mass Transfer*, ICHMT, Palermo, Italy, September 24-27 2012, K. Hanjalic, Y. Nagano, D. Borello and S. Jarkirlic (Editors), Bergel House Inc., p. 721-724, (ISBN 978-1-56700-301-7), .

- Voigt T.; Habisreuther P.; Zarzalis, (2012). Vortex-flame interaction leading to flame flashback in a premixed combustion system - A numerical study, in *Proceedings of the Seventh International Symposium on Turbulence, Heat and Mass Transfer*, ICHMT, Palermo, Italy, September 24-27 2012/ K. Hanjalić, Y. Nagano, D. Borello and S. Jakirlić (Editors); Begell House Inc., p. 1-12, extended verson on CDROM, (ISBN 978-1-56700-302-4), (doi:10.1615/ICHMT.2012.ProcSevIntSympTurbHeatTransfPal.1180).

- Vukadinovic V; Habisreuther P; Zarzalis N, (2012). Experimental Study on Combustion Characteristics of Conventional and Alternative Liquid Fuels. J. Eng. Gas Turbines Power, 134, (12), 121504 (9 pages).(doi:10.1115/1.4007333)

- F. Zhang; P. Habisreuther; M. Hettel; H. Bockhorn, (2012). Numerical computation of combustion induced noise using compressible LES and hybrid CFD/CAA methods. Acta Acustica united with Acustica, 98, (1), 120-134.(doi:10.3813/AAA.918498)

- F. Zhang; G. Geiser; P. Habisreuther; H. Bockhorn; W. Schröder; (2012). Vortrag: *Impact of grid refinement on combustion noise prediction*. Euromech Fluid Mechanics Conference - 9 (EFMC9), Rome, Italy, 9.-13.Sept.,

2011

... zum Anfang der Seite

- S. Anger; D. Trimis; B. Stelzner; Y. Makhynya; S. Peil, (2011). Development of a porous burner unit for glycerine utilization from biodiesel production by Supercritical Water Reforming. International Journal of Hydrogen Energy, 36, (13), 7877-7883.(doi:10.1016/j.ijhydene.2011.01.058)

premixed combustion in a gaseous fuel porous inert media under high pressure and temperature: Novel flame stabilization technique. Fuel, 90, (2), 647-658.

- Bucharsky, E. C.; Schell, K. G.; Habisreuther, P.; Oberacker, R.; Zarzalis, N.; Hoffmann, M. J., (2011). Preparation of Optically Transparent Open-Celled Foams and its Morphological Characterization Employing Volume Image Analysis. Advanced Engineering Materials, 13, (11), 10601065.(doi:10.1002/adem.201100024)

- Camilo Cárdenas, Julia Sedlmaier, Nikolaos Zarzalis, Richard J. Valdes, Werner Krebs, (2011). Measurement of a Benchmarking Jet in Crossflow Configuration under Highly Turbulent Conditions, in *Proceedings of ASME Turbo Expo 2011: Power for Land, Sea and Air*, ASME, Vancouver, Canada, p. GT2011-45262, (doi:10.1115/GT2011-45262).

- I. Dinkov, M. Odinius, P. Habisreuther and H. Bockhorn, (2011). Mild Combustion Characterization of a Liquid Fuelled Combustor Using Homogeneity Parameters, in *INFUB 2011*, Estoril, Portugal, .

- Dinkov I., Odinius M., Habisreuther P. and Bockhorn H., (2011). Flammenlose Oxidation flüssiger Brennstoffe in Brennkammern mit engem Umschließungsverhältniss, in *25. Deutscher Flammentag, VDI-Berichte*, vol. **2119**, VDI, Karlsruhe, Germany, 14.-15. September, p. 333-338, .

- N.Djordjevic, P.Habisreuther and N.Zarzalis, (2011). A numerical investigation of the flame stability in porous burners employing various ceramic sponge-like structures. Chem. Eng. Sci., 66, (4), 682-688.(doi:10.1016/j.ces.2010.11.012)

- Ferchau, E. and Fischer, H. and Krause, H. and Manig, R. and Nitzsche, J. and Protze, C. and Trimis, D. and Wesolowski, S., (2011). Biogas generation using glycerine and soap-water from FAME production [Biogaserzeugung aus nebenprodukten der RME-herstellung]. GWF, Gas - Erdgas, 152, (9), 524-532.

- Galeazzo F. C. C., Donnert G., Habisreuther P., Zarzalis N., Valdes R. J., Krebs W., (2011). Measurement and Simulation of Turbulent Mixing in a Jet in Crossflow. Journal of Engineering for Gas Turbines and Power, 133, (6), 061504.1-10.(doi:10.1115/1.4002319)

- Galeazzo, Flavio Cesar Cunha; Habisreuther, Peter; Zarzalis, Nikolaos; Large Eddy Simulations of a Jet in Crossflow. In *High Performance Computing in Science and Engineering '10*, Nagel, Wolfgang E. and Kröner, Dietmar B. and Resch, Michael M. (ed.), Springer Berlin Heidelberg, p. 327-337, (doi:10.1007/978-3-642-15748-6_25) 2011.

- Galeazzo, F.C.C.; Kern, M.; Habisreuther, P.; Zarzalis, N.; Beck, C., (2011). Simulation of a lifted flame in a vitiated air environment, in *Proceedings of the European Combution Meeting 2011*, British Section of the Combustion Institute, Cardiff, UK, .

- Galeazzo, F. C. C.; Prathap, C.;Kern, M.;Habisreuther, P.;Zarzalis, N.;Beck, C., (2011). Investigations of an axially staged combustion system at elevated pressure conditions, in *25. Deutscher Flammentag, Karlsruhe, 14. und 15. September 2011*, p. 265-270, .

- C. Hasse; K. Uebel; B. Stelzner, (2011). Flame structure and flamelet analysis of an inverse diffusion flame, in *13th Int. Conf. on Numerical Combustion*, April, Corfu, Greece, .

- Haußmann, M.; B. Reznik, H. Bockhorn and J. A. Denev, (2011). Thermal Degradation of Polymethylsilsesquioxane and Microstructure of the Derived Glasses. Journal of Analytical and Applied Pyrolysis, 91(1), 224-231.(doi:10.1016/j.jaap.2011.02.016)

- Henning Haessler, Henning Bockhorn, Christian Pfeifer, Dietmar Kuhn, (2011). Formaldehyde-LIF of Dimethyl Ether During Auto-ignition at Elevated Pressures. Flow, Turbulence and Combustion, online first.(doi:10.1007/s10494-011-9374-8)

- Hettel, M.; Seidelt, S.; Haußmann, M.; Bockhorn H., (2011). Modellierung der Holzverbrennung: Pyrolysekinetik und Partikelmodell, in *VDI-Berichte*, vol. **2119**, 25. Deutscher Flammentag, Karlsruhe, 14. und 15. September 2011, p. 87-93, .

1st ERCOFTAC Conference on Simulation of Multiphase Flows in Gasification and Combustion, September, Dresden, Germany, .

- Kern, M.; Marinov, S.; Habisreuther, P.; Zarzalis, N.; Peschiulli, A.; Turrini, F., (2011). Characteristics of an Ultra-Lean Swirl Combustor Flow by LES and Comparison to Measurements, in *Proceedings of ASME Turbo Expo 2011*, ASME Turbo Expo 2011, Vancouver, Canada, p. GT2011-45300, (doi:10.1115/GT2011-45300).

- Manhart, M.; Ch. Rapp, N. Peller, M. Breuer, O. Aybay, J.A. Denev and C. J. Falconi; Assessment of eddy resolving techniques for the flow over periodically arranged hills up to Re=37000. In *ERCOFTAC Series, 2011*, Spinger Verlag, Berlin Heidelberg, p. 361-370, (doi:10.1007/978-94-007-0231-8_33) 2011.

- Mendes, M.A.A.; Pereira, J.M.C.; Pereira, J.C.F., (2011). Calculation of premixed combustion within inert porous media with model parametric uncertainty quantification. Combustion and Flame, 158, (3), 466-476.(doi:10.1016/j.combustflame.2010.09.015)

- Nadia Sebbar, Joseph W. Bozzelli, and Henning Bockhorn , (2011). Thermochemistry and Reaction Paths in the Oxidation Reaction of Benzoyl Radical: C6H5C(=O). J. Phys. Chem. A, 115, 1189711914.

- Nadia Sebbar, Joseph William Bozzelli, Henning Bockhorn, (2011). Thermochemistry and Kinetics for 2-Butanone-3yl Radical (CH3C(=O)CHCH3) Reactions with O2. Z. Phys. Chem., 225, 9931018.

- Nadia Sebbar, Joseph W. Bozzelli, Henning Bockhorn; (2011). Vortrag: *A Kinetic Study of the C6H5C(=O) O2 Reaction*. The 7th International Conference on Chemical Kinetics, Cambridge, MA USA, July 10 - 14 ,

- Nalcaci, O.O.; Böke, N.; Ovez, B., (2011). Potential of the Bacterial Strain Acidovorax avenae subsp. avenae LMG 17238 and Macro Algae Gracilaria Verrucosa for Denitrification. Desalination, In Press.(doi:10.1016/j.desal.2011.01.067)

- P. Parthasarathy, P. Habisreuther, N. Zarzalis.; Poster: *Identification of radiative properties of a reticulated porous media using ray tracing technique*. 25. Deutscher Flammentag, Karlsruhe, 14. und 15. September, 2011.

- Prathap, C.; Galeazzo, F.C.C.; Kasabov, P.; Habisreuther, P.; Zarzalis, N.; Beck, C.; Krebs, W.; Wegner, B., (2011). Analysis of NOx Formation in an Axially Staged Combustion System at Elevated Pressure Conditions, in *Proceedings of ASME Turbo Expo 2011*, ASME Turbo Expo 2011, Vancouver, Canada, p. GT2011-45239, (doi:10.1115/GT2011-45239).

- Raimondi, A. and Loukou, A. and Fino, D. and Trimis, D., (2011). Experimental analysis of soot abatement in reducing syngas for high temperature fuel cell feeding. Chemical Engineering Journal, 176-177, 295-301.

- Rank, J. and Krasselt, V. and Trimis, D. and Uhlig, V., (2011). Bio-soluble alkaline earth silicate-(AES-) wool in high temperature applications, p. 902-904, .

- Sebbar, N.; Bockhorn, H., Bozzelli, J. W., (2011). Thermochemistry and Kinetics for 2-Butanone-3yl Radical (CH3C(=O)CHCH3) Reactions with O2, Fifth European Combustion Meeting 2011, Cardiff, England, 28 June -1st July, .

- Sebbar, N.; Bozzelli, J. W.; Bockhorn, H., (2011). Reactivity, Thermochemistry and kinetics of 2-Butanone Radicals: CH2C(=O)CHCH3, CH3C(=O)CHCH3 and CH3C(=O)CH2CH2, Seventh Mediterranean Combustion Symposium MCS7, Chia Laguna, Cagliari, Sardinia, Italy, September 11-15, .

- B. Stelzner; C. Keramiotis; S. Voss; M. Werner; M. Founti; D. Trimis, (2011). Experimental Study of the Flame Structure inside a Porous Inert Medium Burner using Planar Laser Induced Fluorescence, in *Imaging Techniques in Fluid Mechanics and Combustion*, March, Laupheim, Germany, .

- B. Stelzner; S. Voss; K. Uebel; A. Laugwitz; F. Hunger; B. Meyer; D. Trimis; C. Hasse, (2011). Preliminary investigation of inverse diffusion flames in the partial oxidation regime, in *GRC: Laser diagnostics in combustion*, August, Waterville (N.H.), USA, .

Untersuchungen einer inversen Diffusionsmodellflamme zur Charakterisierung von Vergasungsprozessen, in *September, Karlsruhe, Germany*, 25. Deutscher Flammentag, .

- B. Stelzner; S. Voss; K. Uebel; A. Laugwitz; F. Hunger; B. Meyer; D. Trimis; C. Hasse, (2011). Preliminary investigation of inverse diffusion flames in the partial oxidation regime, 5th European Combustion Meeting, June, Cardiff, UK, .

- B. Stelzner; F. Hunger; S. Voss; K. Uebel; A. Laugwitz; B. Meyer; D. Trimis; C. Hasse, (2011). Investigation of inverse diffusion flames in the partial oxidation regime for gasification processes, 82nd Annual Meeting of the International Association of Applied Mathematics and Mechanics - GAMM, April, Graz, Austria, .

- Voss, S. and Posdziech, O. and Valldorf, J. and Trimis, D., (2011). Preliminary operational results of a domestic sofc based micro-chp system. International Journal of Energy for a Clean Environment, 12, (1), 1-13.

- Voss, S. and Steinbrück, R. and Kautz, M. and Schießwohl, E. and Arendt, M. and Tom Felde, J. and Volkert, J. and Trimis, D., (2011). Premixed hydrogen-air combustion system for fuel cell systems. International Journal of Hydrogen Energy, 36, (5), 3697-3703.

- Vukadinovic, V.; Zarzalis, N., (2011). Comparison of the combustion characteristics of commercial and alternative liquid fuels: An experimental study, in *25. Deutscher Flammentag, Karlsruhe*, p. 647-652, .

- Werzner, E. and Ray, S. and Trimis, D., (2011). Proposed method for measurement of flow rate in turbulent periodic pipe flow. Journal of Physics: Conference Series, 318, (SECTION 2),

- Zbogar-Rasic, A. and Mrazic, G. and Von Issendorff, F. and Ausmeier, S. and Trimis, D., (2011). Effects of access of secondary air on operation of an atmospheric burner. International Journal of Energy for a Clean Environment, 12, (1), 55-66.

- F. Zhang; P. Habisreuther; M. Hettel; H. Bockhorn, (2011). Numerical simulation of noise emission from a non-premixed flame. Gaswärme International, 3/2011, 1-6.

- F. Zhang; P. Habisreuther; M. Hettel; H. Bockhorn, (2011). A newly developed unified TFC combustion model for numerical simulation of turbulent gas flames, 25. Deutscher Flammentag, Karlsruhe, 14. und 15. September 2011, p. 177-182, .

2010

... zum Anfang der Seite

- Al-Hamamre, Z.; Al-Zoubi, A.; Trimis, D., (2010). Numerical investigation of the partial oxidation process in porous media based reformer. Combustion Theory and Modelling, 14, (1), 91-103.

- A. Aleksandrov, C. Kraus, H. Bockhorn, F. Magagnato, M. Gabi, (2010). Combustion, Instabilities and Pollutant Formation in Combustion Chambers with Multi-burner Arrays Subprojects Z02, C7 and B9, in *International Discussion Meeting: Combustion Diagnostics Key to Understanding Fundamental Flame Processes*, Seeheim, p. 11, .

- Anger, St. and Nitzsche, J. and Krause, H. and Trimis, D., (2010). Optimization of gas processin in a high-temperature proton exchange membrane fuel cell combined heat and power plan on the basis of the numerical pinch method. International Journal of Energy for a Clean Environment, 11, (1-4), 1-10.

- Bakry, A. and Al-Salaymeh, A. and Al-Muhtaseb, A.H. and Abu-Jrai, A. and Trimis, D., (2010). CO and NOx emissions in porous inert media (PIM) burner system operated under elevated pressure and inlet temperature using a new flame stabilization technique. Chemical Engineering Journal, 165, (2), 589-596.

- Bakry, A. and Al-Salaymeh, A. and Al-Muhtaseb, A.H. and Abu-Jrai, A. and Trimis, D. and Durst, F., (2010). Low-emission premixed porous inert media (PIM) burner system fueled with vegetable (rapeseed) oil using a flow velocity flame stabilization technique. Energy and Fuels, 24, (1), 288-294.

Carbonisierung von Biomassen. 28. DECHEMA-Jahrestagung der Biotechnologen und ProcessNet-Jahrestagung 2010, Aachen, 21.-23.09.2010, V1.11.

- Bockhorn, H.; Zarzalis, N.; Kolb, T., (2010). 2. Aktivitäten des Lehrstuhls und Bereichs Verbrennungstechnik, der DVGW-Forschungsstelle, Bereich Verbrennungstechnik, und der Forschungsstelle für Brandschutztechnik. GWF, Gas - Erdgas, 151, (6), 416-425.

- M. Charwath and J. Hentschel and R. Suntz and H. Bockhorn; Characterisation of the flame properties of moderately oscillating sooting methane-air diffusion flames. In *Combustion generated fine carbonaceous particles*, H. Bockhorn, A. DAnna, A. F. Sarofim, H. Wang (ed.), KIT Scientific Publishing, Karlsruhe, p. 589-604, 2010.

- Cárdenas C., Suntz R., Bockhorn H.; Experimental Investigation of the Mixing-Process in a Jet-in-Crossflow Arrangement by Simultaneous 2d-LIF and PIV. In *Springer series on Heat and Mass Transfer, Micro and Macro Mixing*, D. Mewes et al. (ed.), Springer Verlag , Berlin, Heidelberg, p. 87-103, (doi:10.1007/978-3-642-04549-3_6) 2010.

- Denev J. A.; C. J. Falconi, J. Fröhlich and H. Bockhorn, (2010). Wavelet-adapted sub-grid scale models for LES, in *Notes on Numerical Fluid Mechanics and Multidisciplinary Design - Proceedings of the Second International Conference on Turbulence and Interaction*, vol. **110/2010**, 31 May - 5 June 2009, Sainte-Luce, Martinique, Spinger Verlag Berlin Heidelberg, p. 111-117, (doi:10.1007/978-3-642-14139-3_13).

- Denev J. A.; J. Fröhlich; C. J. Falconi and H. Bockhorn; Direct Numerical Simulation, Analysis and Modelling of Mixing Processes in a Round Jet in Crossflow. In *Springer series on Heat and Mass Transfer, Micro and Macro Mixing*, H. Bockhorn et al. (ed.), Springer Verlag Berlin Heidelberg, p. 143-164, (doi:10.1007/978-3-642-04549-3_9) 2010.

- Dinkov I.; Odinius M.; Habisreuther P.; H. Bockhorn, (2010). Characterization of the mild combustion regimes of liquid fuels by homogeneity parameters - Experimental and numerical investigation, in *SPEIC10 Towards Sustainable Combustion*, Spanish and Portuguese Sections of The Combustion Institute, 16-18 June, Tenerife, Spain, .

- Djordjevic, N.; Habisreuther, P. and N. Zarzalis, (2010). Porous burner for application in stationary gas turbines: An experimental investigation of the flame stability, emissions and temperature boundary condition, in *SPEIC10 Towards Sustainable Combustion*, Spanish and Portuguese Sections of The Combustion Institute, June 16-18, Tenerife, Spain, .

- Frassoldati, A.; Cuoci, A.; Faravelli, T.; Ranzi, E.; Colantuoni, S.; di Martino, P.; Cinque, G.; Kern, M.; Marinov, S.; Zarzalis, N.; Da Costa, I.; Guin, C., (2010). Fluid Dynamics and Detailed Kinetic Modelling of Pollutant Emissions from Lean Combustion Systems, in *Proceedings of ASME Turbo Expo 2010: Power for Land, Sea and Air (CDROM)*, ASME, June 14-18, Glasgow, UK, p. GT2010-22551, (doi:10.1115/GT2010-22551).

- Galeazzo F. C. C., Donnert G., Habisreuther P., Zarzalis N., Valdes R. J., Krebs W., (2010). Measurement and Simulation of Turbulent Mixing in a Jet in Crossflow, in *Proceedings of ASME Turbo Expo 2010: Power for Land, Sea and Air (CDROM)*, ASME, p. GT2010-22709, (doi:10.1115/GT2010-22709).

- Haessler, H.; Bockhorn, H., Pfeifer, C. and D. Kuhn, (2010). Formaldehyde-LIF of dimethyl ether during auto ignition at elevated pressures, in *SPEIC10 Towards Sustainable Combustion*, Spanish and Portuguese Sections of The Combustion Institute, June 16-18, Tenerife, Spain, .

- Julia Sedlmaier, (2010), Experimentelle Untersuchung des Einflusses der Reynolds-Zahl auf die Vermischung in einer Jet-in-Crossflow Anordnung, Diplomarbeit, Karlsruher Institut für Technologie.

-

- Kasabov, P.; N. Zarzalis, (2010). Experimental study of the fuel distribution and reaction zone location of lifted flames at elevated pressure, in *SPEIC10 Towards Sustainable Combustion*, Spanish and Portuguese Sections of The Combustion Institute, June 16-18, Tenerife, Spain, .

Stabilized Flame Characteristics Near the Weak Extinction Limit, in *Proceedings of ASME Turbo Expo 2010: Power for Land, Sea and Air (CDROM)*, ASME, June 14-18, Glasgow, UK, p. GT2010-22335, (doi:10.1115/GT2010-22335).

- Marinov, S.; Kern, M.; Zarzalis, N.; Peschiulli, N.; Turrini, F., (2010). Spray Characteristic Investigation of a Kerosene Fuelled Swirl Flame, in *SPEIC10 Towards Sustainable Combustion*, Spanish and Portuguese Sections of The Combustion Institute, June 16-18, Tenerife, Spain, .

- Matthes S.; Erhardt G.; Gierens K.; Petzold A.; Brok P.; Hagström M.; Helmis C.; Isaksen I. S.; Laroche P.; Vancassel X.; Lee D.; Raper D.; Panidis T.; Mathioudakis K.; Tsalavoutas T.; Kurtenbach R.; Wiesen P.; Wilson C.; Habisreuther P.; Schäfer K. and N. Zarzalis, (2010). ECATS - Mission of Association for an environmentally compatible air transport system, in *DLR Deutsches Zentrum fur Luft- und Raumfahrt e.V. - Forschungsberichte*, vol. **10**, Deutsches Zentrum fur Luft- und Raumfahrt e.V, p. 140-145, .

- Nadia Sebbar, Joseph W. Bozzelli, Henning Bockhorn; Poster: *The oxidation reaction of C6H5C(=O) O2 Radical* . The 21th International Symposium on Gas Kinetics, Leuven Belgium, July 18-23, 2010.

- Nalcaci, O.O.; Böke, N.; Ata, A.; Ovez, B., (2010). Adsorption Behaviour of Herbicides onto Biodegradable Polycaprolactone, The 6th Eastern Mediterranean Chemical Engineering Conference for Collaborative Research in Mediterranean Countries Proceedings, p. 94, .

- Nalcaci, O.O.; Ovez, B.; Bayraktar, D., (2010). Modelling of Biological Denitrification in Drinking Water Using Monod Kinetics, The 6th Eastern Mediterranean Chemical Engineering Conference for Collaborative Research in Mediterranean Countries Proceedings, p. 195, .

- Nalcaci, O.O.; Akten, D.; Cinar, D.; Bockhorn, H., (2010). A flame model for the investigation of oxidic nanoparticles, X International Conference on Nanostructured Materials Proceedings, Rome, Italy, p. 27, .

- Nalcaci, O.O.; Akten, D.; Bockhorn, H., (2010). Effect of precursor concentration on the formation of titania particles in a low pressure hydrogen flame, X International Conference on Nanostructured Materials Proceedings, Rome, Italy, p. 91, .

- Nalcaci , O.O.; Ozgen, S.; Ovez, B., (2010). Metal Contamination Characteristics Of Lepidium Sativum In Phosphate, Salinity and Nitrate Contaminated Media. Journal Of Environmental Engineering, 136 (11), 1260-1266.(doi:10.1061/(ASCE)EE.1943-7870.0000264)

- P. Parthasarathy, V. Ratna Kishore, P. Talukdar, A. Ray., (2010). Enhancement of Heat Transfer in a 3-D Rectangular Duct with Solid and Porous Inserts, ISHMT-ASME, IIT Bombay, p. January 4-6, .

- Pereira, J.M.C. and Mendes, M.A.A. and Trimis, D. and Pereira, J.C.F., (2010). Quasi-1D and 3D TPOX porous media diffuser reformer model. Fuel, 89, (8), 1928-1935.

- D. Reichert, A. Montoya, X. Liang, H. Bockhorn, B.S. Haynes, (2010). Conformational and Thermodynamic Properties of Gaseous Levulinic Acid. Journal of Physical Chemistry A, 114, (46), 1232312329.(doi:10.1021/jp107560u)

- B. Stelzner; C. Keramiotis; S. Voss; M. Werner; M. Founti; D. Trimis, (2010). Experimental Study of the Flame Structure inside a Porous Inert Medium Burner using Planar Laser Induced Fluorescence, in *15th Int. Symp. on Applications of Laser Techniques to Fluid Mechanics*, July, Lisboa, Portugal, .

- B. Stelzner; A. Al-Zoubi; A. Al-Sha'arawi; S. Ray; D. Trimis, (2010). Development of ethanol-fuel/off-gas porous hybrid-burner, in *HiTACG - 8th International Symposium on High Temperature Air Combustion and Gasification*, July, Poznan, Poland, .

- Vukadinovic, V.; Habisreuther, P.; Zarzalis, N., (2010). Experimental Study on the Influence of Pressure and Temperature on the Burning Velocity and Markstein Number of Jet A-1 Kerosene, in *Proceedings of ASME Turbo Expo 2010: Power for Land, Sea and Air (CDROM)*, ASME, June 14-18, Glasgow, UK, p. GT2010-22535, (doi:10.1115/GT2010-22535).

Numerical Simulation of a Turbulent Non-Premixed Flame, in *Proceedings of the 8th International ERCOFTAC Symposium on Engineering Turbulence Modelling and Measurements - ETMM8*, vol. **2**, European Research Collaboration on Flow Turbulence and Combustion, ERCOFTAC, June, 9-11, Marseilles, France, p. 681-686, .

- F. Zhang; P. Habisreuther; M. Hettel; H. Bockhorn; (2010). Vortrag: *Application of a unified TFC model to numerical simulation of a lifted turbulent partially premixed flame*. Euromech Fluid Mechanics Conference - 8, Bad Reichenhall, Germany, 13-16. Sept.,

2009

... zum Anfang der Seite

- Al-Hamamre, Z. and Trimis, D., (2009). Investigation of the intermediate oxidation regime of Diesel fuel. Combustion and Flame, 156, (9), 1791-1798.

- Al-Hamamre, Z.; Voß, S.; Trimis, D., (2009). Hydrogen production by thermal partial oxidation of hydrocarbon fuels in porous media based reformer. International Journal of Hydrogen Energy, 34, (2), 827-832.

- S. Anger; B. Stelzner; D. Trimis; Y. Makynya; S. Pfeil, (2009). Development of a porous burner unit for glycerine utilization from biodiesel production by Supercritical Water Reforming, in *Hysydays-3*, October, Torino, Italy, .

- C. Bender, H. Büchner, (2009). Combustion noise from non-premixed and lean-premixed swirl flames. Acta Acustica united with Acustica, Vol. 95, (ISSN 1610-1928), 402-408.(doi:10.3813/AAA.918164)

- C. Bender; F. Zhang; P. Habisreuther; H. Büchner; H. Bockhorn; Measurement and Simulation of Combustion Noise emitted from Swirl Burners. In *Combustion Noise (DFG Research Unit 486)*, Anna Schwarz, Johannes Janicka (ed.), Fluid Mechanics and its Applications, Springer, Berlin Heidelberg, p. 33-62, (doi:10.1007/978-3-642-02038-4_2) 2009.

- Blesinger, G.; Voigt, T.; Koch, R.; Bauer, H.-J.; Habisreuther, P.; Zarzalis, N.; (2009). Vortrag: *Influence of Fuel Properties on Flashback in Turbulent Swirl Flows*. 22nd ICDERS, Minsk, Belarus, Juli, 27.-31. 2009, 56.

- Blesinger, G.; Voigt, T.; Koch, R.; Bauer, H.-J.; Habisreuther, P.; Zarzalis, N., (2009). Influence of Fuel Properties on Flashback in Turbulent Swirl Flows, in *Proc. 22nd International Colloquium on the Dynamics of Explosions and Reactive Systems (CDROM)*, Institute for the Dynamics of Explosions and Reactive Systems, A. V. Luitkov Heat and Mass Transfer Institute, Minsk, Belarus, .

- Bockhorn H.; Habisreuther P.; Hettel M.; Numerical Modelling of Technical Combustion. In *100 Volumes of 'Notes on numerical Fluid Mechanics'*, Hirschel E. H.; Krause E. (ed.), Springer, p. 325-340, (doi:10.1007/978-3-540-70805-6_25) 2009.

- Bockhorn H.; J. A. Denev; M. Domingues; C. J. Falconi; M. Farge; J. Fröhlich; S. Gomes; B. Kadoch; I. Molina; O. Roussel and K. Schneider, (2009). Numerical Simulation of Turbulent Flows in Complex Geometries Using the Coherent Vortex Simulation Approach Based on Orthonormal Wavelet Decomposition, in *Springer series "Notes on Numerical Fluid Mechanics and Multidisciplinary Design (NNFM)*, vol. **104**, Springer Verlag Berlin Heidelberg, C. Brun, D. Juve, M. Manhart and C.D. Munz (Eds.), p. 175-200, .

- Christian Bender and Horst Büchner, (2009). The impact of flame stabilisation and coherent flow structures on the noise emission of turbulent swirl flames. International Journal of Aeroacoustics, 8, (1 & 2), 143-156.(doi:10.1260/147547209786234993)

- Cárdenas C., Suntz R., Bockhorn H., (2009). Estimation of Turbulent Fluxes by Simultaneous two-dimensional LIF and PIV, in *Sixth Mediterranean Combustion Symposium*, Corsica, France, June 7-11, p. (CDROM), .

Vermischung in einer Jet-in-Crossflow-Konfiguration, in *Fachtagung "Laser Methoden in der Strömungsmesstechnik (GALA)*, Erlangen, 8.-10. September 2009, p. 48-59, .

- Denev, J.A.; J. Fröhlich; H. Bockhorn, (2009). Large eddy simulation of a swirling transverse jet into a crossflow with investigation of scalar transport. Physics of Fluids, 21, (1), 015101.(doi:10.1063/1.3054148)

- Dinkov I., Odinius M., Habisreuther P. and H. Bockhorn, (2009). Experimentelle und theoretische Untersuchung der Mischung und Verbrennung bei der flammenlosen Oxidation flüssiger Brennstoffe, in *24. Deutscher Flammentag, VDI-Berichte*, vol. **2056**, VDI-GET, Bochum, Germany, 16.-17. September, p. 109-114, .

- Dinkov I., Odinius M., Habisreuther P. and H. Bockhorn; (2009). Vortrag: *Experimentelle und theoretische Untersuchung der Mischung und Verbrennung bei der flammenlosen Oxidation flüssiger Brennstoffe*. 24. Deutscher Flammentag, Bochum, Germany, 16.-17. September,

- N. Djordjevic, P. Habisreuther, N. Zarzalis, (2009). Application of porous, ceramic, sponge like structures in premixed combustion technology. Materials and Manufacturing Processes, Accepted for publishing,

- N. Djordjevic, P. Habisreuther, N. Zarzalis, (2009). Experimental study on the influence of the pore size of SiSiC sponge on the flame stabilization in a porous burner, in *Proc. 4th European Combustion Meeting*, Vienna, Austria, .

- N. Djordjevic, P. Habisreuther, N. Zarzalis; Poster: *Experimental study on the influence of the pore size of SiSiC sponge on the flame stabilization in a porous burner*. European Combustion Meeting, Vienna, 2009.

- N. Djordjevic, P. Habisreuther, N. Zarzalis, (2009). Numerical simulation of the combustion in solid sponges: Relative importance of the different transport mechanisms for the flame stabilization, in *Sixth Mediterranean Combustion Symposium*, Corsica, France, June 7-11, p. (CDROM), .

- T. Finke, U. Eisele, N. Sebbar, L. Rutz, H. Bockhorn,, (2009). Surface Chemical Characterization of Ceramic Material Adsorption and Thermal Desorption of Ethanol on nano-ZrO2. Ceramic Forum International, cfi/Ber. DKG 86, 13, 7-12.

- P. Fokaides and M. Weiß and M. Kern and N. Zarzalis, (2009). Experimental and Numerical Investigation of Swirl Induced Self-Excited Instabilities at the Vicinity of an Airblast Nozzle. Flow Turbulence Combust, 83, (4), 511-533.(doi:10.1007/s10494-009-9205-3)

- A. Frassoldati, A. Cuoci, T. Faravelli, E. Ranzi, S. Colantuoni, P. Di Martino, G. Cinque, M. Kern, S. Marinov and N. Zarzalis, (2009). Fluid Dynamics and Detailed Kinetic Modeling of Pollutant Emissions from Lean Combustion Systems, in *Sixth Mediterranean Combustion Symposium, MCS6*, Porticcio, Corsica, France, June 7 - 11, p. (CDROM), .

- Große J., Dietrich B., Incera G., Habisreuther P., Zarzalis N., Martin H., Kind M. and B. Kraushaar-Czarnetzki, (2009). Morphological Characterization of Ceramic Sponges for Applications in Chemical Engineering. Ind. Eng. Chem. Res., 48, (23), 1039510401.(doi:10.1021/ie900651c)

- Habisreuther P.; Djordjevic, N. and Zarzalis N., (2009). Statistical Distribution of Residence Time and Tortuosity of Flow through Open-Cell Foams. Chemical Engineering Science, 64, 4943-4954.(doi:10.1016/j.ces.2009.07.033)

- P. Kasabov and N. Zarzalis, (2009). Pressure Dependence of the Stability Limits and the NOx Exhaust Gas Concentrations in Case of Swirl-Stabilized, Diffusion Flames Burning in a Lift-Off Regime (GT2009-59801), in *Proceedings of ASME Turbo Expo 2009: Power for Land, Sea and Air*, ASME, Orlando, USA, .

- P. Kasabov, N. Zarzalis; Poster: *Druckabhängigkeit der Stabilitätsgrenzen und der NOx Emission bei abgehoben brennenden Drallflammen*. Verbrennung und Feuerungen - 24. Deutscher Flammentag, Bochum, 16. und 17. Septermber 2009, VDI Berichte 2056, p.535-538, 2009.

Fälle abgehobener Drallflammen, in *24. Deutscher Flammentag, VDI-Berichte*, vol. **2056**, VDI-GET, Bochum, Germany, 16.-17. September, p. 535-538, .

- Kolb T., Jacobs T. Pantouflas E. and N. Zarzalis, (2009). Production of Syngas from Biomass-Based Slurry in an Entrained-Flow Gasifier, in *24. Deutscher Flammentag, VDI-Berichte*, vol. **2056**, VDI-GET, Bochum, Germany, 16.-17. September, p. 229-234, .

- S. Matthes, G. Erhardt, K. Gierens, A. Petzold, P. Brok, M. Hagström, C. Helmis, Ivar S. Isaksen, P. Laroche, X. Vancassel, D. Lee, D. Raper, T. Panidis, K. Mathioudakis, T. Tsalavoutas, R. Kurtenbach, P. Wiesen, C. Wilson, P. Habisreuther, K. Schäfer, N. Zarzalis, (2009). ECATS - Mission of Association for an environmentally compatible air transport system, in *Proceedings of the 2nd International Conference on Transport, Atmosphere and Climate (TAC-2)*, Aachen, Germany, and Maastricht, The Netherlands, June 22-25th 2009, p. 140-q45, .

- Matthias Kern and Paris Fokaides and Peter Habisreuther and Nikolaos Zarzalis, (2009). Applicability of a Flamelet and a Presumed Jpdf 2-Domain-1-Step-Kinetic Turbulent Reaction Model for the Simulation of a Lifted Swirl Flame (GT2009-59435), in *Proceedings of ASME Turbo Expo 2009: Power for Land, Sea and Air*, .

- Nalcaci, O. O.; Ruzin, E.; Bockhorn, H., (2009). Synthesis of nano-sized iron oxide particles in low-pressure hydrogen flames, vol. **1**, European Aerosol Conference Proceedings, Karlsruhe, Germany, p. 48, .

- P. Parthasarathy, P. Talukdar, V. Ratna Kishore., (2009). Enhancement of heat transfer with porous/solid insert for a laminar flow of participating gas in a 3-D square duct. Numerical Heat Transfer part A, 56, 764-784.(doi:10.1080/10407780903465974)

- Paur, H.-R.; Baumann, W.; Bockhorn, H.; Comouth A.; Diabate, S.; Mätzing, H.; Mülhopt, S.; Nalcaci, O. O.; Panas, A.; Ruzin, E; Saathoff, H; Seifert, H; Weiss, C., (2009). Nanoparticles: Synthesis, characterisation and cellular effects-The NANO-SYNCC- Project, vol. **1**, European Aerosol Conference Proceedings, Karlsruhe, Germany,, p. 18, .

- Pfeifer, C.; Kuhn, D.; Haessler, H., (2009). Imaging of formaldehyde in a transient reacting free fuel jet, in *Proc. 4th European Combustion Meeting*, Vienna, Austria, .

- Pfeifer, C.; Kuhn, D.; Haessler, H.; Poster: *Imaging of formaldehyde in a transient reacting free fuel jet*. 4th European Combustion Meeting , April 14-17th, 2009.

- Sebbar, N.; Bozzelli, J. W.; Bockhorn, H., (2009). The oxidation reaction of C6H5C(=O) radical , Sixth Mediterranean Combustion Symposium MCS6, Ajaccio ,Corsica, France, June 7-11, .

- B. Stelzner; A. Al-Zoubi; A. Al-Sha'arawi; C. Löbel; S. Ray; D. Trimis, (2009). Development of Ethanol-fuel porous Burner for Application in a HT-PEM-Fuel cell system, in *10th Conference on Energy for a Clean Environment*, July, Lisboa, Portugal, .

- Stephan Traut, Carsten von Hänisch, Hans-Joachim Kathagen, (2009). Metalation and Oxidative Coupling of the Unique Cyclic Silylphosphanes (iPr2Si)3PH and (iPr2Si)4PH. Eur. J. Inorg. Chem, 6, 777-783.(doi:10.1002/ejic.200800903)

- Voigt, T.; Habisreuther, P.; Zarzalis, N.; Poster: *Numerical Investigation of Combustion Induced Flame Flashback in a Premixed Combustion System*. 4th European Combustion Meeting, Vienna, 14. - 17. April, 2009.

- Voigt, T.; Habisreuther, P.; Zarzalis, N., (2009). Numerical Investigation of Combustion Induced Flame Flashback in a Premixed Combustion System, in *Proc. 4th European Combustion Meeting*, Vienna, Austria, p. 321-328, .

- Voigt, T.; Habisreuther, P.; Zarzalis, N., (2009). Simulation of Vorticity Driven Flame Instability Using a Flame Surface Density Approach Including Markstein Number Effects (GT2009-59331), in *Proceedings of ASME Turbo Expo 2009: Power for Land, Sea and Air*, ASME, Orlando, USA, .

Using a Flame Surface Density Approach Including Markstein Number Effects. ASME, Orlando, Florida, 08.06.2009-12.06.2009,

- Voigt, T.; Konle, M.; Tangermann, E.; Habisreuther, P.; Zarzalis, N.; Sattelmayer, T.; Pfitzner, M.; (2009). Vortrag: *Comparison of Different Combustion Models with Respect to the Simulation of Combustion Induced Vortex Breakdown*. 22nd ICDERS, Minsk, Belarus, Juli, 27.-31. 2009, 83.

- Voigt, T.; Konle, M.; Tangermann, E.; Habisreuther, P.; Zarzalis, N.; Sattelmayer, T.; Pfitzner, M., (2009). Comparison of Different Combustion Models with Respect to the Simulation of Combustion Induced Vortex Breakdown, in *Proc. 22nd International Colloquium on the Dynamics of Explosions and Reactive Systems (CDROM)*, Institute for the Dynamics of Explosions and Reactive Systems, A. V. Luitkov Heat and Mass Transfer Institute, Minsk, Belarus, .

- Voigt T.; Habisreuther P.; N. Zarzalis, (2009). Simulation von wirbeldynamisch getriebenen Flammeninstabilitäten mittels eines Flammenoberflächendichte Modells unter Berücksichtigung von Markstein-Zahl Effekten, in *24. Deutscher Flammentag, VDI-Berichte*, vol. **2056**, VDI-GET, Bochum, Germany, 16.-17. September, p. 79-84, .

- Zarzalis N., Kolb T., Jacobs T. and Pantouflas E. and ; (2009). Vortrag: *Production of Syngas from Biomass-Based Slurry in an Entrained-Flow Gasifier*. 24. Deutscher Flammentag, Bochum, Germany, 16.-17. September,

- Zarzalis N.; Voigt T.; P. Habisreuther; (2009). Vortrag: *Simulation von wirbeldynamisch getriebenen Flammeninstabilitäten mittels eines Flammenoberflächendichte Modells unter Berücksichtigung von Markstein-Zahl Effekten*. 24. Deutscher Flammentag, Bochum, Germany, 16.-17. September,

- Zbogar-Rasic, A. and Altendorfner, M. and Steven, M. and Issendorff, F. and Trimis, D., (2009). Investigation of design parameters influencing the performance of premixed surface burners. International Journal of Energy for a Clean Environment, 10, (1-4), 135-146.

- F. Zhang; P. Habisreuther; M. Hettel; H. Bockhorn; (2009). Vortrag: *LES of a Complex Premixed Swirl Burner*. Colloquium of the European Mechanics society on Large Eddy Simulation for Aerodynamics and Aeroacoustics, TU Müchen, 23-25, March,

- F. Zhang; P. Habisreuther; M. Hettel; H. Bockhorn, (2009). Numerical Investigations of the Noise Sources Generated in a Swirl Stabilized Flame. Acta Acustica united with Acustica, 95, (3), 418-427.(doi:10.3813/AAA.918166)

- F. Zhang; P. Habisreuther; M. Hettel; H. Bockhorn, (2009). Modelling of a Premixed Swirl-stabilized Flame Using a Turbulent Flame Speed Closure Model in LES. Flow, Turbulence and Combustion, 82, (4), 537-551.(doi:10.1007/s10494-008-9175-x)

2008

... zum Anfang der Seite

- Breitung, W.; Kuhn, D.; Pfeifer, C.; Bockhorn, H.; Haessler, H.; Maas, U.; Schießl, R; (2008). Vortrag: *Auto ignition processes in non-stationary turbulent jets*. , International Workshop on Unsteady Combustion: Transportphenomena, Chemical Reactions, Technical Systems, Bad Herrenalb, 10.-12. April 2008,

- Brunn, O.; Habisreuther, P.; Zarzalis, N., (2008). Temperature prediction for a model combustion chamber considering radiation from a luminous jet flame, in *Proceedings of the 8th European Conference on Industrial Furnaces and Boilers (INFUB 8)*, vol. **CD-ROM**, .

- Brunn, O.; Habisreuther, P.; Zarzalis, N.; (2008). Vortrag: *Temperature prediction for a model combustion chamber considering radiation from a luminous jet flame*. 8th European Conference on Industrial Furnaces and Boilers (INFUB 8), Vilamoura, Portugal, 25.-28. März,

- Cárdenas C., Suntz R. and Bockhorn H., (2008). Experimentelle Untersuchung von Vermischungsvorgängen in einer Jet-in-Crossflow- Anordnung. GASWÄRME International Gas Anwendung in Industrie und Gewerbe (Brenner und Feuerung), (Heft 5 / 2008), 337- 342..

Results from a Direct Numerical Simulation, in *High Performance Computing in Science and Engineering '08, Springer Verlag Berlin Heidelberg, W.E Nagel, D.B.Kroener and M. Resh (Eds.)*, High Performance Computing Center, Stuttgart (HLRS), p. 191-203, (doi:10.1007/978-3-540-88303-6_14).

- J.A. Denev, C. Falconi, J. Fröhlich and H. Bockhorn, (2008). DNS and LES of a jet in crossflow Evaluation of turbulence quantities and modelling issues. Proceedings of the 7th International ERCOFTAC Symposium on Engineering Turbulence Modelling and Measurements, ETMM7, 4 6 June, Limassol, Cyprus, 587-592.

- N. Djordjevic, P. Habisreuther and N. Zarzalis, (2008). Flame stabilization and emissions of a natural gas/air ceramic porous burner. Advanced Materials Research, 47-50, (International Conference on Multi-functional Materials and Structures), 105-108.(doi:10.4028/www.scientific.net/AMR.47-50.105)

- P. Habisreuther, T. Lischer, W. Cai, W. Krebs, N. Zarzalis, H. Bockhorn, (2008). Visualisation of Statistically Periodic Coherent Structures in Turbulent Flows using a Phase Locked Averaging Method. Progress in Computational Fluid Dynamics, 8, (5), 276-287.(doi:10.1504/PCFD.2008.019481)

- P. Habisreuther, N. Djordjevic und N. Zarzalis, (2008). Numerische Simulation der Mikroströmung in porösen inerten Strukturen. Chemie Ingenieur Technik, 80, (3), 327-341.(doi:10.1002/cite.200700077)

- M. Kautz; B. Stelzner; D. Trimis, (2008). Bioethanol für dezentrale KWK - Technische Aspekte im InnoNet-Projekt Regenerative Heizzentrale, in *17. SYMPOSIUM "BIOENERGIE" Festbrennstoffe, Biokraftstoffe, Biogas*, Beitrag C2-2, November 20-21, Bad Staffelheim, Germany, (ISBN 978-3-934681-87-3), .

- Lischer, T.; Donnert, G.D.; Galeazzo,, F.C.C.; Habisreuther, P.; Zarzalis, N.; Valdes, R.; Krebs, W .; (2008). Vortrag: *Simultaneous velocity and concentration measurements using laser-optical measurement methods in comparison with Reynolds averaged Navier-Stokes models*. 12th International Symposium on Transport Phenomena and Dynamics of Rotating Machinery, Honolulu, Hawaii, 17.-22. Februar,

- Mendes, Miguel A. A.; Pereira, J.M.C.; Pereira, J.C.F., (2008). On the stability of ultra-lean H2/CO combustion in inert porous burners. International Journal of Hydrogen Energy, 33, (13), 34163425.(doi:10.1016/j.ijhydene.2008.04.019)

- Mendes, M.A.A.; Pereira, J.M.C.; Pereira, J.C.F., (2008). A numerical study of the stability of one-dimensional laminar premixed flames in inert porous media. Combustion and Flame, 153, (4), 525539.(doi:10.1016/j.combustflame.2008.03.010)

- Nadia Sebbar; Henning Bockhorn; Bozzelli, J. W.; (2008). Vortrag: *The Oxidation of Dibenzofuranyl: Thermodynamic Properties and Reaction Pathways*. 20th International Conference on Chemical Thermodynamics, Warsaw, Poland, August 3-8,

- Nalcaci, O.O.; Böke, N.; Ovez, B., (2008). Polycaprolactone and bacterial strain interaction in biological denitrification; a study on batch and continuous system, 5th Eastern Mediterranean Chemical Engineering Conference for Collaborative Research in Mediterranean Countries Proceedings, p. 371-373, .

- M. Odinius, I. Dinkov, P. Habisreuther, H. Bockhorn, (2008). Effect of the entrainment of spray jets on the mixture field in high temperature air combustion of liquid fuels for use in industrial furnaces, in *INFUB-08*, .

- M. Odinius, I. Dinkov, P. Habisreuther, H. Bockhorn; (2008). Vortrag: *Effect of the entrainment of spray jets on the mixture field in high temperature air combustion of liquid fuels for use in industrial furnaces*. INFUB-08, Vilamoura, Portugal, 27.03.2008,

- Otto, S. and Uhlig, V. and Walter, G. and Trimis, D., (2008). Safe application of burner components made of silicon carbide in process atmospheres [Sicherer Einsatz von Brenner-bauteilen aus Siliziumcarbid in Prozessatmosphären]. Gaswaerme International, 57, (5), 315-319.

- Ozgen, S.; Nalcaci, O.O.; Ovez, B., (2008). Using Gracilaria Verrucosa as an alternative carbon source in biological denitrification of drinking water, The 5th Eastern Mediterranean Chemical Engineering Conference for Collaborative Research in Mediterranean Countries Proceedings, p. 367-370, .

Tomographic Laser Doppler Anemometry. 32nd International Symposium on Combustion, Montreal, August 3-8th, 2008.

- Raquel Y. Miura, Flavio C.C. Galeazzo, Carmen C. Tadini, Jorge A.W. Gut, (2008). The effect of flow arrangement on the pressure drop of plate heat exchangers. Chemical Engineering Science, 63, 5386 - 5393.(doi:10.1016/j.ces.2008.07.029)

- Sebbar, N.; Bockhorn, H.; Bozzelli, J. W., (2008). Thermodynamic Properties of the Species Resulting from the Phenyl Radical with O2 Reaction System. Int. J. Chem Kinet, 40, 583604.

- Sebbar, N.; Bockhorn, H.; Bozzelli, J. W., (2008). Thermochemical similarities among three reaction systems:Vinyl O2 Phenyl O2 Dibenzofuranyl O2. Combust. Sci. and Tech., 180, 959974.

- Talukdar, P. and Issendorff, F.V. and Trimis, D. and Simonson, C.J., (2008). Conduction-radiation interaction in 3D irregular enclosures using the finite volume method. Heat and Mass Transfer/Waerme- und Stoffuebertragung, 44, (6), 695-704.

- Thomas Kolb; Nikolaos Zarzalis, Ulrike Santo, Emmanouil Pantouflas, (2008). Entrained-Flow Gasification of Biomass-Based Slurry - Investigations on Atomization and Fuel Conversion, in *Proceedings of the 7th High Temperature Air Combustion and Gasification International Symposium, HiTACG in conjunction with The 2nd Biomass and Waste Gasification for Power Generation Conference*, The Waste Incineration Research Centre (WIRC) and The Joint Graduate School of Energy and Environment (JGSEE), 13-16 January 2008, Phuket, Thailand, p. HiTACG_115, CDROM, .

- Voß, S. and Loukou, A. and Trimis, D., (2008). Experimental and numerical investigations of a porous burner for combustion of different low and medium - Calorific value gases, vol. **4**, p. 3217-3234, .

- Voigt, T.; Habisreuther, P.; Zarzalis, N., (2008). Verbrennungsinduziertes Aufplatzen in Wirbelröhren unter Berücksichtigung der bevorzugten Diffusion. Abschlussbericht des Forschungsvorhabens DFG Za 270/2-1 CIVB,

- Voss, S. and Kautz, M. and Steinbrück, R. and Schiesswohl, E. and Turner, H. and Tom Felde, J. and Volkert, J. and Trimis, D., (2008). Modulating hydrogen combustion system based on a porous media burner for HT-PEM systems, vol. **2**, p. 787-793, .

- Vourliotakis, G.; Skevis, G.; Founti, M.A.; Al-Hamamre, Z.; Trimis, D., (2008). Detailed kinetic modelling of the T-POX reforming process using a reactor network approach. International Journal of Hydrogen Energy, 33, (11), 2816-2825.

- M. Weiß and N. Zarzalis and R. Suntz, (2008). Experimental study of Markstein number effects on laminar flamelet velocity in turbulent premixed flames. Combust. Flame, 154, (4), 671691.(doi:10.1016/j.combustflame.2008.06.011)

- F. Zhang; P. Habisreuther; M. Hettel; H. Bockhorn, (2008). Numerical investigations of the noise sources generated in a swirl stabilized flame, in *Fortschritte der Akustik - DAGA 08*, 34. Jahrestagung für Akustik, DAGA ’08, .

- F. Zhang; P. Habisreuther; H. Bockhorn, (2008). LES of reactive flow in a strongly swirling combustor system, in *International Conference on Jets, Wakes and Separated Flows*, Berlin, .

2007

... zum Anfang der Seite

- Al-Hamamre, Z. and Voß, S. and Al-Zoubi, A. and Trimis, D., (2007). Detailed investigation of the partial oxidation of methane in a porous reactor for synthesis gas production: Experimental and numerical study. VDI Berichte, (1988), 147-159.

- Bender, C.; Büchner, H. ; (2007). Vortrag: *The Impact of Flame Stabilisation and Coherent Flow Structures on the Noise Emission of Turbulent Swirl Flames*. 11th CEAS-ASC Workshop, Lissabon, Portugal, 27.-28. September 2007,

Thermochemical and Kinetic Analysis. Oxidation of Aromatics - Benzene, Toluene, Xylene. Informal kinetics and dynamics conference Albany, NY , Jan 26 ,

- Brunn, O.; Habisreuther, P.; Zarzalis, N.; Poster: *Numerische Berechnung der Wärmebelastung von Brennkammerwänden unter Berücksichtigung von Ruß- und Gasstrahlung*. 23. Deutscher Flammentag Berlin, 12-13 September 2007, 2007.

- Brunn, O.; Habisreuther, P.; Zarzalis, N., (2007). Numerische Berechnung der Wärmebelastung von Brennkammerwänden unter Berücksichtigung von Ruß- und Gasstrahlung, in *Verbrennung und Feuerungen, 23rd German Flame Day*, vol. **1988**, VDI-GET, Berlin, 12./13. September, p. 651-656, .

- Cárdenas C.; R. Suntz; J.A. Denev; H. Bockhorn, (2007). Two-dimensional estimation of Reynolds-fluxes and -stresses in a Jet-in-Crossflow arrangement by simultaneous 2D-LIF and PIV. Applied Physics B - Lasers and Optics, 88(4), 581-591.

- Denev, J.A.; J. Fröhlich; H. Bockhorn, (2007). Direct Numerical Simulation of a transitional jet in crossflow with mixing and chemical reactions, in *Proceedings of the 5th Int. Symp. on Turbulence and Shear Flow Phenomena, TU-Munich, Garching, Germany, August 27-29. Editors: R. Friedrich, N.A. Adams, J.K. Eaton, J.A.C. Humphrey, N. Kasagi, M.A. Leschziner*, vol. **3, pp. 1243-1248**, p. 1243-1248, .

- Denev, J.A.; J. Fröhlich; H. Bockhorn, (2007). Direct Numerical Simulation of a Round Jet into a Crossflow Analysis and Required Resources, in *High Performance Computing in Science and Engineering '07, Transactions of the High Performance Computing Center, Stuttgart (HLRS) 2007, Springer Verlag Berlin Heidelberg, Editors: W.E. Nagel, Kröner, D. and M. Resch*, vol. **1, pp. 339-350**, (doi:10.1007/978-3-540-74739-0_23).

- Denev, J.A.; J. Fröhlich; H. Bockhorn; F. Schwertfirm; M. Manhart; DNS and LES of scalar transport in a turbulent plane channel flow at low Reynolds number. In *Proceedings of the 6th International Conference on Large-Scale Scientific Computations, June 5-9,Sozopol, Bulgaria, 2007*, Springer Verlag Berlin Heidelberg, Lecture Notes in Computer Science, LNCS 4818, I. Lirkov et. al. (Eds.), 2007, pp. 251-258, p. 251-258, 2007.

- Dirk Grosschmidt, Peter Habisreuther and Henning Bockhorn, (2007). Calculation of the size distribution function of soot particles in turbulent diffusion ﬂames, in *Proc. Combust. Inst.*, vol. **31 (1)**, The Combustion Institute, p. 657665, .

- Durst, F. and Ünsal, B. and Ray, S. and Trimis, D., (2007). Method for defined mass flow variations in time and its application to test a mass flow rate meter for pulsating flows. Measurement Science and Technology, 18, (3), 790-802.

- Fokaides,P.A.; Kasabov,P.; Zarzalis,N., (2007). Experimental Investigation of the Stability Mechanism and Emissions of a Lifted Swirl Non-Premixed Flame (GT2007-27126), vol. **Proceedings of ASME Turbo Expo 2007**, ASME Turbo Expo: Power for Land, Sea and Air, Montreal, Kanada, (doi:10.1115/1.2749279).

- Fokaides, P.A.; Zarzalis, N., (2007). Lean Blowout Dynamics of a Lifted Stabilized, Non-Premixed Swirl Flame, in *Proceedings of European Combustion Meeting 2007*, vol. **7-2**, Combustion Institute, 11-13 Apr. 2007, Chania Greece, .

- Fokaides, P.A.; Kasabov, P.; Zarzalis, N., (2007). Experimentelle Untersuchung Abgehobener Verdrallter Nicht-Vorgemischter Flammen. Gaswärme International, 3/2007, 205-207.

- Fokaides, P.A.; Weiß, M. ; Kern, M. ; Zarzalis, N., (2007). Experimentelle Untersuchung und Numerische Simulation von drallinduzierten selbsterregten Instabilitäten am Brennermund eines Airblast-Zerstäubers, in *23. Deutscher Flammentag - Verbrennung und Feuerungen, VDI-Berichte*, vol. **1988**, VDI-GET, Berlin 12-13 September 2007, p. 223-228, .

- Fokaides,P.A.; Kasabov,P.; Zarzalis,N., (2007). Experimental Investigation of the Stability Mechanism and Emissions of a Lifted Swirl Non-Premixed Flame. Journal of Engineering for Gas Turbines and Power (ASME), October, Vol. 129, (GTP-07-1084),

subgrid-scale modelling in large eddy simulation. In *Proceedings of the 6th International Conference on Numerical Methods and Applications NM&A'06, August 20-24,Borovetz, Bulgaria, 2006*, Springer Verlag Berlin Heidelberg, Lecture Notes in Computer Science, LNCS 4310, T. Boyanov et. al. (Eds.), 2007, pp. 550-557, p. 550-557, 2007.

- Gromke C., J. A. Denev, B. Ruck, (2007). Dispersion of Traffic Exhausts in Urban Street Canyons with Tree Plantings - Experimental and Numerical Investigations, in *In Procs. of The International Workshop on Physical Modelling of Flow and Dispersion Phenomena (PHYSMOD2007), University of Orléans, France, August 29 31*, vol. **1**, .

- P. Habisreuther; F. Zhang; H. Bockhorn; (2007). Vortrag: *Investigations on the noise emissions of a premixed swirl burner using LES*. 11th CEAS-ASC Workshop, Lissabon, Portugal, 27-28.Sept.,

- Hettel, M.; Wetzel, F.; Habisreuther, P.; Bockhorn, H., (2007). Numerical Verification of the Similarity Laws for the Formation of Laminar Vortex Rings. Journal of Fluid Mechanics, 590, 35-60.(doi:10.1017/S0022112007007677)

- Nadia Sebbar and Henning Bockhorn; (2007). Vortrag: *An Elementary Mechanism for the Oxidative Degradation of Dibenzofuran*. Tenth International Congress on Toxic Combustion By-Products, Ischia, Italy, June 17 20,

- Nadia Sebbar; Henning Bockhorn; Joseph W. Bozzelli; Poster: *Development of an extensive Thermochemical Database on unsaturated oxygenated hydrocarbon species*. The 10th International Congress on Combustion by-Products: Origin, Fate and Health Impacts, Ischia, Italy, June 17-20, 2007.

- Nalcaci, O.O.; Tavman, I.H.; Kureti, S.; Bockhorn H., (2007). The Use of Nano-Fe2O3 Particles as Catalyst for Automobile Exhausts, Nanotr-III Proceedings, Ankara, p. 6, .

- Nalcaci, O.O.; Boke, N.; Ovez, B., (2007). Adsorption Characteristics of MCPA from Aqueous Solution on Activated Carbon, vol. **8**, The 3rd International Energy, Exergy and Environment Symposium Proceedings, p. 1-9, .

- Nalcaci, O.O., (2007), The Removal Of Carbon Monoxide By Iron Oxide Nano-particles In Car Exhaust, Diplomarbeit, Dokuz Eylul University.

- Odinius, M; Fokaides, P.A.; Weiß, M.; Zarzalis, N.; Bockhorn, H., (2007). Bestimmung des integralen Zeitmasses in einer turbulenter Strömung aus LDA Messungen, vol. **Fachtagung "Laser Methoden in der Strömungsmesstechnik (GALA)**, GALA, Rostock, 4-6 Sep. 2007, p. Accepted for Publication, .

- Russ, M.; Büchner, H., (2007). Pressure Scaling of Stability Limits in Gas Turbine Combustors, vol. **Proceedings of ASME Turbo Expo 2007** , ASME Turbo Expo: Power for Land, Sea and Air, Montreal, Kanada, p. GT2007-27775, (doi:10.1115/GT2007-27775).

- Russ, M.; Büchner H.; (2007). Vortrag: *Skalierung von Schwingungsgrenzen bei druckaufgeladener Verbrennung*. 4. KW21 - Workshop München, 18.Juli 2007, KW21-TP-GV1.

- Russ, M.; Büchner H., (2007). Berechnung des Schwingungsverhaltens gekoppelter Helmholtz-Resonatoren in technischen Verbrennungssystemen, in *Verbrennung und Feuerung*, vol. **VDI-Berichte zum 23. Deutscher Flammentag**, .

- Russ, M.; Büchner H.; Poster: *Prediction of Combustion Instabilities in Gas Turbine Combustors*. Emil-Kirschbaum Kolloquium Karlsruhe, April 2007, 2007.

- Russ, M.; Büchner H.; Poster: *Prediction of Combustion Instabilities in Gas Turbine Combustors*. 100 Jahre Engler-Bunte-Institut, Mai 2007, 2007.

- Russ M., Büchner H.; (2007). Vortrag: *Prediction of Stability Limits in Gas Turbine Combustors*. ASME Turbo EXPO, Montreal, Kanada, 14.-17. Mai, GT-27775.

Helmholtz-Resonatoren in technischen Verbrennungssystemen. 23. Deutscher Flammentag, Berlin, 12.-13. September,

- U. Santo, M. Eberhard, H. Seifert, T. Kolb, H.-J. Wiemer, D. Kuhn, E. Pantouflas, N. Zarzalis; (2007). Vortrag: *Conversion of Biomass Based Slurry in an Entrained Flow Gasifier - Characterisation of Combustion Behaviour*. 26th International Conference on Incineration and Thermal Treatment Technologies, Phoenix, Arizona, USA, May 14-18,

- Sebbar, N.; Bockhorn, H., Bozzelli, J. W. , (2007). The Phenyl O2 Reaction: Thermodynamics and kinetics, Third European Combustion Meeting 2007, Chania, Crete, 11-13 April , .

- Sebbar, N.; Bockhorn, H.; Bozzelli, J. W. ; (2007). Vortrag: *Numerical Investigation of the Dibenzofuranyl O2 Reaction System: Thermodynamics, Kinetics, and Reaction Paths*. Fachtagung AEM 2007 Gemeinsame Sitzung der ProcessNet-Arbeitsausschüsse Adsorption und Extraktion" und des Arbeitskreises Molekulare Modellierung und Simulation für Prozess- und Produktdesign" Germany, 21-23 march,

- Sebbar, N.; Bozzelli, J. W.; Bockhorn, H., (2007). Thermochemical similarities among three reaction systems: Vinyl O2 Phenyl O2 Dibenzofuranyl O2, Fifth Mediterranean Combustion Symposium MCS5, September 9-13, Monastir, Tunisia, .

- Trimis, D. and Aneziris, C.G. and Hessenkemper, H. and Issendorff, F.V. and Werschy, M. and Fleischmann, B. and Volkert, J. and Franke, M. and Zimmermann, H. and Rebmann, A. and Liphardt, K. and Schnelle, J. and Käs, W. and Donaubauer, B., (2007). InnoGlas" - Innovative heating technologies for minimized energy consumption and quality improvement in glass industry ["InnoGlas" - Innovative heiztechniken zur energieeinsparung und qualitätsverbesserung in der glasindustrie]. Gaswaerme International, 56, (6), 429-433.

- Trimis, D., (2007). University chair for gas and heat engineering facilities at the Institute for Heat Engineering and Thermodynamics at the Technische Universitaet Bergakademie Freiberg [Lehrstuhl für Gas- Und Wärmetechnische Anlagen im Institut für Wärmetechnik und Thermodynamik der Technischen Universität Bergakademie Freiberg]. Gaswaerme International, 56, (3), 210-214.

- Ulrike Santo; Helmut Seifert; Thomas Kolb; Lambert Krebs; Dietmar Kuhn; Hans-Joachim Wiemer; Emmanouil Pantouflas; Nikolaos Zarzalis, (2007). Conversion of Biomass Based Slurry in an Entrained Flow Gasifier. Chem. Eng. Technol, 30, (7), 967-969.

- Ulrike Santo, Dietmar Kuhn, Hans-Joachim Wiemer, Emmanouil Pantouflas, Nikolaos Zarzalis, Helmut Seifert und Thomas Kolb, (2007). Erzeugung von Synthesegas aus biomassestämmigen Slurries im Flugstromvergaser. Chemie Ingenieur Technik, 79, (5), 651-656.

- Voß, S. and Al-Hamamre, Z. and Trimis, D., (2007). Characterisation of the emissions behaviour and combustion stability in porous media burner by using low and medium calorific value gases [Charakterisierung des Emissionsverhaltens und der Verbrennungsstabilität von Schwach-und Mittelgasen in Porenbrennern]. Gaswaerme International, 56, (3), 200-204.

- H.-J. Wiemer, D. Kuhn, U. Santo, M. Eberhard, T. Kolb, E. Pantouflas, N. Zarzalis, (2007). Thermochemische Umsetzung von Matrixflüssigkeit in einem Flugstromvergaser bei der Variation des Luftbedarfs, in *VDI-GET-Fachtagung 'Verbrennung und Feuerung-23. Deutscher Flammentag*, vol. **VDI-Bericht**, VDI-GET, 12.-13. September, Berlin, p. In Press, .

- Zbogar-Rasic, A. and Steven, M. and Von Issendorff, F. and Trimis, D., (2007). Experimental and numerical optimization of the burner mantel design of the premixed household burners. VDI Berichte, (1988), 681-686.

- F. Zhang; P. Habisreuther; M. Hettel; H. Bockhorn, (2007). Modelling of a Premixed Swirl-Stabilized Combustor using a Turbulent Flame Speed Closure Model in LES, in *Computational Combustion 2007, Proc. 2nd ECCOMAS Thematic Conference*, ECCOMAS, Delft, Netherland, 18./20. Juli, .

Combustion Noise, in *Proc. of the 19th International Congress on Acoustics*, International Commission for Acoustics, ICA, Madrid, Spain, 2.-7. September, .

2006

... zum Anfang der Seite

- Ünsal, B. and Trimis, D. and Durst, F., (2006). Instantaneous mass flowrate measurements through fuel injection nozzles. International Journal of Engine Research, 7, (5), 371-380.
- Al-Hamamre, Z. and Deizinger, S. and Mach, A. and Von Issendorff, F. and Trimis, D., (2006). Thermal partial oxidation of diesel in porous reactors for synthesis gas production. Clean Air, 7, (4), 391-407.
- Al-Hamamre, Z. and Diezinger, S. and Talukdar, P. and Von Issendorff, F. and Trimis, D., (2006). Combustion of low calorific gases from landfills and waste pyrolysis using porous medium burner technology. Process Safety and Environmental Protection, 84, (4 B), 297-308.
- Becker, M. and Fend, Th. and Hoffschmidt, B. and Pitz-Paal, R. and Reutter, O. and Stamatov, V. and Steven, M. and Trimis, D., (2006). Theoretical and numerical investigation of flow stability in porous materials applied as volumetric solar receivers. Solar Energy, 80, (10), 1241-1248.
- Brunn, O.; Wetzel, F.; Zarzalis, N.; Poster: *Statistische Modellierung von Wärmefreisetzung und Wärmestrahlung turbulenter Flammen*. Fakultätstag Universität Karlsruhe, 12 Mai 2006, 2006.
- Brunn, O.; Wetzel, F.; Habisreuther, P.; Zarzalis, N., (2006). Investigation of a Combustor using a presumed JPDF Reaction Model applying Radiative Heat Loss by the Monte Carlo Method, in *Proceedings of the 25th Congress of the International Council of the Aeronautical Sciences (ICAS 2006)*, vol. **CD-ROM**, .
- Brunn, O.; Wetzel, F.; Habisreuther, P.; Zarzalis, N.; (2006). Vortrag: *Investigation of a Combustor using a presumed JPDF Reaction Model applying Radiative Heat Loss by the Monte Carlo Method*. 25th Congress of the International Council of the Aeronautical Sciences (ICAS 2006), Hamburg, Deutschland, 03.-08. September, ID 121.
- Denev, J.A.; J. Fröhlich; H. Bockhorn, (2006). Direct Numerical Simulation of mixing and chemical reactions in a round jet into a crossflow - a Benchmark, in *Trans. of the High Performance Computing Center Stuttgart (HLRS) 2006. Springer. Editors: W.E. Nagel, W. Jaeger and M. Resch*, vol. **1**, p. 237-251, (doi:10.1007/978-3-540-36183-1_17).
- Fast, G.; Kuhn, D.; Breitung, W.; Class, A.G.; Haessler, H.; Bockhorn, H; Poster: *Auto-ignition of dimethyl ether at high pressure*. International Workshop on Gas Kinetics, Karlsruhe, Germany, November 17th, 2006.
-
- Flavio C.C. Galeazzo, Raquel Y. Miura, Jorge A.W. Gut, Carmen C. Tadini, (2006). Experimental and numerical heat transfer in a plate heat exchanger. Chemical Engineering Science, (61), 7133 7138.
- Fokaides, P.A.; Kasabov, P.; Zarzalis, N.; Poster: *Experimentelle Untersuchung Abgehobener Doppeldrall-Diffusionsflammen*. Fakultätstag Universität Karlsruhe, 12 Mai 2006, 2006.
- Fokaides, P.A.; Zarzalis,N., (2006), Report on stability and flow characterisation at atmospheric pressure conditions. Deliverable Report: D .2.3.3.a, European Community, AST4-CT-2005-012326, .
- D. Großschmidt, Peter Habisreuther, Henning Bockhorn; (2006). Vortrag: *Calculation of the size distribution function of soot particles inturbulent diffusion ﬂames*. 31st Symp. (Int.) on Combustion, Heidelberg, Germany, Aug. 6-11, , PID 153285.
- P. Habisreuther; (2006). Vortrag: *Modellierung von Drallflammen*. 32. Jahrestagung für Akustik, DAGA ’06, 20-23. Oktober,

DEGA, ISBN 3-9808659-2-4, .

- P. Habisreuther, C. Bender, O. Petsch, H. Büchner, H. Bockhorn, (2006). Prediction of Pressure Oscillations in a Premixed Swirl Combustor Flow and Comparison to Measurements. Flow Turbulence and Combustion (Applied Scientific Research), 77, (1-4), 147-160(14).
- Habisreuther, P. , (2006). LES-Simulation einer Drallflamme. FORTSCHRITTE DER AKUSTIK, 32, (2, ISSN 0720-2253), 637-638 .
- Haessler H.; Bockhorn H.; Fast G.; Kuhn D.; Class A.G; Poster: *Auto-Ignition of Dimethylether at high pressure*. 31st International Symposium on Combustion, Heidelberg, Germany, August 6-11th , 2006.
- Mach, A. and Herzog, A. and Issendorff, F.V. and Kanka, B. and Krieger, R. and Pritzkow, W. and Schäfer, J. and Schmidt, J. and Schmücker, M. and Schneider, H. and Stark, J. and Trimis, D. and Vogt, U. and Megede, D.Z., (2006). CERPOR - Optimised ceramic components for the porous burner technology. InterCeram: International Ceramic Review, 48-54.
- Matthias Hettel, (2006), Analytische und numerische Untersuchungen der Dynamik von Vormischflammen sowie deren Interaktion mit Ringwirbelstrukturen , Dissertation, Karlsruhe.
- Mishra, S.C. and Steven, M. and Nemoda, S. and Talukdar, P. and Trimis, D. and Durst, F., (2006). Heat transfer analysis of a two-dimensional rectangular porous radiant burner. International Communications in Heat and Mass Transfer, 33, (4), 467-474.
- Nadia Sebbar, (2006), Thermochemistry and kinetics for the Oxidative Degradation of Dibenzofuran and Precursors, .
- Nalcaci, O.O.; Sirin, S.; Ovez, B., (2006). Toxicity determination of various phenoxyalkanoic acid herbicides using cress seed in phosphate contaminated aqueous media, in *Water Pollution VIII: Modelling, Monitoring and Management*, vol. **95**, p. 301-307, .
- Ozgen, S.; Nalcaci, O.O.; Ovez, B., (2006). Metal Toxicity Determination Using Cress Seed In Phosphate Contaminated Media, The 4th Eastern Mediterranean Chemical Engineering Conference for Collaborative Research in Mediterranean Countries Proceedings, p. 373-376, .
- Pan, H.-L. and Pickenacker, O. and Trimis, D. and Durst, F., (2006). Experimental investigation of flame propagation of methane mixture in porous media. Kung Cheng Je Wu Li Hsueh Pao/Journal of Engineering Thermophysics, 27, (5), 897-899.
- Russ, M.; Büchner H.; (2006). Vortrag: *Thermoakustische Eigenschaften von LP- und LPP- Flammen*. Zwischengutachten der Forschungsinitiative "Kraftwerke des 21. Jahrhunderts"; Stuttgart Haus der Wirtschaft,
- Russ, M.; Büchner, H., (2006), Thermoakustische Eigenschaften von LP- und LPP- Flammen. Forschungsinitiative "Kraftwerke des 21. Jahrhunderts", Partner MTU Aero Engines, .
- Russ, M.; Büchner H.; (2006). Vortrag: *Vorhersage des Stabilitätsverhaltens eines Vormisch-Verbrennungssystems*. Workshop SFB 606, Bad Herrenalb, 12./13. Oktober ,
- Schäfer, J. and Sommer, M. and Diezinger, S. and Trimis, D. and Durst, F., (2006). Efficiency enhancement in gasoline reforming through the recirculation of reformate. Journal of Power Sources, 154, (2), 428-436.
- Trimis, D., (2006). Porous burner technology - An overview [Porenbrennertechnologie - Ein Überblick]. GWF, Gas - Erdgas, 147, (2), 92-99.
-
- Wetzel, F.; Habisreuther, P.; Zarzalis, N., (2006). Numerical Investigation of Lean Blow Out of a Model Gas Turbine Combustion Chamber using a Presumed JPDF-Reaction Model by taking Heat Loss Processes into accoung, in *Proceedings of ASME Turbo Expo*, ASME, Barcelona, Spain, 8-10 May,, p. GT2006-90064, (doi:10.1115/GT2006-90064).

an Entrained Flow Gasifier - Characterisation of Combustion Behaviour, in *CD- ROM Proceedings*, 7th European Conference on industrial Furnaces and Boilers, Porto, 18-21 April 2006, .

- H.-J. Wiemer, U. Santo, T. Kolb, E. Pantouflas, n. Zarzalis; Poster: *Gasification experiments for Biomass to Liquids (BTL)*. 31. International Symposium on Combustion, Heidelberg, The Combustion Institute, 6-11 August 2006, 2006.

- H.J. Wiemer, U. Santo, t. Kolb, E. Pantouflas, n. Zarzalis, (2006). Spray Characteristics for the Gasification on Pyrolysis Oil Slurries, in *Science in thermal and Chemical Biomass Conversion*, vol. **2**, A.V. Bridgewater and D.G.B. Boocock, CPL Press, p. 1559-1564, .

- Zarzalis, N.; Fokaides, P.A.; Merkle, K., Fuel injection apparatus, 06009563.5-, 2006.

- daSilva, G.; Bozzelli, J. W.; Sebbar, N.; Bockhorn, H. , (2006). Thermodynamic and Ab Initio Analysis of the Controversial Enthalpy of Formation of Formaldehyde. ChemPhysChem, 7, 1119 1126.

- daSilva, G.; Bozzelli, J. W.; Sebbar, N.; Bockhorn, H. , (2006). Thermodynamic and Ab Initio Analysis of the Controversial Enthalpy of Formation of Formaldehyde. ChemPhysChem, 7, 1119 1126.

2005

... zum Anfang der Seite

- Bender, C., Habisreuther, P., Büchner, H., Bockhorn, H; (2005). Vortrag: *Lärmentstehung in pilotierten Drallflammen*. 69. Jahrestagung der Deutschen Physikalischen Gesellschaft, 4.-9. März,

- Bender, C.; Habisreuther, P.; Büchner, H.; Bockhorn, H, (2005). Lärmentstehung in pilotierten Drallflammen, in *Verhandlungen der Deutschen Physikalischen Gesellschaft*, vol. **5/2005, ISSN 0420-0195**, DPG, p. 23, .

- Bender, C.; Büchner, H., (2005). Noise emissions from a premixed swirl combustor, in *Proceedings of Twelfth International Congress on Sound and Vibration (ICSV 12)*, vol. **CD-ROM**, International Institute of Acoustics and Vibration, .

- Bender, C.; Büchner, H; (2005). Vortrag: *Noise emissions from a premixed swirl combustor*. Twelfth International Congress on Sound and Vibration (ICSV 12), Lissabon, Portugal, July 11.-14.,

- Bender, C.; Büchner, H; (2005). Vortrag: *Mechanismen der Lärmentstehung in freibrennenden und eingeschlossenen Drallflammen*. 22. Deutscher Flammentag Braunschweig, 22.9.2005,

- Bender, C.; Büchner, H, (2005). Mechanismen der Lärmentstehung in freibrennenden und eingeschlossenen Drallflammen, in *22. Deutscher Flammentag-Verbrennung und Feuerungen*, vol. **VDI-Berichte Nr. 1888**, VDI-GET, Braunschweig, 21.-22.9.2005, p. 311-317, .

- J.A. Denev; J. Fröhlich; H. Bockhorn, (2005). Evaluation of mixing and chemical reactions within a jet in crossflow by means of LES, in *Proc. of European Combustion Meeting*, vol. **Paper No 139**, Louvain-la-Neuve, Belgium, 3.-6.04, p. -, .

- J.A. Denev; J. Fröhlich; H. Bockhorn, (2005). Structure and mixing of a swirling transverse jet into a crossflow, in *Procs. of 4th Int. Symp. on Turbulece and Shear Flow Phenomena*, vol. **3**, Editors: J.A.C. Humphrey, T.B. Gatski, J.K. Eaton, R. Friedrich, N. Kasagi and M.A. Leschziner, Williamsburg, Virginia, June 27-29, p. 1255-1260, .

- Diezinger, S. and Steven, M. and Talukdar, P. and Al-Hamamre, Z. and Von Issendorff, F. and Trimis, D., (2005). Numerical and experimental study of combustion processes [Numerische und experimentelle Untersuchung von Verbrennungsvorgängen niederkalorischer Gase in Porenbrennern]. VDI Berichte, (1888), 519-524.

- Diezinger, S. and Tslukdar, P. and Von Issendorff, F. and Trimis, D., (2005). Combustion of low calorific value gases in porous burners [Verbrennung von niederkalorischen Gasen in Porenbrennern]. Gaswaerme International, 54, (3), 187-192.

Universität Karlsruhe, Mai 2005, 2005.

- J. Fröhlich, C.P. Mellen, W. Rodi, L. Temmerman, M.A. Leschziner, (2005). Highly-resolved large eddy simulations of separated flow in a channel with streamwise periodic constrictions. J. Fluid Mech., 526, 19-66.
- J. Fröhlich, (2005). Die Habilitation in Frankreich. Forschung und Lehre, 7, 371-373.
- M. García-Villalba, J. Fröhlich, (2005). On the sensitivity of a free annular jet to the level of swirl and a pilot jet, in *Engineering Turbulence Modelling and Experiments*, vol. **6**, Elsevier, p. 845-854, .
- M. García-Villalba, J. Fröhlich, W. Rodi., (2005). Large eddy simulation of an annular swirling jet with pulsating inflow , in *Procs. of 4th Int. Symp. on Turbulent Shear Flow Phenomena,* , p. 717-722, .
- A. Giauque; L. Selle; L. Gicquel; T. Poinsot; H. Büchner; P. Kaufmann; W. Krebs, (2005). System identification of a large-scale swirled partially premixed combustor using LES and measurements. Journal of Turbulence, 6, (N21), (doi:10.1080/14685240512331391985)
- Habisreuther, P.; Bender, C.; Petsch, O.; Büchner, H.; Bockhorn, H.; (2005). Vortrag: *Prediction of Pressure Oscillations in a premixed swril combustor flow and comparison to measurements*. ERCOFTAC International Symposium on Engineering Turbulence Modelling and Measurements, ETMM6, Sardinia, Italy, May 23.-25 .,
- P. Habisreuther; (2005). Vortrag: *Simulation von Drallströmungen*. SFB 606, Numerikseminar, Karlsruhe, 22. Februar,
- P. Habisreuther, C. Bender, O. Petsch, H. Büchner, H. Bockhorn, (2005). Prediction of Pressure Oscillations in a Premixed Swirl Combustor Flow and Comparison to Measurement, in *Proc. ETMM6*, Sardinia, Italy, 23-25 May, p. 855-864, .
- Hans-Heinrich Carstensen, Anthony M. Dean und Olaf Deutschmann ; Poster: *Geschwindigkeitskonstanten für die H-Abstraktion von Alkanen durch Peroxyradikale (RO2): ein Vergleich zwischen TST Berechnungen und empirischen Abschätzungen*. DECHEMA Jahrestagung, Wiesbaden, 6-8.9.2005, P1.10, 2005.
- Heeb, A. and Medeiros, A. and Vom Schloß, J. and Lucka, K. and Abu-Sharekh, Y. and Von Issendorff, F. and Trimis, D. and Brehmer, T.H. and Heger, F. and Pöz, W. and Hayashi, T. and Pereira, J.C.F. and Founti, M. and Kolaitis, D. and Molinari, M. and Ortona, A., (2005). Development of a heating system with stageless output modulation for use with fuel oil EL and fatty acid methyl ester (FAME) mixtures within the setting of the BIOFLAM project [Entwicklung eines Heizungssystems mit stufenloser Leistungsmodulation für die Anwendung mit Heizöl EL und FAME-Gemischen im Rahmen des Projektes BIOFLAM]. VDI Berichte, (1888), 653-658.
- J. Hentschel, H. Bockhorn, R. Suntz, (2005). Soot formation and oxidation in oscillating methane/air diffusion flames at elevated pressure. Applied Optics, in Press,
- J. Hentschel, R. Suntz and H. Bockhorn, (2005). Soot Formation and Oxidation in Oscillating Methane/Air Diffusion Flames at Elevated Pressure. Appl. Optics,
- Hettel, M.; Habisreuther, P.; Weiß, M.; Büchner, H.; Bockhorn, H.; Zarzalis, N., (2005). URANS-Modelling of Pulsed Turbulent Jets and Premixed Jet Flames. Progress in Computational Fluid Dynamics (PCFD), 5, (7), 386-397.
- Hettel, M.; Büchner, H.; Bockhorn, H. , (2005), Numerische Untersuchung von Ringwirbelstrukturen im Hinblick auf die Entstehung von Verbrennungsinstabilitäten. Deutsche Forschungsgemeinschaft (DFG) , Abschlussbericht , Bo693/12-3, .
- M. Hettel; P. Habisreuther; H. Bockhorn, (2005). Unsteady Reynolds-Averaged Navier-Stokes (URANS) - Modeling of Flame Transfer Functions of Turbulent Premixed Jet Flames (Paper: 670) , in *Proceedings of Twelfth International Congress on Sound and Vibration (ICSV12)* , vol. **CD-ROM**, International Institute of Acoustics and Vibration, .

Brennkammerschwingungen, in *Freiberger Forschungshefte* , vol. **C505**, 56. Berg- und Hüttenmännischer Tag , Technische Universität Bergakademie Freiberg, p. 36-41, .

- M. Hettel; P. Habisreuther; H. Bockhorn, (2005). URANS-Modellierung von Frequenzgängen vorgemischter turbulenter Axialstrahlflammen, in *Verbrennung und Feuerungen - 22. Deutscher Flammentag, VDI-Berichte 1888*, Verein Deutscher Ingenieure (ed.), Düsseldorf, p. 395-400, .

- O.R. Inderwildi, D. Lebiedz, O. Deutschmann, J. Warnatz, (2005). Influence of initial oxygen coverage and magnetic moment on the NO decomposition on Rhodium (111). J. Chem. Phys. , 122,

- O.R. Inderwildi, D. Lebiedz, O. Deutschmann, J. Warnatz, (2005). Coverage Dependence of Oxygen Decomposition and Surface Diffusion on Rhodium (111): A DFT Study. J. Chem. Phys., 122,

- B. Jungfleisch, M. Stumpf, R. Suntz, A. Velji, H. Bockhorn and U. Spicher, (2005). Investigations on Soot Emission Behaviour of a Common- Rail Diesel Engine during steady and non- steady Operating Conditions by Means of several Measuring Techniques". SAE, 01, 2154.

- Kumlutas, D.; Karadeniz, Z.H.; Nalcaci, O.O., (2005). Determining The Heat Transfer Coefficient Of Polymers With Two Different Metal Additions, 15. National Congress of Thermal Sciences and Technologies, Trabzon, Turkey, .

- C. Külsheimer, (2005), Die Bedeutung periodischer Ringwirbelstrukturen für das Auftreten selbsterregter Verbrennungsinstabilitäten, Dissertation, Universität Karlsruhe.

- M. Lohrmann, H. Büchner, (2005). Prediction of stability limits for LP and LPP gas turbine combustors. Combust. Sci. and Tech., 177, (12), 2243-2273.

- Mishra, S.C. and Talukdar, P. and Trimis, D. and Durst, F., (2005). Two-dimensional transient conduction and radiation heat transfer with temperature dependent thermal conductivity. International Communications in Heat and Mass Transfer, 32, (3-4), 305-314.

- Nadia Sebbar, Joseph W. Bozzelli, Henning Bockhorn, (2005). Enthalpy of formation and bond energies on unsaturated oxygenated hydrocarbons using G3MP2B3 calculation methods. International Journal of Chemical Kinetics, 37, (10), 633-648.

- M. Odinius, H. Bockhorn, (2005). Effect of the inflow conditions on the entrainment of sprays from air assisted internal mixing atomizers for use in high temperature air combustion, in *Proceedings, 20th Annual Conference on Liquid Atomization and Spray Systems*, vol. **20**, ILASS, p. 391-396, .

- Pantouflas, E.; Zarzalis, N.; (2005). Vortrag: *Effect of the Fluid Properties and the Geometry of the Atomizer on the Spray Characteristics of a Further Developed Coaxial Air-Assisted Internal Mixing Atomizer*. 20th Annual Conference on Liquid Atomization and Spray Systems, ILASS Europe 2005, Orleans, France, 5th-7th September 2005,

- E. Pantouflas; N. Zarzalis, (2005), PyroGas. Auftragsbericht, 320/20288131/IKET, .

- H. J. Pasman; R. Bouma; N. Zarzalis; M. Weiß, (2005). Some Notes on the Fundamentals of Energetic Material Initiation Towards a "Universal Sensitivity Characteristic"?. Central European Journal of Energetic Materials, 2, (3), 55-69.

- Peter Habisreuther, Matthias Philipp, Heinrich Eickhoff, Wolfgang Leuckel; Mathematical Modeling of Turbulent Swirling Flames. In *High Intensity Combustors - Steady Isobaric Combustion*, Sigmar Wittig, Otmar Vöhringer, Soksik Kim (ed.), Wiley-VCH, p. 156-175, (doi:10.1002/3527601996.ch8) 2005.

- Petsch, O.; Pritz, B.; Magagnato, F.; Büchner, H.; Poster: *Untersuchungen zum Resonanzverhalten einer Brennkammer vom Helmholtz-Resonator-Typ*. 22. Deutscher Flammentag, Braunschweig, 21.-22.9.2005, P 01, 2005.

application to flame ball - vortex interaction. Comp. Fluids, 34, (7), 817-831.

- Santo, U.; Wiemer, H.-J.; Kolb, T.; Pantouflas, E.; Zarzalis, N.; Poster: *Vergasungseigenschaften Biomasse basierter Slurries*. Fakultätstag, Universität Karlsruhe, 29 April 2005, 2005.
- Sebbar, N.; Bockhorn, H.; Bozzelli, J. W., (2005). Thermochemical Properties, Rotation Barriers, and Group Additivity for Unsaturated Oxygenated Hydrocarbons and Radicals Resulting from Reaction of Vinyl and Phenyl Radical Systems with O2. J. Phys. Chem. A., 109, (10), 2233-2253.
- T. Stoesser, W. Rodi, J. Fröhlich, (2005). Large Eddy Simulation of open-channel flow over a layer of shperes, in *Proc. of 31th IAHR Congress, Seoul, September 11-16, 2005*, .
- Talukdar, P. and Steven, M. and Issendorff, F.V. and Trimis, D., (2005). Finite volume method in 3-D curvilinear coordinates with multiblocking procedure for radiative transport problems. International Journal of Heat and Mass Transfer, 48, (21-22), 4657-4666.
-
- M. Weiß, N. Zarzalis, R. Suntz, (2005). Modellierung der turbulenten Brenngeschwindigkeit vorgemischter Brennstoff/Luft-Gemische unter Berücksichtigung des Einflusses der Flammenstreckung auf die laminare Brenngeschwindigkeit von Flamelets. VDI-Bericht 1888, 687-692.
- F. Wetzel, N. Zarzalis, (2005), Final report on Validation of JPDF Module and LBO Calculations - Deliverable Report D2.7a. European Community, G4RD-CT-2002-00644, .
- Wetzel, F.; Habisreuther, P.; Zarzalis, N., (2005). Modellierung der Stabilität diffusiver Drallflammen mittels eines presumed JPDF-Reaktionsmodells unter Berücksichtigung lokaler Wärmeverluste, in *22. Deutscher Flammentag - Verbrennung und Feuerungen*, vol. **VDI-Bericht Nr. 1888**, VDI-GET, Braunschweig 21.- 22. September 2005, p. 401-406, .

2004

... zum Anfang der Seite

- C. Bender, P. Habisreuther, H. Büchner, H. Bockhorn; (2004). Vortrag: *Mechanismen der Lärmentstehung in pilotierten Vormisch-Drallflammen*. 11. Workshop Physikalische Akustik "Verbrennungslärm", Bad Honnef, 16.-18. September,
- H. Bockhorn, D. Großschmidt, M. Hettel, J. Hentschel, R. Suntz; Poster: *Soot Formation in Oscillating and Steady Diffusion Flames under Elevated Pressure* . 30th International Symposium on Combustion, Chicage, US, July 2004, 2004.
- H. Dörr, H. Bockhorn; (2004). Vortrag: *Partikelmassenspektrometrie nanoskaliger Eisenpartikel*. Forschungszentrum Karlsruhe, 17.06.2004,
- H. Dörr, H. Bockhorn, R. Suntz; Poster: *Eisenoxidnanopartikel - Herstellung und Charakterisierung*. Universität im Rathaus, Karlsruhe, 27.01.2004, 2004.
- H. Dörr, H. Bockhorn, R. Suntz; Poster: *Particle mass spectrometry and laser diagnostics applied to iron oxide nanoparticle formation*. 8th ETH-Conference on Combustion Generated Nanoparticles, ETH Zürich, Schweiz, 16.-18.08.2004, 2004.
- H. Dörr, H. Bockhorn, R. Suntz; Poster: *Online characterization of combustion generated iron oxide nanoparticles optical diagnostics versus particle mass spectrometry*. Nanofair 2004, Karlsruhe, 23./24.11.2004, 2004.
- Fast, G.; Kuhn, D.; Class, A.G; Haessler, H.; Bockhorn, H; Poster: *Auto-Ignition Processes of Transient Open Jets*. 30th International Symposium on Combustion, Chicago, Illinois, July 25-30th , 2004.
- J. Froehlich; J.A. Denev; H. Bockhorn, (2004). Large eddy simulation of a jet in crossflow, in *Proc. of the 4th European Congress on Computational Methods in Applied Sciences and Engineering, ECCOMAS 2004*, vol. **1, ISBN 951-39-1868-8**, P. Neittaanmaki, T. Rossi, K. Majava, and O. Pironneau (eds.), W.

- J. Fröhlich, W.Rodi, (2004). LES of the flow around a cylinder of finite height. Int. J. Heat Fluid Flow, 25, 537-548.

- M. García-Villalba, J. Fröhlich, W. Rodi, (2004). On inflow boundary conditions for large eddy simulation of turbulent swirling jets, in *Procs. of XXI International Congress of Theoretical and Applied Mechanics,15.-21.8.2004, Warsaw, Poland, CD-ROM, IPPT PAN, ISBN 83-89687-01-1*, .

- M. García-Villalba, J. Fröhlich, W. Rodi, (2004). Unsteady phenomena in an unconfined annular swirling jet, in *Proc. of 10th European Turbulence Conference,* , CIMNE, .

- P. Habisreuther; (2004). Vortrag: *Prediction of CO Burnout using a CHEMKIN based Network Tool*. Alstom Research Center, Dättwiel, 27. Mai,

- P. Habisreuther; (2004). Vortrag: *Validation of a Two-Zone Combustion Model for Premixed Flames*. Alstom Research Center, Dättwiel, 27. Mai,

- P. Habisreuther, O. Petsch, H. Büchner, H. Bockhorn, (2004). Berechnete und gemessene Strömungsinstabilitäten in einer verdrallten Brennerströmung. GASWÄRME International, 53, (6), 326-331.

- P. Habisreuther, O. Petsch, H. Bockhorn, H. Büchner; Poster: *Calculated and Measured Turbulent Noise in a Strongly Swirling Isothermal Jet*. Gemeinschaftstagung: 7eme Congrès Francais d´Acoustique CFA / 30. Deutsche Jahrestagung für Akustik DAGA, Strasbourg, France, March 25, 2004.

- P. Habisreuther, C. Bender, O. Petsch, H. Büchner, H. Bockhorn, (2004). Calculated and Measured Turbulent Noise in a Strongly Swirling Isothermal Jet, in *Proc. Joint Congress CFA/DAGA'04*, Strasbourg, France, p. 1179-1180, .

- Hettel, M.; Büchner, H.; Bockhorn, H. , (2004), Numerische Untersuchung von Ringwirbelstrukturen im Hinblick auf die Entstehung von Verbrennungsinstabilitäten. Deutsche Forschungsgemeinschaft (DFG) , Abschlussbericht , Bo693/12-1/2, .

- Hettel, M.; Habisreuther, P.; Büchner, H.; Bockhorn, H.; Zarzalis, N., (2004). URANS-Modelling of Flame Transfer Functions of Turbulent Premixed Jet Flames (Paper: 2004-GT-53808), in *Proceedings of ASME Turbo Expo 2004, Gas Turbine & Aeroengine Congress*, ASME, June 14th-17th, Vienna, Austria, (doi:10.1115/2004-GT-53808).

- M. Hettel, H. Büchner, P. Habisreuther, H. Bockhorn, N. Zarzalis, (2004). Modeling of Turbulent Ring Vortices and Their Interaction with Turbulent Premixed Flames. Combustion, Science and Technology, 176, (05-06), 835-850.

- Holger Dörr, R. Suntz, M. Türk, K. Schaber, H. Bockhorn; (2004). Vortrag: *Laser Diagnostics of Particle Formation during the Rapid Expansion of Supercritical Solutions*. Particle Nucleation from Supercritical Media, Facility Conception Work Shop, ESTEC (ESA) Nordwijk, Niederlande, 03.-05..03.2004,

- B. Jungfleisch, M. Stumpf, J. Hentschel, H. Kubach, R. Suntz, A. Velji, H. Bockhorn and U. Spicher, (2004). Highly Temporal Resolved Detection of Soot Particle Properties in a Common- Rail Direct Injection Diesel Engine". 24th CIMAC Congress, Kyoto, , (85),

-

- M. Lohrmann, C. Bender, H. Büchner, N. Zarzalis, (2004). Scaling of Stability Limits by Use of Universal Flame Transfer Functions, in *Proc. Joint Congress CFA/DAGA'04*, vol. **2**, Strasbourg, France, p. 1213-1214, .

- M. Lohrmann, C. Bender, H. Büchner, N. Zarzalis; Poster: *Scaling of Stability Limits by Use of Universal Flame Transfer Functions*. Gemeinschaftstagung: 7eme Congrès Francais d´Acoustique CFA / 30. Deutsche Jahrestagung für Akustik DAGA, Strasbourg, France , March 25, 2004.

on the computational efficiency of the discrete transfer method for solving radiative transport problems with participating medium. Numerical Heat Transfer, Part B: Fundamentals, 46, (5), 463-478.

- O. Roussel, K. Schneider, H. Bockhorn, (2004). Adaptive numerical simulation of 3D pulsating spherical flames in micro-gravity, in *7th Drop Tower Day*, ZARM, Bremen, Germany, p. 128-130, .
- Sebbar, N.; Bozzelli, J. W.; Bockhorn, H., (2004). Structures, Thermochemical Properties (Enthalpy, Entropy and Heat Capacity), Rotation Barriers, Bond Energies of Vinyl, Allyl, Ethynyl and Phenyl peroxides. J. Phys. Chem. A., 108(40), (40), 8353-8366.
- Talukdar, P. and Mishra, S.C. and Trimis, D. and Durst, F., (2004). Heat transfer characteristics of a porous radiant burner under the influence of a 2-D radiation field. Journal of Quantitative Spectroscopy and Radiative Transfer, 84, (4), 527-537.
- Talukdar, P. and Mishra, S.C. and Trimis, D. and Durst, F., (2004). Combined radiation and convection heat transfer in a porous channel bounded by isothermal parallel plates. International Journal of Heat and Mass Transfer, 47, (5), 1001-1013.
- Th. Lehre, R. Suntz and H. Bockhorn, (2004). Time-Resolved Two- color LII: Size Distributions of Nano-Particles from GastoParticle Synthesis". 30th Symposium (International) on Combustion, The Combustion Institute, Pittsburgh, im Druck,
-
- F. Wetzel, N. Zarzalis, (2004), Preliminary Version of JPDF software module - Deliverable Report D2.6. European Community, G4RD-CT-2002-00644, .
- H.-J. Wiemer, U. Santo, T. Kolb, E. Pantouflas, N. Zarzalis, (2004). Spray Characteristics for the Gasification on Pyrolysis Oil Slurries, in *Proc. of the 2nd World Biomass Conference "Biomass for Energy, Industry and Climate Protection", Rome, I, May 10-14, 2004*, vol. **1**, Florence: ETA-Florence and WIP-Munich, p. 956-958, .
- H.J. Wiemer, U. Santo, T. Kolb, E. Pantouflas, N. Zarzalis; (2004). Vortrag: *Spray Characteristics for the Gasification on Pyrolysis Oil Slurries*. Science in Thermal and Chemical Biomass Conversion, Victoria, CDN, August 30 - September 2, 2004,
- N. Zarzalis; (2004). Vortrag: *Presentation of the Research Fields*. Alstom Research Center, Dättwiel, 27. Mai,

2003

... zum Anfang der Seite

- Al-Hamamre, Z. and Trimis, D. and Wawrzinek, K. and Diezlnger, S., (2003). Wasserstoffproduktion durch thermische partielle Oxidation von Methan im Porenbrenner. VDI Berichte, (1750), 589-594.
- G. Arnold, H. Büchner, (2003). Modeling of the Transfer Function of a Helmholtz-Resonator-Type combustion chamber, in *Proceedings of the European Combustion Meeting 2003 (ECM2003)*, Federation of the European Sections of the Combustion Institute, .
- H. Bockhorn, T. Lehre, M. Hermle, R. Suntz, (2003). Laserdiagnostische Untersuchung von Nanopartikeln. Chem. Ing. Tech, 75(11), (11), 1642-1646.
- H. Bockhorn, T. Lehre, M. Hermle, R. Suntz; (2003). Vortrag: *Laserdignostische Untersuchung von Nanopartikeln*. Sitzung der GVC-Fachausschüsse Partikelmesstechnik und Zerkleinern, Freiburg, 10./11.4,
- H. Bockhorn, J. Fröhlich, R. Suntz, (2003). SFB 606 - a German research initiative on unsteady combustion. ERCOFTAC Bulletin, 59, 40-44.

Verbrennungsschwingungen bei turbulenten Drallflammen. GVC-Fachausschuß "Hochtemperaturtechnik", Clausthal-Zellerfeld, 20./21. Februar,

- H. Büchner; (2003). Vortrag: *Periodische Verbrennungsinstabilitäten bei vorgemischten Drallflammen*. Kolloquium am Institut für Verbrennungstechnik der DLR-Stuttgart, 10. Februar,

- H. Büchner; (2003). Vortrag: *Übersichtsvortrag: "Flammenstabilisierung durch Drall"*. DFG-Forschergruppe "Verbrennungslärm", DLR-Stuttgart, 14. Februar,

- H. Büchner; (2003). Vortrag: *Coherent Flow Structures in Turbulent Swirl Flames as Drivers for Combustion Instabilities*. International Colloquium on Combustion and Noise Control, Cranfield University, Cranfield, U.K., 13. August,

- H. Büchner, M. Lohrmann, (2003). Coherent Flow Structures in Turbulent Swirl Flames as Drivers for Combustion Instabilities, in *Proceedings of the International Colloquium on Combustion and Noise Control, Cranfield University*, Cranfield, .

- H. Dörr, H. Bockhorn, R. Suntz, (2003), Herstellung submikroner organischer Partikel aus überkritischer Lösung und deren zweidimensionale laserspektroskopische Charakterisierung. Dechema, Abschlussbericht, 2270, .

- J. Fröhlich, M. Uhlmann, (2003). Orthonormal polynomial wavelets on the interval and applications to the analysis of turbulent flow fields. SIAM J. Appl. Math., 63, 1789-1830.

- J. Fröhlich, M. Uhlmann, (2003). New polynomial wavelets and their use for the analysis of wall-bounded flows, in *CD-ROM Proceedings of Congrès Français de Mécanique, Nice, 1.-5.9.2003*, .

- W. Gerlinger, K. Schneider, J. Fröhlich, H. Bockhorn, (2003). Numerical simulations on the stability of spherical flame structures. Combust. Flame, 132, 247-271.

- D. Großschmidt, A. Hoffmann, P. Habisreuther, H. Bockhorn, S. Hohmann, (2003). Modeling Turbulence/Chemistry Interactions for Industrial Application using Assumed PDF Methods. Proceedings of the European Combustion Meeting 2003 (ECM 2003), Federation of the European Sections of the Combustion Institute,

- D. Großschmidt, K. Merkle, H. Büchner, N. Zarzalis; (2003). Vortrag: *Influence of Co and Counter Swirl on Lean Stability Limits of an Airblast Nozzle*. ASME Turbo Expo -- Power for Land, Sea and Air, Atlanta, Georgia, USA, 16.-19. Juni, 2003,

- P. Habisreuther; (2003). Vortrag: *Bildung von thermischem Stickoxid in turbulenten Drallflammen*. Seminar Turbulente Reaktive Strömungen, Stuttgart, Institut für Technische Verbrennung, 13. Januar,

- P. Habisreuther; (2003). Vortrag: *Bildung von thermischem Stickoxid in turbulenten Drallflammen*. Thermodynamik Seminar am Lehrstuhl für Themodynamik, TU München, 31. Januar,

- X. Han, F. Rückert, U. Schnell, K R.G. Hein, S. Koger, H. Bockhorn, (2003). Computational Modelling of NOx Reburning by Hydrocarbons in a Coal Furnace with Reduced Kinetics. Combustion, Science and Technology, 175, 523-544.(doi:10.1080/00102200302383)

- M. Haußmann, M. Müller-Hagedorn, H. Bockhorn, (2003). Pyrolyse von stickstoffhaltigen Modellsubstanzen. VDI-Berichte Nr. 1750, 521-528.

- M. Haußmann, M. Müller-Hagedorn, H. Bockhorn; Poster: *Pyrolyse von stickstoffhaltigen Modellsubstanzen*. 21. Dt. Flammentag, Cottbus, 9.-10.9.2003, 2003.

- M. Hettel, H. Büchner, P. Habisreuther, H. Bockhorn, N. Zarzalis, (2003). Modelling of Ring-Vortices and their Interaction with Turbulent Premixed Flames, in *Proceedings of the Third Mediterranean Combustion Symposium*, June 8.-13., Marrakech, Morocco, p. 1015-1026, .

Response of Turbulent Premixed Flames, in *Proceedings of the European Combustion Meeting 2003 (ECM2003)*, Federation of the European Sections of the Combustion Institute, Orleans, .

- M. Hettel; H. Büchner; P. Habisreuther; H. Bockhorn; N. Zarzalis, (2003). Modellierung des Übertragungsverhaltens von turbulenten, vorgemischten, freibrennenden Axialstrahlflammen, in *Verbrennung und Feuerungen - 21. Deutscher Flammentag, VDI-Berichte 1750*, Verein Deutscher Ingenieure (ed.), Düsseldorf, p. 733-738, .

- Koger, S.; Bockhorn, H.; Teilprojekt 2: Reaktionskinetik der NOx-Bildung. In *Primärseitige Stickoxidminderung als Beispiel für die Optimierung des Verbrennungsvorgangs in Abfallverbrennungsanlagen, Abschlussbericht des HGF-Strategiefonds-Projektes*, Seifert, H.; Merz, D. (ed.), Forschungszentrum Karlsruhe GmbH, Postfach 3640, 76021 Karlsruhe, p. 73-96, 2003.

- T. Lehre, M. Hermle, R. Suntz, H. Bockhorn; (2003). Vortrag: *Ortsaufgelöste in-situ Bestimmung der Größenverteilung nanoskaliger Teilchen bei der gas-to-particle Synthese*. Dechema/GVC Jahrestagung, Mannheim, 16.9. - 18.9.,

- T. Lehre, H. Bockhorn, B. Jungfleisch and R. Suntz, (2003). Development of a measuring technique for simultaneous in situ detection of nanoscaled particle size distributions and gas temperatures. Chemosphere, Volume 51, Issue 10, 1055-1061.

- T. Lehre, B. Jungfleisch, R. Suntz, and H. Bockhorn, (2003). Size distributions of nanoscaled particles and gas temperatures from time-resolved laser-induced-incandescence measurements. Applied Optics, Volume 42, Issue 12, (12), 2021-2030.

- M. Lohrmann, H. Büchner, N. Zarzalis, W. Krebs, (2003). Flame Transfer Function Characteristics of Swirl Flames for Gas Turbine Applications, in *Proceedings of ASME Turbo Expo 2003*, vol. **GT2003-38113**, (doi:10.1115/GT2003-38113).

- M. Lohrmann, H. Büchner, (2003). Influence of the Air Preheating Temperature on the Flame Dynamics of Kerosene-LPP Swirl Flames, in *Proceedings of the European Combustion Meeting 2003 (ECM2003)*, Federation of the European Sections of the Combustion Institute, Orléans, .

- M. Lohrmann, H. Büchner; Schwingungsstabilität mager-vorgemischter Drallflammen in Abhängigkeit von der Gemischvorwärmung. In *Verbrennung und Feuerungen - 21. Deutscher Flammentag*, Verein Deutscher Ingenieure (ed.), VDI-Berichte 1750, VDI-Verlag GmbH, Düsseldorf, p. 401-406, 2003.

- C.P. Mellen, J. Fröhlich, W. Rodi, (2003). Lessons from the European LESFOIL project on LES of flow around an airfoil. AIAA J., 41, 573-581.

- Merkle, K.; Büchner, H.; Zarzalis, N. Sara, O.N.:, (2003). Influence of Co and Counter Swirl on Lean Stability Limits of an Airblast Nozzle, in *Proceedings of ASME Turbo Expo 2003*, vol. **GT2003-38004**, (doi:10.1115/GT2003-38004).

- K. Merkle, H. Haessler, H. Büchner, N. Zarzalis, (2003). Effect of co- and counter-swirl on the isothermal flow- and mixture-field of an airblast atomizer nozzle. International Journal of Heat and Fluid Flow, 24, 529-537.

-

- V. Michelassi, J.G. Wissink, J. Fröhlich, W. Rodi, (2003). LES of flow around low pressure turbine blade with incoming wakes. AIAA J.,, 41, 2143-2156.

- Mishra, S.C. and Talukdar, P. and Trimis, D. and Durst, F., (2003). Computational efficiency improvements of the radiative transfer problems with or without conduction - a comparison of the collapsed dimension method and the discrete transfer method. International Journal of Heat and Mass Transfer, 46, (16), 3083-3095.

pyrolysis of three different wood species. J. Anal. Appl. Pyrolysis, 68-69, 231-249.

- M. Müller-Hagedorn, H. Bockhorn, L. Krebs, U. Müller; (2003). Vortrag: *Formalkinetische Beschreibung der Pyrolyse von Holz - Unterschiede und Gemeinsamkeiten von Nadel- und Laubbaumholz*. 21. Deutscher Flammentag, Cottbus, 9.-10.9.2003,

- M. Müller-Hagedorn, H. Bockhorn, L. Krebs, U. Müller; (2003). Vortrag: *Niederpemperaturpyrolyse von Holz*. DECHEMA/GVC Jahrestagungen, Mannheim, 16.-18.9.2003,

- M. Müller-Hagedorn, H. Bockhorn, L. Krebs, U. Müller, (2003). Formalkinetische Beschreibung der Pyrolyse von Holz - Unterschiede und Gemeinsamkeiten von Nadel- und Laubbaumholz. VDI-Berichte Nr. 1750, 195-201.

- Nadia Sebbar; Joseph W. Bozzelli; Henning Bockhorn, (2003). Reaction of Dibenzofuran radical with O2, in *Proceeding of the European Combustion Meeting 2003*, Orléans, France, .

- Nadia Sebbar, Henning Bockhorn, Joseph W. Bozzelli, (2003). Thermodynamic properties (S298, Cp(T), internal rotations and group additivity parameters) in vinyl and phenyl hydroperoxides. Phys. Chem. Chem. Phys., 5, 300-307.

- Nadia Sebbar; Joseph W. Bozzelli; Henning Bockhorn; Poster: *Reaction of Dibenzofuran radical with O2: Thermodynamic Properties, Reaction Pathways and Kinetics*. The 8th International Congress on Combustion by-Products: Origin, Fate and Health Impacts, Umeå, Sweden, June 17-19, 2003.

- M. Odinius, H. Bockhorn, (2003), Untersuchungen zur Vormischung in Spraystrahlsystemen im Hinblick auf die Anwendung bei flammenloser Oxidation. TECFLAM, Seminar, .

- Pan, H.L. and Pickenäcker, O. and Trimis, D., (2003). Characterization of pore diameters in highly porous media, vol. **2003**, p. 467-475, .

- Plohr,M.; von der Bank, R.; Tilston, J.; Larkman, J.; Lischer, T.; Zarzalis, N., (2003), Future Engine Cycle Prediction and Emissions Study - Deliverable Report D7 Modelling Medium Fan Engines. European Community, G4RD-CT-2002-00383, .

- O. Roussel, K. Schneider, A. Tsigulin, H. Bockhorn, (2003). A conservative fully adaptive multiresolution algorithm for parabolic PDEs. J. Comput. Phys., 188, (2), 493-523.

- O. Roussel, (2003), Development of a 3D adaptive multiresolution algorithm for the resolution of parabolic PDEs. Application to thermodiffusive flame computations., Dissertation, Aix-Marseille II.

- S. Seidelt, M. Müller-Hagedorn, H. Bockhorn, (2003). Thermisches Zersetzungsverhalten von Gummi und Gummimischungen. VDI-Berichte Nr. 1750, 529-536.

- S. Seidelt, M. Müller-Hagedorn, H. Bockhorn; Poster: *Thermisches Zersetzungsverhalten von Gummi und Gummimischungen*. 21. Dt. Flammentag, Cottbus, 9.-10.9.2003, 2003.

- T. Stoesser, J. Fröhlich, W. Rodi, (2003). Identification of coherent flow structures in open--channel flow over rough bed using large eddy simulation, in *Proc. of 30th IAHR Congress, Thessaloniki, Greece, 25.-31.8.2003*, .

- T. Stoesser, F. Mathey, J. Fröhlich, W. Rodi, (2003). LES of flow over multiple cubes. ERCOFTAC Bulletin, 56, 15-19.

- L. Temmerman, M. Leschziner, C.P. Mellen, J. Fröhlich, (2003). Investigation of sub-grid models and wall function approximations in large eddy simulation . Int. J. Heat Fluid Flow, 24, 157-180.

- J. Tilston, J. Larkman, M. Plohr, A. Doepelheuer, T. Lischer, N. Zarzalis, (2003), Future Engine Cycle Prediction and Emissions Study - Final Publishable Report. G4RD-CT-2000-00383, .

Prediction and Emissions Study - Final Technical Report (Deliverable Report D11). G4RD-CT-2000-00383, .

- Trimis, D.; Wawrzinek, K., (2003). Stabilisierung der Verbrennung in porösen Medien bei starker Stoffdiffusion. VDI Berichte, (1750), 595-600.

- M. Uhlmann, J. Fröhlich, (2003). Analysis of channel flow using improved polynomial wavelets for the interval. , in *Proc. of 3rd Int. Symp. On Turbulence and Shear Flow Phenomena, Sendai, Japan, 25.-27.6.2003*, vol. **2**, p. 841-846, .

- F. Wetzel, N. Zarzalis, (2003), Modelling of UnSteady Combustion in Low Emission Systems - Integration of extended kinetic scheme in JPDF module - Deliverable Report D2.5. European Community, G4RD-CT-2002-00644, .

- N. Zarzalis, T. Brutscher, M. Weiß, H. Bockhorn, (2003). Experimentelle Untersuchungen und Modellierungen der turbulenten Flammengeschwindigkeit unter Berücksichtigung des Effektes der "bevorzugten Diffusion". VDI-Bericht 1750, 669-674.

- N. Zarzalis, T. Brutscher, M. Weiß, H. Bockhorn, P. Habisreuther; Poster: *Experimentelle und theoretische Untersuchungen zur Flammenausbreitung bei funkengezündeten Brenngas-Luft-Gemsichen*. 21. Deutscher Flammentag, Cottbus, 9.-10.9.2003, 2003.

- Zarzalis, N.; Brutscher, T.:; (2003). Vortrag: *Zum Einfluss der bevorzugten Diffusion auf die turbulente Flammenausbreitung vorgemischter Brenngas-Luft-Gemische*. Kolloquium am Lehrstuhl für Technische Thermodynamik der Universität Erlangen, 21.01.2003,

2002

... zum Anfang der Seite

- Bockhorn, H.; (2002). Vortrag: *Achievements of SFB: "Unsteady Combustion"*. 1st International SFB568-WORKSHOP "Trends in numerical and physical modelling for turbulent processes in gas turbine combustors", TU-Darmstadt, Germany, November, 14.-15.,

- H. Bockhorn, N. Zarzalis, D. Großschmidt. P. Habisreuther, M. Hettel, A. Hoffmann, G. Knochenhauer, T. Lischer, F. Wetzel; Poster: *Numerical simulation of turbulent reacting systems*. 1st International SFB568-WORKSHOP "Trends in numerical and physical modelling for turbulent processes in gas turbine combustors", TU-Darmstadt, Germany, November, 14.-15., 2002.

- H. Bockhorn, H. Geitlinger, B. Jungfleisch, Th. Lehre, A. Schön, Th. Streibel and R. Suntz, (2002). Progress in characterization of soot formation by optical methods . PCCP, 4, (15), 3780 - 3793.

- M. Braun-Unkhoff, P. Frank, S. Koger, W. Leuckel, D. Stapf, (2002). Evaluation of NOx Reburning Models under Large Scale Conditions. Clean Air, Vol. 3, 273-303.

- T. Brutscher, N. Zarzalis, H. Bockhorn, (2002). An Experimentally Based Approach for the Space-Averaged Laminar Burning Velocity Used for Modelling Premixed Turbulent Combustion. Proceedings of the Combustion Institute, 29, (2), 1825-1832.(doi:10.1016/S1540-7489(02)80221-8)

- H. Büchner, W. Leuckel, Verfahren zur Unterdrückung von Verbrennungsschwingungen bei Haushaltsfeuerungen, Europäische Patentschrift EP 0 794 384, 20. November, 2002.

- H. Büchner, W. Leuckel, Verfahren und Vorrichtung zur Unterdrückung von Flammen-/Druckschwingungen bei einer Feuerung, Europäische Patentschrift, Patent Nummer EP 0 789 193, 10. April , 2002.

- Durst, F. and Trimis, D. and Wawrzinek, K., (2002). Correlative determination of Wobbe index, calorific value, air requirement and gas density [Korrelative bestimmung von Wobbeindex, heizwert, luftbedarf und gasdichte]. Gaswaerme International, 51, (4), 169-173.

1-20.

- H. Dörr, H. Bockhorn, R. Suntz, (2002), Herstellung submikroner organischer Partikel aus überkritischer Lösung und deren zweidimensionale laserspektroskopische Charakterisierung. Dechema, Zwischenbericht, 2270, .
- F. E. Fakhar, H. Büchner, (2002). Combustion-Driven Instabilities in Liquid- Fired Swirl Combustors, In Proceedings of the 6th European Conference on Industrial Furnaces and Boilers, Lisbon, Portugal, .
- B.J. Geurts and J. Fröhlich, (2002). A framework for predicting accuracy limitations in large-eddy simulations. Phys. Fluids, 14, L41-L44.
- D. Großschmidt, A. Hoffmann, N. Zarzalis, H. Bockhorn, (2002), Extension of the 2-domain-1-step kinetic scheme for the CFD4C model Fuel. EC, Contract no.: G4RD-CT-1999-00075, .
- D. Großschmidt, A. Hoffmann, H. Bockhorn, (2002), Model und validation report for the JPDF module. EC, Contract no.: G4RD-CT-1999-00075, .
- D. Großschmidt, H. Bockhorn, M. Goodson, M. Kraft; (2002). Vortrag: *Two Approaches to the Simulation of Silica Particle Synthesis in Aerorsol Flame Reactors*. Ninth International Conference on Numerical Combustion, Sorrento, Italy, April 7-10, 2002, 9th.
- D. Großschmidt, H. Bockhorn, M. Goodson, M. Kraft, (2002). Two Approaches to the Simulation of Silica Particle Synthesis. Proceedings of the 29th International Symposium on Combustion, The Combustion Institute, Volume 29, 1039-1046.
- P. Habisreuther, (2002), Untersuchungen zur Bildung von thermischem Stickoxid in turbulenten Drallflammen, Dissertation, Universität Karlsruhe (TH).
- P. Habisreuther, M. Philipp, H. Eickhoff, W. Leuckel; Mathematical Modeling of Turbulent Swirling Flames. In *High Intensity Combustors - Steady Isobaric Combustion*, S. Wittig, O. Vöhringer and S. Kim (ed.), Final Report of the Collaborative Research Center 167, WILEY-VCH Verlag GmbH & Co. KGaA, p. 156-176, (doi:10.1002/3527601996) 2002.
- Hassa, C.; Voigt, P.; Lehmann, B.; Schodl, R.; Carl, M.; Ripplinger, T.; Zarzalis, N.:, (2002). Flow Field Mixing Characteristics of an Aero-Engine Combustor -Part I: Experimental Results, in *AIAA Joint Propulsion Conference*, vol. **AIAA 2002-3709**, AIAA, .
- A. Heilos, (2002), Spektrale Analyse der thermischen Strahlungswechselwirkung in Kohlenwasserstoffflammen, Dissertation, Universität Karlsruhe (TH).
- Hoffmann, Arne; Bockhorn, H.; (2002). Vortrag: *Evaluierung eines kohärenten Flammenfrontmodelles anhand hochturbulenter vorgemischter Freistrahlflammen*. GVC-Fachausschuss CFD Computational Fluid Dynamics in Weimar, 5. März 2002,
- A. Hoffmann, F. Wetzel, N. Zarzalis, (2002), Modelling of UnSteady Combustion in Low Emission Systems - Extension of kinetic scheme to highly diluted Combustion - Deliverable Report D2.4. European Community, G4RD-CT-2002-00644, .
- S. Koger, H. Bockhorn: , (2002). Validation of Detailed Reaction Kinetics of Nitrogen Oxide Formation in Incineration, in *Proceedings of the 6th European Conference on Industrial Furnaces and Boilers*, vol. **Vol II**, Estoril/ Portugal, p. 33-44, .
- W. Krebs, H. Büchner, M. Lohrmann, S. Hoffmann, B. Prade, (2002). Thermoacoustic Flame Response of Swirl Flames, vol. **GT-2002-30065**, ASME TURBO EXPO 2002, Amsterdam, The Netherlands, (doi:10.1115/GT-2002-30065).
- A. Kufferath, (2002), Über den Zusammenhang von Düseninnenströmung und Spraycharakteristik, Dissertation, Universität Karlsruhe (TH).

Flame, 131/1-2 pp. 70-84,

- Lehre, Thilo; Jungfleisch, Beate; Suntz, Rainer; Bockhorn, Henning; (2002). Vortrag: *LII zur In-Situ Bestimmung von nanoskaligen Partikelgrößenverteilungen und Gastemperaturen - Modellentwicklung und Auswertung*. GVC/Dechema-Jahrestagung, Wiesbaden, 11.-13. Juni ,

- Lehre, Thilo; Jungfleisch, Beate; Suntz, Rainer; Bockhorn, Henning; (2002). Vortrag: *Nanoscaled particle size distributions and gas temperatures from time-resolved LII measurements*. Laser applications to Chemical and Environmental Analysis, Boulder, Colorado (USA), 7.-10. Februar,

- Lischer, T.; Zarzalis, N.; Poster: *Erweiterung von 2-Gleichungs-Turbulenzmodellen zur Berechnung der Querstrahleinmischung ohne und mit überlagerter Wärmefreisetzung*. Schwerpunktprogramm 1141: Analyse, Modellbildung und Berechnung von Strömungsmischern mit und ohne chemische Reaktion, 19. Juni, 2002.

- M. Lohrmann, H. Büchner, C. Külsheimer, W. Krebs; Poster: *Measurements and OH-Imaging of the Flame Response Characteristics of Swirl Flames for Gas Turbine Applications*. 29th International Symposium on Combustion, Sapporo/Japan, 21-26 July, 15-1333, 2002.

- Mößbauer, S. and Pickenäcker, O. and Pickenäcker, K. and Trimis, D., (2002). Application of the porous burner technology in energy- and heat-engineering. Clean Air, 3, (2), 185-198.

- Merkle, K.; Haessler, H.; Zarzalis, N., (2002). Einfluss gleich- und gegensinniger Verdrallung auf das isotherme Strömungs- und Mischungsfeld eines luftseitig zweiflutigen Brenners. GWI, 51, (9), 395-399.

- K. Merkle, H. Haessler, H. Büchner, N. Zarzalis, (2002). Effect of Co- and Counter- Swirl on the Isothermal Flow- and Mixture- Field of an Airblast Atomizer Nozzle, In Proceedings of the 5th International Symposium on Engineering Turbulence Modelling and Measurement, Mallorca, Spain, .

- M. Müller-Hagedorn, H. Bockhorn, L. Krebs, U. Müller; (2002). Vortrag: *A Comparative Study on the Pyrolysis of three different Wood Species*. Pyrolysis, 2002, 17.9. - 20.9.2002,

- M. Müller-Hagedorn, H. Bockhorn, L. Krebs, U. Müller; (2002). Vortrag: *Investigation of thermal Degradation of three Wood Species as Initial Step in Combustion of Biomass*. 29th International Symposium on Conbustion, Sapporo, Japan, 21.7 - 26.7.2002,

- Nadia Sebbar, Henning Bockhorn, Joseph W. Bozzelli, (2002). Structures, thermochemical properties (enthalpy, entropy and heat capacity), rotation barriers, and peroxide bond energies of vinyl, allyl, ethynyl and phenyl hydroperoxides. Phys. Chem. Chem. Phys., 15, 3691-3703.

- Nadia Sebbar; Chiung-ju Chen; Joseph W. Bozzelli; Henning Bockhorn; Poster: *Reaction of Phenyl Radical with O2: Thermodynamic Properties, Reaction Pathways and Kinetics*. 17th International Symposium on Gas Kinetics, Essen, Germany, August 24-29, 2002.

- Nadia Sebbar, Henning Bockhorn and Joseph W. Bozzelli; (2002). Vortrag: *Reaction of Phenyl Radical and Dibenzofuran with O2*. Joint Meeting of the Belgian and Dutch Sections of the Combustion Institute, Brussels Belgium, 24 - 25 April,

- M. Odinius, H. Bockhorn, (2002), Aufbau einer Brennkammer für die Umstezung von flüssigen Brennstoffen durch flammenlose Oxidation - Entrainment von Zweiphasenströmungen. TECFLAM, Seminar, .

- M. Odinius, B. Lenze, (2002), Development, characterization and scaling of atomizers for a combustion technology that offers significant fuel savings and drastic reductions in both CO2 and NO emissions. Europäische Union, Abschlussbericht, ENK 6-CT 1999-0005 - OILTECH, .

- Plohr, M.; Tilston, J.; Larkmann, J.; Lischer, T.; Zarzalis, N., (2002), Future Engine Cycle Prediction and Emissions Study - Deliverable Report D5 Modelling Large Fan Engines. European Community, G4RD-CT-2002-00383, .

equations., in *Finite Volumes for Complex Applications*, vol. **3**, Hermes Penton Science, p. 833-840, .

- P. Schmittel, B. Prade, S. Hoffmann, B. Lenze; Stabilisation of Turbulent Concentric and Swirling Flames based on Flow and Mixing Pattern Investigations. In *High Intensity Combustors - Steady Isobaric Combustion*, S. Wittig, O. Vöhringer and S. Kim (ed.), Final Report of the Collaborative Research Centre 167, WILEY-VCH, 2002.

- A. Schön, Th. Streibel, R. Suntz and H. Bockhorn, (2002). Numerical and Experimental Analysis of Soot Formation in Laminar Diffusion Flames along Selected Particle Tracks. 29th Symposium (International) on Combustion, The Combustion Institute, Pittsburgh, 2399.

- D. Stapf, P. Jansohn, S. Koger, W. Leuckel, (2002), Formation and Reduction of Thermal and Fuel Nitrogen Oxides in Flames, High Intensity Combustors - Steady Isobaric Combustion (SFB 167) . Deutsche Forschungsgemeinschaft, .

- N. Zarzalis, T. Ripplinger, S. Hohmann, M. Hettel, K. Merkle, W. Leuckel, G. Klose, R. Meier, R. Koch, S. Wittig, M. Carl, T. Behrendt, C. Hassa, U. Meier, R. Lückerath, W. Stricker, (2002). Low-NOx Combustor Development national research program in a cooperative effort among engine Manufacturer MTU, University of Karlsruhe and DLR German Aerospace Research Center. Aerospace Science and Technology, 6, 531-544.

- Zarzalis, N.; Merkle, K.:; (2002). Vortrag: *Einfluss gleich- und gegensinniger Verdrallung auf das Strömungs- und Mischungsfeld einer doppelflutigen Brennstoffdüse*. Kolloquium am Lehrstuhl für Thermodynamik der TU München, 28. Juni,

- Zarzalis, N.; (2002). Vortrag: *Skalierung von Gasturbinenbrennkammern*. Antrittsvorlesung, Universität Karlsruhe, 26. November,

2001

... zum Anfang der Seite

- Arnold, (2001). Modelling of resonance characteristics of a Helmholtz-resonator-type combustion chamber with energy dissipation, .

- H. Bockhorn, B. Jungfleisch, T. Lehre, R.Suntz; (2001). Vortrag: *Simultaneous Assessment of Particle Size Distributions and Gas Temperatures from Time-Resolved Laser-Induced Incandescence*. European Congress of Chemical Engineering, Nürnberg, 26.-28.6.,

- H. Bockhorn, B. Jungfleisch, T. Lehre, R. Suntz, (2001). Bestimmung von Partikelgrößenverteilungen und Gastemperaturen in laminaren und turbulenten Verbrennungssystemen durch Messung des zeitlichen Abfalls der laserinduzierten Inkandeszenz. VDI-Berichte Nr. 1629, (1629), 435-440.

- H. Bockhorn, B. Jungfleisch, T. Lehre, R. Suntz; Poster: *Development of a Measuring Technique for Simulatneous In-Situ Detection of Nanoscaled Particle Size Distributions and Gas Temperatures based on Laser-Induced Incandescence*. 11th GRC on Laser Diagnostics in Combustion, Mt Holyoke (MA, USA), 1.7-6.7., 2001.

- H. Bockhorn, B. Jungfleisch, T. Lehre, R. Suntz; (2001). Vortrag: *Progress in Characterization of Soot Formation by Optical Methods*. 77th Int. Bunsen Discussion Meeting, Bad Herrenalb, 7.10-10.10,

- Bozzelli, J. W.; Sebbar, N.; Pitz, W.; Bockhorn, H., The 2nd Joint Meeting of the US Sections of the Combustions Institute, Oakland, California, March 25-28, (2001). Reaction of Phenyl Radical with O2: Thermodynamic Properties, Important Reaction Paths and Kinetics, The 2nd Joint Meeting of the US Sections of the Combustions Institute , Oakland, California, March 25-28, .

- Bozzelli, J. W.; Sebbar, N.; Pitz, W.; Bockhorn, H., (2001). Reaction of Phenyl Radical with O2: Thermodynamic Properties, Important Reaction Paths and Kinetics, The 2nd Joint Meeting of the US Sections of the Combustions Institute, Oakland, California, March 25-28, .

S.; Zarzalis, N.; (2001). Experimental and Numerical Investigation of a Planar Combustor Sector at Realistic Operating Conditions. Journal of Engineering for Gas Turbines and Power, 123, 810-816.

- Cerri, I. and Saracco, G. and Specchia, V. and Trimis, D., (2001). Improved-performance knitted fibre mats as supports for pre-mixed natural gas catalytic combustion. Chemical Engineering Journal, 82, (1-3), 73-85.

- Ch. Külsheimer, H. Büchner, H. Bockhorn, (2001). The Dynamic Behaviour of Turbulent, Premixed Swirl Flames, in *Proceedings of the 18th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS)*, University of Washington, ISBN 0-9711740-0-8, Seattle, Washington, USA, .

- Ch. Külsheimer, H. Büchner, H. Bockhorn, G. Lauer; Untersuchungen zum periodisch-instationären Reaktionsverhalten vorgemischter Drallflammen mittels OH-LIPF und Rayleigh-Streuung. In *Verbrennung und Feuerungen - 20. Deutscher Flammentag*, Verein Deutscher Ingenieure (ed.), VDI-Berichte 1629, VDI-Verlag GmbH, Düsseldorf, p. 295-300, 2001.

- Ch. Külsheimer; (2001). Vortrag: *The Dynamic Behaviour of Turbulent, Premixed Swirl Flames*. 18th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS), University of Washington, Seattle, USA, July 30 - August 3,

- Ch. Külsheimer; (2001). Vortrag: *Untersuchungen zum periodisch-instationären Reaktionsverhalten vorgemischter Drallflammen mittels OH-LIPF und Rayleigh-Streuung*. 20. Deutscher Flammentag, Essen, 4. - 5. September ,

-

- N. Ebersohl, Th. Klos, R. Suntz, A. Heyl, H. Bockhorn, (2001). Joint Multi-Component One-Dimensional Raman Scattering for Investigations of Fluctuating Quantities in Turbulent Combustion. Environmental Combustion Technologies, 2, 135-168.

- H. Geitlinger, B. Jungfleisch, M. Marquardt, Th. Streibel, R. Suntz and H. Bockhorn, (2001). Two-Dimensional Detection of Soot Volume Fractions, Particle Number Densities and Particle Radii in Turbulent Diffusion Flames". Environ. Comb. Tech., 2, 169.

- D. Großschmidt, A. Hoffmann, N. Zarzalis, H. Bockhorn, (2001), Extension of the 2-domain-1-step kinetic scheme for n-decane combustion . EC, Contract no: G4RD-CT-1999-00075, .

- Habisreuther, Peter; (2001). Vortrag: *Die Bildung von thermischem Stickoxid in tubulenten Drallflammen*. Kolloquium Verbrennungstechnik für Fortgeschrittene, Universität Karlsruhe, 15. 6.,

- X. Han, F. Rückert, U. Schnell, K R.G. Hein, S. Koger, H. Bockhorn, (2001). Computational Modelling of the NOx-Reduction Process by Hydrocarbon Reburning with Reduced Kinetics, in *Proceedings of the 6th International Conference on Technologies and Combustion for a Clean Environment*, .

- A. Hoffmann, D. Großschmidt, H. Bockhorn, (2001), Extension of the 2-domain-1-step kinetic scheme towards high pressures and temperatures for methane combustion . EC Contract no: G4RD-CT-1999-00075, .

- A. Hoffmann, D. Großschmidt, M. Zajadatz, W. Leuckel, H. Bockhorn, (2001). Validierung eines JPDF-Modells sowie einer semi-globalen Reaktionskinetik anhand detaillierter Feldmessungen hochturbulenter vorgemischter Freistrahlflammen, in *VDI-GET-Fachtagung "Verbrennung und Feuerungen-20. Deutscher Flammentag"*, vol. **VDI-Bericht Nr. 1629**, VDI-GET, Essen 04. - 05. September 2001, .

- Holger Dörr, M. Türk, K. Schaber, H. Bockhorn, A. Weber, K.Kasper, A.M. Braun, et al. , (2001), Physikalisch-chemische Funktionalisierung von submikronen organischen Partikelsystemen in der Gasphase. Ministerium für Wissenschaft, Forschung und Kunst Baden-Württemberg, Abschlussbericht, .

- A. Hornung, M. Müller-Hagedorn, U. Hornung, H. Bockhorn; Poster: *Bestimmung der integralen Diffusionskoeffizienten von CO2 in PVC im Druckbereich bis 20 MPa*. Diskussionstagung: Neue Methoden der Polymeranalytik, Mainz, 02.04.2001, 2001.

Investigation of the kinetics of thermal degradation of hardwood (carpinus betulus) studies by isothermal and dynamic methods . ECCE (3rd European Congress of Chemical Engineering), Nürnberg, 26.06.2001, 2001.

- Joseph Bozzelli, Nadia Sebbar, William Pitz and Henning Bockhorn; (2001). Vortrag: *Reaction of Phenyl Radical with O2: Thermodynamic Properties, Important Reaction Paths and Kinetics*. The 2nd Joint Meeting of the US Sections of the Combustions Institute, Oakland, California, USA, March 25-28,

- Kesting, A. and Pickenäcker, K. and Trimis, D. and Cerri, I. and Krieger, R. and Schneider, H., (2001). Development of a highly efficient gas infrared heater by means of combustion in inert porous media [DÃ©veloppement d'un chauffage-infrarouge au gas Ã haute efficacitÃ©, basÃ© sur la combustion dans des mÃ©dias poreux inertes], .

- Klose, G.; Hettel, M.; Zarzalis, N.; Schmehl, R.; Meier, R.; Maier, G.; Koch, R.; Leuckel, W.; Wittig, S., (2001). Evaluation of Advanced Two-Phase Flow and Combustion Models for Predicting Low Emission Combustors. Transactions of the ASME, Journal of Engineering for Gas Turbines and Power, 123, (4), 817-823.(doi:10.1115/2000-GT-0133)

-

- M. Lohrmann, G. Arnold, H. Büchner, (2001). Modeling of the resonance characteristics of a Helmholtz-resonator-type combustion chamber with energy dissipation, in *Proceedings of the International Gas Research Conference (IGRC)*, Amsterdam, .

- Nadia Sebbar; Henning Bockhorn; Joseph W. Bozzelli; Poster: *Thermodynamic properties (Enthalpies, Entropies and Heat Capacities) and Reactions of Vinyl hydroperoxides, peroxy radicals and phenyl hydroperoxides I*. Seventh International Congress on Toxic Combustion By-Products. Research Triangle Park, North Carolina USA, June 4 6, 2001.

- Nadia Sebbar; Henning Bockhorn; Joseph W. Bozzelli; Poster: *Thermodynamic properties (Enthalpies, Entropies and Heat Capacities) and Reactions of Vinyl hydroperoxides, peroxy radicals and phenyl hydroperoxides II*. 5th International Conference on Chemical Kinetics. National Institute of standards and Technologies, Gaithersburg, MD USA , 16 20 July, 2001.

- Nadia Sebbar; Joseph W. Bozzelli; Henning Bockhorn; Poster: *Thermodynamic properties and reactions of vinyl hydroperoxides and phenyl hydroperoxides*. Deutsche Bunsen-Gesellschaft für Physikalische Chemie. 77th International Discussion Meeting Formation and Degradation of Hydrocarbons in High-Temperature Reactions. Germany, October, 2001.

- Nadia Sebbar; Joseph W. Bozzelli; Henning Bockhorn; Poster: *Reaction of Phenyl Radical and Dibenzofuran with O2: Thermodynamic Properties, Reactions Pathways, Kinetics and Initial Steps for Dibenzofuran*. Deutsche Bunsen-Gesellschaft für Physikalische Chemie. 77th International Discussion Meeting Formation and Degradation of Hydrocarbons in High-Temperature Reactions, october, 2001.

- Nadia Sebbar; Henning Bockhorn; Joseph W. Bozzelli; (2001). Vortrag: *Reaction of Phenyl Radical and Dibenzofuran with O2: Thermodynamic Properties, Reaction Pathways, Kinetics and Initial Steps for Dibenzofuran Oxidation*. Seventh International Congress on Toxic Combustion By-Products. Research Triangle Park, North Carolina USA, June 4 6,

- M. Odinius, B. Lenze, W. Leuckel, (2001). Pulsationsverhalten eines Verbrennungssystems im mager-vormisch Betrieb, in *Deutscher Flammentag 2001*, VDI, .

- Pickenäcker, O.; Trimis, D., (2001). Experimental study of a staged methane/air burner based on combustion in a porous inert medium. Journal of Porous Media, 4, (3), 197-213.

- Tilston, J.; Larkman, J.; Doepelheuer, A.; Plohr, M.; Zarzalis, N.; Lischer, T., (2001), Future Engine Cycle Prediction and Emissions Study. European Community, Deliverable Report D2-D3, G4RD-CT-2000-00383, .

F. and Krüger, K. and Kuchen, Chr., (2001). Porous burner for liquid fuels with cold flame vaporizer [Porenbrenner für flüssige Brennstoffe mit Gemischbildung durch kalte Flammen]. VDI Berichte, (1643), 55-72.

- Wawrzinek, K. and Kesting, A. and Künzel, J. and Pickenäcker, K. and Pickenäcker, O. and Trimis, D. and Franz, M. and Härtel, G., (2001). Experimental and numerical study of applicability of porous combustors for HCl synthesis. Catalysis Today, 69, (1-4), 393-397.

2000

... zum Anfang der Seite

- O. Angrill, H. Geitlinger, Th. Streibel, R. Suntz and H. Bockhorn:, (2000). Influence of Exhaust Gas Recirculation on Soot Formation in Diffusion Flames. 28th Symposium (International) on Combustion, The Combustion Institute, Pittsburgh,, 2643.

- J. Appel, M. Frenklach, H. Bockhorn, (2000). Kinetic Modeling of Soot Formation with Detailed Chemistry and Physics. Laminar Premixed Flames of C2 Hydrocarbons. Combust. Flame, 121, 122.

- T. Behrendt, M. Carl, C. Fleing, M. Frodermann, J. Heinze, C. Hassa, U. Meier, D. Wolff-Gassmann, S. Hohmann, N. Zarzalis, (2000). Experimental and Numerical Investigation of a Planar Combustor Sector at Realistic Operating Conditions, in *Proceedings of ASME Turbo Expo 2000, 45th ASME Gas Turbine & Aeroengine Congress*, ASME, May 8th-11th, Munich, Germany, (doi:10.1115/2000-GT-0123).

- H.Bockhorn; Soot Formation and Oxidation. In *Pollutants Formation from Combustion*, C. Vovelle (ed.), Kluwer Academic Publishers, Dordrecht, p. 205, 2000.

- H.Bockhorn, (2000). Ultrafine particles from combustion sources: approaches to what we want to know. Phil. Trans. R. Soc. Lond., A 358,

- H. Bockhorn, W. Leuckel, M. Zajadatz, A. Hoffmann, D. Großschmidt; Poster: *Experimental and Numerical Investigations of Highly Turbulent Bunsen-Type*. 28th Symposium (Intern.) on Combustion , Edingburgh, 2000.

- H. Bockhorn, H. Geitlinger, B. Jungfleisch, T. Lehre, T. Streibel, R. Suntz, (2000). Messung von Rußteilcheneigenschaften in turbulenten Flammen mit planaren abbildenden Meßverfahren. GASWÄRME International,

- H. Bockhorn, H. Geitlinger, B. Jungfleisch, T. Lehre, T. Streibel, R. Suntz; (2000). Vortrag: *Planare Messung von Rußteilcheneigenschaften mittels LII-Rayleigh-Streuung in turbulenten Flammen*. 12. DVV-Kolloquium, Karlsruhe, 25/26. 9.,

- H. Bockhorn, H. Geitlinger, B. Jungfleisch, T. Lehre, T. Streibel, R. Suntz; (2000). Vortrag: *Experimentelle Methoden zur in-situ Untersuchung von Teilchengrößen und Anzahldichten von Nanoteilchen am Beispiel der Bildung von Ruß aus Kohlenwasserstoffen*. GVC- Jahrestagung, Karlsruhe, 21. 9.,

- Brenner, G. and Pickenäcker, K. and Pickenäcker, O. and Trimis, D. and Wawrzinek, K. and Weber, T., (2000). Numerical and experimental investigation of matrix-stabilized methane/air combustion in porous inert media. Combustion and Flame, 123, (1-2), 201-213.

- Brutscher, T.; Leuckel, W.; Bockhorn, H.; Poster: *Experimental investigation of the influence of flame straining on turbulent flame front propagation inside a closed cylindrical vessel*. 28th Symp. (Intern.) on Combustion, 2000.

- H. Büchner; (2000). Vortrag: *Aerodynamic Suppression of Combustion-Driven Pressure Oscillations in Technical Premixed Combustors*. Symposium on Energy Engineering in the 21st Century", Hong Kong University of Science and Technology, January 9 - 13,

a Gas Turbine Combustion Chamber, United States Patents, Patent Number 6056538, 2. Mai, 2000.

- H. Büchner, H. Bockhorn, S. Hoffmann, (2000). Aerodynamic Suppression of Combustion-Driven Pressure Oscillations in Technical Premixed Combustors, in *Proceedings of Symposium on Energy Engineering in the 21st Century (SEE 2000)*, vol. **4**, Ping Cheng (editor), Begell House, New York, p. 1573 - 1580, .

- Ch. Külsheimer, H. Büchner, H. Bockhorn; (2000). Vortrag: *Entstehungsmechanismen selbsterregter Druck-/Flammenschwingungen in hochturbulenten Verbrennungssystemen und Maßnahmen zu ihrer Unterdrückung*. Interne Arbeitssitzung der GVC-Fachausschüsse Energieverfahrenstechnik und Hochtemperaturtechnik, Würzburg, 21.-23. Februar,

- Ch. Külsheimer, M. Lohrmann, H. Büchner; (2000). Vortrag: *Entstehungsmechanismen für das Auftreten periodischer Verbrennungsinstabilitäten*. "Instabilitätsphänomene in Gasturbinen", DGLR-Fachseminar des DGLR Fachausschuß T3:"Antriebe", Aachen, 24.-25. Februar,

- Ch. Külsheimer, H. Büchner, H. Bockhorn; Poster: *The Importance of Reactive Coherent Ring-Vortices on Combustion-Driven Instabilities*. 28th Symp. (Intern.) on Combustion, Edinburgh/Scotland, July 30 - August 4, 2000.

-

- F. Fakhar, H. Büchner, (2000). Experimental Investigations of Combustion-Driven Oscillations by Water Injection in Liquid-Fired Gas-Turbine Combustors, in *Proceedings of "Open Meeting on Combustion"*, The Italian Section of the Combustion Institute, Napoli (CDROM), .

- F. Fakhar, H. Büchner, H. Bockhorn; Poster: *Experimental Investigations of Combustion-Driven Oscillations by Water Injection in Liquid-Fired Gas-Turbine Combustors*. 28th Symp. (Intern.) on Combustion, Edinburgh/Scotland, July 30 - August 4, 2000.

- F. Fakhar, H. Büchner, H. Bockhorn, (2000). Experimentelle Untersuchungen der Entstehungsmechanismen selbsterregter Druckschwingungen bei Wassereinspritzung in ölbefeuerten Brennkammern, in *Forschung für die Kraftwerkstechnik 2000*, vol. **TB 234**, VGB Technische Vereinigung der Großkraftwerksbetreiber e.V., Essen, p. E2, 1-8, .

- H. Geitlinger, Th. Streibel, R. Suntz, H. Bockhorn, (2000). Größen- und Konzentrationsbestimmung von Nanopartikeln in der Gasphase mit zeitlicher und zweidimensionaler örtlicher Auflösung. Chem. - Ing. - Tech., 72, 260.

- H. Geitlinger, Th. Streibel, R. Suntz and H. Bockhorn, (2000). Two- Dimensional Imaging of Sizes and Number Densities of Nanoscaled Particles. Tenth International Symposium Appli-cations of Laser Techniques to Fluid Mechanics, Lisbon, 10P6.

- W. Gerlinger, H. Bockhorn, L. Falk, K. Schneider, (2000). Numerical Simulation of the Mixing of Passive and Reactive Scalars in Two-Dimensional Flows Dominated by Coherent Vortices. Chemical Engineering Science, 55, 4255.

- W. Gerlinger, K. Schneider, H. Bockhorn, (2000). Direkte numerische Simulation von Mischung und Turbulenz in zweidimensionalen Strömungen. Chem. - Ing. - Tech., 72, 618.

- M.J. Height, A. Goel, F.A. Sanchez, T. Lehre, P.Hebgen; Poster: *Characterization of Surface and Internal Properties of Soot*. 28th Symp. (Intern.) on Comb., Edinburgh, 2000.

- Hettel, M.; Leuckel, W.; Klose, G.; Schmehl, R.; Meier, R.; Maier, G.; Koch, R.; Wittig, S.; Zarzalis, N.; Hohmann, S., (2000). Evaluierung fortschrittlicher Modelle zur Berechnung von Zweiphasenströmungen, in *DGLR-Jahrbuch 2000*, Deutscher Luft- und Raumfahrtkongress, 18.-21.9. 2000, Leipzig, .

- Hoffmann, A.; Leuckel, W., (2000), Task 5: Modelling CO Production. EBI-VBT, Universität Karlsruhe, Final Report, Brite-EuRam BRPR, CT95-0122, .

Karlsruhe, Final Report, Brite-EuRam BRPR, CT95-0122 , .

- Klose, G.; Hettel, M.; Zarzalis, N.; Schmehl, R.; Meier, R.; Maier, G.; Koch, R.; Leuckel, W.; Wittig, S., (2000). Evaluation of Advanced Two-Phase Flow and Combustion Models for Predicting Low Emission Combustors (Paper: 2000-GT-0133), in *Proceedings of ASME Turbo Expo 2000, 45th ASME Gas Turbine & Aeroengine Congress*, ASME, May 8th-11th, Munich, Germany, (doi:10.1115/2000-GT-0133).

- M. Lohrmann, H. Büchner, (2000). Periodische Störungen im turbulenten Strömungsfeld eines Vormisch-Drallbrenners. Chemie Ingenieur Technik, 72, 512-515.

- M. Lohrmann, H. Büchner, (2000). Flow-Field Instabilities in Highly Turbulent Co-Swirl Burner Systems, in *Proceedings of "Open Meeting on Combustion"(CDROM)*, The Italian Section of the Combustion Institute, Napoli, .

- Nadia Sebbar; Henning Bockhorn; Joseph W. Bozzelli; Poster: *Reaction of Phenyl and Dibenzofuran Radicals with O2: Thermodynamic Properties, Reaction Pathways and kinetics*. The combustion Institute, 28th International Symposium on Combustion Edinburgh, Scotland, 30 July 4 August, 2000.

- M. Odinius, B. Lenze, W. Leuckel, (2000), Instabilities and active control of an atmospheric liquid combustor. Europäische Union, Abschlussbericht, BE 97 4324 BRER CT97 0506 - ACIACOC, .

- Pickenacker, O.; Trimis, D., (2000). Experimental investigation of matrix-stabilized staged combustion in porous inert media, p. 406, .

- P. Schmittel, B. Günther, B. Lenze, W. Leuckel and H. Bockhorn, (2000). Turbulent Swirling Flames: Experimental Investigation of the Flow Field and Formation of Nitrogen Oxide, in *Twenty-Eighth Symposium (International) on Combustion*, vol. **1**, The Combustion Institute, p. 303-309, .

- J. Tilston, J. Larkman, M. Plohr, A. Doepelheuer, T. Lischer, N. Zarzalis, (2000), Future Engine Cycle Prediction and Emissions Study - Final Technical Report (Deliverable D11). G4RD-CT-2000-00383, .

- Trimis, D., (2000). Stabilized combustion in porous media - Applications of the porous burner technology in energy- and heat-engineering, .

1999

... zum Anfang der Seite

- Angrill, Oscar; Streibel, Thorsten; Geitlinger, Hilmar; Suntz, Rainer; Bockhorn, Henning; Rußbildung in turbulenten Diffusionsflammen. In *VDI-Berichte 1492, S. 223*, VDI-Verlag, Düsseldorf, 1999.

- O. Angrill, Th. Streibel, H. Geitlinger, R. Suntz, H. Bockhorn; Rußbildung in turbulenten Diffusionsflammen. VDI-Berichte 1492, VDI-Verlag, Düsseldorf, p. 223, 1999.

- Appel, Jörg; Bockhorn, Henning; Simulation der Evolution von Größenverteilungen der Rußteilchen bei der Verbrennung von Kohlenwasserstoffen. In *Motorische Verbrennung - aktuelle Probleme und moderne Lösungsansätze*, A. Leipertz (ed.), Berichte zur Energie- und Verfahrenstechnik, Heft 99.1, Esytec GmbH, Erlangen, p. 363, 1999.

- Appel, Jörg; Bockhorn, Henning; Rußbildung und -Oxidation in turbulenten Diffusionsflammen: Probleme ultrafeiner Partikel. In *Berichte und Informationen*, Dresden, p. 35, 1999.

- Appel, Jörg; Bockhorn, Henning; Wulkow, Michael; Numerical Simulation of Soot Particle Size Distributions with a Discrete Galerkin Method. In *Scientific Computing in Chemical Engineering II, Simulation, Image Processing, Optimization, and Control*, F. Keil, W. Mackens, H. Voß, J. Werther (ed.), Springer Verlag, Berlin Heidelberg, p. 94, 1999.

- Appel, Jörg; Bockhorn, Henning; Wulkow, Michael, (1999). Simulation of the Evolution of Soot Particle Size Distributions in Flames, in *Proceedings of the Joint Meeting of the British, German and French Sections of The Combustion Institute*, The Combustion Institute, p. 147, .

Partikel. In *Berichte und Informationen*, Dresden, p. 35, 1999.

- J. Appel, H. Bockhorn, M. Wulkow; Numerical Simulation of Soot Particle Size Distributions with a Discrete Galerkin Method. In *Scientific Computing in Chemical Engineering II*, F. Keil, W. Mackens, H. Voß, J. Werther (ed.), Springer Verlag, Berlin Heidelberg, p. 94, 1999.
- J. Appel, H. Bockhorn, M. Wulkow, (1999). Simulation of the Evolution of Soot Particle Size Distributions in Flames, in *Proceedings of the Joint Meeting of the British, German and French Sections of The Combustion Institute*, The Combustion Institute, p. 147, .
- C. Axel Föhl; Untersuchung der Löschverfahren und Löschmittel zur Bekämpfung von Bränden gefährlicher Güter - Literatur-Recherche über Stoffe mit unterschiedlichen Löschmittel-Empfehlungen in europäischen Gefahrstoff-Merkblättern. In *Bericht, Forschungsstelle für Brandschutztechnik für: Arbeitsgemeinschaft der Innenministerien der Bundesländer*, p. 269 S, 1999.
- Bockhorn, Henning; Hornung, Andreas; Hornung, Ursel; Schawaller, Dirk, (1999). Kinetic Study on the Thermal degradation of Polyethylen and Polypropylene. J. Analyt. Appl. Pyrolysis, 48, 93.
- Bockhorn, Henning; Fröhlich, Jochen; Schneider, Kai, (1999). An adaptive two-dimensional Wavelet-Vaguelette Algorithm for circular flames. Combustion Theory and Modelling, 3, 177.
- Bockhorn, Henning; Ernst, Stefan, (1999). Technische Chemie 1998. Nachr. Chem. Tech. Lab, 47, 303.
- Bockhorn, Henning; Hornung, Andreas; Hornung, Ursel; Jakobströer, Petra, (1999). Modelling of Isothermal and Dynamic Pyrolysis of Plastics Considering Non-homogeneous Temperature and Detailed Degradation Mechanism. J. Analyt. Appl. Pyrolysis, 49, 53.
- Bockhorn, Henning; Hornung, Andreas; Hornung, Ursel; Jakobströer, Petra; Kraus, Martin, (1999). Dehydrochlorination of Plastic Mixtures. J. Analyt. Appl. Pyrolysis, 49, 97.
- Bockhorn, Henning; Hornung, Andreas; Hornung, Ursel, (1999). Mechanisms and Kinetics of Thermal Decomposition of Plastics from Isothermal and Dynamic Measurements. J. Analyt. Appl. Pyrolysis, 50, 77.
- Bockhorn, Henning; Hornung, Andreas; Hornung, Ursel; Jakobströer, Petra; Wulkow, Michael; Modeling of Thermal Degradation of Polymers. In *Scientific Computing in Chemical Engineering II, Computational Fluid Dynamics, Reaction Engineering, and Molecular Properties*, F. Keil, W. Mackens, H. Voß, J. Werther (ed.), Springer Verlag, Berlin Heidelberg, p. 192, 1999.
- Bockhorn, Henning; Fröhlich, Jochen; Gerlinger, Wolfgang; Schneider, Kai; Direct Numerical Simulation of Three-Dimensional Flame Balls. In *Scientific Computing in Chemical Engineering II, Simulation, Image Processing, Optimization, and Control*, F. Keil, W. Mackens, H. Voß, J. Werther (ed.), Springer Verlag, Berlin Heidelberg, p. 102, 1999.
- Bockhorn, Henning; Gerlinger, Wolfgang; Schneider, Kai; Ziuber: Jörg; Simulation and Analysis of Mixing in Two-Dimensional Turbulent Flows Using Fourier and Wavelet Techniques. In *Scientific Computing in Chemical Engineering II, Computational Fluid Dynamics, Reaction Engineering, and Molecular Properties*, F. Keil, W. Mackens, H. Voß, J. Werther (ed.), Springer Verlag, Berlin Heidelberg, p. 344, 1999.
- Bockhorn, Henning; Fröhlich, Jochen; Gerlinger, Wolfgang; Schneider, Kai, (1999). Thermo-Diffusive Instabilities of Flame Balls, in *Proceedings of the Joint Meeting of the British, German and French Sections of The Combustion Institute*, The Combustion Institute, p. 37, .
- Bockhorn, Henning; Schön, Astrid; Streibel, Thomas; Peters, Norbert; Born, Caroline; Antoni,, (1999). Kinetik der Rußentstehung und Oxidation in DI-Dieselmotoren bei Abgasrückführung, in *8. Aachener Kolloquium Fahrzeug- und Motorentechnik*, Aachen, p. 905, .
- H. Bockhorn, A. Hornung, U. Hornung, D. Schawaller, (1999). Kinetic Study on the Thermal degradation of Polyethylen and Polypropylene. J. Analyt. Appl. Pyrolysis, 48, (93),

Algorithm for circular flames. Combustion Theory and Modelling, 3, (177),

- H. Bockhorn, S. Ernst, (1999). Technische Chemie 1998,. Nachr. Chem. Tech. Lab., 47, (303),
- H. Bockhorn, A. Hornung, U. Hornung, P. Jakobströer, (1999). Modelling of Isothermal and Dynamic Pyrolysis of Plastics Considering Non-homogeneous Temperature and Detailed Degradation Mechanism. J. Analyt. Appl. Pyrolysis, 49, 53.
- H. Bockhorn, A. Hornung, U. Hornung, P. Jakobströer, M. Kraus, (1999). Dehydrochlorination of Plastic Mixtures. J. Analyt. Appl. Pyrolysis, 49, 97.
- H. Bockhorn, A. Hornung, U. Hornung, (1999). Mechanisms and Kinetics of Thermal Decomposition of Plastics from Isothermal and Dynamic Measurements. J. Analyt. Appl. Pyrolysis, 50, (77),
- H. Bockhorn, A. Hornung, U. Hornung, P. Jakobströer, M. Wulkow; Modeling of Thermal Degradation of Polymers. In *Scientific Computing in Chemical Engineering II, Computational Fluid Dynamics, Reaction Engineering, and Molecular Properties*, F. Keil, W. Mackens, H. Voß, J. Werther (ed.), Springer Verlag, Berlin Heidelberg, p. 192, 1999.
- H. Bockhorn, J. Fröhlich, W. Gerlinger, K. Schneider; Direct Numerical Simulation of Three-Dimensional Flame Balls. In *Scientific Computing in Chemical Engineering II*, F. Keil, W. Mackens, H. Voß, J. Werther (ed.), Springer Verlag, Berlin Heidelberg, p. 102, 1999.
- H. Bockhorn, W. Gerlinger, K. Schneider, J. Ziuber; Simulation and Analysis of Mixing in Two-Dimensional Turbulent Flows Using Fourier and Wavelet Techniques. In *Scientific Computing in Chemical Engineering II, Computational Fluid Dynamics, Reaction Engineering, and Molecular Properties*, F. Keil, W. Mackens, H. Voß, J. Werther (ed.), Springer Verlag, Berlin Heidelberg, p. 344, 1999.
- H. Bockhorn, J. Fröhlich, W. Gerlinger, K. Schneider, (1999). Thermo-Diffusive Instabilities of Flame Balls, in *Proceedings of the Joint Meeting of the British, German and French Sections of The Combustion Institute*, The Combustion Institute, p. 37, .
- H. Bockhorn, J. Hentschel, A. Hornung, U. Hornung, (1999). Environmental, Engineering - Stepwise Pyrolysis of Plastic Waste. Chemical Engineering Science, 54, (3043),
- H. Bockhorn, A. Schön, T. Streibel, N. Peters, C. Born, C. Antoni, B. Mayr, R. Winzer, J. Halfmann, J. Höntsche, R. Pittermann, N. Krümmling, (1999). Kinetik der Rußentstehung und Oxidation in DI-Dieselmotoren bei Abgasrückführung, in *8. Aachener Kolloquium Fahrzeug- und Motorentechnik*, Aachen, p. 905, .
- H. Bockhorn, A. Hornung, U. Hornung, J. Weichmann, (1999). Kinetic Study on the Non-Catalyzed and Catalyzed Degradation of Polyamide 6 with Isothermal and Dynamic Methods. Thermochimica Acta, 337, (97),
- H. Bockhorn, E. Dinjus, A. Hornung, U. Hornung, A. Konrad, M. Müller-Hagedorn; (1999). Vortrag: *Untersuchungen zu Transport- und Reaktionsvorgängen in CO2-Polymer Systemen unter überkritischen Bedingungen*. DECHEMA-Jahrestagung ´99, Wiesbaden, 28.04.1999,
- Braun-Unkhoff, Marina; Frank, Peter; Koger, Stefan; Leuckel, Wolfgang; Stapf, Dieter, (1999). Evaluation of NOx Reburning Models under Large Scale Conditions, in *Proceed. 5th Internat. Conference on Technologies and Combustion for a Clean Environment,*, Lissabon, p. 1023-1032, .
- H. Büchner; (1999). Vortrag: *Strömungsinduzierte Verbrennungsinstabilitäten in technischen Verbrennungssystemen*. Kolloquium der Fakultät Chemieingenieurwesen/Verfahrenstechnik, Universität Karlsruhe (TH), 20. Januar,
- Ch. Külsheimer, H. Büchner, W. Leuckel, H. Bockhorn, S. Hoffmann; Untersuchung der Entstehungsmechanismen für das Auftreten periodischer Druck-/Flammenschwingungen in hochturbulenten Verbrennungssystemen. In *Verbrennung und Feuerungen - 19. Deutscher Flammentag*, Verein Deutscher Ingenieure (ed.), VDI-Berichte 1492, VDI-Verlag GmbH, Düsseldorf, p. 463 - 468, 1999.

Entstehungsmechanismen für das Auftreten periodischer Druck-/Flammenschwingungen in hochturbulenten Verbrennungssystemen. 19. Deutscher Flammentag, Dresden, 14. - 15. September, 1999.

- Durst, F. and Gla, J. and Pickenäcker, K. and Trimis, D. and Wawrzinek, K., (1999). Air ratio controlled combustion through measurement of the Wobbe number [Luftzahlkontrollierte Verbrennung durch Wobbeindexbestimmung]. Gaswaerme International, 48, (7), 429-435.

- Eibl, Josef; Leuckel, Wolfgang; Auslegung von Siloanlagen gegen Staubexplosionen - Bautechnische Maßnahmen zur Schadensminderung bei Staubexplosionen - Richtlinie zur Auslegung von Siloanlagen gegen Staubexplosionen. p. 99 S, 1999.

- Geitlinger, Hilmar; Streibel, Thomas; Suntz, Rainer; Bockhorn, Henning, (1999). Statistical Analysis of Soot Particle Properties in Turbulent Diffusion Flames, in *Proceedings of the Fifth International Conference on Technologies for a Clean Environment*, Lissabon, p. 44.2, .

- H. Geitlinger, T. Streibel, R. Suntz, H. Bockhorn, (1999). Statistical Analysis of Soot Particle Properties in Turbulent Diffusion Flames, in *Proceedings of the Fifth International Conference on Technologies for a Clean Environment,*, Lissabon, p. 44.2, .

- H. Geitlinger, Th. Streibel, R. Suntz, H. Bockhorn, (1999). Statistical Analysis of Soot Volume Fractions, Particle Number Densities and Particle Radii in a Turbulent Diffusion Flame. Combust. Sci. Technol., 149, 115.

- Hermann Schatz; Brandschutz bei recyclingfähigen Stoffen. Teil 4: Brand- und Löschversuche mit unterschiedlichen Brandstoffen mit und ohne Zusätze zum Löschwasser und die Bestimmung von Schadstoffen. In *Bericht, Forschungsstelle für Brandschutztechnik für: Arbeitsgemeinschaft der Innenministerien der Bundesländer*, p. 74 S, 1999.

- Hettel, Matthias; Leuckel, Wolfgang, (1999), Kopplung von Teilmodellen und Berechnung von hochturbulenten Zweiphasenströmungen mit überlagerter Reaktion. MTU-München, Abschlussbericht zum Forschungsvorhaben Engine3E, AP 4200, .

- Hoffmann, A.; Leuckel, W.; Hohmann, S.; Zarzalis, N.; (1999). Vortrag: *Mathematische Modellierung der Gasturbinenverbrennung unter Verwendung eines PDF-Modelles*. VDI-GET-Fachtagung ""Verbrennung und Feuerungen"" --- 19. Deutscher Flammentag in Dresden, 15. September,

- Hoffmann, A.; Leuckel, W., (1999), Task2: Reduced Reaction Mechanism for Kerosene. EBI-VBT, Universität Karlsruhe, Final Report, Brite-EuRam BRPR, CT95-0122, .

- Hornung, Andreas; Bockhorn, Henning; Hornung, Ursel; Koch, Wolfgang; Stufenweise Vergasung von Kunststoffgemischen aus Hausmüll- und Elektronikschrottsammlungen. In *VDI-Berichte 1492*, VDI-Verlag, Düsseldorf, p. 687, 1999.

- A. Hornung, H. Bockhorn, U. Hornung, W. Koch; Stufenweise Vergasung von Kunststoffgemischen aus Hausmüll- und Elektronikschrottsammlungen. VDI-Berichte 1492, VDI-Verlag, Düsseldorf, p. 687, 1999.

- Idda, Ping; Leuckel, Wolfgang, (1999). Anwendung von "presumed-pdf"-Methoden zur Modellierung der Chemie-Turbulenz-Interaktion, in *14. TECFLAM-Seminar*, TU Darmstadt, p. 17-25, .

- Koch Rainer; Ganz, Benedikt; Schmittel, Peter; Wittig, Sigmar, (1999). Experimentelle und numerische Untersuchungen zum Strahlungswärmeaustausch am TECFLAM-Drallbrenner, in *14. TECFLAM-Seminar*, TU Darmstadt, p. 111-122, .

- Kunkelmann, Jürgen; Auswirkung von Schallschutzverglasungen und vorgehängten bzw. doppelten Fassaden auf den Brandablauf sowie die Brand- und Rauchausbreitung innerhalb und außerhalb der Brandwohnung. In *Bericht, Forschungsstelle für Brandschutztechnik für: Arbeitsgemeinschaft der Innenministerien der Bundesländer*, p. 49 S, 1999.

- Leuckel, Wolfgang; Schmittel, Peter; Schmid, Harald; Günther, Bernd; MECBURN, Advanced Burner Design Methodology for Efficient and Clean Gas Fired Commercial and Industrial Boilers (EURO-Project). In *12-Month Report*, 1999.

Strömungsfeld eines Vormisch-Drallbrenner, Kurzfassung. Chemie Ingenieur Technik, 71, (9/1999), 1010-1011.

- Meier, Robert; Merkle, Klaus; Maier, Georg; Zarzalis, Nikolaos; Leuckel, Wolfgang; Wittig, Sigmar, (1999). Development of an Improved Prefilming Airblast Atomizer for Gasturbine Application, in *Proceedings of the 15th Annual Conference on Liquid atomization and spray systems*, Toulouse, France, 5.-7. Juli, .

- K. Merkle, W. Leuckel, (1999), Untersuchung des Einflusses der geometrischen Düsenkenngrößen auf das durch die Düse erzeugte Strömungsfeld. Forschungsvorhaben Engine 3E, Abschlußbericht 1999, .

- Merkle, Klaus; Ament, Andreas; Lenze, Bernhard; Leuckel, Wolfgang; Hadef, Redjem, (1999). Untersuchungen zum Stabilitätsverhalten einer Airblast-Zerstäuberdüse, in *19. Deutscher Flammentag*, p. 449-454, .

- Merkle, Klaus; Leuckel, Wolfgang; Flammenstabilität einer Air-Blast-Zerstäuber/Brennkammeranordnung bei atmosphärischem Druck. In *Abschlussbericht zum Forschungsvorhaben KEROMIX - Stabile schadstoffarme Magerverbrennung*, 1999.

- Merkle, Klaus; Meier, Robert; Maier, Georg; Zarzalis, Nikolaos; Leuckel, Wolfgang; Wittig, Sigmar, (1999). NOx-Reduktion durch Homogenisierung des Gemisches: Ergebnisse einer kooperativen Weiterentwicklung eines Airblast-Konzepts im Rahmen des nationalen Luftfahrtforschungsprogramms Engine3E, in *DGLR Jahrbuch 1999*, Deutsche Gesellschaft für Luft- und Raumfahrt Lilienthal-Oberth e.V., p. 621-630, .

- Nadia Sebbar, Jörg Appel and Henning Bockhorn; Poster: *Atomized Validation of a Detailed Mechanism for the Description of Dioxins Formation and other by products I*. The Combustion Institute, Joint Meeting of the British German and French Sections, Nancy France, 18 21 May, 1999.

- Nadia Sebbar, Jörg Appel and Henning Bockhorn; Poster: *Atomized Validation of a Detailed Mechanism for the Description of Dioxins Formation and other by products II*. The Sixth International Congress on Toxic Combustion By products, University of Karlsruhe, Germany, June 27 30, 1999.

- Pickenäcker, O. and Pickenäcker, K. and Wawrzinek, K. and Trimis, D. and Pritzkow, W.E.C. and Müller, C. and Goedtke, P. and Papenburg, U. and Adler, J. and Standke, G. and Heymer, H. and Tauscher, W. and Jansen, F., (1999). Innovative Ceramic Materials for Porous-Medium Burners, II. InterCeram: International Ceramic Review, 48, (6), 424-X.

- Pickenäcker, O. and Pickenäcker, K. and Wawrzinek, K. and Trimis, D. and Pritzkow, W.E.C. and Müller, C. and Goedtke, P. and Papenburg, U. and Adler, J. and Standke, G. and Heymer, H. and Tauscher, W. and Jansen, F., (1999). Novel ceramic components for high-temperature applications in porous medium burner technology, II [Neuartige keramische Hochtemperaturbauteile fuer die Porenbrennertechnik, II]. Keramische Zeitschrift, 51, (3), 190-"192.

- Pickenaecker, Olaf and Pickenaecker, K. and Wawrzinek, K. and Trimis, D. and Pritzkow, W.E.C. and Mueller, C. and Goedtke, P. and Papenburg, U. and Adler, J. and Standke, G. and Heymer, H. and Tauscher, W. and Jansen, F., (1999). Novel ceramic components for high-temperature applications in porous medium burner technology, I [Neuartige keramische Hochtemperaturbauteile fuer die Porenbrennertechnik, I]. Keramische Zeitschrift, 51, (2), 108-117.

- Ricken, Volker; Leuckel, Wolfgang, (1999). Untersuchung des Verbrennungsdruckeinflusses auf die NOx-Emission von Gasturbinenbrennkammern mit zweistufiger Verbrennungsführung, in *19. Deutscher Flammentag "Verbrennung und Feuerungen", Dresden, 14./15. September 1999,*, Dresden, p. 429 - 434, .

- T. Ripplinger, N. Zarzalis, G. Meikis, C. Hassa, M. Brandt, (1999), NOx Reduction by Lean Premixed Prevaporized Combustion. RTO, MP-14, .

- Schmittel, Peter; Lenze, Bernhard; Leuckel, Wolfgang, (1999). Einfluss der thermischen Randbedingungen der Brennkammer auf die Zündstabilität und die NOX-Emissionen turbulenter Drallflammen, in *14. TECFLAM - Seminar 1999*, TU Darmstadt, p. 67 - 81, .

and Mixing Pattern Investigations, in *Joint Meeting of the British, German and French Section*, The Combustion Institute, p. 355-357, .

- Schmittel, Peter; Lenze, Bernhard; Leuckel, Wolfgang, (1999). Untersuchungen zur Stickoxidminderung hochturbulenter Drallflammen, in *19. Deutscher Flammentag*, p. 557 - 562, .
- Schmittel, Peter; Leuckel. Wolfgang, (1999). Flow patterns, mixing fields and ignition stability of industrial type turbulent swirling flames, in *The Italian Flame Day 1999; International Meeting, Rome, 16. - 17. November 1999*, .
- R. Walther, N. Zarzalis, R. Niehuis, (1999), Designing Advanced Components for High-Bypass Engines. AIAA, 99-IS-115, .
- Zajadatz, Martin; Leuckel, Wolfgang, (1999). Interaction between turbulence and reaction kinetics in high-intensity natural gas flames, in *The Italian Flame Day 1999; International Meeting, Rome, 16. - 17. November 1999*, .

1998

... zum Anfang der Seite

- J. Appel, H. Bockhorn, M. Frenklach, (1998). An Updated Model for the Prediction of Soot Formation in Laminar Premixed Flames, in *Twenty-Seventh Symposium (International) on Combustion, Abstracts of Work in Progress Posters*, The Combustion Institute, Pittsburgh, p. 424, .
- M. Balthasar, H. Bockhorn, A. Heyl, F. Mauß, F. Schmitt; Modellierung der Bildung und Oxidation von Ruß in Diffusionsflammen mit Flamelet-Konzepten. In *Experimente und Modellierung zur heterogenen und homogenen Verbrennung, Vorträge des gemeinsamen Workshops von Universität Karlsruhe (TH) und Forschungszentrum Karlsruhe*, L. Krebs, B. Peters (ed.), Wissenschaftliche Berichte FZKA 6084, Karlsruhe, p. 37, 1998.
- B. Bartenbach, (1998), Untersuchungen zur Rußbildung und Rußoxidation unter den Bedingungen turbulenter Diffusionsflammen, Dissertation, Universität Karlsruhe (TH).
- B. Bartenbach, W. Leuckel; Soot Formation and Burn-out in Turbulent Combustion. In *Extended Abstracts SFB 167 Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung*, 1998.
- H. Bockhorn, J. Fröhlich, W. Gerlinger, K. Schneider, (1998). Numerical Simulation of Two-dimensional Flame Balls in an Adaptive Wavelet Basis, in *SIAM- Seventh International Conference on Numerical Combustion*, SIAM, p. 156, .
- H. Bockhorn, A. Hornung, U. Hornung, P. Jakobström, (1998). New Mechanistic Aspects of the Dehydrochlorination of PVC - Application to Plastic Mixtures and Electronic Scrap. Combust. Sci. Technol., 134, (7),
- H. Bockhorn, A. Hornung, U. Hornung, (1998). Stepwise Pyrolysis for Raw Material Recovery from Plastic Mixtures. J. Analyt. Appl. Pyrolysis, 46, (1),
- H. Bockhorn, J. Fröhlich, W. Gerlinger, K. Schneider, (1998). Numerical Investigation on the Stability of Flame Balls. Computational Fluid Dynamics ’98, 1, (2), 990.
- H. Bockhorn, A. Hornung, U. Hornung, (1998). Stepwise Pyrolysis for Recycling of Plastic Mixtures. Macromol. Symp., 135, (35),
- H. Bockhorn, A. Hornung, U. Hornung, (1998). Gasification of Polystyrene as Initial Step in Incineration, Fires or Smoldering of Plastics, in *Twenty Seventh Symposium (International) on Combustion*, The Combustion Institute, Pittsburgh, p. 1343, .
- P. Bonni, L. Rutz, N. Sebbar, H. Bockhorn, (1998). Numerical and Experimental Investigation of Pyrolysis and Oxidation of Dioxin Precursors and Other Toxic Byproducts, in *Twenty-Seventh Symposium (International) on Combustion, Abstracts of Work in Progress Posters*, The Combustion Institute,

- T. Brutscher, B. Lenze, (1998). Einfluß der Probenahmetechnik bei der NOx-Messung mit gekühlten Meßsonden. gwf Gas/Erdgas, 139, (8), 466 - 472.
- H. Büchner, W. Leuckel, Process and Device for Suppression of Flame and Pressure Oscillations in a Furnace, United States Patents, Patent Number 5758587, 2. Juni , 1998.
- H. Büchner, W. Leuckel, Verfahren und Vorrichtung zur Unterdrückung von Flammen- / Druckschwingungen bei einer Feuerung, Europäische Patentschrift, Patent Nummer EP 0 754 908 B1 , 9. September , 1998.
- H. Büchner; (1998). Vortrag: *Strömungs- und Verbrennungsinstabilitäten in technischen Verbrennungssystemen*. Kolloquium der Fakultät für Angewandte Physik, Justus-Liebig-Universität, Gießen, 2. November,
- N. Ebersohl, Th. Klos, R. Suntz, H. Bockhorn, (1998). One-Dimensional Raman Scattering for Determination of Multi-Point Joint Scalar PDFs in Turbulent Diffusion Flames, in *Twenty Seventh Symposium (International) on Combustion*, The Combustion Institute, Pittsburgh, p. 997, .
- K. Ehrhardt, M. Toqan, P. Jansohn, J.D. Teare, J.M. Beer, G. Sybon, W. Leuckel, (1998). Modelling of NOx Reburning in a Pilot Scale Furnace Using Detailed Reaction Kinetics. Combustion, Science and Technology, 131, 131 - 146.
- K. Ehrhardt, A. Kufferath, W. Leuckel, (1998). Assessment of Atomization Quality with Respect to Burnout for the Incineration of Organically Contaminated Waste Waters. Combustion Science and Technology, 136, 333 - 347.
- K. Ehrhardt, W. Leuckel, (1998). Ausbrand und Flammenstabilität als Kriterien für die Optimierung der Abwasserverbrennung mit dem Flammenverdampfungsbrenner. Chemie-Ingenieur-Technik, 70, 1160 - 1161.
- K.Ehrhardt, A.Ehret, W.Leuckel, (1998). Experimental Study on the Dependence of Burnout on the Operation Conditions and Physical Properties in Wastewater Incineration, in *27th Symp. (Intern.) on Combustion*, The Combustion Institute, p. 1253-1299, .
- B. Ganz, P. Schmittel, R. Koch, S. Wittig, (1998). Validation of Numerical Methods at a Confined Turbulent Natural Gas Diffusion Flame Considering Deailed Radiative Transfer, in *Proceedings ASME-Konferenz*, ASME, p. 87 - 94, (doi:10.1115/98-GT-228).
- H. Geitlinger, Th. Streibel, R. Suntz, H. Bockhorn, (1998). Two-Dimensional Imaging of Soot Volume Fractions, Particle Number Densities and Particle Radii in Laminar and Turbulent Diffusion Flames, in *Twenty Seventh Symposium (International) on Combustion*, The Combustion Institute, Pittsburgh, p. 1613, .
- P. Habisreuther, M. Phillipp, H. Eickhoff, B. Lenze; Mathematical Models for Aerodynamics, Mixing and Reaction in Turbulent Swirling Flames. In *Extended Abstracts SFB 167 Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung*, 1998.
- R. Hadef, K. Merkle, B. Lenze, W. Leuckel, (1998). Untersuchungen zum Stabilitätsverhalten einer mit Kerosin betriebenen Air-Blast-Zerstäuberdüse, in *Wissenschaftliche Abschlußberichte des 33. Internationalen Seminars*, Internationales Seminar, p. 72 - 82, .
- A. Heyl, H. Bockhorn, (1998). Modelling of Pollutant Formation in Complex Geometries under Consideration of Detailed Chemical Mechanisms. Computational Fluid Dynamics ’98, 2, 808.
- A. Hoffmann, (1998), Reduced Reaction Mechanism for Kerosine. Brite-EuRam BRPR, Final Report for Period January 1996 - June 1997, CT95-0122, .
- Hoffmann, A., Leuckel, W., (1998), Task4: Turbulence Modelling. EBI-VBT, Universität Karlsruhe, Final Report, Brite-EuRam BRPR, CT95-0122, .

Turbulent Swirling Flames. In *Extended Abstracts SFB 167 Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung*, 1998.

- U. Hornung, A. Hornung, H. Bockhorn, (1998). Bestimmung des thermischen Abbaus von Feststoffen in einem isothermen, gradientenfreien Reaktor. Chem.-Ing.-Tech., 70, (145),
- U. Hornung, A. Hornung, H. Bockhorn, (1998). Ein Kugelkreislaufreaktor zur Umsetzung viskoser Medien. Chem.-Ing.-Tech., 70, (264),
- A. Hornung, U. Hornung, H. Bockhorn, (1998). Gestufte Pyrolyse von Kunststoffgemischen - Prozessintegrierte Schadstoff- und Wertstofftrennung, in *DGMK-Tagungsbericht 9802*, Deutsche wissenschaftliche Gesellschaft für Erdöl, Erdgas und Kohle e.V., Hamburg, p. 261, .
- U. Hornung, A. Hornung, H. Bockhorn, (1998). Investigation of Thermal Degradation of Solids in an Isothermal, Gradient Free Reactor. Chem. Eng. Techn., 21, (332),
- U. Hornung, H. Bockhorn, A. Hornung, S. Teepe, J. Weichmann; Isotherme und dynamische Messungen zur Bestimmung der Vergasungskinetik von Kunststoffen. In *Experimente und Modellierung zur heterogenen und homogenen Verbrennung, Vorträge des gemeinsamen Workshops von Universität Karlsruhe (TH) und Forschungszentrum Karlsruhe*, L. Krebs, B. Peters (ed.), Wissenschaftliche Berichte FZKA 6084, Karlsruhe, p. 77, 1998.
- A. Hornung, H. Bockhorn, U. Hornung, M. Kraus, A. Schöneberger, J. Weichmann; Gestufte Pyrolyse als Verfahrensprinzip zur Vergasung von Kunststoffen. In *Experimente und Modellierung zur heterogenen und homogenen Verbrennung, Vorträge des gemeinsamen Workshops von Universität Karlsruhe (TH) und Forschungszentrum Karlsruhe*, L. Krebs, B. Peters (ed.), Wissenschaftliche Berichte FZKA 6084, Karlsruhe, p. 109, 1998.
- A. Hornung, H. Bockhorn, U. Hornung, (1998). A Circulated-Spheres Reactor for the Conversion of Viscous Media. Chem. Eng. Technol., 21, (723),
- A. Hornung, P. Jakobströer, S. Löchner, H. Bockhorn, (1998). Polystyrene Pyrolysis as the Initial Stage of Polymer Combustion: Experiments and Modeling on the Degradation Kinetics and the Formation of Gaseous Products, in *Twenty-Seventh Symposium (International) on Combustion, Abstracts of Work in Progress Posters*, The Combustion Institute, Pittsburgh, p. 18, .
- O. Häßler, B. Jungfleisch, R. Suntz, H. Bockhorn, (1998). Laser-Induced C2-Fluorescence from Laser Vaporized Soot in Low Pressure Laminar Premixed Ethyne-Oxygene-Argon-Flames, in *Twenty-Seventh Symposium (International) on Combustion, Abstracts of Work in Progress Posters*, The Combustion Institute, Pittsburgh, p. 536, .
- B. Jungfleisch, M. Marquardt, J. Appel, R. Suntz, H. Bockhorn; Laserinduzierte Inkandeszenz zur Messung von Rußkonzentrationen in Flammen. In *Experimente und Modellierung zur heterogenen und homogenen Verbrennung, Vorträge des gemeinsamen Workshops von Universität Karlsruhe (TH) und Forschungszentrum Karlsruhe*, L. Krebs, B. Peters (ed.), Wissenschaftliche Berichte FZKA 6084, Karlsruhe, p. 167, 1998.
- M. Kraft, H. Fey, H. Bockhorn:, (1998). Higher Order Factorization and Particle Approximation of Stochastic Reactor Models Based on the PDF Transport Equation, in *SIAM- Seventh International Conference on Numerical Combustion*, SIAM, p. 97, .
- A. Kufferath, B. Wende, W. Leuckel, (1998). Influence of Liquid Flow Conditions on Spray Characteristics of Internal Mixing Twin Fluid Atomizers, in *Proceedings 14th Annual Conference of ILASS-Europe on Liquid Atomization and Spray Systems*, ILASS, p. 159 - 164, .
- A. Kufferath, M. Löffler-Mang, M. Horvay, W. Leuckel; Pressure-Swirl and Twin-Fluid Atomization with Regard to Industrial Liquid Fuel Combustion. In *Extended Abstracts SFB 167 Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung*, 1998.

innenmischender Zweistoffdüsen als Grundlage verfahrensoptimierter Zerstäubung. Chemie-Ingenieur-Technik, 70, 1111 - 1112.

- A. Kufferath, W. Leuckel; (1998). Vortrag: *Korrelation von Düseninnenströmung und Spraycharacteristik innenmischender Zweistoffdüsen als Grundlage verfahrensoptimierter Zerstäubung*. GVC-Jahrestagung Prozeß- und Umwelttechnik,

- B. Lenze, B. Prade, P. Schmittel; Investigation of Aerodynamics, Mixing and Stabilization of Turbulent Concentric and Swirling Flames. In *Extended Abstracts SFB 167 Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung*, 1998.

- W. Leuckel; Stability, Burn Out and Emission Characteristics of Turbulent Flames. In *Extended Abstracts SFB 167 Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung*, 1998.

- K. Merkle, B. Lenze, (1998), Flammenstabilität einer Airblast-Zerstäuber/Brennkammer-Anordnung bei atmosphärischem Druck. Forschungsvorhaben KEROMIX, Jahresbericht 1997, .

- C. Procaccini, M. Kraft, H. Fey, H. Bockhorn, J.P. Longwell, A.F. Sarofim, K.A. Smith, (1998). PIC Formation During the Combustion of Simple Hydrocarbons in Inhomogeneous Incineration Systems, in *Twenty Seventh Symposium (International) on Combustion*, The Combustion Institute, Pittsburgh, p. 1275, .

- Schmid, Hans-Peter; Habisreuther, Peter; Leuckel, Wolfgang, (1998). A model for calculating heat release in premixed turbulent flames. Comb. and Flame, 113, 79-91.(doi:10.1016/S0010-2180(97)00193-4)

- P. Schmittel, B. Lenze, W. Leuckel, (1998). Einfluß von Drall und Brenngaszufuhr auf die Mischung, Temperaturverteilung und Stickoxidemissionen in turbulenten Drallflammen, in *Proceedings 10. Internationale VGB-Konferenz*, VGB, .

- P. Schmittel, B. Lenze, W. Leuckel, (1998), Experimentelle und modellierende Optimierung der Drehimpuls- und Axialimpulsströme von Drallflammen hinsichtlich Ausbrand und niedriger NOx-Emissionen. TECFLAM, Jahresbericht, .

- P. Schmittel, B. Lenze, W. Leuckel, (1998), Erarbeitung von Basisdatensätzen der Feldgrößen Temperatur, Spezieskonzentration, Strömungsgeschwindigkeit und Turbulenzparameter an turbulenten Standard-Drallflammen. TECFLAM, Jahresbericht, .

- K. Schneider, H. Bockhorn, J. Fröhlich; Direkte numerische Simulation turbulenter reaktiver Strömungen. In *Experimente und Modellierung zur heterogenen und homogenen Verbrennung, Vorträge des gemeinsamen Workshops von Universität Karlsruhe (TH) und Forschungszentrum Karlsruhe*, L. Krebs, B. Peters (ed.), Wissenschaftliche Berichte FZKA 6084, Karlsruhe, p. 3, 1998.

- D. Stapf, (1998), Experimentell basierte Weiterentwicklung von Berechnungsmodellen der NOx-Emission technischer Verbrennungssysteme, Dissertation, Universität Karlsruhe.

- D. Stapf, K. Ehrhardt, W. Leuckel, (1998). Modellierung der NOx-Minderung durch dreistufige Verbrennung. Chemie-Ingenieur-Technik, 70, 574 - 577.

- D. Stapf, K. Ehrhardt, W. Leuckel, (1998). Modelling of NOx-Reduction by Reburning. Chemical Engineering and Technology, 21, 412 - 415.

- D. Stapf, P. Jansohn, S. Koger, W. Leuckel; Formation and Reduction of Nitrogen Oxides in Flames. In *Extended Abstracts SFB 167 Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung*, 1998.

- Th. Klos, M. Koch, N. Ebersohl, M. Kraft, R. Suntz, H. Bockhorn; Multikomponenten-Raman-Streuung zur Messung turbulenter Schwankungsgrößen. In *Experimente und Modellierung zur heterogenen und homogenen Verbrennung, Vorträge des gemeinsamen Workshops von Universitöt Karlsruhe (TH) und Forschungszentrum Karlsruhe*, L. Krebs, B. Peters (ed.), Wissenschaftliche Berichte FZKA 6084, Karlsruhe, p. 179, 1998.

Non-Catalytic NOx-Reduction in Diesel Engines Using Aqueous Urea. SAE, Report, Paper 982651, .

- M. Zajadatz, W. Leuckel, (1998). Verbrennungseigenschaften von Vergasungsgas unter gasturbinenspezifischen Bedingungen von Druck und Temperatur, in *VGB-Konferenz "Forschung für die Kraftwerkstechnik"*, VGB, p. C2, .

- M. Zajadatz, G. Lauer, W. Leuckel, (1998), Bestimmung der Brenngeschwindigkeiten von typischen mittelkalorischen Brennstoffen für stationäre Gasturbine. Arbeitsgemeinschaft Hochtemperaturgasturbine, Teilverbundprojekt Turboflam, Abschlußbericht, Vorhaben 3.2.1.6, .

- M. Zajadatz, W. Leuckel, (1998), Verbrennungseigenschaften von Vergasungsgasen unterschiedlicher Zusammensetzung unter gasturbinenspezifischen Bedingungen. VGB, Abschlußbericht, Vorhaben 167, .

- M. Zajadatz, M. Hettel, W. Leuckel, (1998). Burning Velocity of High-Turbulence Natural Gas Flames for Gas Turbine Application, in *Prodeedings of the International Gas Research Conference*, 8.-11.11.98, San Diego, CA, p. 793 - 803, .

- N. Zarzalis, (1998). Entwicklungsstadien eines Konzeptes zur mageren Verbrennung mit Vorverdampfung und Vorvermischung des flüssigen Brennstoffs, in *Tagungsband des 6. Statusseminars*, AG Turbo, p. 3-1 bis 3-11, .

- G. Zhen, (1998), Zum Einfluß strahlinduzierter Turbulenz auf die instationäre Flammenausbreitung bei Gas- und Staubexplosionen in Geschlossenen Behältern, Dissertation, Universität Karlsruhe.

- J. Zhuang, W. Leuckel, (1998). A Modified Two-Sensor-Method for the Measurement of High Gas Temperature Facing Surroundings with Different Surface Temperatures. Combustion, Science and Technology, 139, (1 - 6), 229 - 247.

- J. Zhuang, W. Leuckel, (1998). Formation of Nitrogen Dioxide in Combustion Processes, in *International Gas Research Conference*, IPP-24, p. 349 - 360, .

- M. Ziegler, (1998), Untersuchungen zur Ausbreitung stationärer, turbulenter Vormischflammen unter besonderer Berücksichtigung bevorzugter Diffusion, Dissertation, Universität Karlsruhe.

- J. Ziemann, F. Shum, M. Moore, D. Kluyskens, D. Thomaier, N. Zarzalis, (1998). Low-NOx Combustors for Hydrogen Fueled Aero Engine. Int. J. Hydrogen Energy, Vol. 23, No. 4, (PII: S0360-3199(97)00054-2), 281-288.

1997

... zum Anfang der Seite

- H. Bockhorn; Modelle für die Bildung und Oxidation von Ruß unter dieselmotorischen Bedingungen. In *Motorische Verbrennung - aktuelle Probleme und moderne Lösungsansötze*, A. Leipertz (ed.), Berichte zur Energie- und Verfahrenstechnik, Heft 97.1, Esytec GmbH, Erlangen, p. 137, 1997.

- H. Bockhorn, K. Schneider, H. Fey, M. Kraft, (1997). Dynamische Simulation von Mischung, Turbulenz und chemischen Reaktionen am Beispiel der Verbrennung halogenierter Kohlenwasserstoffe. Chem.-Ing.-Tech., 69, (1275),

- H. Bockhorn, C. Antoni, N. Krümmling, B. Mayr, N. Peters, R. Pittermann, A. Schön, Th. Streibel, R. Winzer, (1997). Kinetik der Rußentstehung und Oxidation in DI-Dieselmotoren bei Abgasrückführung, in *6. Aachener Kolloquium Fahrzeug- und Motorentechnik*, Aachen, p. 285, .

- Brenn, G. and Durst, F. and Trimis, D. and Weclas, M., (1997). Methods and tools for advanced fuel spray production and investigation. Atomization and Sprays, 7, (1), 43-75.

- H. Büchner, Ch. Külsheimer, (1997). Untersuchungen zum frequenzabhängigen Mischungs- und Reaktionsverhalten pulsierender, vorgemischter Drallflammen. GASWÄRME International, 46, (2), 122 - 129.

dämpfungsbehafteten Helmholtz-Resonators. In *Feuerungstechnik - Kaleidoskop aus aktueller Forschung und Entwicklung; Festschrift Wolfgang Leuckel*, Engler-Bunte-Institut, Universität Karlsruhe (TH), ISBN 3-00-001593-0, p. 123 - 145, 1997.

- Ch. Külsheimer; (1997). Vortrag: *Experimentelle Untersuchungen zum instationären Einmischverhalten von isothermen turbulenten Drallstrahlen*. 43. Seminar des SFB 167 "Hochbelastete Brennräume - stationäre Gleichdruckverbrennung", Universität Karlsruhe (TH), 25. Juni,

- Chimote, Ratnakar; Schmittel, Peter; Lenze, Bernhard; Leuckel, Wolfgang, (1997). Experimentelle und theoretische Untersuchung zur Stabilität eingeschlossener Drallflammen, in *Wissenschaftlicher Abschlußbericht des 32. Internationalen Seminars*, Karlsruhe, p. 170 - 179, .

- Durst, F. and Kesting, A. and Mößbauer, S. and Pickenäcker, K. and Pickenäcker, O. and Trimis, D., (1997). The porous burner - Concept, technique, and fields of application [Der Porenbrenner - Konzept, technik und anwendungsgebiete]. Gaswaerme International, 46, (5), 300-307.

- N. Ebersohl, Th. Klos, R. Suntz, H. Bockhorn; Bestimmung von turbulenten Skalen mittels eindimensionaler Raman Streuung. In *VDI-Berichte 1313*, VDI-Verlag, Düsseldorf, p. 567, 1997.

- Ehrhardt, Kai; Schöbel, Anke; Leuckel, Wolfgang, (1997). Optimierung der Flammenstabilität eines Mehrstoffbrenners für heizwertarme Industrieabwässer, in *18. Deutsch-Niederländischer Flammentag*, p. 151 - 156, .

- Ehrhardt, Kai; Ehret, Armin; Leuckel, Wolfgang, (1997). Influence of Volatility and Reactivity of the Organic Fraction Solved in Waste Waters on Burnout, in *First Meeting of the Greek Section of the Combustion Institute*, Athen, Griechenland, 28. - 29. 11. 1997, p. 253 - 258, .

- Ganz, Benedikt; Schmittel, Peter; Koch, Rainer; Lenze, Bernhard; Wittig, Sigmar; Spektrale Strahlungsmessung an einer eingeschlossenen turbulenten Erdgas Drall-Diffusionsflamme. In *Feuerungstechnik - Kaleidoskop aus aktueller Forschung und Entwicklung; Festschrift Wolfgang Leuckel,*, Karlsruhe, p. 93 - 107, 1997.

- Habisreuther, Peter; Stapf, Dieter; Eickhoff, Heinrich; Lenze, Bernhard, (1997). Validierung eines PDF-Modells für die thermische NOx-Bildung in eingeschlossen brennenden turbulenten vorgemischten Drallflamen. GASWÄRME International, 46, (2), 115-121.

- Habisreuther, Peter; Stapf, Dieter; Eickhoff, Heinrich; Lenze, Bernhard; Validierung eines PDF-Modells nach der Momentenmethode für die thermische NOx-Bildung in eingeschlossen brennenden turbulenten vorgemischten Drallflammen. In *Feuerungstechnik - Kaleidoskop aus aktueller Forschung und Entwicklung; Festschrift Wolfgang Leuckel,*, Karlsruhe, p. 47 - 65;, 1997.

- Habisreuther, Peter; Schmittel, Peter; Idda, Ping; Eickhoff, Heinrich; Lenze, Bernhard, (1997). Experimentelle und numerische Untersuchungen an einer eingeschlossenen Drall-Diffusionsflamme, in *Verbrennungen und Feuerungen - 18. Deutsch-Niederländischer Flammentag*, vol. **1313**, Delft/NL, p. 127-132, .

- Habisreuther, Peter; Eickhoff, Heinrich; Leuckel, Wolfgang; Modellierung und experimentelle Validierung von eingeschlossenen Vormisch- und Diffusionsdrallflammen. In *Forschungsbericht SFB167, Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung*, BMBF, p. 143-172, 1997.

- F. Hess, M. Kraft, M. Richter, H. Bockhorn, (1997). Comparison and Assessment of Various Wavelet and Wavelet Packet based Denoising Algorithms for Noisy Data, in *Progress in Industrial Mathematics at ECMI 96*, Stuttgart, p. 223, .

- Hettel, Matthias; Schmid, Hans-Peter; Lenze, Bernhard, (1997). Flame Structures of Highly Turbulent Premixed Flames: Measurements and Numerical Calculations, in *Proceedings of the First Asia-Pacific Conference on Combustion (ASPACC97)*, 12. - 15. 5.97, Osaka, Japan, .

Flammen mit Hilfe detaillierter kinetischer Modelle. In *VDI-Berichte 1313*, VDI-Verlag, Düsseldorf, p. 449, 1997.

- Hoffmann, Stefan; Lenze, Bernhard; Eickhoff, Heinrich; Results of Experiments and Models for Predicting Stability Limits of Turbulent Swirling Flames. In *Feuerungstechnik - Kaleidoskop aus aktueller Forschung und Entwicklung; Festschrift Wolfgang Leuckel*, Karlsruhe, p. 281- 298, 1997.

- Holzäpfel, Frank; Lenze, Bernhard; Swirl-Induced Intermittency - Assessment of a Novel Effect Modifying the Turbulence Structure of Swirling Jets. In *Feuerungstechnik - Kaleidoskop aus aktueller Forschung und Entwicklung; Festschrift Wolfgang Leuckel*, Karlsruhe, p. 67 - 91, 1997.

-

- John, Reiner; Brein, Dieter; Zielorientierter Brandschutz einer Mehrzweckhalle: Evakuierungskonzept und Rauchfreihaltung. In *Feuerungstechnik - Kaleidoskop aus aktueller Forschung und Entwicklung; Festschrift Wolfgang Leuckel*, Karlsruhe, p. 535 - 553, 1997.

- Kolb, Thomas; Christill, Michael; Dorn, I.H.; Seifert, Helmut; Kufferath, Andreas; Incineration of Halogenated Waste Streams. In *Feuerungstechnik - Kaleidoskop aus aktueller Forschung und Entwicklung; Festschrift Wolfgang Leuckel*, Karlsruhe, p. 409 - 420, 1997.

- M. Kraft, H. Fey, C. Procaccini, J. P. Longwell, A. F. Sarofim, H. Bockhorn, (1997). Modelling the Thermal Decomposition of Chlorinated Hydrocarbons in an Ideal Turbulent Incinerator litentry editor=M. Brons, M.P. Bendsoe, M.P. Soerensen, in *Progress in Industrial Mathematics at ECMI 96*, Stuttgart, p. 118, .

- M. Kraft; H. Fey; C. Procaccini; K.A. Smith; J.P. Longwell; A.F. Sarofim; P. Bonni; L. Rutz; N. Sebbar; H. Bockhorn; Experimental and Numerical Investigation of the Degradation of Chlorinated Hydrocarbons in Incineration Systems. In *VDI-Berichte 1313*, VDI-Verlag, Düsseldorf, p. 163, 1997.

- Kufferath, Andreas; Leuckel Wolfgang, (1997). Experimental Investigation of Flow Conditions Inside an Air-Assisted Internal-Mixing Nozzle and their Correlation with Spray Data, in *7th International Conference on Liquid Atomization and Spray Systems, Seoul, Korea, 18. - 22. 8.1997*, Seoul, Korea, p. 62 - 269, .

- Kufferath, Andreas; Ehrhardt, Kai; Minimierung des Zusatzbrennstoffbedarfs bei der Abwasserverbrennung durch Optimierung der Zweistoffzerstäubung. In *Feuerungstechnik - Kaleidoskop aus aktueller Forschung und Entwicklung; Festschrift Wolfgang Leuckel*, Karlsruhe, p. 445 - 465, 1997.

- Lauer, Gerald; Leuckel, Wolfgang; Zajadatz, Martin; Ricken, Volker, (1997). Laminare Brenngeschwindigkeiten von Brenngasen unter erhöhten Drücken / Basisdaten für die Modellierung der Verbrennung in Gasturbinenbrennkammern, in *Informationstagung Turbinen der Forschungsvereinigung Verbrennungskraftmaschinen e.V. (FVV), Frankfurt/Main, 9. 4. 1997*, Frankfurt/Main, .

- Leisenheimer, Bert, (1997), Zum Ausbreitungsverhalten von Deflagrationsfronten in laminaren und turbulenten Brenngas/Luft-Gemischen innerhalb geschlossener Behälter, Dissertation, Universität Karlsruhe (T.H.).

- Leuckel, Wolfgang; Lenze, Bernhard; Leisenheimer, Bert; Schmittel, Peter; Ziegler, Michael; Untersuchungen der Wechselwirkung zwischen Turbulenz und Reaktion an Modellbrennern für turbulente Vormischflammen. In *TECFLAM Abschlußbericht 1994-1996*, p. 134 -158, 1997.

- Merkle, Klaus; Leuckel, Wolfgang, (1997). KEROMIX - Flammenstabilität, in *Tagungsbroschüre zum Statusseminar umweltschonende Antriebe, Bad Godesberg, 2. - 3. 6. 1997*, Bad Godesberg, p. 35, .

- Merkle, Klaus; Leuckel, Wolfgang, (1997). Magere Stabilitätsgrenze unter Atmosphärendruck, in *Tagungsbroschüre zum Internen Keromix Workshop, Köln-Porz, 17. 11. 1997*, Köln-Porz, p. 5 - 15, .

- Oellrich, Lothar; Leisenheimer, Bert; Srinivasan, K.; Flammability Behavior of (Octafluoropropane Propane) and (Octafluoropropane Methane). In *Feuerungstechnik - Kaleidoskop aus aktueller Forschung und Entwicklung; Festschrift Wolfgang Leuckel*, Karlsruhe, p. 503 - 511, 1997.

Experimentelle und Numerische Untersuchungen am Engler-Bunte-Institut. In *Feuerungstechnik - Kaleidoskop aus aktueller Forschung und Entwicklung; Festschrift Wolfgang Leuckel*, Karlsruhe, p. 147 - 164, 1997.

- Schmittel, Peter; Lenze, Bernhard; Leuckel, Wolfgang, (1997). Messungen zur Stabilität turbulenter, eingeschlossener Drallflammen unter Variation der Einflußgrößen, in *18. Deutsch-Niederländischer Flammentag*, p. 121 - 126, .

- Siegfried Höchst, (1997), Untersuchungen zur Druckentlastung großer Behälter beim deflagrativen Abbrand von Brenngas/Luft- und Brennstaub/Luft-Gemischen, Dissertation, Universität Karlsruhe (T.H.).

- Siegfried Höchst; Charakteristische Druck/Zeit-Verläufe bei entlasteten Deflagrationen. In *Feuerungstechnik - Kaleidoskop aus aktueller Forschung und Entwicklung; Festschrift Wolfgang Leuckel*, Karlsruhe, p. 555 - 566, 1997.

- Siegfried Höchst, (1997). Untersuchungen zur Überprüfung der Zündfähigkeit von Luft/Öl-Gemischen bei der Minimalmengenschmierung, in *Abschluß-Meeting zum BMBF-Projekt "Trockenverspannung von Alu-Knetlegierungen"*, 17. 6., .

- Skou, E.; Kauranen, P.; Hentschel, J., (1997). Water and methanol uptake in proton conducting Nafion membranes. Solid State Ionics, 97, 333-337.

- R. Suntz, M. Marquardt, B. Jungfleisch, H. Bockhorn, (1997). Twodimensional Imaging of Soot Volume Fractions and Particle Radii in Sooting Turbulent Diffusion Flames, in *Fourth International Conference on Technologies and Combustion for a Clean Environment, Vol II*, Lissabon, p. 24.2, .

- M. Teigeler, F. Schmitt, Ch. Enderle, F. Wirbeleit, H. Bockhorn; Mechanismen der NOx-Bildung und -Reduktion: Ansötze zur innermotorischen NOx-Absenkung unter dieselmotorischen Bedingungen. In *Berichte und Informationen*, Dresden, p. 158, 1997.

- Th. Klos, N. Ebersohl, R. Suntz, A. Heyl, H. Bockhorn, (1997). Joint Multi-Component One-Dimensional Raman Scattering for Investigations of Fluctuating Quantities in Turbulent Flames, in *Fourth International Conference on Technologies and Combustion for a Clean Environment, Vol I*, Lissabon, p. 18.1, .

- N. Zarzalis, (1997), NOx-Emissionsminderung bei Flugbetriebwerksbrennkammern nach dem Konzept der Fett-Mager Verbrennung: Von der Grundlagenforschung zum industriellen Einsatz. DGLR, Paper, JT97-107, .

- N. Zarzalis, (1997). Die neue Brennkammer ist magersüchtig. Aerospace, 3, 46 - 48.

- N. Zarzalis; (1997). Vortrag: *NOx Reduktion durch Homogenisierung des Gemisches in der Bennkamer*. Statusseminar Umweltschonene Antriebe, Bonn Bad-Godesberg,

- Zhen, Guangping; Leuckel Wolfgang, (1997). Effects of Ignitors and Turbulence on Dust Explosions. Journal of Loss Prevention in the Process Industries, 10, (5 - 6), 317 - 324.

1996

... zum Anfang der Seite

- J. Appel, B. Jungfleisch, M. Marquardt, R. Suntz, H. Bockhorn, (1996). Assessment of Soot Volume Fractions from Laser-Induced-Incandescence by Comparison with Extinction Measurements in Laminar Premixed Flat Flames, in *Twenty-Sixth Symposium (International) on Combustion*, The Combustion Institute, Pittsburgh, p. 2387, .

- M. Balthasar, A. Heyl, F. Mauß, F. Schmitt, H. Bockhorn, (1996). Flamelet Modelling of Soot Formation in Laminar Ethyne/Air-Diffusion Flames, in *Twenty-Sixth Symposium (International) on Combustion*, The Combustion Institute, Pittsburgh, p. 2369, .

- Bartenbach, Bernd ; Leuckel, Wolfgang, (1996). A Simplified Phenomenological Model for Soot Growth Based on Plug Flow reactor Experiments, in *26th Symp. (Intern.) on Combustion, July 28 - August 2*, Naples, July 96, .

Thermal Degradation of Commodity Plastics. Combust. Sci. Technol., 116/117, (129),

- H. Büchner and W. Leuckel; The Influence of Fuel/Air Mixture Oscillations on the Formation of Self-Sustained Combustion Instabilities in Premixed Combustion Systems. In *Unsteady combustion*, F. Culick, M.V. Heitor and J.H. Whitelaw (ed.), NATO ASI series: E, Applied sciences, Vol. 306, Kluwer Academic Publishers, Dordrecht, p. 71, 1996.

- Dieter Brein, (1996). Brandschutz bei Flachdächern im industriellen Bereich. s s report VdS Magazin Schadenverhütung und Sicherheitstechnik, Heft 6, 3. Jahrgang, 12-17.

- Dieter Brein, (1996). , in *Conference Proceedings of the 1st International Fire Safety Conference*, Aristotle University of Thessalonoki, Santorini, Greece, .

- Durst, F. and Melling, A. and Trimis, D. and Volkholz, P., (1996). Development of a flow meter for instantaneous flow rate measurements of anaesthetic liquids. Flow Measurement and Instrumentation, 7, (3-4), 215-221.

- Durst, F. and Ismailov, M. and Trimis, D., (1996). Measurement of instantaneous flow rates in periodically operating injection systems. Experiments in Fluids, 20, (3), 178-188.

- Döbbeling, Klaus; Zajadatz, Martin; Leuckel, Wolfgang, (1996). Vormischbrennertechnik für unverdünnte Kohlegase, in *Tagungsband zum 5. Statusseminar der Arbeitsgemeinschaft Hochtemperatur-Gasturbine; 5. - 6. Dezember,*, Köln, p. 13.1-13.11, .

- Heilos, Andreas; Leuckel, Wolfgang, (1996). Investigation of the Local Radiation Properties of Flame Soot in Fuel-Oil and Propane Flames, in *26th International Symposium on Combustion; July 28 - August 2*, Naples, Italy, p. 179, .

- Hermann Schatz, (1996). Brand- und Löschversuche im Wassernebel an Pappkartons und Kästen aus Polypropylen im Hochregal. vfdb-Z Zeitschrift Forschung und Technik im Brandschutz, 1, 31-36.

- Hirsch, C; Leuckel, W., (1996). A curvature correction for the k,e-model in engineering applications, in *Proceedings of the 3rd International Symposium on Engeneering Turbulence Modelling and Measurements*, vol. **3**, Heraclion - Crete, Greece, p. 71-80, .

- Hoffmann, Stefan; Lenze, Bernhard, (1996), Das Strömungs- und Reaktionsfeld sowie Stabilisierungseigenschaften in Drallflammen unter dem Einfluß der inneren Rückströmzone. FIZ, DFG-Bericht, 7-1, 8-1, .

- Hoffmann, A.B.; McAdam, S.; Beér, J.M.; Sarofim, A.F., (1996). Soot Surface Growth by Polycyclic Aromatic Hydrocarbon and Acetylen Addition, in *26th International Symposium on Combustion; July 28 - August 2*, Naples, Italy, p. 81, .

- Holzäpfel, Frank; Lenze, Bernhard; Leuckel, Wolfgang, (1996). Swirl Induced Intermittency - a Novel Effect Modifying the Turbulence Structure of Swirling Free Jets, in *26th International Symposium on Combustion; July 28 - August 2*, Naples, Italy, p. 187-194, .

- Holzäpfel, Frank, (1996), Zur Turbulenzstruktur freier und eingeschlossener Drehströmungen, Dissertation, Universität Karlsruhe (TH).

- A. Hornung, U. Hornung, H. Bockhorn, A. Schöneberger, J. Weichmann, (1996). Gestufte Pyrolyse als Verfahrensprinzip zur chemischen Auftrennung von Kunststoffgemischen, in *DGMK-Tagungsbericht 9603*, Deutsche wissenschaftliche Gesellschaft für Erdöl, Erdgas und Kohle e.V., Hamburg, p. 291, .

- Höchst, Siegfried; Nasr, Tarek; Eibl, Josef; Leuckel, Wolfgang, (1996). Einwirkungen aus Staubexplosionen auf Siloanlagen bei Entlastung mit unterschiedlichen Elementen, in *Tagungsband "Silos - Forschung und Praxis"; Universität Karlsruhe, 29. Februar - 1. März*, p. 145-152, .

Devices, in *7th Intern. Colloquium on Dust Explosions*, Bergen, Norway, Juni 23 - 26, p. 8.1-8.10, .

- John, Reiner; Brein, Dieter, (1996). Rauchfreihaltung von Rettungswegen - Bemessung der Rauchfreihaltung, der Rettungswege und begleitender brandschutztechnischer Maßnahmen für eine Multifunktionshalle, in *Internationale Konferenz zum Thema "Zielorientierte Brandschutzkonzepte"; 15. bis 17. Oktober*, Zürich, Schweiz, .
-
- Kolb, Thomas; Christill, Michael; Dorn, I.H.; Seifert, H.; Kufferath, Andreas; Leuckel, Wolfgang, (1996). Studies on the Thermal Destruction Behavior of Chlorinated Hydrocarbons, in *International Conference on Incineration and Thermal Technologies, May 6 - 10*, Irvine, California, USA, .
- M. Kraft, Th. Klos, H. Bockhorn; Turbulent Diffusion Flames: PDF Modelling and Comparison to Raman/Rayleigh Measured PDFs. In *Progress in Industrial Mathematics at ECMI 94*, H. Neunzert (ed.), Wiley-Teubner, Chichester, tuttgart, p. 184, 1996.
- M. Kraft, E. Stöckelmann, H. Bockhorn, (1996). Modelling of Turbulent Mixing using the PDF Transport Equation with a Detailed and a Global Reaction Mechanism, in *SIAM- Sixth International Conference on Numerical Combustion*, SIAM, p. 100, .
- M. Kraft, H. Fey, A. Schlegel, J.-Y. Chen, H. Bockhorn, (1996). A Numerical Study on the Influence of Mixing Intensity on NOx Formation, in *Proceedings of the Third Workshop on Modelling of Chemical Reaction Systems*, Heidelberg, .
- M. Kraft, E. Stöckelmann, H. Bockhorn, (1996). Analysis of Wet CO Oxidation under Turbulent Non-Premixed Conditions Using a PDF Method and Detailed Chemical Kinetics, in *Twenty-Sixth Symposium (International) on Combustion*, The Combustion Institute, Pittsburgh, p. 807, .
- M. Kraft, E. Stöckelmann, H. Bockhorn, (1996). Influence of Turbulent Mixing on the Pyrolysis of Chloroform Using Detailed Chemical Kinetics, in *Twenty-Sixth Symposium (International) on Combustion*, The Combustion Institute, Pittsburgh, p. 2431, .
- Kufferath, Andreas; Ehrhardt, Kai; Leuckel, Wolfgang, (1996). Influence of Spray Characteristics on Burnout for the Incineration of Waste Water, in *26th International Symposium on Combustion; July 28 - August 2*, Naples, Italy, p. 71, .
- Kufferath, Andreas; Heyse, Christian; Leuckel, Wolfgang, (1996). Influence of the Outlet Port length on liquid Fuel Atomisation by an Air-Assisted Intenal-Mixing Nozzle, in *12th Annual Conference of ILASS-Europe, June 19 - 21*, Lund, Sweden, p. 179-184, .
- Kunkelmann, Jürgen, (1996). Brandausbreitung in Palettenlagern und Vergleich mit Gitterbox- und Blocklagerung. vfdb-Z Zeitschrift Forschung und Technik im Brandschutz, 1, 24-31.
- Lauer, Gerald; Habisreuther, Peter; Leuckel, Wolfgang; Eickhoff, Heinrich, (1996). Experimentelle Überprüfung eines JPDF-Reaktionsmodelles. GASWÄRME International, 45, (4/5), 189-196.
- Leisenheimer, Bert; Leuckel, Wolfgang; Self-Generated Turbulence of Laminar and Turbulent Transient Flame Fronts Inside a Closed Spherical Vessel. In *Fire Engineering and Emergency Planing*, Ronald Braham (ed.), London, p. 30-38, 1996.
- Leisenheimer, Bert; Leuckel, Wolfgang, (1996). Numerical Simulation of Heat Release in Turbulent Self-Generated Acceleration of Confined Deflagrative Flame Front. Combust. Sci. and Tech., 118, (1-3), 147.
- Leisenheimer, Bert; Oellrich, L.;Leuckel, Wolfgang, (1996). Zum Zündverhalten einiger Ersatzkältemittel. KI Luft- und Kältetechnik, 32, (11), 505-508.
- Leisenheimer, Bert; Oellrich, L.;Leuckel, Wolfgang, (1996). Explosibility Characteristics of some Alternative Refrigerants, in *2nd International Specialist Meeting on Fuel-Air Explosions, June 26 - 28*, Bergen, Norway, p. 4.1-4.8, .

auf die Stickstoffoxidbildung in Haushaltsbrennern. GWF Gas, Erdgas, 137, (2),

- M. Marquardt, F. Mauß, B. Jungfleisch, R. Suntz, H. Bockhorn, (1996). Re-Initiation of Soot Surface Growth in Premixed Counter-Flow Flames, in *Twenty-Sixth Symposium (International) on Combustion*, The Combustion Institute, Pittsburgh, p. 2343, .

- C. Procaccini , S. Macadam, J.P. Longwell, A.F. Sarofim, M. Kraft, H. Bockhorn, (1996). Influence of Turbulent Mixing on PIC Production: Experimental and Modelling Studies, in *Twenty-Sixth Symposium (International) on Combustion, Abstracts of Work in Progress Posters*, The Combustion Institute, Pittsburgh, p. 137, .

- A. Schlegel, P. Benz, T. Griffin, W. Weisenstein, H. Bockhorn, (1996). Catalytic Stabilization of Lean Premixed Combustion: Method for Improving NOx Emissions. Combust. Flame, 105, (332),

- Schmid, Hans Peter; Leuckel, Wolfgang, (1996). Development and Testing of a new Reaction Model for Heat Release in Turbulent Premixed and Partially Flames, in *26th International Symposium on Combustion; July 28 - August 2*, Naples, Italy, p. 279, .

- Schmid, Hans-Peter; Habisreuther, Peter; Leuckel, Wolfgang, (1996). A Reaction Model for Heat Release in Turbulent Premixed Flames, in *6th International Conference on Numerical Combustion, March 4 - 6*, New Orleans, USA, .

- F. Schmitt, F. Mauß, H. Bockhorn, (1996). Efficient Calculation of Instationary Flamelets with Moving Grid Techniques, in *SIAM- Sixth International Conference on Numerical Combustion*, SIAM, p. 173, .

- F. Schmitt, K. Schneider, F. Mauß, H. Bockhorn, (1996). NO Formation during Ignition of One Dimensional Laminar Flamelets, in *Proceedings of the Third Workshop on Modelling of Chemical Reaction Systems*, Heidelberg, .

- F. Schmitt, K. Schneider, H. Bockhorn, (1996). Numerical Simulation of Pulsating NO Reduction with Ammonia Using Interactive Flamelets, in *Twenty-Sixth Symposium (International) on Combustion, Abstracts of Work in Progress Posters*, The Combustion Institute, Pittsburgh, p. 224, .

- Stapf, Dieter; Leuckel, Wolfgang, (1996). Flow Reactor Studies and Testing of Comprehensive Mechanisms for NOx Reburning, in *26th Symp. (Intern.) on Combustion*, The Combustion Institute, Naples, July 28 - August 2, p. 38, .

- Stapf, Dieter; Leuckel Wolfgang, (1996). Zur mathematischen Modellierung der Flammenfront-NO-Bildung bei turbulenter Verbrennung. Gaswärme Internat., 45, (7/8, 9), 350-357, 410-415.

- D. Stapf and W. Leuckel, (1996). Flow Reactor Studies and Testing of Comprehensive Mechanism for NOx Reburning, in *Twenty-Sixth Symposium (International) on Combustion*, vol. **1**, The Combustion Institute, p. 2083-2090, .

- Trimis, D.; Durst, F., (1996). Combustion in a porous medium-advances and applications. Combustion, Science and Technology, 121, (1-6), 153-168.

- Zhen, Guangping; Leuckel, Wolfgang, (1996). Determination of Dust Dispersion Induced Turbulence and its Influence on Dust Explosions. Combust. Sci. and Tech., 113-114, 629.

- Zhen, Guangping; Leuckel, Wolfgang, (1996). Effects of Igniter and Turbulence on Dust Explosions, in *7th International Colloquium on Dust Explosions, June 23 - 26,*, Bergen, Norway, p. 7.12-7.19, .

- Zhuang, Jurong; Doll, Andreas; Leuckel, Wolfgang, (1996). Parameters Affecting the Measurement of Nitrogen Oxides in Flames, in *Proceedings of First European Conference on Small Burner Technology and Heating Equipment, 25. - 26. September,*, vol. **1**, Zürich, Switzerland, p. 203-213, .

1995

... zum Anfang der Seite

Bedingungen industrieller Diffusionsflammen. In *Forschungsbericht des Sonderforschungsbereiches 167, "Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung", Berichtszeitraum 1993- 1995,*, p. 83-109, 1995.

- Bartenbach, Bernd; Leuckel, Wolfgang, (1995). Untersuchungen zur Rußbildung aus gasförmigen Kohlenwasserstoffen unter den Bedingungen technischer Diffusionsflammen, in *Verbrennung und Feuerungen - 17. Deutscher Flammentag*, Düsseldorf, p. 219-226, .

- Bartenbach, Bernd; Hüning, Frauke; Leuckel, Wolfgang, (1995). Experimental investigations on phenomenological aspects of soot formation in turbulent diffusion flames, in *Book of Abstracts, Joint Meeting of the French and German Sections of the Combustion Institute*, Mulhouse, France, 11.-13.10.1995, .

- H. Bockhorn, A. Hornung, U. Hornung, S. Teepe, J. Weichmann, (1995). Gasification of Plastics, in *Combustion Meeting '95*, The Italian Section of the Combustion Institute, Neapel, p. A-2, .

- H. Büchner, W. Leuckel, (1995). Experimental and Theoretical Investgations on the Formation of Self-Sustained Pressure Oscillations in a Low NOx Burner, in *Proceedings of 3rd Asian-Pacific International Symposium on Combustion and Energy Utilization*, p. 205-210, .

- H. Büchner; (1995). Vortrag: *Experimentelle und theoretische Untersuchungen der Entstehungsmechanismen thermo-akustischer Druckschwingungen in einem industriellen Vormischbrenner*. 17. Deutscher Flammentag, Hamburg, 12. -13. September,

- H. Büchner; (1995). Vortrag: *Experimental and Theoretical Investigations on the Formation of Self-Sustained Pressure Oscillations in a Low-NOx Burner*. 3rd Asian-Pacific International Symposium on Combustion and Energy Utilization, Hong Kong, December 11 - 15,

- H. Büchner, W. Leuckel, A. Hilgenstock; Experimentelle und theoretische Untersuchungen der Entstehungsmechanismen thermo-akustischer Druckschwingungen in einem industriellen Vormischbrenner. In *Verbrennung und Feuerungen - 17. Deutscher Flammentag*, Verein Deutscher Ingenieure (ed.), VDI-Berichte 1193, VDI-Verlag, Düsseldorf, p. 243-250, 1995.

- Christill, Michael; Kolb, Thomas; Seifert, Heinz; Kufferath, Andreas; Leuckel, Wolfgang, (1995). Untersuchungen zum thermischen Abbauverhalten chlorierter Kohlenwasserstoffe, in *Verbrennung und Feuerungen - 17. Deutscher Flammentag*, Düsseldorf, p. 381-388, .

- Christoph Hirsch, (1995), Ein Beitrag zur Wechselwirkung zwischen Turbulenz und Drall, Dissertation, Universität Karlsruhe (TH).

- Ehrhardt, Kai; Hettel, Matthias; Leuckel, Wolfgang; Untersuchungen zu Stabilität und Ausbrandverhalten von drallstabilisierten Flüssigbrennstoffflammen. In *Forschungsbericht des Sonderforschungsbereiches 167, "Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung", Berichtszeitraum 1993- 1995*, p. 207-225, 1995.

- P. Griebel, T. Behrendt, C. Hassa, R. Lückerath, V. Bergmann, W. Stricker, N. Zarzalis, (1995), Untersuchung eines atmosphärischen Fett-Mager-Brennkammersektors für Flugtriebwerke. VDI, Bericht, 1193, .

- Habisreuther, Peter; Leuckel, Wolfgang; Eickhoff, Heinrich; Modellierung und experimentelle Validierung von eingeschlossenen Vormisch- und Diffusionsdrallflammen. In *Forschungsbericht des Sonderforschungsbereiches 167, "Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung", Berichtszeitraum 1993- 1995*, p. 143-171, 1995.

- Hans-Peter Schmid, (1995), Ein Verbrennungsmodell zur Beschreibung der Wärmefreisetzung von vorgemischten turbulenten Flammen, Dissertation, Universität Karlsruhe (TH).

- Heilos, Andreas; Leuckel, Wolfgang, (1995). Spectral measurement and modelling of soot radiation in turbulent diffusion flames, in *Proceedings, 8th International Symposium on Transport Phenomena in Combustion*, 16.-20. Juli 1995, San Francisco, USA, .

emission from luminous turbulent flames, in *Proceedings, 3rd European Conference on Industrial Furnaces and Boilers*, 18.-21. April 1995, Lissabon, Portugal, .

- Heilos, Andreas; Leuckel, Wolfgang, (1995). Spektrale Analyse der Strahlungsemission aus rußhaltigen turbulenten Diffusionsflammen, in *Verbrennung und Feuerungen - 17. Deutscher Flammentag*, Düsseldorf, p. 319, .

- Hoffmann, Stefan; Habisreuther, Peter; Lenze, Bernhard; Eickhoff, Heinrich; Lean stability limits of turbulent swirling natural gas flames. In *Reprints of the 1995 International Gas Research Conference, Cannes*, p. 11-18, 1995.

- Holzäpfel, Frank; Hirsch, Christoph; Lenze, Bernhard; Modifizierung von Turbulenzmodellen zur Beschreibung von eingeschlossenen Drallströmungen auf der Basis von Feldmessungen der turbulenten Austauschgrößen. In *Forschungsbericht des Sonderforschungsbereiches 167, "Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung", Berichtszeitraum 1993- 1995*, p. 173-203, 1995.

- Höchst, Siegfried; Leuckel, Wolfgang, (1995). Pressure generation and flame propagation in large scale vented gas and dust explosions, in *Conference Proceedings, 15th International Colloquium on the Dynamics of Explosions and Reactive Systems*, University of Colorado, Boulder, CO, USA, 30.07.-04.08.1995, p. 541-544, .

- Höchst, Siegfried; Leuckel, Wolfgang, (1995). Pressure load and flame propagation in silos during dust explosions, in *Proceedings, 3rd European Symposium "Storage and Flow of Particulate Solids"*, p. 261-270, .

- Höchst, Siegfried; Leuckel, Wolfgang, (1995). Influencing parameters on pressure generation and flame propagation in large scale vented gas and dust explosions, in *Book of Abstracts, Joint Meeting of the French and German Sections of the Combustion Institute*, Mulhouse, France, 11.-13.10.1995, .

- B. Jungfleisch, M. Marquardt, R. Suntz, H. Bockhorn, (1995). Messung von Rußkonzentrationen durch laserinduzierte Inkandeszenz, in *11. Tecflam - Seminar: ‘‘Verbrennungsdiagnostik und Prozesskontrolle’’*, Stuttgart, p. 01, .

- M. Kraft, Th. Klos, H. Bockhorn, (1995). PDF-Modelling and Comparison to Raman/Rayleigh Measured PDFs for Turbulent Diffusion Flames, in *Proc. Third European Conference on Industrial Furnaces and Boilers*, Lissabon, .

- M. Kraft, A. Heyl, Th. Klos, H. Bockhorn; PDF Modellierung von turbulenten Kohlenmonoxidflammen. In *VDI-Berichte 1193*, VDI-Verlag, Düsseldorf, p. 635, 1995.

- M. Kraft, K. Schneider, F. Schmitt, H. Bockhorn, (1995). Dynamische Simulation der Wechselwirkung von Turbulenz und chemischer Reaktion am Beispiel der Chloroformpyrolyse. Chem.-Ing.-Tech., 67, (1131),

- M. Kraft, H. Bockhorn, (1995). PDF-Modelling of Chemical Reations under Turbulent Flow Conditions, in *Proceedings of the Joint Meeting of the French and German Sections of the Combustion Institute*, The Combustion Institute, p. 83, .

- M. Kraft, H. Bockhorn, (1995). PDF-Modelling of carbon monoxide oxidation under turbulent conditions, in *Proceedings of the Euromech Colloquium 340 (ERCOFTAC)*, p. 51, .

- Krisch, Willi, (1995). Entwicklung eines Verfahrens zur Messung des Strahlungswirkungsgrades von gasbetriebenen Infrarotstrahlern. Das Gas- und Wasserfach (gwf) - Gas/Erdgas, 136, (4), 165-172.

- Kufferath, Andreas; Ehrhardt, Kai; Leuckel, Wolfgang, (1995). Influence of nozzle design on atomization and its implication on incineration of aqueous wastes, in *Book of Abstracts, Joint Meeting of the French and German Sections of the Combustion Institute*, Mulhouse, France, 11.-13.10.1995, .

- Lauer, Gerald; Leuckel, Wolfgang, (1995). An experimental and computational study on the laminar burning velocity and kinetic structure of premixed CH4- and H2/CO/N2-air flames at elevated pressures and temperatures, in *Book of Abstracts, Joint Meeting of the French and German Sections of the Combustion*

- Lauer, Gerald; Leuckel, Wolfgang, (1995). Untersuchungen der laminaren Brenngeschwindigkeit und der Stickoxidbildung von Methan-Vormischflammen bei normalen und gasturbinenspezifischen Druck- und Temperaturbedingungen: Experiment und Modellierung, in *Verbrennung und Feuerungen - 17. Deutscher Flammentag*, Düsseldorf, p. 643, .

- G. Lauer, W. Leuckel, (1995). Laminar burning velocity of coal gases and methane at elevated pressures and temperatures: experiments and modelling. archivum combustionis, 15, (1-2), 7-23.

- F. Mauss, H. Bockhorn, (1995). Soot Formation in Premixed Hydrocarbon Flames: Prediction of Temperature and Pressure Dependence. Z. Phys. Chem., 188, (45),

- F. Mauss, Th. Schäfer, H. Bockhorn; Bildung und Oxidation von Ruß in vorgemischten Gegenstrom-Flammen. In *VDI-Berichte 1193*, VDI-Verlag, Düsseldorf, p. 225, 1995.

- A. Schlegel, P. Benz, T. Griffin, W. Weisenstein, H. Bockhorn; Katalytisch stabilisierte magere Vormischverbrennung: Eine Methode zur Verringerung der NOx-Emissionen. In *VDI-Berichte 1193*, VDI-Verlag, Düsseldorf, p. 541, 1995.

- Schmid, Hans-Peter; Habisreuther, Peter; Leuckel, Wolfgang, (1995). A reaction model for heat release in turbulent premixed flames, in *Book of Abstracts, Joint Meeting of the French and German Sections of the Combustion Institute*, Mulhouse, France, 11.-13.10.1995, .

- Schmid, Hans-Peter; Leuckel, Wolfgang, (1995). A model for the turbulent burning velocity of premixed flames, in *Conference Proceedings, 15th International Colloquium on the Dynamics of Explosions and Reactive Systems*, ICDERS, University of Colorado, Boulder, CO, USA, 30.07.-4.8.1995, p. 21-23, .

- Stapf, Dieter; Leuckel, Wolfgang; Modellierung der Schadstoffbildung in technischen Drallflammen unter dem Einfluß turbulenter Schwankungen von Temperatur und Stöchiometrie. In *Forschungsbericht des Sonderforschungsbereiches 167, "Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung", Berichtszeitraum 1993- 1995*, p. 111-142, 1995.

- Stapf, Dieter ; Leuckel, Wolfgang, (1995). Validierung von Reaktionsmechanismen zur Berechnung von NOx-Reduktionsprozessen an einem Kolbenströmungsreaktor, in *Verbrennung und Feuerungen - 17. Deutscher Flammentag*, Düsseldorf, p. 629, .

- Sybon, Günter; Leuckel, Wolfgang, (1995). Reduzierung der NOx -Emission aus Brennstoff-Stickstoff durch dreistufige Verbrennung. Chemie-Ingenieur-Technik, 67, (6), 749-752.

- Th. Schäfer, F. Mauß, H. Bockhorn, F. Fetting, (1995). Surface Growth and Oxidation of Soot Particles under Flame Conditions. Z. Naturforsch., 50a, (1009),

- Trimis, D.; Melling, A., (1995). Improved laser doppler anemometry techniques for two-point turbulent flow correlations. Measurement Science and Technology, 6, (6), 663-673.

- N. Zarzalis, (1995), NOx-Reduktion mittels der zweistufigen Verbrennung (Fett-Mager-Verbrennung) bei Gasturbinenbrennkammern. MTU Focus, 1, .

- N. Zarzalis, G. Pellischek, G. Meikis, B. Glaeser, G. Huster, (1995), NOx-Reduction in Aero Engine Combustors by Application of the Rich Lean Combustion Concept. ASME-IMECE, WAM, 95-6, .

- Zhen, Guangping; Leuckel,Wolfgang, (1995). Influence of transient injection induced turbulent flow on gas and dust explosions in a closed vessel, in *Proceedings, 8th International Symposium on Loss Prevention and Safety Promotion in the Process Industries*, vol. **II**, 06.06.-09.06.1995, Antwerp, Belgium, p. 257-268., .

- Zhen, Guangping; Leuckel,Wolfgang, (1995). Determination of dust dispersion induced turbulence and its influence on dust explosions, in *Proceedings, 15th International Colloquium on the Dynamics of Explosions and Reactive Systems*, Boulder, U.S.A., July 30 - August 4, p. 569-571., .

turbulence, in *Proceedings, 10th Symposium on Turbulent Shear Flows,*, vol. **3**, Pennsylvania State University, USA, August 14-16, p. 25-7, .

- Zhen, Guangping; Leuckel,Wolfgang, (1995). Application of the hot wire technique to investigations on transient turbulent jet mixing in closed vessels, in *Proceedings, 10th Symposium on Turbulent Shear Flows*, vol. **2**, Pennsylvania State University, USA., August 14-16, p. 13-1, .

- Ziegler, Michael; Lenze, Bernhard, (1995). Turbulente Reaktionsintensität von Vormischflammen in Abhängigkeit von Turbulenzparametern und Gemischeigenschaften, in *Verbrennung und Feuerungen - 17. Deutscher Flammentag*, Düsseldorf, p. 630, .

- Ziegler, Michael; Lenze, Bernhard, (1995). The influence of turbulence conditions and molecular transport phenomena on turbulent burning rates of premixed flames in a stagnation flow system, in *Book of Abstracts, Joint Meeting of the French and German Sections of the Combustion Institute*, Mulhouse, France, 11.-13.10.1995, .

- Ziegler, Michael; Lenze, Bernhard, (1995). Lewis number effects on turbulent premixed combustion investigated using LDV and laser tomography, in *Proceedings, 8th International Symposium on Transport Phenomena in Combustion*, 16.-20. Juli 1995, San Francisco, USA. London: Tylor and Francis, .

1994

... zum Anfang der Seite

- In *Soot Formation in Combustion - Mechanisms and Models*, H. Bockhorn (ed.), Springer Verlag, Berlin, Heidelberg, 1994.

- B. Bartenbach, C. Hirsch, M. Huth, W. Leuckel, (1994). Modelling and Validation of Soot Concentration Patterns of Turbulent Diffusion Flames Based on Data from Plug Flow Reactor Experiments. Chemical Engineering and Processing, 33, (5), 401 - 408.

- P. Basmer, P.G. Seeger, (1994), Analyse des Brandaerosols von Verpackungsmaterial. VFDB-Z, 1, .

- Basmer, Peter; Seeger Paul Gerhard, (1994). Analyse des Brandaerosols von Verpackungsmaterial. VFDB-Z, 43, (1), 31-34.

- H. Bockhorn; Aufarbeitungs- und Verwertungsverfahren von Kunststoffgemischen. In *VDI-GET-Jahrbuch 1994*, VDI-Verlag, Düsseldorf, p. 204, 1994.

- H. Bockhorn, Th. Schäfer; Growth of Soot Particles in Premixed Flames by Surface Reactions. In *Soot Formation in Combustion - Mechanisms and Models*, H. Bockhorn (ed.), Springer Verlag, Berlin, Heidelberg, p. 253, 1994.

- H. Bockhorn, F. Hassel, A. Hundhausen, Th. Klos, M. Kraft, U. Sprenzel, P. Nooren, T.W.J. Peeters, D. Roekaerts, (1994). Turbulent Diffusion Flames: PDF-Modelling and Comparison to Raman/Rayleigh Measured PDF's, in *Twenty-Fifth Symposium (International) on Combustion, Abstracts of Work in Progress Posters*, The Combustion Institute, Pittsburgh, p. 99, .

- H. Büchner; (1994). Vortrag: *Experimentelle und theoretische Untersuchungen zur Stabilität vorgemischter Verbrennungssysteme*. ABB Forschungszentrum, Dättwil, Schweiz, 13. September,

- M. Christill, B. Maurer, W. Leuckel, R. Jastrow, (1994). Sicherheitstechnische Beurteilung der Zündempfindlichkeit hybrider Gemische. Chemie-Ingenieur-Technik, 66, (8), 1091 - 1093.

- A. Heilos, W. Leuckel, (1994). Rechenmodell für die Gastemperatur in Rollen-Durchlauföfen als Basis zur Vorhersage der thermischen Stickoxidbildung, in *Tagungsband zur VI. International Conference on Combustion and Heat Technics*, International Conference on Combustion and Heat Technics, p. 201 - 214, .

Roller Kiln in Order to Predict Thermal NO-Emissions and Energy Efficiency, in *Proceedings in Heat Transfer in Radiation and Combusting Systems 2*, Eurotherm 37, p. 477 490, .

- A. Heilos, W. Leuckel, H.-G. Bittner, (1994). Berechnung der Temperaturverteilung in Rollenöfen zur Vorhersage der thermischen NOx-Bildung. Gaswärme International, 43, (8), 408 - 418.
- A. Heilos, W. Leuckel, H.-G. Bittner, (1994). Berechnung der Temperaturverteilung und Vorausberechnung der thermischen NOx-Bildung in Rollenöfen. Keramische Zeitschrift, 46, (8), 5 - 9.
- A. Heilos, G. Wachter, W. Leuckel, (1994), Experimentelle Entwicklung mathematischer Modelle für Gas- und Flüssigbrennstoff-Flammen in technischen Brennkammern. Arbeitsgemeinschaft Technische Flammen (TECFLAM), Abschlußbericht, 1990-1993, .
- Heilos, Andreas; Leuckel, Wolfgang, (1994). Rechenmodell für die Gastemperatur in Rollen-Durchlauföfen als Basis zur Vorhersage der thermischen Stickoxidbindung, in *V. International Conference on Combustion and Heat Technics*, Miskoic/Ungarn, 8.6.-10.6.1994, p. 201-214, .
- Heilos, Andreas; Leuckel, Wolfgang, (1994). Development of a zonal model for the determination of temperatures in an roller kiln in order to predict thermal NO-emissions and energy efficiency, in *Proceedings in heat transfer in radiation and combusting system 2 (Eurotherm 37)*, Saiuggia/ltalien, 5.10.-7.10.1994, p. 477-490, .
- Heilos, Andreas; Wachter Gerd; Leuckel, Wolfgang, (1994). Experimentelle Entwicklung mathematischer Modelle für Gas- und F1üssigbrennstoff-Flammen in technischen Brennkammern, in *Abschlußbericht 1990-1993der Arbeitsgemeinschaft Technische Flammen (TECFLAM)*, p. 155-168, .
- S. Hoffmann, (1994), Untersuchungen des Stabilisierungsverhaltens und der Stabilitätsgrenzen von Drallflammen mit innerer Rückströmzone, Dissertation, Universität Karlsruhe (TH).
- S. Hoffmann, P. Habisreuther, B. Lenze, (1994). Development and Assessment of Correlations for Predicting Stability Limits of Swirling Flames. Chemical Engineering and Processing, 33, (5), 393 - 400.
- Hoffmann, Stefan; Habisreuther, Peter; Lenze, Bernhard, (1994). Development and assessment of correlations for predicting stability limits of swirling flames. Chem. Eng. and Processing, 33, (5), 393-400.
- F. Holzäpfel, B. Lenze, W. Leuckel; Assessment of a Quintuple Hotwire Measurement Technique for Highly Turbulent Flows. In *Experiments in Fluids 18*, Springer-Verlag, p. 100 - 106, 1994.
- F. Holzäpfel, B. Lenze, W. Leuckel, (1994). Quintuple Hot-Wire Measurements in Highly Turbulent Confined Swirl Flows, in *Proceedings of the 2nd International Conference on Fluid Dynamic Measurement and its Applications*, 2nd International Conference on Fluid Dynamic Measurement and its Applications, p. 338 - 343, .
- Holzäpfel, Frank; Lenze, Bernhard; Leuckel, Wolfgang; Assessment of a quintuple hotwire measurement technique for highly turbulent flows. In *Experiments in Fluids 18*, p. 100-106, 1994.
- Holzäpfel, Frank; Lenze, Bernhard; Leuckel, Wolfgang, (1994). Quintuple hot-wire measurements in highly turbulent confined swirl flows, in *Proceedings of the 2nd International Conference on Fluid Dynamic Measurement and its Applications*, Beijing/China, 19.10. - 22.10.1994, p. 338-343, .
- M. Huth, W. Leuckel; Soot Formation from Hydrocarbons in a Plug Flow Reactor. In *Soot Formation in Combustion. Mechanisms and Models*, H. Bockhorn (ed.), Springer-Verlag (Springer Series in Chemical Physics), p. 371 - 381, 1994.
- Huth, Michael; Leuckel, Wolfgang; Soot formation from hydrocarbons in a plug flow reactor: influence of temperature. In *Soot Formation in Combustion. Mechanisms and Models*, Bockhorn, Henning (ed.), Berlin u.a., p. 371-381, 1994.

66, (11), 1491 - 1493.

- Höchst, Siegfried; Bartenbach, Bernd; Achema-Berichte: Hochtemperaturtechnik. In *BASF AG, Technische Entwicklung - Sicherheitstechnik, Ludwigshafen/Rhein*, p. 1491-1493, 1994.
- K. Knapp, (1994), Untersuchungen zur Reduzierung der NOx-Emission von Gasturbinenbrennkammern durch zweistufige Verbrennungsführung, Dissertation, Universität Karlsruhe (TH).
- R. Knümann, H. Bockhorn, (1994). Niedrigtemperaturpyrolyse als Möglichkeit zur chemischen Auftrennung von Kunststoffgemischen. Chem.-Ing.-Tech., 66, (74),
- R. Knümann, H. Bockhorn, (1994). Investigation of the Kinetics of Pyrolysis of PVC by TGA-MS-Analysis. Combust. Sci. Technol., 101, (283),
- J. Kunkelmann, (1994), Brandausbreitung bei verschiedenen Stoffen, die in lagermäßiger Anordnung gestapelt sind. Teil 11: Großbrandversuche 6 - Brandausbreitung in Palettenlagern und Vergleich mit Gitterbox- und Blocklagerung. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Arbeitskreis V - Unterausschuß "Feuerwehrangelegenheiten", Forschungsbericht, 88, .
- Kunkelmann, Jürgen; Brandausbreitung bei verschiedenen Stoffen, die in lagermäßiger Anordnung gestapelt sind. Teil 1 1: Großbrandversuche 6 - Brandausbreitung in Palettenlagern und Vergleich mit Gitterbox- und Blocklagerung. In *Forschungsbericht Nr. 88. Karlsruhe: Forschungsstelle für Brandschutztechnik, September*, 1994.
- B. Lenze, S. Höchst, G. Sybon, (1994). 16. Deutscher Flammentag in Clausthal: Verbrennung und Feuerungen - Neue Aspekte. Wärmetechnik, (1), 38 - 41.
- Lenze, Bernhard; Höchst, Siegfried; Sybon, Günter; In *Verbrennungen und Feuerungen - 16. Deutscher Flammentag*, VDI Berichte 1090, p. 38-41, 1994.
- W. Leuckel, G. Lauer, C. Hirsch, P. Habisreuther, (1994), Mathematische Modellierung der Wechselwirkung von Turbulenz und Reaktion unter den in Gasturbinenbrennkammern vorliegenden Bedingungen. Universität Karlsruhe (TH) , Schlußbericht, .
- Leuckel, Wolfgang; Heilos Andreas, (1994). Untersuchung zurn Strahlungsverhalten rußhaltiger Kohlenwasserstoffflammen. Gaswärme International, 43, (10), 474-481.
- Leuckel, Wolfgang; Lauer, Gerald; Hirsch, Christoph; Habisreuther, Peter; Mathematische Modellierung der Wechselwirkung von Turbulenz und Reaktion unter den in Gasturbinenbrennkammern vorliegenden Bedingungen. In *Abschlußbericht AG-Turbo, Turboflam, Verbundvorhaben 3.1.3.4*, TIB Hannover, BMBF, p. 107-126, 1994.
- Manfred John, (1994). Auslegung und Betrieb von Vormischbrennern für häusliche Gasfeuerstätten. Das Gas- und Wasserfach (gwf) - Gas/Erdgas, 135, (3), 171-175.
- F. Mauss, H. Bockhorn, (1994). Numerical Calculation of Soot Formation in Premixed Hydrocarbon Flames. ACS Division of Fuel Chemistry Preprints, 39, (1), 172.
- F. Mauss, Th. Schäfer, H. Bockhorn, (1994). Inception and Growth of Soot Particles in Dependence on the Surrounding Gasphase. Combust. Flame 99, 697,
- Michael Ziegler; Turbulenz- und Reaktionsstruktur in stationären und instationären, vorgemischten Modellflammen im Bereich grober Turbulenz-Reynoldszahl. In *Abschlußbericht 1989-1993TECFLAM 11*, 1994.
- My, Tran Gia; Lenze, Bernhard, (1994). Untersuchungen zur NOx-Bildung in laminaren vorgemischten Methanflammen. Das Gas- und Wasserfach (gwf) - Gas/Erdgas, 135, (2), 89-94.

Palettenlager. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Arbeitskreis V - Unterausschuß "Feuerwehrangelegenheiten", Forschungsbericht, 87, .

- Schatz, Hermann; Löscheinsatz bei gelagerten Stoffen. Teil 1 1: Literaturauswertung - Sprinklereinsatz bei Palettenlager. In *Forschungsbericht Nr. 87. Karisruhe: Forschungsstelle für Brandschutztechnik, Juli*, 1994.

- A. Schlegel, S. Buser, P. Benz, H. Bockhorn, F. Mauss, (1994). NOx Formation in Lean Premixed Non-Catalytic and Catalytically Stabilized Combustion of Propane, in *Twenty-Fifth Symposium (International) on Combustion*, The Combustion Institute, Pittsburgh, p. 1019, .

- G. Sybon, (1994), Untersuchungen zur Bildung und Emission von NOx und N2O bei brennstoffgestufter Verbrennungsführung, Dissertation, Universität Karlsruhe (TH).

- Sybon, Günter; Leuckel, Wolfgang, (1994). Reduzierung der NOx-Emission aus Brennstoffstickstoff durch dreistufige Verbrennung. Chemie-ingenieur-Technik, 66, (9), 1231.

- M. Ziegler, (1994), Turbulenz- und Reaktionsstruktur in stationären und instationären, vorgemischten Modellflammen im Bereich großer Turbulenz-Reynoldszahl. TECFLAM II, Abschlußbericht, 1989 - 1993, .

1993

... zum Anfang der Seite

- B. Bartenbach, A. Heilos, W. Leuckel, (1993). Rußbildung aus Kohlenwasserstoffgasen in turbulenten Flammen und deren Einfluß auf den Strahlungswärmeübergang, in *Tagungsheft 9. TECFLAM Seminar*, TECFLAM, p. 137 - 149, .

- B. Bartenbach, M. Huth, W. Leuckel, (1993). Investigations on Soot Mass Growth in a Plug Flow Isothermal Reactor Combined with Soot Concentration Field Measurements in Turbulent Diffusion Flames, in *Proceedings of the Anglo-German Combustion Symposium*, The British Section of the Combustion Institute, p. 491 - 494, .

- B. Bartenbach, M. Huth, W. Leuckel, (1993). Application of Soot Mass Growth Rates Determined in a Plug Flow Reactor on Soot Prediction in Turbulent Diffusion Flames, in *Proceedings of the Second International Conference on Combustion Technologies for a Clean Environment*, vol. **2**, p. 34.1, .

- T. Behrendt, H. Vogg, W. Leuckel, (1993). Neuere Erkenntnisse zum Betriebsverhalten der Hausmüllverbrennungsanlage, in *VDI-Berichte 1090, Verbrennung und Feuerungen*, 16. Deutscher Flammentag, p. 355 - 362, .

- H. Bockhorn, (1993). Soot Formation during Combustion: Recent Developments in Mechanisms and Models, in *Joint Meeting of the Britisch and German Sections of the Combustion Institute*, The British Section of the Combustion Institute, Cambridge, p. 1, .

- S. Buser, R. Knochenmuss, P. Benz, A. Schlegel, H. Bockhorn, (1993). Catalytically Supported Combustion of Hydrogen-Air Mixtures, in *Joint Meeting of the Britisch and German Sections of the Combustion Institute*, The British Section of the Combustion Institute, Cambridge, p. 140, .

- S. Buser, P. Benz, A. Schlegel, H. Bockhorn; Katalytisch stabilisierte Verbrennung von Wasserstoff: Numerische Simulation und Vergleich mit Experimenten. In *VDI-Berichte 1090*, VDI-Verlag, Düsseldorf, p. 191, 1993.

- S. Buser, P. Benz, A. Schlegel, H. Bockhorn, (1993). Measurements of OH by LIF and Temperatures by Holographic Interferometry in Catalytically Stabilized Combustion of Hydrogen: Comparison of Measurements and Numerical Simulation. Ber. Bunsenges. Phys. Chem., 97, (1791),

- H. Büchner, (1993). Der Einfluß von Druckschwankungen auf die Bildung von Gas-Luft-Gemischen in Vormisch-Verbrennungssystemen. if - Die Industriefeuerung, 56, 10 -14.

Premixed Axial Jet Flames. Combustion, Science and Technology, 94, (1 - 6), 219 - 228.

- H. Büchner, W. Leuckel, (1993). Selbsterregte Druckschwingungen in turbulenten Vormisch-Verbrennungssystemen. GASWÄRME International, 42, (6), 272 - 279.

- H. Büchner; (1993). Vortrag: *The Influence of Fuel/Air Mixture Oscillations on the Formation of Self-Sustained Combustion Instabilities in Premixed Combustion Systems*. ASI "Unsteady Combustion", Praia da Granja, Portugal, September 6 - 17,

- M. Christill, B. Maurer, W. Leuckel, R. Jastrow, (1993). Sicherheitstechnische Beurteilung der Zündempfindlichkeit hybrideer Gemische (Kurzfassung des Vortragees beim GVC-Jahrestreffen 29.9.-1.10.1993 in Nürnberg). Chemie-Ingenieur-Technik, 65, (9), 1062 - 1063.

- J. Eibl, W. Leuckel, (1993), Bautechnische Maßnahmen zur Schadensminderung bei Staubexplosionen. Institut für Bautechnik, Abschlußbericht, Aktenzeichen: IV 1-5-605/90, .

- H. Eickhoff, B. Lenze, H. Streb, (1993). Influence of Reynolds-Number on the Spreading of H2-Diffusion Flames, in *Proceedings of the Anglo-German Combustion Symposium*, The British Section of the Combustion Institute, p. 554, .

- C.A. Föhl, P. Basmer, (1993), Untersuchung der Löschverfahren und Löschmittel zur Bekämpfung von Bränden gefährlicher Güter. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Arbeitskreis V - Unterausschuß "Feuerwehrangelegenheiten", Forschungsbericht, 86, .

- A. Föhl, P. Basmer, (1993), Untersuchung der Löschverfahren und Löschmittel zur Bekämpfung von Bränden gefährlicher Güter - GC/MS-Rauchgasanalyse. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Arbeitskreis V - Unterausschuß "Feuerwehrangelegenheiten", Forschungsbericht, 81, .

- F. Hassel, A. Hundhausen, Th. Klos, U. Sprenzel, H. Bockhorn, (1993). Raman/Rayleigh Scattering for Joint-Pdf measurements in Turbulent Diffusion Flames, in *Joint Meeting of the Britisch and German Sections of the Combustion Institute*, The British Section of the Combustion Institute, Cambridge, p. 219, .

- F. Hassel, A. Hundhausen, Th. Klos, U. Sprenzel, H. Bockhorn, (1993). Joint PDFs of Scalar Quantities in Turbulent Diffusion Flames by Raman and Rayleigh Scattering. Ber. Bunsenges. Phys. Chem., 97, (1713),

- A. Heilos, W. Leuckel, (1993), Entwicklung eines Rechenmodells zur Vorausberechnung von thermischem Stickstoffoxid in brennstoffbeheizten Industrieöfen sowie zur Auslegung von Minderungsmaßnahmen. AIF, Abschlußbericht, Forschungsvorhaben 8379, .

- C. Hirsch, B. Prade, K. Ehrhardt, B. Lenze, (1993). Anwendung und Bewertung isothermer Turbulenzmodellierung zur Berechnung des Brennernahfeldes eines Stauscheibenbrenners. if - Die Industriefeuerung, 56, 15 - 21.

- S. Hofmann, B. Lenze, (1993). Experimentelle Untersuchung des Stabilisierungsvorganges hochturbulenter Drallflammen und Entwicklung eines vereinfachten Modells zur Vorhersage der Flammenstabilität, in *VDI Berichte 1090, Verbrennung und Feuerungen, 16. Deutscher Flammentag*, VDI, p. 183 - 190, .

- S. Hofmann, B. Lenze, (1993). Experimental Investigation of the Stabilisation Processes in Highly Turbulent Premixed Swirling Flames and Comparison with Simple Flame Stability Models, in *Proceedings of the Anglo-German Combustion Symposium*, The British Section of the Combustion Institute, p. 56 - 59, .

- S. Höchst, W. Leuckel, J. Eibl, (1993). Experimentelle Untersuchung zum Ablauf von Staubexplosionen in einer druckentlasteten Versuchs-Silozelle. Chemie-Ingenieur-Technik, 65, (12), 1488 - 1490.

- K. Knapp, J. Meisl, W. Leuckel, S. Wittig, (1993). Reduzierung der NOx-Emission in Gasturbinenbrennkammern durch zweistufige Verbrennungsführung, in *VDI Berichte 1090, Verbrennung und Feuerungen, 16. Deutscher Flammentag*, VDI, p. 587 - 594, .

zweistufige Verbrennungsführung, in *Forschungsheft R 472, Informationstagung Turbinen*, FVV (Forschungsvereinigung Verbrennungskraftmaschinen e.V.), .

- K. Knapp, J. Meisl, W. Leuckel, S. Wittig, (1993), Reduzierung der NOx-Emission in Gasturbinen durch zweistufige Verbrennungsführung. FVV (Forschungsvereinigung Verbrennungskraftmaschinen e.V.), Forschungsberichte Verbrennungskraftmachinen, Heft 528, .

- R. Knümann, H. Bockhorn; Pyrolyse von PVC und Kunststoffgemischen bei milden Bedingungen als Möglichkeit zur Auftrennung von Kunststoffabfällen. In *VDI-Berichte 1090*, VDI-Verlag, Düsseldorf, p. 423, 1993.

- R. Knümann, H. Bockhorn; Low Temperature Pyrolysis for Chemical Separation of Plastic-Mixtures. In *ECCM Recycling Concepts and Procedures*, M. Neitzel, J.C. Lambert, G. Menges, A. Kell (ed.), Woodhead Publishing Ltd., Abington Cambridge, p. 59, 1993.

- J. Kunkelmann, (1993), Brandausbreitung bei veschiedenen Stoffen, die in lagermäßiger Anordnung gestapelt sind. Teil 10: Weiterfürende Literaturübersicht über die Brandausbreitung sowie über Wechselwirkungen des Trpfenschwarmes eines Srinklers mit einer Heißgasströmung. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Arbeitskreis V - Unterausschuß "Feuerwehrangelegenheit", Forschungsbericht, 84, .

- R. Lege, B. Bartenbach, A. Müller, W. Leukel, (1993). Application of a Multiple Wavelength Extinction Technique for Soot Particle Determination in Turbulent Diffusion Flames, in *Proceedings of the Anglo-German Combustion Symposium*, The British Section of the Combustion Institute, p. 483 - 486, .

- B. Leisenheimer, W. Leuckel, (1993). Schnelle deflagrative, laminare und turbulente CH4/Luft-Flammenfront-Ausbreitung in geschlossenen sphärischen Explosioonsbehältern. Chemie-Ingenieur-Technik, 65, (6), 749 - 751.

- W. Leuckel, (1993). Aus der Tätigkeit des Engler-Bunte-Instituts, Lehrstuhl und Bereich Feuerungtechnik, der Universität Karlsruhe (TH) im Jahr 1992. Gas Wärme International, 42, (6), 241 - 249.

- W. Leuckel, J. Eibl, S. Höchst, J. Ockert, (1993), Experimentelle Studien an einer Versuchs-Siloanlage zur Druckentlastung von Staubexplosionen. Universität Karlsruhe, Arbeits- und Ergebnisbericht für die Jahre 1990-1992, SFB 219, .

- W. Leuckel, H.-P. Schmid, G.-p. Zhen, (1993), Druck/Zeit-Belastungsfunktionen von Silowandungen bei Innenraum-Staubexplosionen. Universität Karlsruhe, Arbeits- und Ergebnisbericht für die Jahre 1990-1992, SFB 219, .

- Leuckel, W.; Büchner, H.; Hettel, M.; Hirsch, C.;, (1993), Druckschwingungen in industriellen Vormisch-Verbrennungssystemen, Teil II: Mathematische Modellierung der pulsierenden, isothermen Strahlströmung. DVGW-Forschungsstelle, Abschlussbericht AIF/DVV, Forschungsvorhaben Nr.: 7317, .

- Y. Liu, M. Ziegler, B. Lenze, (1993). Burning Velocity of Premixed Flames as a Function of Turbulence and Physico-Chemical Fuel Properties, in *Proceedings of the Anglo-German Combustion Symposium*, The British Section of the Combustion Institute, p. 64 - 67, .

- F. Mauss, N. Peters, H. Bockhorn, (1993). A Detailed Chemical Model for Soot Formation in Premixed Acetylene- and Propane- Oxygen Flames, in *Joint Meeting of the Britisch and German Sections of the Combustion Institute*, The British Section of the Combustion Institute, Cambridge, p. 470, .

- F. Mauss, M Marquardt, H. Bockhorn, (1993). Numerische Simulationen zur Berechnung der Temperatur- und Druckabhängigkeit der Rußbildung in vorgemischten Ethen-Luft-Flammen, in *Tecflam - Seminar: ‘‘Russ und Kohlenstaub in Flammen’’*, Stuttgart, p. 21, .

- T.G. My, B. Lenze, (1993), Experimentelle Untersuchungen zu Bildungsmechanismen und Minderungsmaßnahmen von Stickstoffoxid in laminaren teilvorgemischten Methanflammen. Universität Karlsruhe, Wissenschaftliche Abschlußberichte, .

Stauscheibendiffusionsflammen, Dissertation, Universität Karlsruhe (TH).

- H. Schatz, (1993), Löscheinsatz bei gelagerten Stoffen. Teil 10: Literaturauswertung - Tropfenverteilungen - Löschversuche. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Arbeitskreis V - Unterausschuß "Feuerwehrangelegenheit", Forschungsbericht, 85, .

- A. Schlegel, S. Buser, P. Benz, H. Bockhorn, (1993). NOx Emissions of Catalytically Stabilized Combustion in Comparison to Lean Premixed Combustion, in *Proceedings of the Second International Conference on Technologies for a Clean Environment*, Lissabon, p. 35.1, .

- P.G. Seeger; Forschungsstelle für Brandschutztechnik an der Universität Karlssruhe (Tätigkeitsbericht). In *Feuerwehr-Jahrbuch 1992/3*, Deutscher Feuerwehrband (DFV), p. 170 - 171, 1993.

- D. Stapf, (1993). Experimental Studies and Reaction Kinetics Modelling of NOx Formation from Fuel Nitrogen in Technical Flames, in *Proceedings of the Anglo-German Combustion Symposium*, The British Section of the Combustion Institute, p. 495 - 498, .

- D. Stapf, W. Leuckel, (1993). NOx Formation from Fuel Nitrogen in Technical Flames - Application of Reaction Kinetics Modelling to In-Flame Conditions, in *Proceedings of the Second Inernational Conference on Combustion Technologies for a CLean Environment*, vol. **I**, p. 13.2, .

- H. Streb, (1993), Untersuchungen zum Einfluss des Auftriebs auf die Mischung und Reaktion in turbulenten Feistrahldiffusionsflammen, Dissertation, Universität Karlsruhe (TH).

- H. Streb, B. Lenze, (1993). Mixing and Reaction in Axial-Jet Turbulent Diffusion Flames; Influence of Reynolds and Froude Number, in *Proceedings of the Anglo-German Combustion Symposium*, The British Section of the Combustion Institute, p. 495 - 498, .

- H. Streb, B. Lenze, (1993). Investigaations of the Mixing and Reaction Behaviour in Vertical Free Jet Turbulent Diffusion Flames, in *14th International Colloquium on Dynamics of Explosioons and Reaactive Systems*, vol. **I**, ICDERS, p. 10, .

- G. Sybon, W. Leuckel, (1993). Experimental Study on Formation and Destruction of Nitrous Oxide under Reaction Conditions Similar to Fluidized Bed Combustion, in *Proceedings of the Anglo-German Combustion Symposium*, The British Section of the Combustion Institute, p. 303 - 307, .

- G. Sybon, W. Leuckel, (1993). Experimental Studies on Formation and Destruction of Nitric and Nitrous Oxide in Advanced Combustion Systems, in *Proceedings of the Second Inernational Conference on Combustion Technologies for a CLean Environment*, vol. **I**, p. 20.1, .

- G. Sybon, W. Leuckel, J. Albrecht, G. Bandel, A. Hollnagel, G. Schaub, (1993). Maßnahmen zur Minderung der N2O-Emissionen aus Wirbelschichtfeuerungen - Grundlegende Untersuchungen und verfahrentechnische Maßnahmen, in *VDI Berichte 1090, Verbrennung und Feuerungen, 16. Deutscher Flammentag*, VDI, p. 91 - 98, .

- G. Wachter, (1993), Spektrale Analyse der Gas- und Rußstrahlunge turbulenter Diffusionsflammen im Infrarot-Bereich, Dissertation, Universität Karlsruhe (TH).

- G. Wachter, (1993), Strahlungsmodellierung von Diffusionsflammen und deren anwendungstechnische Bedeutung. Deutsche Glastechnische Gesellschaft e.V. (DGG), Ausschußbericht, .

- G. Wachter, (1993). Strahlungsmodellierung von Diffusionsflammen und deren anwendungstechnische Bedeutung. Glastechnische Berichte, 66, (8), 48 - 49.

- G. Wachter, A. Heilos, W. Leuckel, (1993). Evaluation of Soot Radiation Properties from Turbulent Diffusion Flames by Means of Spectral Radiation Measuremetns and Spectral Gas Radiation Modelling, in *Proceedings of the Anglo-German Combustion Symposium*, The British Section of the Combustion Institute, p. 487 - 490, .

- B. Bartenbach, (1992). Verbrennung und Feuerungen - Neue Aspekte. Zusammenfassung des 15. Deutschen Flammentages in Bochum. Wärmetechnik, 37, (2), 94 - 95.
- B. Bartenbach, (1992). Partikel in Verbrennungsprozessen. Wärmetechnik, 37, (8), 429 - 430.
- B. Bartenbach, M. Huth, W. Leuckel, (1992), Untersuchungen zum Rußwachstum unter den Bedingungen industrieller Diffusionsflammen. Universität Karlsruhe, Forschungsbericht, Teilprojekt A6, .
- Bernd Prade, Bernhard Lenze, (1992), Untersuchung der Stabilität von Difusionsflammen mit konzentrischer Luftzufuhr und Stauscheiben. Universität Kalrsruhe, Forschungsbericht, Teilprojekt A1, .
- Bernd Prade, Bernhard Lenze; Experimental investigation in extinction of turbulent nonpremixed disk-stabilized flames. In *24th International Symposium on Combustion, Sydney/Australien*, The Combustion Institute, p. 369-375, 1992.
- Bernhard Lenz, (1992). Entstehung von Stickstoffoxiden in atmosphärischen Haushaltsfeuerstellen und Möglichkeiten der Emissonsminderung. Das Gas- und Wasserfach (gwf) - Gas/Erdgas, 133, (2), 72-80.
- H. Bockhorn, F. Fetting, A. Hornung, Ch. Reh, (1992). Untersuchungen zum Altern von Rußteilchen in Flammen mit der TG-MS-Analyse. Chem.-Ing.-Tech, 64, (722),
- H. Bockhorn, A. Hornung, (1992). Investigation of the Aging of Soot Particles in Premixed Acetylene-Oxygen Flames by TG-MS-Analysis, in *Joint Meeting of the French, Italian and Swedish Sections of the Combustion Institute*, CUEN, Neapel, p. 7-2, .
- H. Büchner, (1992), Experimentelle und theoretische Untersuchungen der Entstehungsmechanismen selbst-erregter Druckschwingungen in technischen Vormisch-Verbrennungssystemen, Dissertation, Universität Karlsruhe (TH).
- H. Büchner, (1992). Der Einfluß von Druckschwankungen auf die Bildung von Gas-Luft-Gemischen in Vormisch-Verbrennungssystemen. GASWÄRME International, 41, (1), 24 - 28.
- H. Büchner, W. Leuckel; Poster: *The Importance of Coherent Turbulent Vortex Rings in Premixed Pulsating Combustion*. 24th International Symposium on Combustion, Sydney, Australia, July 5 -10, 1992.
- H. Büchner; (1992). Vortrag: *Das Schwingungsverhalten turbulenter Vormischflammen*. Internes Seminar des SFB 167 "Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung", Universität Karlsruhe (TH), 1. Juli,
- H. Büchner, Chr. Hirsch; (1992). Vortrag: *Oscillations of Natural Gas Flames - Experimental Investigations and Numerical Modeling*. GERG PC5 Acoustic Seminar, Solihull, England, December 9,
- Dieter Brein, (1992), Brandschutzanforderungen in Industriedächer. VDI, Berichte, 983, .
- Dieter Stapf, Wolfgang Leuckel, (1992), Experimentelle Bestimung und reaktionskinetische Modellierung der NO-Bildung aus Brennstoffstickstoff in industriellen Diffusionsflame. Universität Karlsruhe, Forschungsbericht, Teilprojekt A8, .
- Dieter Stapf, Wolfgang Leuckel, (1992). FTIR-analysis of wet flue gases in combustion systems, in *International Flame Research Foundation (IFRF), 6th Topic Orientated Technical Meeting* , IFRF tagungsband, .
- Dieter Stapf, Szbon Günter, Wolfgang Leuckel, Peter Jansohn, (1992). Analyse feuchter Verbrennungsabgase mittels fouriertransformierter Infrarot-Spektroskopie.(Kurzfassung des Vortrages beim GVC-jahrestreffen 30.9.-2.10. 1992 Wien Österreich). Chemie-Ingenieur-technik, 64, (9), 860-861.
- K. Döbbeling, B. Lenze, W. Leuckel, (1992). Four-Sensor Hot-Wire Probe Measurements of the Isothermal FLow in a Model COmbustion Chamber at Different Levels of Swirl. Experimental Thermal and Fluid Science, 5, 381 - 389.

(1992). Destruction and Formation of NO in Low Pressure Stoichiometric CH4/O2 Flames, in *Twenty-Fourth Symposium (International) on Combustion*, The Combustion Institute, Pittsburgh, p. 925, .

- Gerd Wachter, Wolfgang Leuckel, (1992). Radiation measurements by spectral radiometry in non-luminous and luminous turbulent diffusion flames, in *International Flame Research Foundation (IFRF), 6th Topic Orientated Technical Meeting* , IFRF tagungsband, .
- Gerd Wachter, Wolfgang Leuckel, (1992). Rußstrahlungsmodellierung turbulenter Diffusionsflammen unter Verwendung spektraler Intensitätsmessungen und eines SLG-Gasstrahlungsmodells, in *Tagungsband yum 8.TECFLAM Seminar am 13.11.1992*, TECFLAM, .
- F. Hassel, A. Hundhausen, Th. Klos, U. Sprenzel, H. Bockhorn, (1992). Joint PDF's of Scalar Quantities in Turbulent Flames at Low Damköhler Numbers by Raman Scattering, in *Joint Meeting of the French, Italian and Swedish Sections of the Combustion Institute*, CUEN, Neapel, p. 4-7, .
- Hermann Schatz, (1992), Löscheneinsatz bei gelagerten Stoffen. Teil 9: Messung und Simulation der Wasserbeaufschlagung. Bestimmung von Topfengröße und Flüssigkeitsverteilungen. Arbeitsgemanschaft der Innenministerien der Bundesländer, Arbeitskreis V, Unterausschuß "Feuerwehrangelegenheiten", Forschungsbericht, 82, .
- C. Hirsch, H. Büchner, W. Leuckel, (1992). The Formation of Coherent Turbulent Vortex Rings in Periodic Flow, in *Proceedings of the 13th Symposium on Turbulence*, 21.-31.9.92, University of Missouri-Rolla, Rolla, MO, .
- C. Hirsch, B. Prade, K. Ehrhardt, B. Lenze, (1992). Anwendung und Bewertung isothermer Turbulenzmodellierung zur Berechnung des Brennernahfeldes eines Stauscheibenbrenners. Gas Wärme International, 41, (1), 17 - 23.
- S. Hoffmann, B. Lenze, (1992). Investigations Concerning Stability Mechanisms of Unconfined Swirling Premixed Flames. Archivum Combustionis, 12, (1 - 4), 45 - 57.
- S. Hoffmann, M. Philipp, H. Eickhoff, B. Lenze, (1992). Untersuchung des Reaktionsfeldes und des Stabilisierungsmechanismus von drallstabilisierten Freistrahlflammen. Gas Wärme International, 41, (1), 8 - 16.
- S. Hoffmann, M. Philipp, H. Eickhoff, B. Lenze, (1992). Untersuchung des Reaktionsfeldes und des Stabilisierungsmechanismus von drallstabilisierten Freistrahlflammen. if - Die Industriefeuerung, (55), 52 - 60.
- Holger Streb; Verbrennung und Feuerungen - Neue Aspekte. In *Zusammenfassung des 15. Deutschen Flammentages in Bochum*, Wärmetechnik, p. 129-130, 1992.
- Holger Streb, Bernhard Lenze, (1992). Strömungs- und Reaktionsstrukturen in turbulenten Diffusionsflammen, in *TECFLAM-Jahresbericht 1991*, TECFLAM, p. 35-42, .
- Holger Streb, Bernhard Lenze, (1992). Geschwindigkeitsmessungen in turbulenten Strahlen - Ein Vergleich zwischen LDV-Meßtechnik und Prandlsonde. Gas Wärme International, 41, (9), 369-376.
- F. Holzäpfel, K. Döbbeling, B. Lenze, (1992), Experimentelle und theoretische Untersuchungen an stark verdrallten, turbulenten isothermen Strömungen. Universität Karlsruhe, Forschungsbericht, Teilprojekt A10, .
- Huth Michael , (1992), Untersuchung der Rußbildung bei partiller Brennstoffoxidartion und Pyrolyse, Dissertation, Universität Karlsruhe .
- S. Höchst, W. Leuckel, (1992). Einflußgrößen auf den Druckverlauf bei, in *Tagungsband: Silos - Forschung und Praxis*, Silotagung, p. 95 - 102, .
- S. Höchst, W. Leuckel, J. Eibl, (1992). Experimentelle Untersuchungen zum Ablauf von Staubexplosionen in einer druckentlasteten Versuchs-Silozelle. (Kurzfassung des WVortrages beim GVC-Jahrestreffen in Wien). Chemie-Ingenieur-Technik, 64, (9), 787 - 788.

Gas und Wasserfach (gwf) - Gas/Erdgas, 133, (8), 392-398.

- M. John, W. Kirsch , (1992). Quantitative Erfassung der Rußmassenkonzentration. Gas Wärme International, 41, (2-3), 101-106.
- Jürgen Kunkelmann; Brandausbreitung bei der verschiedenen Stoffe, dei in lagermäßiger Anordnung gestapelt sind. Teil 9: Simulation der Wasserbeaufschlagung eines Sprinklers. 1992.
- K. Knapp, W. Leuckel, (1992). , in *Reduzierung der NOx-Emission bei Gasturbinen durch zweistufige Verbrennungsführung*, Informationstagung Turbinen der Forschungsvereinigung Verbrenungskraftmaschinen (F.V.V.), .
- T. Kolb, G. Sybon, (1992). NOx-Emmisionsminderung durch dreistuffige Verbrenung: Optimierung der Reduktionsstuffe. Brennstoffe-Wärme-Kraft, 44, (11), 481-484.
- G. Lauer, C. Hirsch, W. Leuckel, (1992). Mathematische Modellierung der Wechselwirkung von Turbulenz und Reaktion unter den in Gasturbinenbrennkamern vorliegenden Bedingungen, p. 143-153, .
- B. Leisenheimer, W. Leuckel , (1992). Schnelle deflagrative, Laminare und turbulente CH4/Luft-Flammenfront-Ausbreitung in geschlossenen sphärischen Explosionsbehäaltern. (Kurzfassung des Vortrages beim GVC-Jahrestreffen 30.9.-2.10. 1992 in Wien/Österreich). Chemie-Ingenieur-Technick, 64, (9), 787.
- B. Leisenheimer, M. Ziegler, B. Lenze, W. Leuckel, (1992). Turbulenz- und Reaktionsstruktur in stationären und instationären Modellflammen im Bereich großer Turbulenz-Reynoldzahl, in *TECFLAM-Jahresbericht 1991*, TECFLAM, p. 27-34, .
- W. Leuckel, B. Leisenheimer, K. Bier, (1992). Verbrennungstechnische Eigenschafen des Kältemittels R152a und seiner Mischungen mit R134a bzw. R23. Klima Kälte Heizung (ki), 4, 113-117.
- Y. Liu, B. Lenze, (1992). Investigation of flame-generated turbulence in premixed flames at low and high burning velocities. Experimental Thermal and Fluid Science, (5), 410-415.
- Martin Löffler-Mang, (1992), Düseninnenströmung, Tropfenentstehung und Tropfenausbreitung bei rücklaufgeregelten Drall-Druckzertäubern, Dissertation, Universität Kalrsruhe .
- Martin Löffler-Mang, Wolfgang Leuckel , (1992), Flussigbrennstoffzertäiubung mit Einstoffdüssen im Hinblick auf deren Einsatz für Industrielle Flammen. Universität Karlsruhe, Forschungsbericht, Teilprojekt A3, .
- Martin Löffler-Mang, Wolfgang Leuckel , (1992). A comparision of four drop sizing methods when applied to swirl pressure-jet atomizers, in *ILASS-Europe 8th Annual Conference*, ILASS, .
- Martin Löffler-Mang, Wolfgang Leuckel , (1992). Application of Phase-Doppler droplet size and velocity analysis to fuel atomizers, in *International Flame Research Foundation (IFRF), 6th Topic Orientated Technical Meeting* , IFRF tagungsband, .
- Paul Gerhard Seeger, (1992). Forschungsstelle für Brandschutztechnik an der Universität Karlsruhe (Tätigkeitbericht), in *Feuerwehr-Jahrbuch*, Deutscherfeuerwehrverband (DFV), .
- Paul Gerhard Seeger, (1992). Rack storage fire suppresion by sprinkles, in *Proceedings of the first International Conference on Fire Suppression Research*, p. 83-101, .
- Philipp, Matthias; Habisreuther, Peter; Eickhoff, Heinrich; Leuckel, Wolfgang; Rechenmodell für aerodynamisch stabilisierte Drallflammen. In *Forschungsbericht SFB167, Hochbelastete Brennräume - Stationäre Gleichdruckverbrennung*, p. 213-244, 1992.
- Philipp, Matthias; Hoffmann, Stefan; Habisreuther, Peter; Lenze, Bernhard; Eickhoff, Heinrich, (1992). Experimental and numerical study concerning stabilization of strongly swirling premixed and nonpremixed flames, in *24th Symp. (Intern.) on Combustion*, The Combustion Institute, Sydney, p. 361-368, .

velocity profiles in oscillating pipe-flows by using laser Doppler velocimetry and ultrasonic measuring devices. Flow Measurement and Instrumentation, 3, (2), 95-101.

- N. Zarzalis, (1992), NOx-Reduction by Rich-Lean Combustion. AIAA, paper, 92-3339, .
- N. Zarzalis, (1992). NOx-Reduktion mittels der zweistufigen Verbrennung (Fett-Mager Verbrennung). BWK, 11, 485 - 490.
- N. Zarzalis, (1992). NOx-Reduktion mittels der Fett-Mager- und der Magerverbrennung unter praxisnahen Betriebsbedingungen, in *Tagungsband des 3. Statusseminars*, AG Hochtemperatur-Gasturbine, p. 159 - 172, .
- N. Zarzalis, (1992), Schadstoffreduktion von hocheffizienten Gasturbinen mittels gezielter Steuerung der Verbrennung. AG-Turbo-Turboflam-Vorhaben 3.2.1.1, Abschlußbericht, MTUM-B92ET-0062, .

1991

... zum Anfang der Seite

- H. Bockhorn, (1991). Turbulent Transport and Chemical Reaction Rates, in *Proc. Second European Conference on Industrial Furnaces and Boilers*, Vilamoura, .
- H. Bockhorn, Th. Schäfer, (1991). Surface Growth of Soot Particles in Hydrocarbon Flames, in *Twentieth Binennial Conference on Carbon, Extended Abstracts*, The American Carbon Society, p. 436, .
- H. Bockhorn, (1991). Simulation Chemischer Reaktionen in Turbulenten Strömungen. Chem.-Ing.-Tech, 63, (715),
- H.Bockhorn, Ch. Chevalier, J. Warnatz, V. Weyrauch, (1991). Experimental Investigation and Modeling of Prompt-NO Formation in Hydrocarbon Flames. Heat-Transfer in Fire and Combustion Systems, ASME - HDT-Vol. 166,
- H. Bockhorn, Ch. Chevalier, J. Warnatz, V. Weyrauch; Bildung von NO in Kohlenwasserstoff-Luft und Methanol-Luft Flammen. In *VDI Berichte Nr. 922*, VDI-Verlag, Düsseldorf, p. 171, 1991.
- H. Büchner; (1991). Vortrag: *Experimental Investigations on the Dynamics of Pulsated Premixed Axial Jetflames*. International Symposium on Pulsating Combustion, Monterey, USA, August 6 - 8,
- H. Büchner; (1991). Vortrag: *Experimentelle Untersuchungen zum dynamischen Reaktionsverhalten pulsierter Vormischflammen*. 15. Deutscher Flammentag, Bochum, 17. - 18. September,
- H. Büchner, W. Leuckel; Experimentelle Untersuchungen zum dynamischen Reaktionsverhalten pulsierter Vormischflammen. In *Verbrennung und Feuerungen - 15. Deutscher Flammentag*, Verein Deutscher Ingenieure (ed.), VDI Berichte 922, VDI-Verlag, Düsseldorf, p. 453 - 462, 1991.
- M. Christill, W. Leuckel, (1991). Einfluß hinderniserzeugter Turbulenz auf die instationäre Flammenausbreitung in Brenngas/Luft-Gemischen, in *Tagungsband Combustion and Reaction Kinetics, 22nd International Annual Conference of ICT*, ICT, p. 24-1 - 24-15, .
- K. Döbbeling, B. Lenze, W. Leuckel, (1991). Computer-aided Calibration and Measurements with a Quadruple Hotwire Probe. Experiments in Fluids, 8, 257 - 262.
- K. Döbbeling, B. Lenze, W. Leuckel, (1991). Basic Considerations Concerning the Construction and Usage of Multiple Hot-Wire Probes for Highly Turbulent Three-Dimesional Flows. Measurement Science & Technology, 1, 924 - 933.
- A. Föhl, (1991), Entstehung von Dioxinen und Furanen in Brandfalle und erforderliche Abwehrmaßnahmen. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Arbeitskreis V - Unterausschuß "Feuerwehrangelegenheiten", Forschungsbericht, 77, .

zum Stabilitätsverhalten freibrennender Vormisch-Drallflammen, in *VDI-Berichte Nr.922*, 15. Deutscher Flammentag, p. 463 - 472, .

- S. Höchst, E. Klein, W. Leuckel, (1991). Druckentlastete Explosionsläufe von Gas- und Staub-Luft-Gemischen in einem 50 m³-Versuchssilo, in *Tagungsband Combustion and Reaction Kinetics, 22nd International Annual Conference of ICT*, ICT, p. 100-1 - 100-13, .
- S. Höchst, B. Leisenheimer, (1991). ACHEMA Berichte: Hochtemperaturtechnik. Chemie-Ingenieur-Technik, 63, (11), 1049 - 1051.
- S. Höchst, B. Leisenheimer, (1991), Hochtemperaturtechnik. ACHEMA, Bericht, 11, .
- S. Höchst, W. Leuckel; Pressure Time Load and Flame Propagation in Silos During Dust Explosion. In *Archivum Combustionis*, Politechnika Warszawska, 1991.
- P. Jansohn, (1991), Bildung und Abbau N-haltiger Verbindungen, insbesondere von HCN, NH3 und NO, in turbulenten Diffusionsflammen, Dissertation, Universität Karlsruhe (TH).
- M. John, (1991). Nachprüfung von DIN/DVGW-geprüften Gasgeräten für den Betrieb mit Stadtgas in den fünf neuen Bundesländern. Das Gas- und Wasserfach (gwf) - Gas/Erdgas, 132, (1), 36 - 38.
- M. John, W. Krisch, T. Jannemann, M. Koschowitz, (1991). Neues Meßverfahren zur Ermittlung der Kondensatbildung auf Wärmeaustauschern von Gasgeräten. Gaswärme International, 40, (4), 159 - 163.
- R. John, (1991), Rauchabführung aus hohen und weitläufigen Bauwerken im Brandfall für den Personenschutz. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Arbeitskreis V - Unterausschuß "Feuerwehrangelegenheiten", Forschungsbericht, 79, .
- R. Knümann, M.Schleussner, H.Bockhorn, (1991). TG-MS-Analysis of Pyrolysis of PVC and other Polymers, in *Combustion and Reaction Kinetics, 22nd International Annual Conference of ICT*, Karlsruhe, p. 36-1, .
- R.Knümann, M. Schleussner, H. Bockhorn; Untersuchungen zur Pyrolyse von PVC und anderen Polymeren. In *VDI Berichte Nr. 922*, VDI-Verlag, Düsseldorf, p. 237, 1991.
- T. Kolb, W. Leuckel, (1991). Untersuchungen zur Minderung der NOx-Emission durch dreistufige Verbrennung. Chemie-Ingenieur-Technik, 63, (7), 758 - 759.
- J. Kunkelmann, (1991), Brandausbreitung bei verschiedenen Stoffen, die in lagermäßiger Anordnung gestapelt sind. Teil 8: Simulation der Wechselwirkung eines Tropfenschwarms mit einer Heißgasströmung. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Arbeitskreis V - Unterausschuß "Feuerwehrangelegenheiten", Forschungsbericht, 80, .
- B. Leisenheimer, M. Christill, W. Leuckel, (1991). Verbrennungstechnische Sicherheitskenndaten des Stoffpaares R152a/R134a als ozonunschädliche Alternative zu konventionellen Kältemitteln, in *Tagungsband Combustion and Reaction Kinetics, 22nd International Annual Conference of ICT*, ICT, p. 110-1 - 110-10, .
- B. Lenze, P. Jansohn, (1991). Bildungsmechanismen und Möglichkeiten der Minderung von Stickstoffoxiden in mit Vormischbrennern betriebenen Feuerungen, in *VDI-Berichte Nr.922*, 15. Deutscher Flammentag, p. 371 - 380, .
- W. Leuckel, (1991). Aus der Tätigkeit des Engler-Bunte-Instituts, Lehrstuhl und Bereich Feuerungstechnik, der Universität Karlsruhe (TH) im Jahre 1990. Gaswärme International, 40, (6), 286 - 291.
- W. Leuckel, (1991). Sicherheit, Energieeinsparung und Umweltschutz bei der Gasverwendung - eine Quadratur des Kreises?. Das Gas- und Wasserfach (gwf) - Gas/Erdgas, 132, (10 - 11), 456 - 466.
- Y. Liu, (1991), Untersuchung zur stationären Ausbreitung turbulenter Vormischflammen, Dissertation, Universität Karlsruhe (TH).

Stagnation Flames of N2-CH4-Mixtures. Turbulent Shear Flows, 7, 357 - 366.

- Y. Liu, B. Lenze, W. Leuckel; Investigation on the Laminar and Turbulent Burning Velocities of Premixed Lean and Rich Flames of CH4-H2-Air Mixtures. In *Dynamics of Deflagrations and Reactive Systtems: Flames. (Progress in Astronautics and Aeronautics)*, A.L. Kuhl, J.-C. Leyer, A.A. Borisov, W.A. Sirignano (ed.), p. 259 - 274, 1991.

- M. Löffler-Mang, W. Leuckel, (1991). Atomization with Spill Controlled Swirl Pressure-Jet Nozzles, in *ICLASS 91 (International Conference of Liquid Atomization and Spray Systems) Proceedings*, ICLASS, p. 431 - 440, .

- M. Löffler-Mang, W. Leuckel, (1991). Investigation of the Processes Near to the Orifice of Spill-Controlled Swirl Pressure-Jet Nozzles, in *ILASS Europe, Sprays and Aerosols Proceedings*, ILASS Europe, p. 72 - 77, .

- M. Philipp, (1991), Experimentelle und theoretische Untersuchungen zum Stabilitätsverhalten von Drallflammen mit zentraler Rückströmzone, Dissertation, Universität Karlsruhe (TH).

- H. Schatz, (1991), Löscheinsatz bei gelagerten Stoffen. Teil 8: Literaturauswertung Sprinkler. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Arbeitskreis V - Unterausschuß "Feuerwehrangelegenheiten", Forschungsbericht, 78, .

- K.P. Schindler, H. Bockhorn; Rußbildung bei der dieselmotorischen Verbrennung. In *Mitteilungen des Instituts für Verbrennungskraftmaschinen und Thermodynamik, Nr. 62*, Graz, p. 329, 1991.

- C. Schmid, (1991), Drallbrenner-Simulation durch Starrkörperwirbel-Strömungen unter Einbeziehung von drallfreier Primärluft und Verbrennung, Dissertation, Universität Karlsruhe (TH).

- P.G. Seeger; Forschungsstelle für Brandschutztechnik an der Universität Karlsruhe (Tätigkeitsbericht). In *Feuerwehr-Jahrbuch 1991*, Deutscher Feuerwehrverband (DFV), p. 141, 1991.

- H. Streb, B. Lenze, (1991), Strömungs- und Reaktionsstrukturen in turbulenten Diffusionsflammen. TECFLAM, Stuttgart, Zwischenbericht 1989/90, .

- G. Sybon, W. Leuckel, (1991). Das Stickoxid-Minderungspotential der Brennstoffstufung im Vergleich zu anderen Minderungsverfahren, in *Tagungsband Combustion and Reaction Kinetics, 22nd International Annual Conference of ICT 1991*, ICT, p. 29-1 - 29-12, .

- Th. Schäfer, H. Bockhorn, (1991). Untersuchungen zum Teilchenwachstum von Rußteilchen in vorgemischten Kohlenwasserstoff-Sauerstoff-Flammen, in *7. Tecflam - Seminar: ‘‘Partikel in Verbrennungsprozessen’’*, Stuttgart, p. 21, .

- G. Wachter, W. Leuckel, (1991). Spektrale Messungen und Modellrechnungen zur Strahlungswärmeabgabe turbulenter Erdgas-Diffusionsflammen, in *VDI-Berichte Nr. 922*, 15. Deutscher Flammentag, p. 65 - 76, .

1990

... zum Anfang der Seite

- A. Arnold, H. Becker, R. Suntz, P. Monkhouse and J. Wolfrum, R. Maly and W. Pfister, (1990). Flame Front Imaging in an Internal- Combustion Engine Simulator by Laser- Induced Fluorescence of Acetaldehyde. Opt. Lett, 15, 831.

- A. Arnold, H. Becker, R. Hemberger, W. Hentschel, W. Ketterle, M. Köllner, W. Meienburg, P. Monkhouse, H. Neckel, M. Schäfer, K. P. Schindler, V. Sick, R. Suntz and J. Wolfrum, (1990). Laser in situ Monitoring of Combustion Processes. Appl. Opt, 29, (33), 4860.

- C. Axel Föhl, (1990). Untersuchung der Löschverfahren und Löschmittel zur Bekämpfung von Bränden gefährlicher Güter. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Arbeitskreis V - Unterausschuß "Feuerwehrangelegenheiten", (73), 136.

Flame Structure and Burning Behaviour in an IC Engine Simulator by 2D- LIF of OH Radicals. Appl. Phys. B, 50, (6), 473.(doi:10.1007/BF00408773)

- H. Bockhorn; Chemical Reaction Rate Effects in Turbulent Non - Premixed Combustion. In *Dissipative Structures in Transport Processes and Combustion*, D. Meinköhn (ed.), Springer-Verlag, Berlin, Heidelberg, p. 95, 1990.

- H.Bockhorn, B. Rogg, (1990). Sensitivity Analysis of Combustion Kinetics in Diluted Ethyne-Oxygen Flames, in *Joint Meeting of the Soviet and Italian Sections of the Combustion Institute*, Tacchi Editore, Pisa, p. 6-9, .

- H. Bockhorn, (1990). Mathematical Modelling. Fundamentals of Chemical Engineering, B1, (2),

- H. Bockhorn, Ch. Chevalier, J. Warnatz, V. Weyrauch, (1990). Bildung von promptem NO in Kohlenwasserstoff-Luft Flammen, in *6. Tec-flam - Seminar: ‘‘Schadstoffreduktion bei Verbrennungsprozessen’’*, Stuttgart, p. 7, .

- H. Bockhorn, (1990). Modeling Turbulent Reacting Flows: Detailed Chemical Reaction Mechanisms and Sensitivity Analysis. Dynamics of Deflagrations and Reactive Systems: Flames, Progress in Astronautics and Aeronautics, 131, 303.

- H. Bockhorn, (1990). Sensitivity Analysis Based Reduction of Complex Reaction Mechanisms in Non-Premixed Turbulent Combustion, in *Twenty-Third Symposium (International) on Combustion*, The Combustion Institute, Pittsburgh, p. 767, .

- Ch.Reh, H.Bockhorn, (1990). Caracterization of Soot by TGA-MS-analysis, in *Joint Meeting of the Soviet and Italian Sections of the Combustion Institute*, Tacchi Editore, Pisa, p. 13.1, .

- Dieter Brein; Paul Gerhard Seeger, (1990). Verbesserung der Brandsicherheit von Strahlpezprofildächern mit Einbauten (Licht-kuppeln, Gullies, Rohrdurchfürungen). VFDB-Zeitschrift, 39, (2), 68-74.

- Guang-ping Zehn; Siegfried Höchst; Wolfgang Leuckel, (1990), Experimentelle Untersuchung zur Bestimmung der Laminaren Flammengeschwindigkeit von Maisstärke/Luft-Gemischen. Universität Karlsruhe, Wissenschaftlicher Abschlußbericht, .

- Hermann Schatz, (1990), Löscheneinsatz bei gelagerten Stoffen. Teil 7: literaturauswertung und Simulation der Wasserbeaufschlagung. Arbeitsgemanschaft der Innenministerien der Bundesländer, Arbeitskreis V, Unterausschuß "Feuerwehrangelegenheiten", Forschungsbericht, 74, .

- Jürgen Kunkelmann, (1990), Brandausbreitung bei verschiedenen Stoffen, die in lagermäßiger Anordnung gestapelt sind. Teil 7: Literaturübersicht über die Wechselwirkungen eines Tropfenschwarmes mit einer Heißgasströmung. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Arbeitskreis V-Unterausschuß "Feuerwehrangelegenheiten", Forschungsbericht, 76, .

- Klaus Döbbeling, (1990), Experimentelle und theoretische untersuchungen an stark verdrallten, turbulenten isothermen Strömungen, Dissertation, Universität Karlsruhe (TH).

- Klaus Döbbeling; Bernhard Lenze; Wolgang Leuckel , (1990). Four-sensor hot-wire probe measurement of isothermal flow in a model combustion chamber at different levels of swirl, in *Procceding of the International Symposium of Engineering, Turbulence Modelling and Measurements*, p. 717-726, .

- Klaus Knapp; Wolfgang Leuckel, (1990). Reduzierung der NOx-Emission bei Gasturbinen durch zweistufige Verbrennungsführung, in *Informationstagung Turbinen Herbst 1990*, Forschungsvereinigung Verbrenungskraftmaschinen e. V. (FVV), .

- Klaus Knapp; Wolfgang Leuckel, (1990), Ermittlung der erforderlichen Luftvolumenströmen zur Verdünnung von Brandrauch auf ein die Gesundheit und Sichtbarkeit in Rettungswegen gewährleistendes Maß. Teil 5: Brandversuche im natürlichen Maßstab zur Beurteilung der entstehenden Brandrauchkonzentration und deren Abbau sowie die daraus resultierenden Maßnahmen zum Schutz von Rettungswegen. Forschungsvereinigung Verbrenungskraftmaschinen e. V. (FVV), Bericht, .

Pyrolytic Conditions, in *Joint Meeting of the Soviet and Italian Sections of the Combustion Institute*, Tacchi Editore, Pisa, p. 13.2, .

- T. Kolb;G. Sybon; W. Leuckel, (1990), Reduzierung der NOx-Bildung aus brennstoffgebundenem Stickstoff durch gestufte Verbrennungsführungen. TECFLAM, Seminar, .
- W. Leuckel; G. Lauer; C. Hirsch, (1990), Mathematische Modellierung der Wechselwirkung von Turbulenz und Reaktion unter den in Gasturbinenbrennkammern vorliegenden Bedingungen. Arbeitsgemeinschaft Hochtemperatur-Gasturbine, Statusseminar, Tagungsband 2., .
- W. Leuckel; B. Lenze, (1990), Validation experiments to test the flamelet assumption in turbulent combustion. European Communities "Turbulent combustion and diagnostics project 1986-89", Report EUR 12696 EN, .
- W. Leuckel; B. Lenze, (1990), Experimental and numerical investigation on turbulent diffusion and premixed flames. European Communities "Turbulent combustion and diagnostics project 1986-89", Report EUR 12696 EN, .
- W. Leuckel; W. Nastoll; N. Zarzalis, (1990). Experimental Investigation of the Influence on the Transient Premixed Flame Propagation Inside Closed Vessels, in *23rd Symposium (international) on Combustion*, p. 729-734, .
- Y. Liu; B. Lenze , (1990). Laser tomography study of turbulent Bunsen flames, in *Joint Meeting of the Soviet and Italian Sections of the Combustion Institut*, p. 8.4, .
- Y. Liu; B. Lenze; W. Leuckel, (1990). Investigations on flame generated turbulencein premixed flames at low and high burning intensities, in *Proceedings of the International Symposium on Engineering, Tubulence Modelling and Measurements.* , p. 687 - 696, .
- Y. Liu; H. Streb, (1990). Verbrennungsmodellierung und Lasermeßtechnik. Zusammenfassung des 5, TECFLAM Seminars von 5. 10. 89 in Stuttgart. Wärmetechnik , 35, (2), 88 - 91.
- Y. Liu; H. Streb; B. Lenze, (1990), Mathematische Modellierung und Lasermeßtechnik von Verbrennungsvorgängen. TECFLAM, Abschlußbericht 1984-1989, .
- M. Löffler-Mang; W. Leuckel , (1990). Investigations with spill-controlled swirl pressure-jet nozzles using the phase-doppler technique, in *ILASS-Europe, 6th Annual Conference*, ILASS-Europe, .
- M. Löffler-Mang; W. Leuckel , (1990). Two-colour phase-doppler technique applied to spray cone investigations with a pressure atomizer, in *Fifth International Symposium on Aplication of Laser Techniques to Fluid Mechanics*, .
- Michael Christill, (1990), Untersuchungen zum Einfluss hinderserzeugter Turbulenz auf die instationä Flammenausbreitung in Brenngas/Luft-Gemisch. Universität Karlsruhe (TH), Dissertation, .
- Michael Christill; Wolgang Leuckel , (1990). Untersuchungen zur Beschleunigung instationärer Flammenfronten an Hindernisstrukturen. Chemie-Ingenieur-Technik, 62, (11), 935-937.
- Michael Huth; Wolgang Leuckel , (1990). Untersuchungen zur Ruß-und Kohlenwasserstoff-Bildung aus gasförmigen Brennstoffen in einem turbulenten durchströmten Pfropfenströmungsreaktoren. Chemie-Ingenieur-Technik, 62, (7), 574-575.
- Michael Huth; Wolgang Leuckel, (1990). Experiments on soot formation from propane under partial oxdation conditionsina turbulent plug-flow-reactor, in *23rd Symposium (International) on Combustion*, p. 1493-1499, .
- Paul Gerhard Seeger, (1990). Forschungsstelle für Brandschutztechnik an der Universität Karlsruhe (Tätigskeitbericht). Feuerwehr-Jahrbuch , (74), 62.

Löschwasser. TÜ- Technische Überwachung 31, (5), 211 - 214, 219.

- B. Prade; B. Lenzen , (1990). Stability of concentric diffusion flames in dependence on flow properties and burning velocity, in *Joint Meeting of the Soviet and Italian Sections of the Combustion Institut*, p. 6.3, .
- Reiner John, (1990), Ermittlung der erforderlichen Luftvolumenströmen zur Verdünnung von Brandrauch auf ein die Gesundheit und Sichtbarkeit in Rettungswegen gewährleistendes Maß. Teil 5: Brandversuche im natürlichen Maßstab zur Beurteilung der entstehenden Brandrauchkonzentration und deren Abbau sowie die daraus resultierenden Maßnahmen zum Schutz von Rettungswegen. Arbeitsgemeinschaft der Innenministerien der Bundesländer, Forschungsbericht, 75, .
- H. Streb; B. Lenzen , (1990). Flow, mixing and reaction in diffusion flames in dependence on turbulence and residence time, in *Joint Meeting of the Soviet and Italian Sections of the Combustion Institut*, p. 6.5, .
- Thomas Kolb, (1990), Experimentelle und theoretische Untersuchungen zur Minderung der NOx-Emission technischer Feuerungen durch gestufte Verbrennungsführung. Universität Karlsruhe (TH), Dissertation , .
- H. Umhauer; M. Löffler-Mang; P. Neumann; W. Leuckel, (1990). Pulse holography and phase-doppler-technique. A comparision when applied to swirl pressure-jet atomizers. Particle & Particle Systems Characterization, (7), 226 - 232.

1989

... zum Anfang der Seite

- A. Arnold, H. Becker, W. Ketterle, P. Monkhouse, R. Suntz, M. Köllner und J. Wolfrum, (1989). Einsatz von Ultrakurzzeit- und Hochleistungs- UV- Lasersystemen zur mehrdimen-sionalen Fluoreszenzdiagnostik industrieller Verbrennungsprozesse. VDI- Berichte, VDI- Verlag, (457), 765.
- Y. Liu, B. Lenze, (1989). Untersuchung über turbulente Flammengeschwindigkeit in einem Stauflammensystem mittels Laser-Doppler-Anemometrie. VDI-Berichte, 765, 625-634.
- M. Löffler-Mang, W. Leuckel, (1989). Strömungsfelduntersuchungen in rücklaufgeregelten Drall-Druckzerstäubern. VDI-Berichte, 765, 613-623.

1988

... zum Anfang der Seite

- M. Christill, W. Nastoll. W. Leuckel, N. Zarzalis, (1988). Der Einfluß von Strömungsturbulenz auf den Explosionsablauf in Staub/Luft-Gemischen. VDI-Berichte, 701, 123-141.
- T. Kolb, P. Jansohn, W. Leuckel, (1988). Reduction of NOx Emission in Turbulent Combustion by Fuel-Staging/Effects of Mixing and Stoichiometry in the Reduction Zone. Twenty-Second Symposium (International) on Combustion, 1193-1203.
- R. Suntz, H. Becker, P. Monkhouse and J. Wolfrum, (1988). Two- Dimensional Visualization of the Flame Front in an Internal Combustion Engine by Laser- Induced Fluorescence of OH Radicals. Appl. Phys, 47, 287.

1987

... zum Anfang der Seite

- R. Günther, (1987). Zur Flammengeschwindigkeit turbulenter Vormischflammen. Chem. -Ing. -Tech., 2, 137-139.
- H. Jänsch, K. Becker, K. Blatt, H. Leucker, D. Fick, R. Butsch, B. Heck, D. Krämer, K.-H. Möbius, W. Ott, P. Paul, R. Suntz, G. Tungate, I. M. Turkiewicz, A. Weller and E. Steffens, (1987). Nuclear Spin Polarized Alkali Beams (Li and Na): Production and Acceleration. Nucl. Instr. and Meth, A 254, 7.

Chem, (91), 5543.

1986

... zum Anfang der Seite

- R. Butsch, H. Jänsch, D. Krämer, K.-H. Möbius, Z. Moroz, W. Ott, K. Rusek, E. Steffens, R. Suntz, G. Tungate, I. M. Turkiewicz, A. Weller, K. Becker, K. Blatt, D. Fick, H. Leucker, W. Luck and P. Paul, (1986). Subbarrier Fusion with Aligned 23Na Ions. Phys. Rev. Lett, 57, 16-2002.
- R. Hillemanns, B. Lenze, W. Leuckel, (1986). Flame Stabilization and Turbulent Exchange in Strongly Swirling Natural Gas Flames. Twenty-first Symposium (International) on Combustion, 1445-1453.
- M. Horvay, W. Leuckel, (1986). Experimental and Theoretical Investigation of Swirl Nozzles for Pressure-Jet Atomization. German Chemical Engineering, 5, 276-283.

1985

... zum Anfang der Seite

- R. Günther, H. Hoffmann, (1985). Turbulenzstruktur und Flammengeschwindigkeit in Bunsenflammen. VDI-Berichte, 574, 219-233.
- W. Kohler, B. Lenze, W. Leuckel, (1985). Experimentelle Analyse der Strömungs- Reaktions- und Temperaturfelder einer Erdgas-Diffusionsflamme in einer zylindrischen Brennkammer. Chem. - Ing. -Tech., 57, 258-259.
- W. Kohler, B. Lenze, W. Leuckel, (1985). Investigation of Confined Axial Jet Gas Diffusion Flames with Emphasis on External Recirculation by Measuring Time Mean and Fluctuation Velocities. International Conference on Laser Anemometry-Advances and Application, Paper 10, 187-202.

1984

... zum Anfang der Seite

- H. Eickhoff, B. Lenze, W. Leuckel, (1984). Experimental Investigation on the Stabilization Mechanism of Jet Diffusion Flames. Twentieth Symposium (International) on Combustion, 311-316.
- M. Horvay, W Leuckel, (1984). LDA-Measurements of Liquid Swirl Flow in Converging Swirl Chambers with Tangential Inlets. Laser Anemometry in Fluid Mechanics, 487-503.

1983

... zum Anfang der Seite

- V. Emmerich, (1983). Messung und Berechnung der Wärmestrahlung rußhaltiger Flammen und Flammengase. Forschung in der Kraftwerkstechnik, 82-87.

1982

... zum Anfang der Seite

- E. Hoffmann-Berling, R. Günther, W. Leuckel, (1982). The Effect of the Flame Front Structure on Flame Propagation in Premixed Gases. Nineteenth Symposium (International) on Combustion, 433-439.
- P. Lang, B. Lenze, (1982). Gas-Solid Flow in a Model Smelting Cyclone. German Chemical Engineering, 5, 351-356.

1981

... zum Anfang der Seite

- R. Günther, W. Lenz, (1981). Der Einfluß von Flammen auf die Entstehung selbsterregter Brennkammerschwingungen. VDI-Berichte, 423, 111-118.

Symposium (International) on Combustion, 961-967.

1967

... zum Anfang der Seite

- Leuckel, W., (1967), Swirl Intensities, Swirl Types and Energy Losses of Different Swirl Generating Devices. IFRF, Doc Nr. G 02/a/16, Ijmuiden, .

Nach oben