

LIST OF PUBLICATIONS

Prof Dr Frank Behrendt

September 28, 2021

I Papers in Peer-Reviewed Journals

- I.1 F. Behrendt, J. Warnatz
The Dependence of Flame Propagation in H₂-O₂-N₂ Mixtures on Temperature, Pressure, and Initial Composition
International Journal of Hydrogen Energy **10(11)**, 749-755 (1985)
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- I.2 G. Dixon-Lewis, T. David, P. H. Gaskell, S. Fukutani, H. Jinno, J. A. Miller, R.J. Kee, M.D. Smooke, N. Peters, E. Effelsberg, F. Behrendt, J. Warnatz
Calculation of the Structure and Extinction Limit of a Methane-Air Counterflow Diffusion Flame in the Forward Stagnation Region of a Porous Cylinder.
Proceedings of the Combustion Institute **20(1)**, 1893-1904 (1985)
doi 10.1016/S0082-0784(85)80688-3, ISSN 1540-7489
- I.3 B. Rogg, F. Behrendt, J. Warnatz
Modelling of Turbulent Methane-Air Diffusion Flames: The Laminar Flamelet Model
Berichte der Bunsengesellschaft für physikalische Chemie **90(11)**, 1005-1010 (1986)
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- I.4 F. Behrendt, T. Dreier, B. Lange, J. Wolfrum, M. Zahn, J. Warnatz
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- I.7 V. Sick, A. Arnold, E. Diebel, T. Dreier, W. Ketterle, B. Lange, J. Wolfrum, K.-U. Thiele, F. Behrendt, J. Warnatz
Two-Dimensional Laser Diagnostics and Modeling of Counterflow Diffusion Flames
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- I.8 E. Diebel, T. Dreier, B. Lange, J. Wolfrum, F. Behrendt, J. Warnatz
CARS Measurements and Numerical Simulation Results for Methane/Air Counterflow Flames
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Numerical Study of Two-Dimensional Effects Associated with Laser Induced Ignition in a Hydrogen-Oxygen Mixtures Mixtures
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- I.14 F. Behrendt, O. Deutschmann, U. Maas, J. Warnatz
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- I.19 O. Deutschmann, R. Schmidt, F. Behrendt, J. Warnatz
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Journal of Chemical Physics **107(15)**, 5918-5928 (1997)
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Simulation of the Non-oxidative Methane Conversion with a Catalytically Active Carbonaceous Overlayer
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Proceedings of the Combustion Institute **27(2)**, 2267-2274 (1998)
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- I.38 F. He, N. Zobel, W. Zha, F. Behrendt
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- I.46 G. J. G. Gluth, W. Zhang, M. Gaggl, B. Hillemeier, F. Behrendt
Multicomponent gas diffusion in hardened cement paste at temperatures up to 350 °C
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- I.47 N. Hempel, I. Petrick, F. Behrendt
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- I.65 Y. Zhang, F. He, X. Li, F. Behrendt, Z. Gao, R. Yu
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- I.66 M.-T. Scharl, D. A. Greenhalgh, A. Dieguez Alonso, F. Behrendt
Numerical and Experimental Investigation of Laminar One-Dimensional Counter-Flow Flames Using Product Gas from Pyrolysis and Gasification of Woody Biomass
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- I.70 Julian Borgmeyer, Frank Behrendt
On-line tar monitoring using light-induced fluorescence: A setup for continuous operation in a biomass gasification plant environment
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- I.71 Robert Eberwein, Andreas Rogge, Frank Behrendt, Christian Knaust
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- I.73 Jenny Rieck, Lina Taube, Frank Behrendt
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- I.75 Xiuhua Li, Fang He, Frank Behrendt, Zhenqiang Gao, Junrui Shi, Chenyu Li
Inhibition of K_2SO_4 on evaporation of KCl in combustion of herbaceous biomass
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- I.76 Fabian Schmid, Joscha Winzer, Andre Pasemann, Frank Behrendt
An open-source modeling tool for multi-objective optimization of renewable nano/micro-off-grid power supply system: Influence of temporal resolution, simulation period, and location
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- I.77 José Luis Míguez, Jacobo Porteiro, Frank Behrendt, Diana Blanco, David Patiño, Alba Dieguez-Alonso
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- I.78 Fabian Schmid, Frank Behrendt
Optimal sizing of Solar Home Systems: Charge controller technology and its influence on system design
Sustainable Energy Technologies and Assessments **45**, 101198 (2021)
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Optimal sizing of Solar Home Systems: Charge controller technology and its influence on system design
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- I.80 Rayimjou Aliev, Frank Behrendt, Jasurbek Gulomov, Murodjou Abduvohidov, Suhrob Aliev, Bobur Rashidov
On The Flexophotovoltaic Effect In Semiconductor P-N-Structures
Turkish Journal of Computer and Mathematics Education **12(7)**, 947-950 (2021)
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- I.81 Lina Taube, Florian Biedenbach, Fabian Schmid, Jenny Rieck, Frank Behrendt
Economic benefits through system integration of electric waste collection vehicles: Case study of grid-beneficial charging and discharging strategies
Electrical Power and Energy Systems **136**, 107282 (2022)
doi 10.1016/j.ijepes.2021.107282, ISSN 0142-0615

II Papers in Peer-Reviewed Proceedings

- II.1 F. Behrendt, J. Warnatz
The Dependence of Flame Propagation in H₂-O₂-N₂ Mixtures on Temperature, Pressure, and Initial Composition
Hydrogen Energy Progress **5**, 1515-1528 (1984)
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- II.2 F. Behrendt, J. Warnatz
Modellierung laminarer Methan-Luft- und Methanol-Luft-Gegenstromdiffusionsflammen
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