# Hartmut Spliethoff

List of Publications by Year
in descending order



| 211 | 10,629 | 34016 | 35952 |
|---|---|---|---|
| papers | citations | 52 h-index | 97 g-index |

| 216 | 216 | 216 | 9029 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Impact of hydrothermal carbonization on combustion properties of residual biomass. Biomass Conversion and Biorefinery, 2022, 12, 2541-2552. | 2.9 | 19 |
| 2 | Optimal integration of Power-to-X plants in a future European energy system and the resulting dynamic requirements. Energy Conversion and Management, 2022, 251, 115020. | 4.4 | 13 |
| 3 | Comparison of Fuels and Effluents Originating from Washing and Hydrothermal Carbonisation of Residual Biomass. Waste and Biomass Valorization, 2022, 13, 2321-2333. | 1.8 | 5 |
| 4 | Impact of Different Forecast Horizons in Energy System Simulations. , 2022, , . | | 0 |
| 5 | Impact of Power-to-X on Energy Systems as a Key Technology to Defossilization. , 2022, , . | | 0 |
| 6 | Thermodynamic and Economic Optimization of CO <sub>2</sub> Plume Geothermal Systems for Combined Heat and Power Production. , 2022, , . | | 1 |
| 7 | Numerical analysis of feedforward concepts for advanced control of organic Rankine cycle systems on heavy-duty vehicles. Journal of Cleaner Production, 2022, 351, 131470. | 4.6 | 5 |
| 8 | Applying Reaction Kinetics to Pseudohomogeneous Methanation Modeling in Fixedâ€Bed Reactors. Chemical Engineering and Technology, 2022, 45, 991-991. | 0.9 | 0 |
| 9 | Experimental evaluation of an ORC-CHP architecture based on regenerative preheating for geothermal applications. Applied Energy, 2022, 315, 119057. | 5.1 | 22 |
| 10 | Experimental investigation, model validation and application of twin-screw expanders with different built-in volume ratios. Applied Energy, 2021, 282, 116139. | 5.1 | 15 |
| 11 | Fuel-specific devolatilization parameters for detailed comparison of pulverized biomass fuels. Fuel, 2021, 286, 119309. | 3.4 | 10 |
| 12 | R1224yd(Z), R1233zd(E) and R1336mzz(Z) as replacements for R245fa: Experimental performance, interaction with lubricants and environmental impact. Applied Energy, 2021, 288, 116661. | 5.1 | 45 |
| 13 | Low-carbon hydrogen production via electron beam plasma methane pyrolysis: Techno-economic analysis and carbon footprint assessment. International Journal of Hydrogen Energy, 2021, 46, 19897-19912. | 3.8 | 42 |
| 14 | Numerical simulation of gasification with a one-dimensional particle submodel for char structure evolution. Fuel, 2021, 293, 120492. | 3.4 | 4 |
| 15 | Experimental Investigation of an Anode Supported SOFC Stack Under High Direct Internal Reforming Conditions. ECS Meeting Abstracts, 2021, MA2021-03, 27-27. | 0.0 | 0 |
| 16 | A collection of model parameters describing the gasification behavior of different fuels under entrained flow conditions. Fuel, 2021, 296, 120536. | 3.4 | 4 |
| 17 | Flexible and Modular Fully Metallic Housing Concept for Solid Oxide Fuel Cells. ECS Transactions, 2021, 103, 1817-1826. | 0.3 | 0 |
| 18 | Experimental Investigation of an Anode Supported SOFC Stack Under High Direct Internal Reforming Conditions. ECS Transactions, 2021, 103, 159-168. | 0.3 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Flexible and Modular Fully Metallic Housing Concept for Solid Oxide Fuel Cells. ECS Meeting Abstracts, 2021, MA2021-03, 179-179. | 0.0 | 0 |
| 20 | Alkali removal with mineral sorbents â€“ Part II: Fixed-bed experiments and model validation. Powder Technology, 2021, 389, 406-415. | 2.1 | 5 |
| 21 | Alkali removal with mineral sorbents â€“ Part I: Sorption capacity and reaction kinetics. Powder Technology, 2021, 390, 190-196. | 2.1 | 5 |
| 22 | Crystal morphology data for viscosity modelling of fuel slags â€“ Supplementation of spinel phase and validation by crystallisation in entrained flow gasifiers. Fuel, 2021, 303, 121114. | 3.4 | 3 |
| 23 | Improving carbon efficiency for an advanced Biomass-to-Liquid process using hydrogen and oxygen from electrolysis. Renewable and Sustainable Energy Reviews, 2021, 152, 111670. | 8.2 | 18 |
| 24 | Combined heat and power from hydrothermal geothermal resources in Germany: An assessment of the potential. Renewable and Sustainable Energy Reviews, 2020, 120, 109661. | 8.2 | 63 |
| 25 | Experimental and numerical investigation of an advanced injection cooling concept for Organic Rankine Cycles. Energy Conversion and Management, 2020, 224, 113342. | 4.4 | 4 |
| 26 | Thermodynamic comparison of direct supercritical CO2 and indirect brine-ORC concepts for geothermal combined heat and power generation. Renewable Energy, 2020, 161, 1292-1302. | 4.3 | 25 |
| 27 | Power-to-liquidviasynthesis of methanol, DME or Fischerâ€“Tropsch-fuels: a review. Energy and Environmental Science, 2020, 13, 3207-3252. | 15.6 | 328 |
| 28 | CO2-neutral co-produced gas utilization for deep geothermal applications. Geothermics, 2020, 88, 101895. | 1.5 | 1 |
| 29 | Advanced ORC architecture for geothermal combined heat and power generation. Energy, 2020, 205, 117967. | 4.5 | 41 |
| 30 | Applying Reaction Kinetics to Pseudohomogeneous Methanation Modeling in Fixedâ€Bed Reactors. Chemical Engineering and Technology, 2020, 43, 1224-1233. | 0.9 | 7 |
| 31 | Determination of the Intrinsic Gasification Kinetics of a Bituminous Coal Including Product Gas Inhibition and Char Deactivation Under Entrained Flow Conditions. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, . | 1.4 | 4 |
| 32 | Development of an Operational Planning Tool for Geothermal Plants With Heat and Power Production. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, . | 1.4 | 3 |
| 33 | Operation of SOFC Short-Stacks with Simulated Bio-Syngas: Influence of Model Tars Naphthalene and Phenol. Journal of the Electrochemical Society, 2020, 167, 124514. | 1.3 | 6 |
| 34 | Co-combustion of Solid Biofuels in Coal-Fired Power Plants. , 2019, , 691-713. | | 0 |
| 35 | Coarse-grained CFD-DEM simulation of biomass gasification in a fluidized bed reactor. Fuel, 2019, 255, 115790. | 3.4 | 63 |
| 36 | Thermo-hydraulic simulation of district heating systems. Geothermics, 2019, 82, 244-253. | 1.5 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Effect of internal hydrocarbon reforming during coupled operation of a biomass gasifier with hot gas cleaning and <scp>SOFC</scp> stacks. Energy Science and Engineering, 2019, 7, 1140-1153. | 1.9 | 8 |
| 38 | Effects of Naphthalene on the Performance of Ni/YSZ Anode-Supported SOFCs. ECS Transactions, 2019, 91, 697-706. | 0.3 | 5 |
| 39 | Reverse Current Treatment of Short Stacks â€“ Experimental Results and System Considerations. ECS Transactions, 2019, 91, 2737-2747. | 0.3 | 0 |
| 40 | Development of a Continuous Fluidized Bed Reactor for Thermochemical Energy Storage Application. Journal of Energy Resources Technology, Transactions of the ASME, 2019, 141, . | 1.4 | 11 |
| 41 | Numerical Approaches for Modeling Gasâ€“Solid Fluidized Bed Reactors: Comparison of Models and Application to Different Technical Problems. Journal of Energy Resources Technology, Transactions of the ASME, 2019, 141, . | 1.4 | 7 |
| 42 | Experimental and numerical investigation of direct liquid injection into an ORC twin-screw expander. Energy, 2019, 178, 867-878. | 4.5 | 16 |
| 43 | Kalina power plant part load modeling: Comparison of different approaches to model part load behavior and validation on real operating data. Energy, 2019, 174, 625-637. | 4.5 | 17 |
| 44 | Experimental investigation of modern ORC working fluids R1224yd(Z) and R1233zd(E) as replacements for R245fa. Applied Energy, 2019, 240, 946-963. | 5.1 | 119 |
| 45 | Modelling of a Reversible SOC in Ansys Fluent. ECS Transactions, 2019, 91, 2065-2074. | 0.3 | 0 |
| 46 | Large Eddy Simulation of a particle-laden flow around a cylinder: Importance of thermal boundary layer effects for slagging and fouling. Fuel, 2019, 241, 585-606. | 3.4 | 13 |
| 47 | Comprehensive investigation and comparison of TFM, DenseDPM and CFD-DEM for dense fluidized beds. Chemical Engineering Science, 2019, 196, 291-309. | 1.9 | 54 |
| 48 | Simulation of Organic Rankine Cycle â€“ Quasi-steady state vs dynamic approach for optimal economic performance. Energy, 2019, 167, 619-640. | 4.5 | 28 |
| 49 | Benchmarking and Potential of Heat Pumps for Flue Gas Condensation. International Journal of Thermodynamics, 2019, 22, 168-175. | 0.4 | 0 |
| 50 | Numerical calculation of wall-to-bed heat transfer coefficients in Geldart B bubbling fluidized beds with immersed horizontal tubes. Powder Technology, 2018, 333, 193-208. | 2.1 | 21 |
| 51 | Heat Transfer to Supercritical Water in Advanced Power Engineering Applications: An Industrial Scale Test Rig. Journal of Energy Resources Technology, Transactions of the ASME, 2018, 140, . | 1.4 | 9 |
| 52 | Online Corrosion Measurements in Combination with Deposit and Aerosol Analysis during the Co-firing of Straw with Coal in Electrically Heated, Small-Scale Pulverized Fuel and Circulating Fluidized Bed Systems. Energy & Fuels, 2018, 32, 2506-2516. | 2.5 | 7 |
| 53 | Simulation of Cogeneration-Combined Cycle Plant Flexibilization by Thermochemical Energy Storage. Journal of Energy Resources Technology, Transactions of the ASME, 2018, 140, . | 1.4 | 30 |
| 54 | Current status of water electrolysis for energy storage, grid balancing and sector coupling via power-to-gas and power-to-liquids: A review. Renewable and Sustainable Energy Reviews, 2018, 82, 2440-2454. | 8.2 | 1,263 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Char particle burning behavior: Experimental investigation of char structure evolution during pulverized fuel conversion. Fuel Processing Technology, 2018, 171, 361-373. | 3.7 | 22 |
| 56 | Design of a MW-scale thermo-chemical energy storage reactor. Energy Reports, 2018, 4, 507-519. | 2.5 | 56 |
| 57 | Coupling SOFCs to biomass gasification - The influence of phenol on cell degradation in simulated bio-syngas. Part I: Electrochemical analysis. International Journal of Hydrogen Energy, 2018, 43, 20417-20427. | 3.8 | 28 |
| 58 | The Reaction Kinetics of Gaseous Alkali Capture by Kaolin in Syngas Atmosphere. Chemical Engineering and Technology, 2018, 41, 1881-1888. | 0.9 | 7 |
| 59 | Ash formation and deposition in coal and biomass fired combustion systems: Progress and challenges in the field of ash particle sticking and rebound behavior. Progress in Energy and Combustion Science, 2018, 68, 65-168. | 15.8 | 322 |
| 60 | Theoretical analysis and experimental investigation of material compatibility between refrigerants and polymers. Energy, 2018, 163, 782-799. | 4.5 | 18 |
| 61 | Batch evaporation power cycle: Influence of thermal inertia and residence time. Energy, 2018, 157, 1090-1101. | 4.5 | 6 |
| 62 | Ash particle sticking and rebound behavior: A mechanistic explanation and modeling approach. Proceedings of the Combustion Institute, 2017, 36, 2341-2350. | 2.4 | 45 |
| 63 | Performance of two iron-based syngas-fueled chemical looping systems for hydrogen and/or electricity generation combined with carbon capture. Clean Technologies and Environmental Policy, 2017, 19, 451-470. | 2.1 | 13 |
| 64 | Simulation of a reversible SOFC with Aspen Plus. International Journal of Hydrogen Energy, 2017, 42, 10329-10340. | 3.8 | 63 |
| 65 | Investigation of Different Operation Strategies to Provide Balance Energy With an Industrial Combined Heat and Power Plant Using Dynamic Simulation. Journal of Engineering for Gas Turbines and Power, 2017, 139, . | 0.5 | 10 |
| 66 | Gasification kinetics of a bituminous coal at elevated pressures: Entrained flow experiments and numerical simulations. Fuel, 2017, 196, 210-216. | 3.4 | 22 |
| 67 | Three dimensional multi fluid modeling of Geldart B bubbling fluidized bed with complex inlet geometries. Powder Technology, 2017, 312, 89-102. | 2.1 | 23 |
| 68 | Oxygen-Blown Entrained Flow Gasification of Biomass: Impact of Fuel Parameters and Oxygen Stoichiometric Ratio. Energy & Fuels, 2017, 31, 3949-3959. | 2.5 | 21 |
| 69 | Organic Rankine Cycles (ORC) for mobile applications â€“ Economic feasibility in different transportation sectors. Applied Energy, 2017, 204, 1188-1197. | 5.1 | 30 |
| 70 | Transient simulation and fatigue evaluation of fast gas turbine startups and shutdowns in a combined cycle plant with an innovative thermal buffer storage. Energy, 2017, 130, 246-257. | 4.5 | 37 |
| 71 | Modelling and transient simulation of a supercritical coal-fired power plant: Dynamic response to extended secondary control power output. Energy, 2017, 137, 927-940. | 4.5 | 37 |
| 72 | Airâ€Blown Entrainedâ€Flow Gasification of Biocoal from Hydrothermal Carbonization. Chemical Engineering and Technology, 2017, 40, 270-277. | 0.9 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Measuring gaseous HCl emissions during pulverised co-combustion of high shares of straw in an entrained flow reactor. Energy Procedia, 2017, 120, 246-253. | 1.8 | 2 |
| 74 | Online corrosion measurements in small- and mid-scale during pulverised biomass/coal co-combustion. Energy Procedia, 2017, 120, 309-316. | 1.8 | 5 |
| 75 | Air-Blown Entrained-Flow Gasification of Biomass: Influence of Operating Conditions on Tar Generation. Energy & Fuels, 2017, 31, 10924-10932. | 2.5 | 17 |
| 76 | Working Fluid Selection and Optimal Power-to-Weight Ratio for ORC in Long-Haul Trucks. Energy Procedia, 2017, 129, 754-761. | 1.8 | 11 |
| 77 | Techno-Economic Analysis of Waste Heat Recovery with ORC from Fluctuating Industrial Sources. Energy Procedia, 2017, 129, 503-510. | 1.8 | 40 |
| 78 | Material compatibility of ORC working fluids with polymers. Energy Procedia, 2017, 129, 137-144. | 1.8 | 8 |
| 79 | Impact of HTC reaction conditions on the hydrochar properties and CO2 gasification properties of spent grains. Fuel Processing Technology, 2017, 167, 663-669. | 3.7 | 51 |
| 80 | Influence of Operating Parameters and System Design on Efficiency of Biomass and Biogas Based SOFC Systems. ECS Transactions, 2017, 78, 219-227. | 0.3 | 0 |
| 81 | Corrigendum to â€œDevelopment of a new empirical correlation for the prediction of the onset of the deterioration of heat transfer to supercritical water in vertical tubesâ€•[Int. J. Heat Mass Transfer 102C (2016) 133â€“141]. International Journal of Heat and Mass Transfer, 2017, 113, 1332. | 2.5 | 0 |
| 82 | On the adhesive JKR contact and rolling models for reduced particle stiffness discrete element simulations. Powder Technology, 2017, 319, 472-482. | 2.1 | 78 |
| 83 | Air-Blown Entrained Flow Gasification of Biocoal: Gasification Kinetics and Char Behavior. Energy & Fuels, 2017, 31, 9568-9575. | 2.5 | 5 |
| 84 | Economic Feasibility of Organic Rankine Cycles (ORC) in Different Transportation Sectors. Energy Procedia, 2017, 105, 1401-1407. | 1.8 | 9 |
| 85 | The role of gasification reactions during pulverized solid fuel combustion: A detailed char combustion model based on measurements of char structure and kinetics for coal and pre-treated biomass. Combustion and Flame, 2017, 184, 117-135. | 2.8 | 32 |
| 86 | A state of art of review on interactions between energy performance and indoor environment quality in Passive House buildings. Renewable and Sustainable Energy Reviews, 2017, 72, 1303-1319. | 8.2 | 93 |
| 87 | Dynamic Simulation of an Organic Rankine Cycleâ€”Detailed Model of a Kettle Boiler. Energies, 2017, 10, 548. | 1.6 | 11 |
| 88 | Hydrodynamics and heat transfer around a horizontal tube immersed in a Geldart b bubbling fluidized bed. International Journal of Computational Methods and Experimental Measurements, 2017, 6, 71-85. | 0.1 | 6 |
| 89 | Co-combustion of Solid Biofuels in Coal-Fired Power Plants. , 2017, , 1-24. | | 0 |
| 90 | Comparison of synthetic natural gas production pathways for the storage of renewable energy. Wiley Interdisciplinary Reviews: Energy and Environment, 2016, 5, 327-350. | 1.9 | 28 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Development of a new empirical correlation for the prediction of the onset of the deterioration of heat transfer to supercritical water in vertical tubes. International Journal of Heat and Mass Transfer, 2016, 102, 133-141. | 2.5 | 37 |
| 92 | Thermo-Economic Evaluation of Novel Flexible CAES/CCPP Concept. , 2016, , . | | 0 |
| 93 | Influence of Stoichiometry and Mixing on NO<sub>x</sub> Reduction in Waste-to-Energy Plants. Energy & Fuels, 2016, 30, 10893-10899. | 2.5 | 8 |
| 94 | Investigation of Different Operation Strategies to Provide Balance Energy With an Industrial CHP Plant Using Dynamic Simulation. , 2016, , . | | 0 |
| 95 | Variability of wind and solar power â€“ An assessment of the current situation in the European Union based on the year 2014. Energy, 2016, 106, 147-161. | 4.5 | 65 |
| 96 | Alkali Vapor Condensation on Heat Exchanging Surfaces: Laboratory-Scale Experiments and a Mechanistic CFD Modeling Approach. Energy & Fuels, 2016, 30, 9793-9800. | 2.5 | 16 |
| 97 | Experimental Investigation of Nitrogen Species Distribution in Wood Combustion and Their Influence on NO<sub>x</sub> Reduction by Combining Air Staging and Ammonia Injection. Energy & Fuels, 2016, 30, 5816-5824. | 2.5 | 19 |
| 98 | Innovative CHP concept for ORC and its benefit compared to conventional concepts. Applied Energy, 2016, 183, 478-490. | 5.1 | 33 |
| 99 | Working fluid selection for organic Rankine cycles â€“ Impact of uncertainty of fluid properties. Energy, 2016, 109, 987-997. | 4.5 | 52 |
| 100 | A parametric approach for the valuation of power plant flexibility options. Energy Reports, 2016, 2, 40-47. | 2.5 | 81 |
| 101 | Experimental study of an ORC (Organic Rankine Cycle) and analysis of R1233zd-E as a drop-in replacement for R245fa for low temperature heat utilization. Energy, 2016, 103, 660-671. | 4.5 | 120 |
| 102 | Reaction Kinetics of Pressurized Entrained Flow Coal Gasification: Computational Fluid Dynamics Simulation of a 5â€‰MW Siemens Test Gasifier. Journal of Energy Resources Technology, Transactions of the ASME, 2016, 138, . | 1.4 | 14 |
| 103 | Comparison of high temperature chars of wheat straw and rice husk with respect to chemistry, morphology and reactivity. Biomass and Bioenergy, 2016, 86, 76-87. | 2.9 | 57 |
| 104 | Direkte thermo-chemische Umwandlung (Verbrennung). , 2016, , 815-1058. | | 0 |
| 105 | Numerical simulation of entrained flow gasification: Reaction kinetics and char structure evolution. Fuel Processing Technology, 2015, 138, 314-324. | 3.7 | 40 |
| 106 | Influence of fast pyrolysis conditions on yield and structural transformation of biomass chars. Fuel Processing Technology, 2015, 140, 205-214. | 3.7 | 94 |
| 107 | Optimal Heat Source Temperature for thermodynamic optimization ofÂsub-critical Organic Rankine Cycles. Energy, 2015, 88, 897-906. | 4.5 | 15 |
| 108 | A detailed techno-economic analysis of heat integration in high temperature electrolysis for efficient hydrogen production. International Journal of Hydrogen Energy, 2015, 40, 38-50. | 3.8 | 56 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | School building energy performance and classroom air environment implemented with the heat recovery heat pump and displacement ventilation system. Applied Energy, 2014, 114, 58-68. | 5.1 | 42 |
| 110 | Effect and comparison of different working fluids on a two-stage organic rankine cycle (ORC) concept. Applied Thermal Engineering, 2014, 63, 246-253. | 3.0 | 106 |
| 111 | Fluidized bed gasification of biomass â€“ In bed investigation of gas and tar formation. Fuel, 2014, 117, 1248-1255. | 3.4 | 33 |
| 112 | Coupled simulation of a tangentially hard coal fired 700Â°C boiler. Fuel, 2014, 122, 149-163. | 3.4 | 85 |
| 113 | Investigation of hydrofluoroolefins as potential working fluids in organic Rankine cycle for geothermal power generation. Energy, 2014, 67, 106-116. | 4.5 | 53 |
| 114 | Economic comparison of ORC (Organic Rankine cycle) processes at different scales. Energy, 2014, 74, 694-706. | 4.5 | 45 |
| 115 | Small-scale production of synthetic natural gas by allothermal biomass gasification. International Journal of Energy Research, 2013, 37, 1318-1330. | 2.2 | 44 |
| 116 | Optical measurement of tars in a fluidized bed gasifier: influence of fuel type and gasification parameters on their formation. Biomass Conversion and Biorefinery, 2013, 3, 157-167. | 2.9 | 8 |
| 117 | Performance of entrained flow and fluidised bed biomass gasifiers on different scales. Energy Conversion and Management, 2013, 69, 95-106. | 4.4 | 63 |
| 118 | Gasification kinetics during entrained flow gasification â€“ Part III: Modelling and optimisation of entrained flow gasifiers. Fuel, 2013, 107, 170-182. | 3.4 | 40 |
| 119 | Gasification kinetics during entrained flow gasification â€“ Part II: Intrinsic char reaction rate and surface area development. Fuel, 2013, 107, 653-661. | 3.4 | 56 |
| 120 | IGCCâ€“EPI: Decentralized concept of a highly load-flexible IGCC power plant for excess power integration. Applied Energy, 2013, 104, 869-879. | 5.1 | 17 |
| 121 | Oxyfuel combustion of lignite in a non-stoichiometric operating two burner arrangement. Fuel, 2013, 104, 398-408. | 3.4 | 7 |
| 122 | Gasification kinetics during entrained flow gasification â€“ Part I; Devolatilisation and char deactivation. Fuel, 2013, 103, 663-671. | 3.4 | 52 |
| 123 | Experimental Study of High-Temperature Chlorine-Induced Corrosion in Dependence of Gas Velocity. Energy & Fuels, 2013, 27, 5628-5639. | 2.5 | 17 |
| 124 | Energy efficiency monitoring â€“ which sensors are really needed?. Waste Management and Research, 2013, 31, 525-531. | 2.2 | 1 |
| 125 | Validation of CFD-Models for Non-stoichiometric Oxycoal Combustion. , 2013, , 1177-1188. | | 0 |
| 126 | The potential of small-scale SNG production from biomass gasification. Biomass Conversion and Biorefinery, 2012, 2, 275-283. | 2.9 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Sensitivity analysis of different devolatilisation models on predicting ignition point position during pulverized coal combustion in O2/N2 and O2/CO2 atmospheres. Fuel, 2012, 101, 23-37. | 3.4 | 41 |
| 128 | Improved numerical prediction of ash formation and deposition using a novel developed char fragmentation model. Fuel, 2012, 98, 103-110. | 3.4 | 17 |
| 129 | Influence of pressure, temperature and steam on tar and gas in allothermal fluidized bed gasification. Fuel, 2012, 99, 204-209. | 3.4 | 98 |
| 130 | Validation of spectral gas radiation models under oxyfuel conditions â€“ Part C: Validation of simplified models. International Journal of Greenhouse Gas Control, 2012, 11, 34-51. | 2.3 | 29 |
| 131 | Coal and char properties in high temperature entrained flow gasification. Energy, 2012, 45, 176-182. | 4.5 | 47 |
| 132 | Reduction of the flue gas recirculation rate in oxycoal processes by means of non-stoichiometric burner operation. Energy, 2012, 45, 117-124. | 4.5 | 7 |
| 133 | Ash deposition modeling using a visco-elastic approach. Fuel, 2012, 102, 145-155. | 3.4 | 39 |
| 134 | Entrained flow gasification of biocoal from hydrothermal carbonization. Fuel, 2012, 102, 396-403. | 3.4 | 64 |
| 135 | Tar formation in a steam-O2 blown CFB gasifier and a steam blown PBFB gasifier (BabyHPR): Comparison between different on-line measurement techniques and the off-line SPA sampling and analysis method. Fuel Processing Technology, 2012, 100, 16-29. | 3.7 | 18 |
| 136 | Experimental investigation of high temperature and high pressure coal gasification. Applied Energy, 2012, 92, 279-285. | 5.1 | 86 |
| 137 | Evaluation, comparison and validation of deposition criteria for numerical simulation of slagging. Applied Energy, 2012, 93, 184-192. | 5.1 | 61 |
| 138 | Assessment of oxy-fuel, pre- and post-combustion-based carbon capture for future IGCC plants. Applied Energy, 2012, 94, 109-116. | 5.1 | 177 |
| 139 | Integrated system approach for increase of engine combined cycle efficiency. Energy Conversion and Management, 2012, 60, 36-44. | 4.4 | 33 |
| 140 | Waste heat recovery from a landfill gas-fired power plant. Renewable and Sustainable Energy Reviews, 2012, 16, 1779-1789. | 8.2 | 79 |
| 141 | Role of ZnCl<sub>2</sub> in High-Temperature Corrosion in a Bench-Scale Fluidized Bed Firing Simulated Waste Wood Pellets. Energy & Fuels, 2011, 25, 3476-3483. | 2.5 | 17 |
| 142 | Validation of spectral gas radiation models under oxyfuel conditions. Part A: Gas cell experiments. International Journal of Greenhouse Gas Control, 2011, 5, S76-S99. | 2.3 | 32 |
| 143 | Validation of spectral gas radiation models under oxyfuel conditionsâ€”Part B: Natural gas flame experiments. International Journal of Greenhouse Gas Control, 2011, 5, S66-S75. | 2.3 | 20 |
| 144 | A novel IGCC plant with membrane oxygen separation and carbon capture by carbonationâ€“calcinations loop. International Journal of Greenhouse Gas Control, 2011, 5, 1176-1183. | 2.3 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Study of the effects of low and high stoichiometry on the flame stabilization during oxycoal combustion with Non-Stoichiometric Burners. , 2011, , . | | 0 |
| 146 | Modelling, comparison and operation experiences of entrained flow gasifier. Energy Conversion and Management, 2011, 52, 2135-2141. | 4.4 | 58 |
| 147 | Anforderungen an zukÃ¼nftige Kraftwerke. Chemie-Ingenieur-Technik, 2011, 83, 1792-1804. | 0.4 | 4 |
| 148 | Thermische Nutzung von Biomasse und Reststoffen in Deutschland. Chemie-Ingenieur-Technik, 2011, 83, 1897-1911. | 0.4 | 5 |
| 149 | A combustion concept for oxyfuel processes with low recirculation rate â€“ Experimental validation. Combustion and Flame, 2011, 158, 1542-1552. | 2.8 | 43 |
| 150 | Dynamic modeling and optimal control strategy of waste heat recovery Organic Rankine Cycles. Applied Energy, 2011, 88, 2183-2190. | 5.1 | 390 |
| 151 | Structured exergy analysis of an integrated gasification combined cycle (IGCC) plant with carbon capture. Energy, 2011, 36, 1480-1487. | 4.5 | 48 |
| 152 | Flame temperatures and species concentrations in non-stoichiometric oxycoal flames. Fuel, 2011, 90, 3109-3117. | 3.4 | 12 |
| 153 | Numerical investigation of influence of homogeneous/heterogeneous ignition/combustion mechanisms on ignition point position during pulverized coal combustion in oxygen enriched and recycled flue gases atmosphere. International Journal of Heat and Mass Transfer, 2011, 54, 921-931. | 2.5 | 53 |
| 154 | High efficient waste-to-energy in Amsterdam: getting ready for the next steps. Waste Management and Research, 2011, 29, S20-S29. | 2.2 | 44 |
| 155 | Analysis and Comparison of Reactivity and CO2 Capture Capacity of Fresh Calcium-Based Sorbents and Samples From a Lab-Scale Dual Fluidized Bed Calcium Looping Facility. Journal of Engineering for Gas Turbines and Power, 2011, 133, . | 0.5 | 2 |
| 156 | Simulation of Water-Gas Shift Membrane Reactor for Integrated Gasification Combined Cycle Plant with CO2 Capture. Strojniski Vestnik/Journal of Mechanical Engineering, 2011, 57, 911-926. | 0.6 | 12 |
| 157 | Biomass fired hot air gas turbine with fluidized bed combustion. Applied Thermal Engineering, 2010, 30, 1594-1600. | 3.0 | 25 |
| 158 | TG-FTIR characterization of coal and biomass single fuels and blends under slow heating rate conditions: Partitioning of the fuel-bound nitrogen. Fuel Processing Technology, 2010, 91, 103-115. | 3.7 | 109 |
| 159 | Modelling of an IGCC plant with carbon capture for 2020. Fuel Processing Technology, 2010, 91, 934-941. | 3.7 | 75 |
| 160 | Parametric investigation of the calcium looping process for CO2 capture in a 10kWth dual fluidized bed. International Journal of Greenhouse Gas Control, 2010, 4, 776-784. | 2.3 | 135 |
| 161 | Power Generation from Solid Fuels. Power Systems, 2010, , . | 0.3 | 102 |
| 162 | Analysis and Comparison of Reactivity and CO2 Capture Capacity of Fresh Calcium-Based Sorbents and Samples From a Lab-Scale Dual Fluidized Bed Calcium Looping Facility. , 2010, , . | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Power Generation from Biomass and Waste. Power Systems, 2010, , 361-467. | 0.3 | 2 |
| 164 | Steam Power Stations for Electricity and Heat Generation. Power Systems, 2010, , 73-219. | 0.3 | 2 |
| 165 | Solid Fuels. Power Systems, 2010, , 15-56. | 0.3 | 1 |
| 166 | Coal-Fuelled Combined Cycle Power Plants. Power Systems, 2010, , 469-628. | 0.3 | 1 |
| 167 | Carbon Capture and Storage (CCS). Power Systems, 2010, , 629-667. | 0.3 | 1 |
| 168 | Combustion Systems for Solid Fossil Fuels. Power Systems, 2010, , 221-359. | 0.3 | 1 |
| 169 | Thermodynamic evaluation of small-scale systems with biomass gasifiers, solid oxide fuel cells with Ni/GDC anodes and gas turbines. Journal of Power Sources, 2009, 190, 461-475. | 4.0 | 75 |
| 170 | Biomass combustion in fluidized bed boilers: Potential problems and remedies. Fuel Processing Technology, 2009, 90, 21-50. | 3.7 | 1,125 |
| 171 | The fate of main gaseous and nitrogen species during fast heating rate devolatilization of coal and secondary fuels using a heated wire mesh reactor. Fuel Processing Technology, 2009, 90, 388-395. | 3.7 | 36 |
| 172 | Quantitative and kinetic TG-FTIR study of biomass residue pyrolysis: Dry distiller's grains with solubles (DDGS) and chicken manure. Journal of Analytical and Applied Pyrolysis, 2009, 85, 301-312. | 2.6 | 117 |
| 173 | Energetic and economic investigation of Organic Rankine Cycle applications. Applied Thermal Engineering, 2009, 29, 1809-1817. | 3.0 | 395 |
| 174 | Quantitative and Kinetic Thermogravimetric Fourier Transform Infrared (TG-FTIR) Study of Pyrolysis of Agricultural Residues: Influence of Different Pretreatments. Energy & Fuels, 2009, 23, 5695-5706. | 2.5 | 59 |
| 175 | Scale-up study on combustibility and emission formation with two biomass fuels (B quality wood and) Tj ETQq1 1 0.784314 rgBT /Ov | 2.9 | 45 |
| 176 | Combined Homo- and Heterogeneous Model for Mercury Speciation in Pulverized Fuel Combustion Flue Gases. Energy & Fuels, 2008, 22, 321-330. | 2.5 | 17 |
| 177 | Investigation of Biomasses and Chars Obtained from Pyrolysis of Different Biomasses with Solid-State <sup>13</sup>C and <sup>23</sup>Na Nuclear Magnetic Resonance Spectroscopy. Energy & Fuels, 2008, 22, 3523-3530. | 2.5 | 26 |
| 178 | Advanced Steam Generator Concepts for Oxy-Fuel Processes. , 2008, , 227-236. | | 0 |
| 179 | A Fluidized Bed Biomass Combustion Model with Discretized Population Balance. 1. Sensitivity Analysis. Energy & Fuels, 2007, 21, 2346-2356. | 2.5 | 6 |
| 180 | A Fluidized Bed Combustion Model with Discretized Population Balance. 2. Experimental Studies and Model Validation. Energy & Fuels, 2007, 21, 3709-3717. | 2.5 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Effect of Air-Staging on Mercury Speciation in Pulverized Fuel Co-combustion:Â Part 2. Energy & Fuels, 2007, 21, 1891-1894. | 2.5 | 5 |
| 182 | Effect of Secondary Fuels and Combustor Temperature on Mercury Speciation in Pulverized Fuel Co-combustion:Â Part 1. Energy & Fuels, 2007, 21, 1883-1890. | 2.5 | 5 |
| 183 | TG-FTIR pyrolysis of coal and secondary biomass fuels: Determination of pyrolysis kinetic parameters for main species and NOx precursors. Fuel, 2007, 86, 2367-2376. | 3.4 | 118 |
| 184 | Measurements Inside a Bluff-Body Stabilized Gas Turbine Combustor for Application of Pressurized Biomass Derived Low Calorific Value Fuel Gas and Comparison of the Results: Part 2. , 2006, , . | | 0 |
| 185 | Alkali Metals in Circulating Fluidized Bed Combustion of Biomass and Coal: Measurements and Chemical Equilibrium Analysis. Energy & Fuels, 2005, 19, 1889-1897. | 2.5 | 60 |
| 186 | Measurements Inside a Bluff-Body Stabilized Gas Turbine Combustor for Application of Pressurized Biomass Derived Low Calorific Value Fuel Gas and Comparison of the Results. , 2005, , . | | 0 |
| 187 | Biomass gasification integrated with pyrolysis in a circulating fluidised bed. Solar Energy, 2004, 76, 345-349. | 2.9 | 64 |
| 188 | Thermogravimetry as a tool to classify waste components to be used for energy generation. Journal of Analytical and Applied Pyrolysis, 2004, 71, 883-900. | 2.6 | 158 |
| 189 | Feasibility study of wood biomass gasification/molten carbonate fuel cell power systemâ€"comparative characterization of fuel cell and gas turbine systems. Journal of Power Sources, 2004, 138, 31-40. | 4.0 | 48 |
| 190 | Biomass pyrolysis/gasification for product gas production: the overall investigation of parametric effects. Energy Conversion and Management, 2003, 44, 1875-1884. | 4.4 | 201 |
| 191 | Catalytic pyrolysis of biomass for hydrogen rich fuel gas production. Energy Conversion and Management, 2003, 44, 2289-2296. | 4.4 | 142 |
| 192 | Thermochemical conversion of brown coal and biomass in a pressurised fluidised bed gasifier with hot gas filtration using ceramic channel filters: measurements and gasifier modelling. Applied Energy, 2003, 74, 425-437. | 5.1 | 41 |
| 193 | Biomass and fossil fuel conversion by pressurised fluidised bed gasification using hot gas ceramic filters as gas cleaning. Biomass and Bioenergy, 2003, 25, 59-83. | 2.9 | 71 |
| 194 | Gas turbine combustor for biomass derived LCV gas, a first approach towards fuel-NOx modelling and experimental validation. Applied Thermal Engineering, 2002, 22, 959-970. | 3.0 | 29 |
| 195 | Legislative and environmental issues on the use of ash from coal and municipal sewage sludge co-firing as construction material. Waste Management, 2001, 21, 17-31. | 3.7 | 61 |
| 196 | Tar quantification with a new online analyzing method. Biomass and Bioenergy, 2000, 18, 79-86. | 2.9 | 54 |
| 197 | Effect of Co-Combustion of Sewage Sludge and Biomass on Emissions and Heavy Metals Behaviour. Chemical Engineering Research and Design, 2000, 78, 33-39. | 2.7 | 35 |
| 198 | Generation and conversion of carbonaceous fine particles during bubbling fluidised bed gasification of a biomass fuel. Fuel, 1999, 78, 1473-1481. | 3.4 | 49 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | In-situ-Bestimmung momentaner Reaktionsraten von Brennstoffpartikeln durch simultane Messung von Partikeltemperatur und GrÃ¶ÃŸe. Chemie-Ingenieur-Technik, 1999, 71, 857-861. | 0.4 | 0 |
| 200 | Pulverized Coal Combustion: Concept for the Lowest NOx Emissions. Chemical Engineering and Technology, 1998, 21, 51-55. | 0.9 | 6 |
| 201 | Konzepte fÃ¼r niedrigste NOx-Emissionen bei der Kohlenstaubverbrennung. Chemie-Ingenieur-Technik, 1998, 70, 165-170. | 0.4 | 2 |
| 202 | A kinetic model for the prediction of no emissions from staged combustion of pulverized coal. Proceedings of the Combustion Institute, 1998, 27, 3037-3044. | 0.3 | 41 |
| 203 | Study on trace metal partitioning in pulverized combustion of bituminous coal and dry sewage sludge. Waste Management, 1998, 18, 433-444. | 3.7 | 55 |
| 204 | Investigation of slagging in pulverized fuel co-combustion of biomass and coal at a pilot-scale test facility. Fuel Processing Technology, 1998, 54, 109-125. | 3.7 | 98 |
| 205 | Co-Pyrolysis of Coal/Biomass and Coal/Sewage Sludge Mixtures. , 1998, , . | | 2 |
| 206 | Distribution of fuel nitrogen in pyrolysis products used for reburning. Fuel, 1997, 76, 201-205. | 3.4 | 42 |
| 207 | Investigations in Combined Combustion of Biomass and Coal in Power Plant Technology. Energy & Fuels, 1996, 10, 789-796. | 2.5 | 48 |
| 208 | Basic effects on NOx emissions in air staging and reburning at a bench-scale test facility. Fuel, 1996, 75, 560-564. | 3.4 | 184 |
| 209 | Comparison of coherent anti-Stokes Raman-scattering thermometry with thermocouple measurements and model predictions in both natural-gas and coal-dust flames. Applied Optics, 1995, 34, 3303. | 2.1 | 20 |
| 210 | The effect of different reburning fuels on NOx-reduction. Fuel, 1994, 73, 1443-1446. | 3.4 | 55 |
| 211 | Effect of coal blending and particle size on NOx emission and burnout. Fuel, 1994, 73, 1447-1452. | 3.4 | 79 |