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	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
2	Biomass combustion in fluidized bed boilers: Potential problems and remedies. Fuel Processing Technology, 2009, 90, 21-50.	3.7	1,125
3	Energetic and economic investigation of Organic Rankine Cycle applications. Applied Thermal Engineering, 2009, 29, 1809-1817.	3.0	395
4	Dynamic modeling and optimal control strategy of waste heat recovery Organic Rankine Cycles. Applied Energy, 2011, 88, 2183-2190.	5.1	390
5	Power-to-liquidviasynthesis of methanol, DME or Fischerâ€“Tropsch-fuels: a review. Energy and Environmental Science, 2020, 13, 3207-3252.	15.6	328
6	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
7	Biomass pyrolysis/gasification for product gas production: the overall investigation of parametric effects. Energy Conversion and Management, 2003, 44, 1875-1884.	4.4	201
8	Basic effects on NOx emissions in air staging and reburning at a bench-scale test facility. Fuel, 1996, 75, 560-564.	3.4	184
9	Assessment of oxy-fuel, pre- and post-combustion-based carbon capture for future IGCC plants. Applied Energy, 2012, 94, 109-116.	5.1	177
10	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
11	Catalytic pyrolysis of biomass for hydrogen rich fuel gas production. Energy Conversion and Management, 2003, 44, 2289-2296.	4.4	142
12	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
13	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
14	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
15	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
16	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
17	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
18	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

#	Article	IF	Citations
19	Power Generation from Solid Fuels. Power Systems, 2010, , .	0.3	102
20	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
21	Influence of pressure, temperature and steam on tar and gas in allothermal fluidized bed gasification. Fuel, 2012, 99, 204-209.	3.4	98
22	Influence of fast pyrolysis conditions on yield and structural transformation of biomass chars. Fuel Processing Technology, 2015, 140, 205-214.	3.7	94
23	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
24	Experimental investigation of high temperature and high pressure coal gasification. Applied Energy, 2012, 92, 279-285.	5.1	86
25	Coupled simulation of a tangentially hard coal fired 700Â°C boiler. Fuel, 2014, 122, 149-163.	3.4	85
26	A parametric approach for the valuation of power plant flexibility options. Energy Reports, 2016, 2, 40-47.	2.5	81
27	Effect of coal blending and particle size on NOx emission and burnout. Fuel, 1994, 73, 1447-1452.	3.4	79
28	Waste heat recovery from a landfill gas-fired power plant. Renewable and Sustainable Energy Reviews, 2012, 16, 1779-1789.	8.2	79
29	On the adhesive JKR contact and rolling models for reduced particle stiffness discrete element simulations. Powder Technology, 2017, 319, 472-482.	2.1	78
30	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
31	Modelling of an IGCC plant with carbon capture for 2020. Fuel Processing Technology, 2010, 91, 934-941.	3.7	75
32	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
33	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
34	Biomass gasification integrated with pyrolysis in a circulating fluidised bed. Solar Energy, 2004, 76, 345-349.	2.9	64
35	Entrained flow gasification of biocoal from hydrothermal carbonization. Fuel, 2012, 102, 396-403.	3.4	64
36	Performance of entrained flow and fluidised bed biomass gasifiers on different scales. Energy Conversion and Management, 2013, 69, 95-106.	4.4	63

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37	Simulation of a reversible SOFC with Aspen Plus. International Journal of Hydrogen Energy, 2017, 42, 10329-10340.	3.8	63
38	Coarse-grained CFD-DEM simulation of biomass gasification in a fluidized bed reactor. Fuel, 2019, 255, 115790.	3.4	63
39	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
40	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
41	Evaluation, comparison and validation of deposition criteria for numerical simulation of slagging. Applied Energy, 2012, 93, 184-192.	5.1	61
42	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
43	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
44	Modelling, comparison and operation experiences of entrained flow gasifier. Energy Conversion and Management, 2011, 52, 2135-2141.	4.4	58
45	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
46	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
47	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
48	Design of a MW-scale thermo-chemical energy storage reactor. Energy Reports, 2018, 4, 507-519.	2.5	56
49	The effect of different reburning fuels on NOx-reduction. Fuel, 1994, 73, 1443-1446.	3.4	55
50	Study on trace metal partitioning in pulverized combustion of bituminous coal and dry sewage sludge. Waste Management, 1998, 18, 433-444.	3.7	55
51	Tar quantification with a new online analyzing method. Biomass and Bioenergy, 2000, 18, 79-86.	2.9	54
52	Comprehensive investigation and comparison of TFM, DenseDPM and CFD-DEM for dense fluidized beds. Chemical Engineering Science, 2019, 196, 291-309.	1.9	54
53	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
54	Investigation of hydrofluoroolefins as potential working fluids in organic Rankine cycle for geothermal power generation. Energy, 2014, 67, 106-116.	4.5	53

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55	Gasification kinetics during entrained flow gasification â€“ Part I; Devolatilisation and char deactivation. Fuel, 2013, 103, 663-671.	3.4	52
56	Working fluid selection for organic Rankine cycles â€“ Impact of uncertainty of fluid properties. Energy, 2016, 109, 987-997.	4.5	52
57	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
58	Generation and conversion of carbonaceous fine particles during bubbling fluidised bed gasification of a biomass fuel. Fuel, 1999, 78, 1473-1481.	3.4	49
59	Investigations in Combined Combustion of Biomass and Coal in Power Plant Technology. Energy & Fuels, 1996, 10, 789-796.	2.5	48
60	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
61	Structured exergy analysis of an integrated gasification combined cycle (IGCC) plant with carbon capture. Energy, 2011, 36, 1480-1487.	4.5	48
62	Coal and char properties in high temperature entrained flow gasification. Energy, 2012, 45, 176-182.	4.5	47
63	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
64	Economic comparison of ORC (Organic Rankine cycle) processes at different scales. Energy, 2014, 74, 694-706.	4.5	45
65	Ash particle sticking and rebound behavior: A mechanistic explanation and modeling approach. Proceedings of the Combustion Institute, 2017, 36, 2341-2350.	2.4	45
66	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
67	High efficient waste-to-energy in Amsterdam: getting ready for the next steps. Waste Management and Research, 2011, 29, S20-S29.	2.2	44
68	Small-scale production of synthetic natural gas by allothermal biomass gasification. International Journal of Energy Research, 2013, 37, 1318-1330.	2.2	44
69	A combustion concept for oxyfuel processes with low recirculation rate â€“ Experimental validation. Combustion and Flame, 2011, 158, 1542-1552.	2.8	43
70	Distribution of fuel nitrogen in pyrolysis products used for reburning. Fuel, 1997, 76, 201-205.	3.4	42
71	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
72	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

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73	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
74	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
75	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
76	Advanced ORC architecture for geothermal combined heat and power generation. Energy, 2020, 205, 117967.	4.5	41
77	Gasification kinetics during entrained flow gasification â€“ Part III: Modelling and optimisation of entrained flow gasifiers. Fuel, 2013, 107, 170-182.	3.4	40
78	Numerical simulation of entrained flow gasification: Reaction kinetics and char structure evolution. Fuel Processing Technology, 2015, 138, 314-324.	3.7	40
79	Techno-Economic Analysis of Waste Heat Recovery with ORC from Fluctuating Industrial Sources. Energy Procedia, 2017, 129, 503-510.	1.8	40
80	Ash deposition modeling using a visco-elastic approach. Fuel, 2012, 102, 145-155.	3.4	39
81	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
82	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
83	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
84	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
85	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
86	Integrated system approach for increase of engine combined cycle efficiency. Energy Conversion and Management, 2012, 60, 36-44.	4.4	33
87	Fluidized bed gasification of biomass â€“ In bed investigation of gas and tar formation. Fuel, 2014, 117, 1248-1255.	3.4	33
88	Innovative CHP concept for ORC and its benefit compared to conventional concepts. Applied Energy, 2016, 183, 478-490.	5.1	33
89	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
90	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

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91	Organic Rankine Cycles (ORC) for mobile applications â€“ Economic feasibility in different transportation sectors. Applied Energy, 2017, 204, 1188-1197.	5.1	30
92	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
93	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
94	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
95	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
96	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
97	Simulation of Organic Rankine Cycle â€“ Quasi-steady state vs dynamic approach for optimal economic performance. Energy, 2019, 167, 619-640.	4.5	28
98	Investigation of Biomasses and Chars Obtained from Pyrolysis of Different Biomasses with Solid-State ¹³C and ²³Na Nuclear Magnetic Resonance Spectroscopy. Energy & Fuels, 2008, 22, 3523-3530.	2.5	26
99	Biomass fired hot air gas turbine with fluidized bed combustion. Applied Thermal Engineering, 2010, 30, 1594-1600.	3.0	25
100	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
101	Three dimensional multi fluid modeling of Geldart B bubbling fluidized bed with complex inlet geometries. Powder Technology, 2017, 312, 89-102.	2.1	23
102	Gasification kinetics of a bituminous coal at elevated pressures: Entrained flow experiments and numerical simulations. Fuel, 2017, 196, 210-216.	3.4	22
103	Char particle burning behavior: Experimental investigation of char structure evolution during pulverized fuel conversion. Fuel Processing Technology, 2018, 171, 361-373.	3.7	22
104	Experimental evaluation of an ORC-CHP architecture based on regenerative preheating for geothermal applications. Applied Energy, 2022, 315, 119057.	5.1	22
105	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
106	Oxygen-Blown Entrained Flow Gasification of Biomass: Impact of Fuel Parameters and Oxygen Stoichiometric Ratio. Energy & Fuels, 2017, 31, 3949-3959.	2.5	21
107	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
108	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

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109	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
110	Experimental Investigation of Nitrogen Species Distribution in Wood Combustion and Their Influence on NO_x Reduction by Combining Air Staging and Ammonia Injection. Energy & Fuels, 2016, 30, 5816-5824.	2.5	19
111	Impact of hydrothermal carbonization on combustion properties of residual biomass. Biomass Conversion and Biorefinery, 2022, 12, 2541-2552.	2.9	19
112	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
113	Theoretical analysis and experimental investigation of material compatibility between refrigerants and polymers. Energy, 2018, 163, 782-799.	4.5	18
114	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
115	Combined Homo- and Heterogeneous Model for Mercury Speciation in Pulverized Fuel Combustion Flue Gases. Energy & Fuels, 2008, 22, 321-330.	2.5	17
116	Role of ZnCl₂ in High-Temperature Corrosion in a Bench-Scale Fluidized Bed Firing Simulated Waste Wood Pellets. Energy & Fuels, 2011, 25, 3476-3483.	2.5	17
117	Improved numerical prediction of ash formation and deposition using a novel developed char fragmentation model. Fuel, 2012, 98, 103-110.	3.4	17
118	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
119	Experimental Study of High-Temperature Chlorine-Induced Corrosion in Dependence of Gas Velocity. Energy & Fuels, 2013, 27, 5628-5639.	2.5	17
120	Air-Blown Entrained-Flow Gasification of Biomass: Influence of Operating Conditions on Tar Generation. Energy & Fuels, 2017, 31, 10924-10932.	2.5	17
121	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
122	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
123	Experimental and numerical investigation of direct liquid injection into an ORC twin-screw expander. Energy, 2019, 178, 867-878.	4.5	16
124	Optimal Heat Source Temperature for thermodynamic optimization ofÂsub-critical Organic Rankine Cycles. Energy, 2015, 88, 897-906.	4.5	15
125	Experimental investigation, model validation and application of twin-screw expanders with different built-in volume ratios. Applied Energy, 2021, 282, 116139.	5.1	15
126	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

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127	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
128	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
129	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
130	Flame temperatures and species concentrations in non-stoichiometric oxycoal flames. Fuel, 2011, 90, 3109-3117.	3.4	12
131	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
132	The potential of small-scale SNG production from biomass gasification. Biomass Conversion and Biorefinery, 2012, 2, 275-283.	2.9	12
133	Airâ€Blown Entrainedâ€Flow Gasification of Biocoal from Hydrothermal Carbonization. Chemical Engineering and Technology, 2017, 40, 270-277.	0.9	12
134	Working Fluid Selection and Optimal Power-to-Weight Ratio for ORC in Long-Haul Trucks. Energy Procedia, 2017, 129, 754-761.	1.8	11
135	Dynamic Simulation of an Organic Rankine Cycleâ€”Detailed Model of a Kettle Boiler. Energies, 2017, 10, 548.	1.6	11
136	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
137	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
138	Fuel-specific devolatilization parameters for detailed comparison of pulverized biomass fuels. Fuel, 2021, 286, 119309.	3.4	10
139	Economic Feasibility of Organic Rankine Cycles (ORC) in Different Transportation Sectors. Energy Procedia, 2017, 105, 1401-1407.	1.8	9
140	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
141	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
142	Influence of Stoichiometry and Mixing on NO_x Reduction in Waste-to-Energy Plants. Energy & Fuels, 2016, 30, 10893-10899.	2.5	8
143	Material compatibility of ORC working fluids with polymers. Energy Procedia, 2017, 129, 137-144.	1.8	8
144	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

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145	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
146	Oxyfuel combustion of lignite in a non-stoichiometric operating two burner arrangement. Fuel, 2013, 104, 398-408.	3.4	7
147	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
148	The Reaction Kinetics of Gaseous Alkali Capture by Kaolin in Syngas Atmosphere. Chemical Engineering and Technology, 2018, 41, 1881-1888.	0.9	7
149	Thermo-hydraulic simulation of district heating systems. Geothermics, 2019, 82, 244-253.	1.5	7
150	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
151	Applying Reaction Kinetics to Pseudohomogeneous Methanation Modeling in Fixedâ€Bed Reactors. Chemical Engineering and Technology, 2020, 43, 1224-1233.	0.9	7
152	Pulverized Coal Combustion: Concept for the Lowest NOx Emissions. Chemical Engineering and Technology, 1998, 21, 51-55.	0.9	6
153	A Fluidized Bed Biomass Combustion Model with Discretized Population Balance. 1. Sensitivity Analysis. Energy & Fuels, 2007, 21, 2346-2356.	2.5	6
154	Batch evaporation power cycle: Influence of thermal inertia and residence time. Energy, 2018, 157, 1090-1101.	4.5	6
155	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
156	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
157	Effect of Air-Staging on Mercury Speciation in Pulverized Fuel Co-combustion:Â Part 2. Energy & Fuels, 2007, 21, 1891-1894.	2.5	5
158	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
159	Thermische Nutzung von Biomasse und Reststoffen in Deutschland. Chemie-Ingenieur-Technik, 2011, 83, 1897-1911.	0.4	5
160	Online corrosion measurements in small- and mid-scale during pulverised biomass/coal co-combustion. Energy Procedia, 2017, 120, 309-316.	1.8	5
161	Air-Blown Entrained Flow Gasification of Biocoal: Gasification Kinetics and Char Behavior. Energy & Fuels, 2017, 31, 9568-9575.	2.5	5
162	Effects of Naphthalene on the Performance of Ni/YSZ Anode-Supported SOFCs. ECS Transactions, 2019, 91, 697-706.	0.3	5

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163	Alkali removal with mineral sorbents â€“ Part II: Fixed-bed experiments and model validation. Powder Technology, 2021, 389, 406-415.	2.1	5
164	Alkali removal with mineral sorbents â€“ Part I: Sorption capacity and reaction kinetics. Powder Technology, 2021, 390, 190-196.	2.1	5
165	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
166	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
167	A Fluidized Bed Combustion Model with Discretized Population Balance. 2. Experimental Studies and Model Validation. Energy & Fuels, 2007, 21, 3709-3717.	2.5	4
168	Anforderungen an zukÃ¼nftige Kraftwerke. Chemie-Ingenieur-Technik, 2011, 83, 1792-1804.	0.4	4
169	Experimental and numerical investigation of an advanced injection cooling concept for Organic Rankine Cycles. Energy Conversion and Management, 2020, 224, 113342.	4.4	4
170	Numerical simulation of gasification with a one-dimensional particle submodel for char structure evolution. Fuel, 2021, 293, 120492.	3.4	4
171	A collection of model parameters describing the gasification behavior of different fuels under entrained flow conditions. Fuel, 2021, 296, 120536.	3.4	4
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