

Jochen StrÄhle

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8182630/publications.pdf>

Version: 2024-02-01

62
papers

2,273
citations

201575

27
h-index

223716

46
g-index

62
all docs

62
docs citations

62
times ranked

1465
citing authors

#	ARTICLE	IF	CITATIONS
1	Release of nitrogen, sulfur and chlorine species from coal in carbon dioxide atmosphere. <i>Fuel</i> , 2021, 284, 119279.	3.4	15
2	Special Issue "Thermochemical Conversion Processes for Solid Fuels and Renewable Energies" <i>Applied Sciences (Switzerland)</i> , 2021, 11, 1907.	1.3	5
3	Design of a 1 MWth Pilot Plant for Chemical Looping Gasification of Biogenic Residues. <i>Energies</i> , 2021, 14, 2581.	1.6	26
4	Acceleration of Load Changes by Controlling the Operating Parameters in CFB Co-Combustion. <i>Frontiers in Energy Research</i> , 2021, 9, .	1.2	2
5	Experimental and modeling assessment of sulfur release from coal under low and high heating rates. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 4053-4061.	2.4	11
6	Efficient CO ₂ capture from lime production by an indirectly heated carbonate looping process. <i>International Journal of Greenhouse Gas Control</i> , 2021, 112, 103430.	2.3	12
7	Techno-economic assessment of alternative fuels in second-generation carbon capture and storage processes. <i>Mitigation and Adaptation Strategies for Global Change</i> , 2020, 25, 149-164.	1.0	9
8	Experimental measurements for torrefied biomass Co-combustion in a 1 MWth pulverized coal-fired furnace. <i>Journal of the Energy Institute</i> , 2020, 93, 833-846.	2.7	23
9	Combustion of solid recovered fuels within the calcium looping process "Experimental demonstration at 1 MWth scale. <i>Experimental Thermal and Fluid Science</i> , 2020, 113, 110023.	1.5	21
10	Performance of the carbonator and calciner during long-term carbonate looping tests in a 1 MWth pilot plant. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103578.	3.3	17
11	Flexibility of CFB Combustion: An Investigation of Co-Combustion with Biomass and RDF at Part Load in Pilot Scale. <i>Energies</i> , 2020, 13, 4665.	1.6	10
12	Simulation Study of the Formation of Corrosive Gases in Coal Combustion in an Entrained Flow Reactor. <i>Energies</i> , 2020, 13, 4523.	1.6	6
13	Simulation of a CFB Boiler Integrated With a Thermal Energy Storage System During Transient Operation. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	10
14	Euler-Lagrange-Modell zur Simulation des Carbonate-Looping-Prozesses. <i>Chemie-Ingenieur-Technik</i> , 2020, 92, 648-658.	0.4	3
15	Process Control Strategies in Chemical Looping Gasification "A Novel Process for the Production of Biofuels Allowing for Net Negative CO ₂ Emissions. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4271.	1.3	34
16	Operation of a 1 MWth calcium looping pilot plant firing waste-derived fuels in the calciner. <i>Powder Technology</i> , 2020, 372, 267-274.	2.1	17
17	CO ₂ capture from waste-to-energy plants: Techno-economic assessment of novel integration concepts of calcium looping technology. <i>Resources, Conservation and Recycling</i> , 2020, 162, 104973.	5.3	50
18	Investigation of chemical looping combustion of natural gas at 1 MWth scale. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 4353-4360.	2.4	25

#	ARTICLE	IF	CITATIONS
19	Scale-up of the carbonate looping process to a 20 MWth pilot plant based on long-term pilot tests. International Journal of Greenhouse Gas Control, 2019, 88, 332-341.	2.3	18
20	Investigation of gas and particle radiation modelling in wet oxy-coal combustion atmospheres. International Journal of Heat and Mass Transfer, 2019, 133, 1026-1040.	2.5	26
21	CFD Simulation of an Oxy-fuel Demonstration Power Plant with Application of a WSGG radiation model. Energy Procedia, 2019, 158, 1993-1998.	1.8	3
22	HTWâ„¢-gasification of high volatile bituminous coal in a 500 kWth pilot plant. Fuel, 2019, 250, 306-314.	3.4	15
23	Techno-economic assessment of polygeneration based on fluidized bed gasification. Fuel, 2019, 250, 285-291.	3.4	10
24	Coarse grain 3D CFD-DEM simulation and validation with capacitance probe measurements in a circulating fluidized bed. Chemical Engineering Science, 2019, 196, 37-53.	1.9	35
25	Development and validation of a 1D process model with autothermal operation of a 1 MW th chemical looping pilot plant. International Journal of Greenhouse Gas Control, 2018, 73, 29-41.	2.3	26
26	Numerical CFD simulation of 1 MWth circulating fluidized bed using the coarse grain discrete element method with homogenous drag models and particle size distribution. Fuel Processing Technology, 2018, 169, 84-93.	3.7	27
27	Investigation of the fuel influence on the carbonate looping process in 1 MWth scale. Fuel Processing Technology, 2018, 169, 170-177.	3.7	30
28	Assessment of the operability of a 20 MWth calcium looping demonstration plant by advanced process modelling. International Journal of Greenhouse Gas Control, 2018, 75, 224-234.	2.3	9
29	Reactive two-fluid model for chemical looping combustion Simulation of fuel and air reactors. International Journal of Greenhouse Gas Control, 2018, 76, 175-192.	2.3	24
30	Numerical investigation and comparison of coarse grain CFD DEM and TFM in the case of a 1 MW th fluidized bed carbonator simulation. Chemical Engineering Science, 2017, 163, 189-205.	1.9	61
31	Euler-Euler CFD simulation of the fuel reactor of a 1 MWth chemical-looping pilot plant: Influence of the drag models and specularly coefficient. Fuel, 2017, 200, 435-446.	3.4	28
32	Experimental investigations in a demonstration plant for fluidized bed gasification of multiple feedstockâ„¢s in 0.5 MW th scale. Fuel, 2017, 205, 286-296.	3.4	23
33	Quantification of the influence of parameters determining radiative heat transfer in an oxy-fuel operated boiler. Fuel Processing Technology, 2017, 157, 76-89.	3.7	33
34	Chemical looping combustion of hard coal and torrefied biomass in a 1 MW th pilot plant. International Journal of Greenhouse Gas Control, 2017, 65, 149-159.	2.3	88
35	Long-term pilot testing of the carbonate looping process in 1 MWth scale. Fuel, 2017, 210, 892-899.	3.4	47
36	Long-term Carbonate Looping Testing in a 1 MWth Pilot Plant with Hard Coal and Lignite. Energy Procedia, 2017, 114, 179-190.	1.8	27

#	ARTICLE	IF	CITATIONS
37	The EU-FP7 Project SUCCESS – Scale-up of Oxygen Carrier for Chemical Looping Combustion using Environmentally Sustainable Materials. <i>Energy Procedia</i> , 2017, 114, 395-406.	1.8	21
38	Release of sulfur and chlorine gas species during coal combustion and pyrolysis in an entrained flow reactor. <i>Fuel</i> , 2017, 201, 105-110.	3.4	46
39	Technical and Economical Assessment of the Indirectly Heated Carbonate Looping Process. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2016, 138, .	1.4	22
40	Comparison of CFD Simulations with Measurements of Gaseous Sulfur Species Concentrations in a Pulverized Coal Fired 1 MW _{th} Furnace. <i>Energy & Fuels</i> , 2016, 30, 9836-9849.	2.5	9
41	Sulfur and Chlorine Gas Species Formation during Coal Pyrolysis in Nitrogen and Carbon Dioxide Atmosphere. <i>Energy & Fuels</i> , 2016, 30, 7713-7720.	2.5	34
42	Design and operation of a 300 kW _{th} indirectly heated carbonate looping pilot plant. <i>International Journal of Greenhouse Gas Control</i> , 2016, 54, 272-281.	2.3	30
43	Comparison of three different CFD methods for dense fluidized beds and validation by a cold flow experiment. <i>Particuology</i> , 2016, 29, 34-47.	2.0	46
44	Chemical-Looping Combustion of Hard Coal: Autothermal Operation of a 1 MW _{th} Pilot Plant. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2016, 138, .	1.4	64
45	Extended Euler–Euler model for the simulation of a 1 MW _{th} chemical looping pilot plant. <i>Energy</i> , 2015, 93, 2395-2405.	4.5	28
46	3-D numerical simulation for co-firing of torrefied biomass in a pulverized-fired 1 MW _{th} combustion chamber. <i>Energy</i> , 2015, 85, 105-116.	4.5	35
47	Development of a process model for coal chemical looping combustion and validation against 100 kW _{th} tests. <i>Applied Energy</i> , 2015, 157, 433-448.	5.1	41
48	Chemical looping combustion of hard coal in a 1 MW _{th} pilot plant using ilmenite as oxygen carrier. <i>Applied Energy</i> , 2015, 157, 288-294.	5.1	142
49	Validation of a Detailed Reaction Mechanism for Sulfur Species in Coal Combustion. <i>Combustion Science and Technology</i> , 2014, 186, 540-551.	1.2	11
50	Design and operation of a 1 MW _{th} chemical looping plant. <i>Applied Energy</i> , 2014, 113, 1490-1495.	5.1	176
51	Carbonate looping experiments in a 1 MW _{th} pilot plant and model validation. <i>Fuel</i> , 2014, 127, 13-22.	3.4	192
52	Extended CFD/DEM model for the simulation of circulating fluidized bed. <i>Advanced Powder Technology</i> , 2013, 24, 403-415.	2.0	83
53	Carbonate looping process simulation using a 1D fluidized bed model for the carbonator. <i>International Journal of Greenhouse Gas Control</i> , 2011, 5, 686-693.	2.3	75
54	Wide band correlated-k approaches for non-grey radiation modelling in oxy-fuel combustion with dry recycling. <i>Fuel</i> , 2011, 90, 3007-3013.	3.4	7

#	ARTICLE	IF	CITATIONS
55	Simulation of the Carbonate Looping Process for Post-Combustion CO ₂ Capture from a Coal-Fired Power Plant. <i>Chemical Engineering and Technology</i> , 2009, 32, 435-442.	0.9	71
56	Feasibility study on the carbonate looping process for post-combustion CO ₂ capture from coal-fired power plants. <i>Energy Procedia</i> , 2009, 1, 1313-1320.	1.8	50
57	Dynamic simulation of a supercritical once-through heat recovery steam generator during load changes and start-up procedures. <i>Applied Energy</i> , 2009, 86, 1274-1282.	5.1	77
58	Assessment of the re-ordered wide band model for non-grey radiative transfer calculations in 3D enclosures. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2008, 109, 1622-1640.	1.1	23
59	Modeling and investigation start-up procedures of a combined cycle power plant. <i>Applied Energy</i> , 2008, 85, 1173-1189.	5.1	114
60	On the application of the exponential wide band model to the calculation of radiative heat transfer in one- and two-dimensional enclosures. <i>International Journal of Heat and Mass Transfer</i> , 2002, 45, 2129-2139.	2.5	41
61	A MEAN FLUX DISCRETE ORDINATES INTERPOLATION SCHEME FOR GENERAL CO-ORDINATES. , 2001, , .		8
62	Efficient CO ₂ Capture from Lime Production by an Indirectly Heated Carbonate Looping Process. <i>SSRN Electronic Journal</i> , 0, , .	0.4	1