

Atsushi Tsutsumi

List of Publications by Year in descending order

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190
papers

5,094
citations

87401

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193
times ranked

4417
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermodynamic Mechanism of Self-Heat Recuperative Heat Circulation System with Non-Isentropic Compression and Expansion for a Continuous Heating and Cooling Gas Cycle Process. Journal of Chemical Engineering of Japan, 2021, 54, 313-323.	0.3	1
2	Coal Gasification with Exergy Recuperation and CO ₂ Recovery. , 2021, , 593-619.		1
3	A drag model considering the particle size distribution via multi-subgrid for the simulation of downer. Chemical Engineering Science, 2020, 214, 115363.	1.9	7
4	Numerical simulation of hydrodynamic behaviors in a gas-solids dense downer reactor. Advanced Powder Technology, 2020, 31, 3028-3037.	2.0	3
5	Simulated Application of Self-Heat Recuperation and Pressure Swing System to Industrial Methanol Synthesis Process. Journal of Chemical Engineering of Japan, 2019, 52, 650-655.	0.3	3
6	Mechanism analysis of the solids holdup variations in downer reactors based on volumetric flux. Chemical Engineering Science, 2019, 205, 259-268.	1.9	9
7	Design of energy-saving CO ₂ capture process using circulating fluidized bed for power generation. Computer Aided Chemical Engineering, 2018, 44, 1825-1830.	0.3	0
8	A novel water-splitting electrochemical cycle for hydrogen production using an intermediate electrode. Chemical Engineering Science, 2017, 157, 200-208.	1.9	27
9	Lowering the co-sintering temperature of cathode/electrolyte bilayers for micro-tubular solid oxide fuel cells. Ceramics International, 2017, 43, 10698-10707.	2.3	16
10	Heat Transfer in a Pulsed Fluidized Bed of Biomass Particles. Industrial & Engineering Chemistry Research, 2017, 56, 3740-3756.	1.8	18
11	Design and performance evaluation of a novel 1 kW-class hydrogen production/power generation system. Applied Energy, 2017, 194, 296-303.	5.1	9
12	Pulsation-assisted fluidized bed for the fluidization of easily agglomerated particles with wide size distributions. Powder Technology, 2017, 316, 388-399.	2.1	28
13	Innovative freeze-drying process based on self-heat recuperation technology. Journal of Cleaner Production, 2017, 168, 1244-1250.	4.6	9
14	Design of energy-saving carbon dioxide separation process using fluidized bed. Applied Thermal Engineering, 2017, 126, 134-138.	3.0	4
15	Gas-solid mixing and mass transfer in a tapered fluidized bed of biomass with pulsed gas flow. Powder Technology, 2017, 316, 373-387.	2.1	26
16	Direct methane operation of a micro-tubular solid oxide fuel cell with a porous zirconia support. Journal of Solid State Electrochemistry, 2017, 21, 255-262.	1.2	12
17	Improving Rate Performance of MnO ₂ Positive Electrode for Fuel Cell/Battery Systems by Blending with Ni(OH) ₂ . Journal of the Electrochemical Society, 2016, 163, A2299-A2303.	1.3	0
18	An elevated-pressure cryogenic air separation unit based on self-heat recuperation technology for integrated gasification combined cycle systems. Energy, 2016, 103, 440-446.	4.5	23

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19	Biomass drying in a pulsed fluidized bed without inert bed particles. <i>Fuel</i> , 2016, 186, 270-284.	3.4	43
20	Reducing energy consumption of advanced PTSA CO ₂ capture process—Experimental and numerical study. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2016, 64, 69-78.	2.7	23
21	A cryogenic air separation process based on self-heat recuperation for oxy-combustion plants. <i>Applied Energy</i> , 2016, 162, 1114-1121.	5.1	63
22	Fabrication and Evaluation of a Micro-Tubular Solid Oxide Fuel Cell with an Inert Support Using Scandia-Stabilized Zirconia Electrolyte. <i>Journal of the Electrochemical Society</i> , 2015, 162, F1555-F1560.	1.3	19
23	Chemical Charging on a MnO ₂ Electrode of a Fuel Cell/Battery System in a Highly O ₂ -Dissolved Electrolyte. <i>Electrochimica Acta</i> , 2015, 160, 323-329.	2.6	6
24	Energy saving in a biodiesel production process based on self-heat recuperation technology. <i>Chemical Engineering Journal</i> , 2015, 278, 556-562.	6.6	21
25	Fluidization and drying of biomass particles in a vibrating fluidized bed with pulsed gas flow. <i>Fuel Processing Technology</i> , 2015, 138, 471-482.	3.7	65
26	Process intensification for dimethyl ether production by self-heat recuperation. <i>Energy</i> , 2015, 90, 122-127.	4.5	11
27	Agglomeration behavior in fluidized-bed evaporator for thermal seawater desalination. <i>Applied Thermal Engineering</i> , 2015, 89, 1096-1103.	3.0	7
28	Biodiesel production process from microalgae oil by waste heat recovery and process integration. <i>Bioresource Technology</i> , 2015, 193, 192-199.	4.8	33
29	Self-heat recuperative heat circulation processing with thermoelectric device. <i>Applied Energy</i> , 2015, 160, 836-842.	5.1	7
30	Experimental and simulation investigations on self-heat recuperative fluidized bed dryer for biomass drying with superheated steam. <i>Fuel Processing Technology</i> , 2015, 136, 79-86.	3.7	14
31	Conceptual design of a novel pressure swing CO ₂ adsorption process based on self-heat recuperation technology. <i>Chemical Engineering and Processing: Process Intensification</i> , 2015, 94, 20-28.	1.8	15
32	Novel hydrogen production and power generation system using metal hydride. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 6197-6206.	3.8	25
33	Performance improvement and redox cycling of a micro-tubular solid oxide fuel cell with a porous zirconia support. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 10588-10595.	3.8	17
34	Morphology and Electrochemical Properties of $\hat{1}^{\pm}$, $\hat{1}^2$, $\hat{1}^3$, and $\hat{1}^{\cdot}$ -MnO ₂ Synthesized by Redox Method. <i>Journal of the Electrochemical Society</i> , 2015, 162, A2058-A2065.	1.3	65
35	An Advanced Cryogenic Air Separation Process Based on Self-heat Recuperation for CO ₂ Separation. <i>Energy Procedia</i> , 2014, 61, 1673-1676.	1.8	15
36	Hydrodynamic behavior of binary mixture of solids in a triple-bed combined circulating fluidized bed with high mass flux. <i>Advanced Powder Technology</i> , 2014, 25, 379-388.	2.0	23

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37	Experimental investigation of an active magnetic regenerative heat circulator applied to self-heat recuperation technology. <i>Applied Thermal Engineering</i> , 2014, 70, 1202-1207.	3.0	11
38	Influences of heating rate during coal char preparation and AAEMs on volatile char interaction with different sources of biomass volatile. <i>Fuel Processing Technology</i> , 2014, 119, 10-18.	3.7	19
39	Numerical studies of solid-solid mixing behaviors in a downer reactor for coal pyrolysis. <i>Powder Technology</i> , 2014, 253, 722-732.	2.1	33
40	Novel fluidized bed dryer for biomass drying. <i>Fuel Processing Technology</i> , 2014, 122, 170-175.	3.7	39
41	A novel multistep dip-coating method for the fabrication of anode-supported microtubular solid oxide fuel cells. <i>Journal of Solid State Electrochemistry</i> , 2014, 18, 1899-1905.	1.2	20
42	Catalytic Activity and Stability of Nickel-Modified Molybdenum Carbide Catalysts for Steam Reforming of Methanol. <i>Journal of Physical Chemistry C</i> , 2014, 118, 9485-9496.	1.5	77
43	An innovative methanol synthesis process based on self-heat recuperation. <i>Applied Thermal Engineering</i> , 2014, 70, 1189-1194.	3.0	14
44	Effect of biomass type on the performance of cogasification of low rank coal with biomass at relatively low temperatures. <i>Fuel</i> , 2014, 134, 414-419.	3.4	77
45	Application of the self-heat recuperation technology for energy saving in biomass drying system. <i>Fuel Processing Technology</i> , 2014, 117, 66-74.	3.7	40
46	Self-heat Recuperative Heat Circulator with Thermoelectric Device. <i>Energy Procedia</i> , 2014, 61, 303-306.	1.8	1
47	Micro-tubular solid oxide fuel cell based on a porous yttria-stabilized zirconia support. <i>Scientific Reports</i> , 2014, 4, 5754.	1.6	47
48	Advanced Energy Saving and its Applications in Industry. <i>SpringerBriefs in Applied Sciences and Technology</i> , 2013, , .	0.2	6
49	Synergetic effect during co-pyrolysis/gasification of biomass and sub-bituminous coal. <i>Fuel Processing Technology</i> , 2013, 115, 11-18.	3.7	281
50	Conceptual design of an active magnetic regenerative heat circulator based on self-heat recuperation technology. <i>Energy</i> , 2013, 55, 127-133.	4.5	12
51	Magnetocaloric heat circulator based on self-heat recuperation technology. <i>Chemical Engineering Science</i> , 2013, 101, 5-12.	1.9	16
52	A novel experimental technique to determine the heat transfer coefficient between the bed and particles in a downer. <i>Advanced Powder Technology</i> , 2013, 24, 487-494.	2.0	11
53	System modeling of exergy recuperated IGCC system with pre- and post-combustion CO ₂ capture. <i>Applied Thermal Engineering</i> , 2013, 54, 310-318.	3.0	45
54	Numerical simulations and experiments on heat transfer around a probe in the downer reactor for coal gasification. <i>Powder Technology</i> , 2013, 235, 359-367.	2.1	8

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55	A novel exergy recuperative drying module and its application for energy-saving drying with superheated steam. <i>Chemical Engineering Science</i> , 2013, 100, 392-401.	1.9	36
56	Thermal seawater desalination based on self-heat recuperation. <i>Clean Technologies and Environmental Policy</i> , 2013, 15, 765-769.	2.1	8
57	Evaluation of a Self-Heat Recuperative Thermal Process Based on Thermodynamic Irreversibility and Exergy. <i>Journal of Chemical Engineering of Japan</i> , 2013, 46, 87-91.	0.3	31
58	Biomass derived tar decomposition over coal char bed. <i>ScienceAsia</i> , 2013, 39, 511.	0.2	15
59	Distillation Section. <i>SpringerBriefs in Applied Sciences and Technology</i> , 2013, , 27-36.	0.2	0
60	Drying Section. <i>SpringerBriefs in Applied Sciences and Technology</i> , 2013, , 37-48.	0.2	0
61	Reaction Section. <i>SpringerBriefs in Applied Sciences and Technology</i> , 2013, , 17-25.	0.2	0
62	Energy Saving Technology. <i>SpringerBriefs in Applied Sciences and Technology</i> , 2013, , 3-14.	0.2	4
63	Dynamic characteristics of self-heat recuperative distillation process. <i>Computer Aided Chemical Engineering</i> , 2012, , 700-704.	0.3	0
64	Analysis of IGFC With Exergy Recuperation and Carbon Dioxide Separation Unit. , 2012, , .		3
65	Performance enhancement of strontium-doped lanthanum manganite cathode by developing a highly porous microstructure. <i>Journal of Applied Electrochemistry</i> , 2012, 42, 953-959.	1.5	6
66	Exergy Analysis of Biomass Drying Based on Self-Heat Recuperation Technology and Its Application to Industry: a Simulation and Experimental Study. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 9997-10007.	1.8	25
67	Experimental and Numerical Investigations on the Electrostatics Generation and Transport in the Downer Reactor of a Triple-Bed Combined Circulating Fluidized Bed. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 14258-14267.	1.8	25
68	Advanced energy saving in low rank coal drying based on self-heat recuperation technology. <i>Fuel Processing Technology</i> , 2012, 104, 16-22.	3.7	48
69	Downward Gas-Solids Flow Characteristics in a High-Density Downer Reactor. <i>Journal of Chemical Engineering of Japan</i> , 2012, 45, 948-954.	0.3	5
70	Exergy recuperative CO ₂ gas separation in pre-combustion capture. <i>Clean Technologies and Environmental Policy</i> , 2012, 14, 465-474.	2.1	11
71	Electrostatic characteristics in a large-scale triple-bed circulating fluidized bed system for coal gasification. <i>Chemical Engineering Science</i> , 2012, 75, 435-444.	1.9	20
72	Catalytic steam reforming of biomass tar over iron- or nickel-based catalyst supported on calcined scallop shell. <i>Applied Catalysis B: Environmental</i> , 2012, 115-116, 159-168.	10.8	153

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73	Application of the self-heat recuperation technology to crude oil distillation. <i>Applied Thermal Engineering</i> , 2012, 43, 153-157.	3.0	33
74	Mixing behaviors of cold-hot particles in the downer of a triple-bed combined circulating fluidized bed. <i>Powder Technology</i> , 2012, 221, 70-79.	2.1	30
75	Exergy Recuperative CO ₂ Gas Separation in Post-Combustion Capture. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 10128-10135.	1.8	26
76	System Analysis of IGFC With Exergy Recuperation Utilizing Low-Grade Coal. , 2011, , .		7
77	Advanced energy saving in distillation process with self-heat recuperation technology. <i>Energy</i> , 2011, 36, 4640-4645.	4.5	65
78	Self-heat recuperative fluidized bed drying of brown coal. <i>Chemical Engineering and Processing: Process Intensification</i> , 2011, 50, 944-951.	1.8	49
79	Process design methodology for high-energy saving HiDiC based on self-heat recuperation. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2011, 6, 320-326.	0.8	10
80	A novel cryogenic air separation process based on self-heat recuperation. <i>Separation and Purification Technology</i> , 2011, 77, 389-396.	3.9	100
81	Flow behaviors in the downer of a large-scale triple-bed combined circulating fluidized bed system with high solids mass fluxes. <i>Chemical Engineering Science</i> , 2011, 66, 4212-4220.	1.9	56
82	Fibrous MnO ₂ electrode electrodeposited on carbon fiber for a fuel cell/battery system. <i>Electrochimica Acta</i> , 2011, 56, 6696-6701.	2.6	22
83	Inhibition of steam gasification of biomass char by hydrogen and tar. <i>Biomass and Bioenergy</i> , 2011, 35, 179-185.	2.9	55
84	Hydrodynamic characteristics of a large-scale triple-bed combined circulating fluidized bed. <i>Powder Technology</i> , 2011, 209, 1-8.	2.1	38
85	Integrated Process Module for Distillation Processes Based on Self-Heat Recuperation Technology. <i>Journal of Chemical Engineering of Japan</i> , 2010, 43, 502-507.	0.3	28
86	Power generation/energy storage by a fuel cell/battery system: Regeneration of the MnO ₂ positive electrode with gaseous oxygen. <i>Electrochimica Acta</i> , 2010, 55, 8771-8778.	2.6	10
87	Advanced energy saving in the reaction section of the hydro-desulfurization process with self-heat recuperation technology. <i>Applied Thermal Engineering</i> , 2010, 30, 2300-2305.	3.0	25
88	High-density circulating fluidized bed gasifier for advanced IGCC/IGFC-Advantages and challenges. <i>Particology</i> , 2010, 8, 602-606.	2.0	89
89	Prediction of flow behavior of the riser in a novel high solids flux circulating fluidized bed for steam gasification of coal or biomass. <i>Chemical Engineering Journal</i> , 2010, 164, 221-229.	6.6	50
90	An innovative modularity of heat circulation for fractional distillation. <i>Chemical Engineering Science</i> , 2010, 65, 330-334.	1.9	43

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91	Novel Drying Process Based on Self-Heat Recuperation Technology. <i>Drying Technology</i> , 2010, 29, 105-110.	1.7	48
92	New Design Methodology Based on Self-Heat Recuperation for Production by Azeotropic Distillation. <i>Energy & Fuels</i> , 2010, 24, 6099-6102.	2.5	18
93	Energy Flow of Advanced IGCC With CO ₂ Capture Option. , 2010, , .		1
94	Performance Improvement of NiMH-Based Fuel Cell/Battery (FCB) with .ALPHA.-Ni(OH) ₂ . <i>Journal of Chemical Engineering of Japan</i> , 2010, 43, 224-230.	0.3	4
95	Al-Doped .ALPHA.-Nickel Hydroxide Electrode: Addition of Co and Effect of Al Ion in Electrolyte. <i>Journal of Chemical Engineering of Japan</i> , 2009, 42, 452-456.	0.3	6
96	Elucidation of the interaction among cellulose, xylan, and lignin in steam gasification of woody biomass. <i>AIChE Journal</i> , 2009, 55, 529-537.	1.8	35
97	Development of NiMH-based Fuel Cell/Battery (FCB) system: Characterization of Ni(OH) ₂ /MnO ₂ positive electrode for FCB. <i>Journal of Power Sources</i> , 2009, 194, 1150-1155.	4.0	22
98	Electrochemical properties of polyaniline/carboxydextran (PANI/carDEX) composite films for biofuel cells in neutral aqueous solutions. <i>Biotechnology Letters</i> , 2009, 31, 851-855.	1.1	5
99	Rapid hydrogen charging on metal hydride negative electrode of Fuel Cell/Battery (FCB) systems. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 2058-2061.	3.8	13
100	Elucidation of interaction among cellulose, lignin and xylan during tar and gas evolution in steam gasification. <i>Journal of Analytical and Applied Pyrolysis</i> , 2009, 86, 82-89.	2.6	55
101	Encapsulation of SiO ₂ and TiO ₂ Fine Powders with Poly(dl-lactic-co-glycolic acid) by Rapid Expansion of Supercritical CO ₂ Incorporated with Ethanol Cosolvent. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 11230-11235.	1.8	28
102	Self-Heat Recuperation Technology for Energy Saving in Chemical Processes. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 7682-7686.	1.8	96
103	Parametric Study of an Advanced IGCC. , 2009, , .		3
104	Polyaniline/Carboxydextran-Gold Hybrid Nanomaterials as a Biofuel Cell Electrode Platform. <i>Journal of Chemical Engineering of Japan</i> , 2009, 42, 596-599.	0.3	4
105	A201 POTENTIAL ABILITY OF IGCC WITH EXERGY RECUPERATION IN GASIFICATION PROCESS(Gas Turbine-4). <i>The Proceedings of the International Conference on Power Engineering (ICOPE)</i> , 2009, 2009.2, _2-1_-2-5_.	0.0	1
106	Characterization of MnO ₂ positive electrode for Fuel Cell/Battery (FCB). <i>Journal of Power Sources</i> , 2008, 181, 177-181.	4.0	20
107	Catalytic effects of potassium on lignin steam gasification with $\hat{1}^3$ -Al ₂ O ₃ as a bed material. <i>Korean Journal of Chemical Engineering</i> , 2008, 25, 656-662.	1.2	35
108	Formation of deagglomerated PLGA particles and PLGA-coated ultra fine powders by rapid expansion of supercritical solution with ethanol cosolvent. <i>Korean Journal of Chemical Engineering</i> , 2008, 25, 838-845.	1.2	10

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109	Effects of solids feeder and riser exit configuration on establishing high density circulating fluidized beds. Powder Technology, 2008, 187, 37-45.	2.1	51
110	Release Behavior of Tar and Alkali and Alkaline Earth Metals during Biomass Steam Gasification. Energy & Fuels, 2008, 22, 4235-4239.	2.5	46
111	Supercritical CO ₂ -Pulse Cleaning in Deep Microholes. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2008, 2, 619-628.	0.3	3
112	Influences of Nano Particle Addition on Hydrodynamics and Heat Transfer in Gas-Solid Fluidized Beds. Journal of Chemical Engineering of Japan, 2008, 41, 670-677.	0.3	1
113	Steam Gasification of Cellulose with Cobalt Catalysts in a Fluidized Bed Reactor. Energy & Fuels, 2007, 21, 590-595.	2.5	19
114	Biomass gasification in fluidized bed reactor with Co catalyst. Chemical Engineering Science, 2007, 62, 5558-5563.	1.9	41
115	Surface Analyses of Cobalt Catalysts for the Steam Reforming of Tar derived from Biomass Gasification. Studies in Surface Science and Catalysis, 2006, , 517-520.	1.5	5
116	Kinetic Study on the Pyrolysis of Cellulose Using the Novel Continuous Cross-Flow Moving Bed Type Differential Reactor. Energy & Fuels, 2006, 20, 2681-2685.	2.5	13
117	Towards further internal heat integration in design of reactive distillation columns. Part II. The process dynamics and operation. Chemical Engineering Science, 2006, 61, 5377-5392.	1.9	37
118	Electrochemical characteristics of iron carbide as an active material in alkaline batteries. Journal of Power Sources, 2006, 160, 1431-1435.	4.0	50
119	Reactive distillation design with considerations of heats of reaction. AIChE Journal, 2006, 52, 2518-2534.	1.8	47
120	Energy-Recuperative Coal-Integrated Gasification/Gas Turbine Power Generation System. Journal of Chemical Engineering of Japan, 2006, 39, 545-552.	0.3	13
121	Combination of thermochemical recuperative coal gasification cycle and fuel cell for power generation. Fuel, 2005, 84, 1019-1021.	3.4	94
122	Kinetics of steam gasification of nascent char from rapid pyrolysis of a Victorian brown coal. Fuel, 2005, 84, 1612-1612.	3.4	65
123	Towards further internal heat integration in design of reactive distillation columns. Part I: The design principle. Chemical Engineering Science, 2005, 60, 4901-4914.	1.9	42
124	Development of cobalt catalysts for the steam reforming of naphthalene as a model compound of tar derived from biomass gasification. Applied Catalysis A: General, 2005, 278, 195-205.	2.2	106
125	Comparison of Co/MgO and Ni/MgO catalysts for the steam reforming of naphthalene as a model compound of tar derived from biomass gasification. Applied Catalysis A: General, 2005, 278, 207-212.	2.2	175
126	Modeling nonlinear dynamics of circulating fluidized beds using neural networks. Particuology: Science and Technology of Particles, 2005, 3, 84-89.	0.4	1

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127	Nonlinear Dynamic Analysis of the Local Heat Transfer Rate in Three-Phase Reactors. International Journal of Chemical Reactor Engineering, 2004, 2, .	0.6	0
128	An Overview of Advanced Power generation Technologies Using Brown Coal. , 2004, , 360-400.		3
129	Modeling for size reduction of agglomerates in nanoparticle fluidization. AIChE Journal, 2004, 50, 2763-2771.	1.8	73
130	Reduction of Iron Oxides by Nano-Sized Graphite Particles Observed in Pre-Oxidized Iron Carbide at Temperatures around 873 K. Materials Transactions, 2004, 45, 1907-1910.	0.4	12
131	Materialographic Investigation on the Mechanism of Hydrogen Production through the Reaction between Iron Carbide and Steam at a Temperature of 673 K. Materials Transactions, 2004, 45, 1911-1914.	0.4	7
132	Microstructure Evolution of Iron Carbide during Reaction with Steam at Elevated Temperatures. ISIJ International, 2004, 44, 1748-1752.	0.6	3
133	A nano-coating process by the rapid expansion of supercritical suspensions in impinging-stream reactors. Powder Technology, 2003, 138, 211-215.	2.1	16
134	Generalized dynamic modeling of local heat transfer in bubble columns. Chemical Engineering Journal, 2003, 96, 37-44.	6.6	25
135	Steam gasification characteristics of coal with rapid heating. Journal of Analytical and Applied Pyrolysis, 2003, 70, 185-197.	2.6	26
136	Energy recuperation in solid oxide fuel cell (SOFC) and gas turbine (GT) combined system. Journal of Power Sources, 2003, 117, 7-13.	4.0	87
137	Effect of Heating Rate on Steam Gasification of Biomass. 1. Reactivity of Char. Industrial & Engineering Chemistry Research, 2003, 42, 3922-3928.	1.8	95
138	Effect of Heating Rate on Steam Gasification of Biomass. 2. Thermogravimetric-Mass Spectrometric (TG-MS) Analysis of Gas Evolution. Industrial & Engineering Chemistry Research, 2003, 42, 3929-3936.	1.8	96
139	Combinations of solid oxide fuel cell and several enhanced gas turbine cycles. Journal of Power Sources, 2003, 124, 65-75.	4.0	94
140	Local Bubble Dynamics and Macroscopic Flow Structure in Bubble Columns with Different Scales. Canadian Journal of Chemical Engineering, 2003, 81, 1139-1148.	0.9	9
141	Coproduction of Iron and Hydrogen from Iron Carbide.. Journal of Chemical Engineering of Japan, 2003, 36, 881-886.	0.3	5
142	Energy-Recuperative Biomass Integrated Gasification Power Generation System.. Journal of Chemical Engineering of Japan, 2003, 36, 846-851.	0.3	8
143	Neural Networks for Prediction of the Dynamic Heat-Transfer Rate in Bubble Columns. Industrial & Engineering Chemistry Research, 2001, 40, 5358-5361.	1.8	10
144	Characterization of Axial and Radial Liquid Mixing in a Liquid-Solid Circulating Fluidized Bed. Industrial & Engineering Chemistry Research, 2001, 40, 5431-5435.	1.8	9

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145	Fluidization of Ultrafine Particles with High G.. Journal of Chemical Engineering of Japan, 2001, 34, 121-125.	0.3	15
146	Scale-up effects on the time-averaged and dynamic behavior in bubble column reactors. Chemical Engineering Science, 2001, 56, 6149-6155.	1.9	14
147	Characterization of nonlinear dynamics in a circulating fluidized bed by rescaled range analysis and short-term predictability analysis. Chemical Engineering Science, 2001, 56, 6545-6552.	1.9	19
148	Ultrafine particle fluidization and its application to photocatalytic NOx treatment. Chemical Engineering Journal, 2001, 82, 183-188.	6.6	78
149	Mechanism of particle coating granulation with RESS process in a fluidized bed. Powder Technology, 2001, 118, 229-235.	2.1	44
150	Nonlinear Modeling of Chaotic Dynamics in a Circulating Fluidized Bed by an Artificial Neural Network.. Journal of Chemical Engineering of Japan, 2001, 34, 107-113.	0.3	13
151	The Latest Frontiers of Bubble Columns and Slurry Bubble Columns. Prediction of Dynamic Heat Transfer of a 2-D Bubble Column Using ANNs.. Kagaku Kogaku Ronbunshu, 2001, 27, 461-465.	0.1	0
152	The Latest Frontiers of Bubble Columns and Slurry Bubble Columns. Microscopic Flow Structure around Rising Bubbles in a Continuous Single-Bubble Flow System.. Kagaku Kogaku Ronbunshu, 2001, 27, 466-469.	0.1	3
153	Advanced Energy Conversion Technologies. Thermochemical Recuperative Combined Cycle with Methane-Steam Reforming Combustion.. Kagaku Kogaku Ronbunshu, 2000, 26, 257-262.	0.1	3
154	Nonlinear dynamics of gas-solid circulating fluidized-bed system. Chemical Engineering Science, 2000, 55, 403-410.	1.9	34
155	Design and scale-up methodology for multi-phase reactors based on non-linear dynamics. Applied Energy, 2000, 67, 195-219.	5.1	6
156	Energy transfer mechanism in a vibrating fluidized bed. Chemical Engineering Journal, 2000, 78, 115-123.	6.6	40
157	Reactions in Brown Coal Pyrolysis Responsible for Heating Rate Effect on Tar Yield. Energy & Fuels, 2000, 14, 400-408.	2.5	60
158	Design and scale-up methodology for multi-phase reactors based on non-linear dynamics. , 2000, , 195-219.		0
159	Classification and characterization of hydrodynamic and transport behaviors of three-phase reactors. Korean Journal of Chemical Engineering, 1999, 16, 709-720.	1.2	16
160	Chaotic characteristics of local voidage fluctuation in a circulating fluidized bed. Canadian Journal of Chemical Engineering, 1999, 77, 247-252.	0.9	15
161	High-velocity fluidization of solid particles in a liquid-solid circulating fluidized bed system. Canadian Journal of Chemical Engineering, 1999, 77, 291-298.	0.9	17
162	Nonlinear Phenomena. Nonlinear Hydrodynamics of Three-Phase Reactors.. Kagaku Kogaku Ronbunshu, 1999, 25, 530-534.	0.1	1

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