## Chi-Hwa Wang

List of Publications by Year in descending order

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		28274	48315
188	9,580	55	88
papers	citations	h-index	g-index
189	189	189	10320
10)	10)	10)	10320
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Activated carbon derived from carbon residue from biomass gasification and its application for dye adsorption: Kinetics, isotherms and thermodynamic studies. Bioresource Technology, 2016, 200, 350-359.	9.6	435
2	A critical review on sustainable biochar system through gasification: Energy and environmental applications. Bioresource Technology, 2017, 246, 242-253.	9.6	263
3	Electrohydrodynamic atomization: A two-decade effort to produce and process micro-/nanoparticulate materials. Chemical Engineering Science, 2015, 125, 32-57.	3.8	240
4	Sustainable biodiesel production via transesterification of waste cooking oil by using CaO catalysts prepared from chicken manure. Energy Conversion and Management, 2016, 123, 487-497.	9.2	240
5	Drug delivery systems for programmed and on-demand release. Advanced Drug Delivery Reviews, 2018, 132, 104-138.	13.7	229
6	Electrohydrodynamic atomization for biodegradable polymeric particle production. Journal of Colloid and Interface Science, 2006, 302, 103-112.	9.4	217
7	Microparticles developed by electrohydrodynamic atomization for the local delivery of anticancer drug to treat C6 glioma in vitro. Biomaterials, 2006, 27, 3321-3332.	11.4	185
8	Chemical looping gasification of biomass with Fe2O3/CaO as the oxygen carrier for hydrogen-enriched syngas production. Chemical Engineering Journal, 2020, 379, 122346.	12.7	165
9	Effect of gasification biochar application on soil quality: Trace metal behavior, microbial community, and soil dissolved organic matter. Journal of Hazardous Materials, 2019, 365, 684-694.	12.4	156
10	Encapsulation of protein drugs in biodegradable microparticles by co-axial electrospray. Journal of Colloid and Interface Science, 2008, 317, 469-476.	9.4	149
11	Biomass gasification for syngas and biochar co-production: Energy application and economic evaluation. Applied Energy, 2018, 209, 43-55.	10.1	146
12	Biocompatibility of electroactive polymers in tissues. Journal of Biomedical Materials Research Part B, 2000, 52, 467-478.	3.1	143
13	Double-walled microspheres for the sustained release of a highly water soluble drug: characterization and irradiation studies. Journal of Controlled Release, 2002, 83, 437-452.	9.9	132
14	Gasification biochar from biowaste (food waste and wood waste) for effective CO2 adsorption. Journal of Hazardous Materials, 2020, 391, 121147.	12.4	132
15	Biochar enhanced thermophilic anaerobic digestion of food waste: Focusing on biochar particle size, microbial community analysis and pilot-scale application. Energy Conversion and Management, 2020, 209, 112654.	9.2	125
16	Paclitaxel delivery from PLGA foams for controlled release in post-surgical chemotherapy against glioblastoma multiforme. Biomaterials, 2009, 30, 3189-3196.	11.4	123
17	Coâ€gasification of woody biomass and sewage sludge in a fixedâ€bed downdraft gasifier. AICHE Journal, 2015, 61, 2508-2521.	3.6	122
18	3D bioprinting of skin tissue: From pre-processing to final product evaluation. Advanced Drug Delivery Reviews, 2018, 132, 270-295.	13.7	122

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19	Electrostatics of the Granular Flow in a Pneumatic Conveying System. Industrial & Engineering Chemistry Research, 2004, 43, 7181-7199.	3.7	112
20	Organic waste to biohydrogen: A critical review from technological development and environmental impact analysis perspective. Applied Energy, 2019, 256, 113961.	10.1	111
21	Biomass gasification bottom ash as a source of CaO catalyst for biodiesel production via transesterification of palm oil. Energy Conversion and Management, 2015, 92, 234-243.	9.2	110
22	Characterization of bioenergy biochar and its utilization for metal/metalloid immobilization in contaminated soil. Science of the Total Environment, 2018, 640-641, 704-713.	8.0	110
23	Pyrolysis and in-line catalytic decomposition of polypropylene to carbon nanomaterials and hydrogen over Fe- and Ni-based catalysts. Applied Energy, 2020, 265, 114819.	10.1	108
24	Sustainable gasification biochar as a high efficiency adsorbent for CO2 capture: A facile method to designer biochar fabrication. Renewable and Sustainable Energy Reviews, 2020, 124, 109785.	16.4	107
25	The use of submicron/nanoscale PLGA implants to deliver paclitaxel with enhanced pharmacokinetics and therapeutic efficacy in intracranial glioblastoma in mice. Biomaterials, 2010, 31, 5199-5207.	11.4	105
26	Comparison of the co-gasification of sewage sludge and food wastes and cost-benefit analysis of gasification- and incineration-based waste treatment schemes. Bioresource Technology, 2016, 218, 595-605.	9.6	105
27	The delivery of BCNU to brain tumors. Journal of Controlled Release, 1999, 61, 21-41.	9.9	102
28	Characterization and ecotoxicological investigation of biochar produced via slow pyrolysis: Effect of feedstock composition and pyrolysis conditions. Journal of Hazardous Materials, 2019, 365, 178-185.	12.4	100
29	Biochar industry to circular economy. Science of the Total Environment, 2021, 757, 143820.	8.0	100
30	A comparative life cycle assessment on four waste-to-energy scenarios for food waste generated in eateries. Applied Energy, 2018, 225, 1143-1157.	10.1	98
31	Simultaneous syngas and biochar production during heavy metal separation from Cd/Zn hyperaccumulator (Sedum alfredii) by gasification. Chemical Engineering Journal, 2018, 347, 543-551.	12.7	97
32	Biomass gasification with CO2 in a fluidized bed. Powder Technology, 2016, 296, 87-101.	4.2	96
33	Impact of temperature on the activity of Fe-Ni catalysts for pyrolysis and decomposition processing of plastic waste. Chemical Engineering Journal, 2021, 408, 127268.	12.7	96
34	Methane yield enhancement of mesophilic and thermophilic anaerobic co-digestion of algal biomass and food waste using algal biochar: Semi-continuous operation and microbial community analysis. Bioresource Technology, 2020, 302, 122892.	9.6	83
35	Coaxial electrohydrodynamic atomization: Microparticles for drug delivery applications. Journal of Controlled Release, 2015, 205, 70-82.	9.9	81
36	CO2 gasification of woody biomass: Experimental study from a lab-scale reactor to a small-scale autothermal gasifier. Energy, 2019, 170, 497-506.	8.8	78

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37	Co-gasification of woody biomass and chicken manure: Syngas production, biochar reutilization, and cost-benefit analysis. Energy, 2017, 139, 732-742.	8.8	76
38	On the association between outdoor PM2.5 concentration and the seasonality of tuberculosis for Beijing and Hong Kong. Environmental Pollution, 2016, 218, 1170-1179.	7.5	75
39	Energetic and economic evaluation of hybrid solar energy systems in a residential net-zero energy building. Applied Energy, 2019, 254, 113709.	10.1	70
40	Fabrication of double-walled microspheres for the sustained release of doxorubicin. Journal of Colloid and Interface Science, 2005, 291, 135-143.	9.4	69
41	Three-stage anaerobic co-digestion of food waste and horse manure. Scientific Reports, 2017, 7, 1269.	3.3	69
42	Biodegradable microparticles and fiber fabrics for sustained delivery of cisplatin to treat C6 glioma <i>in vitro</i> . Journal of Biomedical Materials Research - Part A, 2008, 85A, 897-908.	4.0	68
43	Chemotherapeutic drug transport to brain tumor. Journal of Controlled Release, 2009, 137, 203-210.	9.9	68
44	Paclitaxel and suramin-loaded core/shell microspheres in the treatment of brain tumors. Biomaterials, 2010, 31, 8732-8740.	11.4	67
45	An investigation on utilization of biogas and syngas produced from biomass waste in premixed spark ignition engine. Applied Energy, 2018, 212, 210-222.	10.1	67
46	Simulation of the delivery of doxorubicin to hepatoma. Pharmaceutical Research, 2001, 18, 761-770.	3.5	65
47	On the temporal modelling of solar photovoltaic soiling: Energy and economic impacts in seven cities. Applied Energy, 2018, 228, 1136-1146.	10.1	65
48	Core/shell microspheres via coaxial electrohydrodynamic atomization for sequential and parallel release of drugs. Journal of Biomedical Materials Research - Part A, 2010, 95A, 709-716.	4.0	64
49	Towards practical application of gasification: a critical review from syngas and biochar perspectives. Critical Reviews in Environmental Science and Technology, 2018, 48, 1165-1213.	12.8	64
50	Roles of Biochar and CO <sub>2</sub> Curing in Sustainable Magnesia Cement-Based Composites. ACS Sustainable Chemistry and Engineering, 2021, 9, 8603-8610.	6.7	62
51	Techno-economic and greenhouse gas savings assessment of decentralized biomass gasification for electrifying the rural areas of Indonesia. Applied Energy, 2017, 208, 495-510.	10.1	61
52	Optimal design of negative emission hybrid renewable energy systems with biochar production. Applied Energy, 2019, 243, 233-249.	10.1	60
53	3D Printing Personalized, Photocrosslinkable Hydrogel Wound Dressings for the Treatment of Thermal Burns. Advanced Functional Materials, 2021, 31, 2105932.	14.9	60
54	Model-based downdraft biomass gasifier operation and design for synthetic gas production. Journal of Cleaner Production, 2018, 178, 476-493.	9.3	59

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55	Removal of nitrate and phosphate by chitosan composited beads derived from crude oil refinery waste: Sorption and cost-benefit analysis. Journal of Cleaner Production, 2019, 207, 846-856.	9.3	58
56	On the electrostatic equilibrium of granular flow in pneumatic conveying systems. AICHE Journal, 2006, 52, 3775-3793.	3.6	57
57	Potential application of gasification to recycle food waste and rehabilitate acidic soil from secondary forests on degraded land in Southeast Asia. Journal of Environmental Management, 2016, 172, 40-48.	7.8	57
58	Coaxial electrohydrodynamic atomization process for production of polymeric composite microspheres. Chemical Engineering Science, 2013, 104, 330-346.	3.8	56
59	Convection enhanced delivery of chemotherapeutic drugs into brain tumour. Journal of Controlled Release, 2018, 271, 74-87.	9.9	56
60	Mesophilic and thermophilic anaerobic digestion of soybean curd residue for methane production: Characterizing bacterial and methanogen communities and their correlations with organic loading rate and operating temperature. Bioresource Technology, 2019, 288, 121597.	9.6	56
61	Mechanism of drug release from double-walled PDLLA(PLGA) microspheres. Biomaterials, 2013, 34, 3902-3911.	11.4	55
62	Double-Walled Microparticles-Embedded Self-Cross-Linked, Injectable, and Antibacterial Hydrogel for Controlled and Sustained Release of Chemotherapeutic Agents. ACS Applied Materials & Controlled Release of Chemotherapeutic Agents. ACS Applied Materials & Controlled Release of Chemotherapeutic Agents. ACS Applied Materials & Controlled Release of Chemotherapeutic Agents.	8.0	54
63	Synthesis of intracellular reduction-sensitive amphiphilic polyethyleneimine and poly ( $\hat{l}\mu$ -caprolactone) graft copolymer for on-demand release of doxorubicin and p53 plasmid DNA. Acta Biomaterialia, 2016, 39, 79-93.	8.3	53
64	Chemically treated carbon black waste and its potential applications. Journal of Hazardous Materials, 2017, 321, 62-72.	12.4	53
65	Convection enhanced delivery of liposome encapsulated doxorubicin for brain tumour therapy. Journal of Controlled Release, 2018, 285, 212-229.	9.9	53
66	Phytoremediation of Cd-contaminated farmland soil via various Sedum alfredii-oilseed rape cropping systems: Efficiency comparison and cost-benefit analysis. Journal of Hazardous Materials, 2021, 419, 126489.	12.4	53
67	Life cycle assessment of a sewage sludge and woody biomass co-gasification system. Energy, 2017, 137, 369-376.	8.8	52
68	Integrated downdraft gasification with power generation system and gasification bottom ash reutilization for clean waste-to-energy and resource recovery system. Journal of Cleaner Production, 2018, 188, 69-79.	9.3	52
69	Integrating food waste sorting system with anaerobic digestion and gasification for hydrogen and methane co-production. Applied Energy, 2020, 257, 113988.	10.1	52
70	Energy performance of an integrated bio-and-thermal hybrid system for lignocellulosic biomass waste treatment. Bioresource Technology, 2017, 228, 77-88.	9.6	51
71	Water hyacinth for energy and environmental applications: A review. Bioresource Technology, 2021, 327, 124809.	9.6	51
72	Anaerobic digestion and gasification hybrid system for potential energy recovery from yard waste and woody biomass. Energy, 2017, 124, 133-145.	8.8	48

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73	Optimized construction of a full thickness human skin equivalent using 3D bioprinting and a PCL/collagen dermal scaffold. Bioprinting, 2021, 21, e00123.	5.8	48
74	Granular size and shape effect on electrostatics in pneumatic conveying systems. Chemical Engineering Science, 2006, 61, 3858-3874.	3.8	47
75	Harvest green energy through energy recovery from waste: A technology review and an assessment of Singapore. Renewable and Sustainable Energy Reviews, 2018, 98, 163-178.	16.4	46
76	Techno-economic analysis of geopolymer production from the coal fly ash with high iron oxide and calcium oxide contents. Journal of Hazardous Materials, 2019, 361, 237-244.	12.4	46
77	Steam co-gasification of horticultural waste and sewage sludge: Product distribution, synergistic analysis and optimization. Bioresource Technology, 2020, 301, 122780.	9.6	46
78	Transient interstitial fluid flow in brain tumors: Effect on drug delivery. Chemical Engineering Science, 2005, 60, 4803-4821.	3.8	43
79	Role of Convective Flow in Carmustine Delivery to a Brain Tumor. Pharmaceutical Research, 2009, 26, 2289-2302.	3.5	43
80	Conversion of Coal Fly Ash into Zeolite Materials: Synthesis and Characterizations, Process Design, and Its Cost-Benefit Analysis. Industrial & Engineering Chemistry Research, 2017, 56, 11565-11574.	3.7	43
81	Food-waste anaerobic digestate as a fertilizer: The agronomic properties of untreated digestate and biochar-filtered digestate residue. Waste Management, 2021, 136, 143-152.	7.4	41
82	A hybrid biological and thermal waste-to-energy system with heat energy recovery and utilization for solid organic waste treatment. Energy, 2018, 152, 214-222.	8.8	40
83	Using CO <sub>2</sub> as an Oxidant in the Catalytic Pyrolysis of Peat Moss from the North Polar Region. Environmental Science & Environmental Science	10.0	40
84	Biochar utilisation in the anaerobic digestion of food waste for the creation of a circular economy via biogas upgrading and digestate treatment. Bioresource Technology, 2021, 333, 125190.	9.6	40
85	Fabricating scalable, personalized wound dressings with customizable drug loadings via 3D printing. Journal of Controlled Release, 2022, 341, 80-94.	9.9	40
86	Conversion of Waste Plastic Packings to Carbon Nanomaterials: Investigation into Catalyst Material, Waste Type, and Product Applications. ACS Sustainable Chemistry and Engineering, 2022, 10, 1125-1136.	6.7	39
87	Computer simulation of the delivery of etanidazole to brain tumor from PLGA wafers: Comparison between linear and double burst release systems. Biotechnology and Bioengineering, 2003, 82, 278-288.	3.3	38
88	A comparison of PM exposure related to emission hotspots in a hot and humid urban environment: Concentrations, compositions, respiratory deposition, and potential health risks. Science of the Total Environment, 2017, 599-600, 464-473.	8.0	38
89	Effective Recovery of Vanadium from Oil Refinery Waste into Vanadium-Based Metal–Organic Frameworks. Environmental Science & Technology, 2018, 52, 3008-3015.	10.0	37
90	Mathematical Modelling of Convection Enhanced Delivery of Carmustine and Paclitaxel for Brain Tumour Therapy. Pharmaceutical Research, 2017, 34, 860-873.	3.5	36

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91	Thermodynamic assessment of a solar/autothermal hybrid gasification CCHP system with an indirectly radiative reactor. Energy, 2018, 142, 201-214.	8.8	36
92	Pneumatic conveying of granular solids in horizontal and inclined pipes. AICHE Journal, 2004, 50, 1729-1745.	3.6	35
93	Mesoporous Silicaâ€Encaged Ultrafine Bimetallic Nanocatalysts for CO <sub>2</sub> Hydrogenation to Formates. ChemCatChem, 2019, 11, 5093-5097.	3.7	35
94	Effects of the three dual-fuel strategies on performance and emissions of a biodiesel engine. Applied Energy, 2020, 262, 114542.	10.1	35
95	Biodegradable Films Developed by Electrospray Deposition for Sustained Drug Delivery. Journal of Pharmaceutical Sciences, 2008, 97, 3109-3122.	3.3	33
96	Overall evaluation of microwave-assisted alkali pretreatment for enhancement of biomethane production from brewers' spent grain. Energy Conversion and Management, 2018, 158, 315-326.	9.2	33
97	Biochar for urban agriculture: Impacts on soil chemical characteristics and on Brassica rapa growth, nutrient content and metabolism over multiple growth cycles. Science of the Total Environment, 2020, 727, 138742.	8.0	33
98	An environmental friendly animal waste disposal process with ammonia recovery and energy production: Experimental study and economic analysis. Waste Management, 2017, 68, 636-645.	7.4	31
99	Hydrogen production of solar-driven steam gasification of sewage sludge in an indirectly irradiated fluidized-bed reactor. Applied Energy, 2020, 261, 114229.	10.1	31
100	Co-gasification of sewage sludge and woody biomass in a fixed-bed downdraft gasifier: Toxicity assessment of solid residues. Waste Management, 2015, 36, 241-255.	7.4	29
101	Computational study of coreâ€shell droplet formation in coaxial electrohydrodynamic atomization process. AICHE Journal, 2016, 62, 4259-4276.	3.6	29
102	Performance analysis of a biomass gasification-based CCHP system integrated with variable-effect LiBr-H2O absorption cooling and desiccant dehumidification. Energy, 2019, 176, 961-979.	8.8	29
103	Food waste treating by biochar-assisted high-solid anaerobic digestion coupled with steam gasification: Enhanced bioenergy generation and porous biochar production. Bioresource Technology, 2021, 331, 125051.	9.6	29
104	Toxicity assessment of carbon black waste: A by-product from oil refineries. Journal of Hazardous Materials, 2017, 321, 600-610.	12.4	28
105	Development of Nanoparticles for Drug Delivery to Brain Tumor: The Effect of Surface Materials on Penetration Into Brain Tissue. Journal of Pharmaceutical Sciences, 2019, 108, 1736-1745.	3.3	28
106	Energetic, economic, and environmental assessment of a Stirling engine based gasification CCHP system. Applied Energy, 2021, 281, 116067.	10.1	27
107	Experimental investigation on a dehumidification unit with heat recovery using desiccant coated heat exchanger in waste to energy system. Applied Thermal Engineering, 2021, 185, 116342.	6.0	27
108	Impacts of biochar concentration on the growth performance of a leafy vegetable in a tropical city and its global warming potential. Journal of Cleaner Production, 2020, 264, 121678.	9.3	26

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109	Study of cell seeding on porous poly(d,l-lactic-co-glycolic acid) sponge and growth in a Couette–Taylor bioreactor. Chemical Engineering Science, 2010, 65, 2108-2117.	3.8	25
110	Experimental and Numerical Investigations on the Electrostatics Generation and Transport in the Downer Reactor of a Triple-Bed Combined Circulating Fluidized Bed. Industrial & Engineering Chemistry Research, 2012, 51, 14258-14267.	3.7	25
111	Box-Behnken design based CO2 co-gasification of horticultural waste and sewage sludge with addition of ash from waste as catalyst. Applied Energy, 2019, 242, 1549-1561.	10.1	25
112	Heart developmental toxicity by carbon black waste generated from oil refinery on zebrafish embryos (Danio rerio): Combined toxicity on heart function by nickel and vanadium. Journal of Hazardous Materials, 2019, 363, 127-137.	12.4	25
113	Hazard of electrostatic generation in a pneumatic conveying system: electrostatic effects on the accuracy of electrical capacitance tomography measurements and generation of spark. Measurement Science and Technology, 2008, 19, 015502.	2.6	24
114	Experimental and modeling investigation of an integrated biomass gasifier–engine–generator system for power generation and waste heat recovery. Energy Conversion and Management, 2019, 199, 112023.	9.2	24
115	Gasification biochar from horticultural waste: An exemplar of the circular economy in Singapore. Science of the Total Environment, 2021, 781, 146573.	8.0	24
116	Electric field controlled electrospray deposition for precise particle pattern and cell pattern formation. AICHE Journal, 2010, 56, 2607-2621.	3.6	23
117	Customizing high-performance molten salt biochar from wood waste for CO2/N2 separation. Fuel Processing Technology, 2022, 234, 107319.	7.2	23
118	Coaxial electrohydrodynamic atomization toward large scale production of coreâ€shell structured microparticles. AICHE Journal, 2017, 63, 5303-5319.	3.6	22
119	Electrical Field Guided Electrospray Deposition for Production of Gradient Particle Patterns. ACS Applied Materials & Deposition 18499-18506.	8.0	22
120	Insight into the Fe2O3/CaO-based chemical looping process for biomass conversion. Bioresource Technology, 2020, 310, 123384.	9.6	22
121	Enhanced penetration of pro-apoptotic and anti-angiogenic micellar nanoprobe in 3D multicellular spheroids for chemophototherapy. Journal of Controlled Release, 2020, 323, 502-518.	9.9	22
122	Codelivery of antiâ€cancer agents via doubleâ€walled polymeric microparticles/injectable hydrogel: A promising approach for treatment of triple negative breast cancer. Biotechnology and Bioengineering, 2017, 114, 2931-2946.	3.3	20
123	Nitrogen Removal and Energy Recovery from Sewage Sludge by Combined Hydrothermal Pretreatment and CO <sub>2</sub> Gasification. ACS Sustainable Chemistry and Engineering, 2018, 6, 16629-16636.	6.7	20
124	Three-stage anaerobic co-digestion of food waste and waste activated sludge: Identifying bacterial and methanogenic archaeal communities and their correlations with performance parameters. Bioresource Technology, 2019, 285, 121333.	9.6	20
125	A factorial experimental analysis of using wood fly ash as an alkaline activator along with coal fly ash for production of geopolymer-cementitious hybrids. Science of the Total Environment, 2020, 718, 135289.	8.0	20
126	A 28 kWe multi-source high-flux solar simulator: Design, characterization, and modeling. Solar Energy, 2020, 211, 569-583.	6.1	20

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127	A hybrid peripheral fragmentation and shrinking-core model for fixed-bed biomass gasification. Chemical Engineering Journal, 2020, 400, 124940.	12.7	19
128	Computational and experimental studies of electrospray deposition process in pharmaceutical micro-pattern formation. Chemical Engineering Science, 2011, 66, 3836-3849.	3.8	18
129	Particulate emission from the gasification and pyrolysis of biomass: Concentration, size distributions, respiratory deposition-based control measure evaluation. Environmental Pollution, 2018, 242, 1108-1118.	7.5	18
130	Experimental and numerical study of biomass catalytic pyrolysis using Ni2P-loaded zeolite: Product distribution, characterization and overall benefit. Energy Conversion and Management, 2020, 208, 112581.	9.2	18
131	Effective co-delivery of nutlin-3a and p53 genes via core–shell microparticles for disruption of MDM2–p53 interaction and reactivation of p53 in hepatocellular carcinoma. Journal of Materials Chemistry B, 2017, 5, 5816-5834.	5.8	17
132	Synergistic effect on co-gasification of chicken manure and petroleum coke: An investigation of sustainable waste management. Chemical Engineering Journal, 2021, 417, 128008.	12.7	17
133	Experimental investigations of granular shape effects on the generation of electrostatic charge. Particuology, 2014, 15, 82-89.	3.6	16
134	Rapid toxicity screening of gasification ashes. Waste Management, 2016, 50, 93-104.	7.4	16
135	Emerging pharmaceutical and organic contaminants removal using carbonaceous waste from oil refineries. Chemosphere, 2021, 271, 129542.	8.2	16
136	Sustainable and Highly Efficient Recycling of Plastic Waste into Syngas via a Chemical Looping Scheme. Environmental Science &	10.0	15
137	Investigation of the application of a Taylor-Couette bioreactor in the post-processing of bioprinted human dermal tissue. Biochemical Engineering Journal, 2019, 151, 107317.	3.6	14
138	Multi-criteria optimization of a biomass gasification-based combined cooling, heating, and power system integrated with an organic Rankine cycle in different climate zones in China. Energy Conversion and Management, 2021, 243, 114364.	9.2	14
139	Plastic-containing food waste conversion to biomethane, syngas, and biochar via anaerobic digestion and gasification: Focusing on reactor performance, microbial community analysis, and energy balance assessment. Journal of Environmental Management, 2022, 306, 114471.	7.8	14
140	Solar-driven gasification in an indirectly-irradiated thermochemical reactor with a clapboard-type internally-circulating fluidized bed. Energy Conversion and Management, 2021, 248, 114795.	9.2	13
141	Superhydrophobic leached carbon Black/Poly(vinyl) alcohol aerogel for selective removal of oils and organic compounds from water. Chemosphere, 2022, 286, 131520.	8.2	13
142	Granular attrition in a rotary valve: Attrition product size and shape. Chemical Engineering Science, 2006, 61, 3435-3451.	3.8	12
143	Localized Delivery of Pilocarpine to Hypofunctional Salivary Glands through Electrospun Nanofiber Mats: An Ex Vivo and In Vivo Study. International Journal of Molecular Sciences, 2019, 20, 541.	4.1	12
144	Convection enhanced delivery of light responsive antigen capturing oxygen generators for chemo-phototherapy triggered adaptive immunity. Biomaterials, 2021, 275, 120974.	11.4	12

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145	Multi-criteria decision making of biomass gasification-based cogeneration systems with heat storage and solid dehumidification of desiccant coated heat exchangers. Energy, 2021, 233, 121122.	8.8	12
146	Evaluating the urban metabolism sustainability of municipal solid waste management system: An extended exergy accounting and indexing perspective. Applied Energy, 2021, 300, 117254.	10.1	12
147	Investigation of particle transport by a turbulent flow through a 90° bend pipe with electrostatic effects. Powder Technology, 2021, 394, 547-561.	4.2	12
148	3D Printing Methyl Cellulose Hydrogel Wound Dressings with Parameter Exploration Via Computational Fluid Dynamics Simulation. Pharmaceutical Research, 2022, 39, 281-294.	3.5	12
149	Investigation of granule electrostatic charge generation with normal stress effect. Advanced Powder Technology, 2016, 27, 2094-2101.	4.1	11
150	Comparison-Based Optical Assessment of Hyperboloid and Ellipsoid Reflectors in a Beam-Down Solar Tower System With Linear Fresnel Heliostats. Journal of Solar Energy Engineering, Transactions of the ASME, 2017, 139, .	1.8	11
151	Sustainable production of bio-oil and carbonaceous materials from biowaste co-pyrolysis. Chemical Engineering Journal, 2022, 427, 131821.	12.7	11
152	Experimental investigation of pressure fluctuation propagation in two orthogonal directions using a clapboard-type internally circulating fluidized bed. Advanced Powder Technology, 2020, 31, 3395-3407.	4.1	10
153	Optimization of operation strategies of a syngas-fueled engine in a distributed gasifier-generator system driven by horticulture waste. Energy Conversion and Management, 2020, 208, 112580.	9.2	10
154	Modelling the co-firing of coal and biomass in a 10 kWth oxy-fuel fluidized bed. Powder Technology, 2022, 395, 43-59.	4.2	10
155	Experimental and numerical study on thermal performance of an indirectly irradiated solar reactor with a clapboard-type internally circulating fluidized bed. Applied Energy, 2022, 305, 117976.	10.1	10
156	Co-firing of coal and biomass under pressurized oxy-fuel combustion mode: Experimental test in a 10 kWth fluidized bed. Chemical Engineering Journal, 2022, 431, 133457.	12.7	10
157	On the density waves developed in gravity channel flows of granular materials. Journal of Fluid Mechanics, 2001, 435, 217-246.	3.4	9
158	Experimental and computational studies of oxygen transport in a Taylor-Couette bioreactor. Chemical Engineering Journal, 2018, 334, 1954-1964.	12.7	9
159	Microbial succession analysis reveals the significance of restoring functional microorganisms during rescue of failed anaerobic digesters by bioaugmentation of nano-biochar-amended digestate. Bioresource Technology, 2022, 352, 127102.	9.6	9
160	Methanosarcina thermophila bioaugmentation and its synergy with biochar growth support particles versus polypropylene microplastics in thermophilic food waste anaerobic digestion. Bioresource Technology, 2022, 360, 127531.	9.6	9
161	Thermodynamic analysis of an epitrochoidal rotary reactor for solar hydrogen production via a water-splitting thermochemical cycle using nonstoichiometric ceria. Energy Conversion and Management, 2022, 268, 115968.	9.2	9
162	Template-Free Synthesis of Alkaline Earth Vanadate Nanomaterials from Leaching Solutions of Oil Refinery Waste. ACS Sustainable Chemistry and Engineering, 2018, 6, 2292-2301.	6.7	8

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163	2017 P.V. Danckwerts Memorial Lecture special issue editorial: Advances in emerging technologies of chemical engineering towards sustainable energy and environment: Solar and biomass. Chemical Engineering Science, 2020, 215, 115384.	3.8	8
164	Characterization of granular electrostatics generation. Powder Technology, 2020, 363, 74-85.	4.2	8
165	Syntrophic interactions in anaerobic digestion: how biochar properties affect them?. Sustainable Environment, 2021, 7, .	2.4	8
166	Sewage sludge ash-based mortar as construction material: Mechanical studies, macrofouling, and marine toxicity. Science of the Total Environment, 2022, 824, 153768.	8.0	8
167	Production of PEX protein from QM7 cells cultured in polymer scaffolds in a Taylor–Couette bioreactor. Biochemical Engineering Journal, 2014, 88, 179-187.	3.6	7
168	Mesoporous silica-encaged ultrafine ceria–nickel hydroxide nanocatalysts for solar thermochemical dry methane reforming. Applied Physics Letters, 2022, 120, .	3.3	7
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