

Rong Chen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6549271/publications.pdf>

Version: 2024-02-01

187
papers

4,013
citations

147726

31
h-index

197736

49
g-index

188
all docs

188
docs citations

188
times ranked

3166
citing authors

#	ARTICLE	IF	CITATIONS
1	An investigation of CO ₂ adsorption kinetics on porous magnesium oxide. <i>Chemical Engineering Journal</i> , 2016, 283, 175-183.	6.6	179
2	An overview of smoothed particle hydrodynamics for simulating multiphase flow. <i>Applied Mathematical Modelling</i> , 2016, 40, 9625-9655.	2.2	138
3	Carbon-Based Photothermal Superhydrophobic Materials with Hierarchical Structure Enhances the Anti-Icing and Photothermal Deicing Properties. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 48308-48321.	4.0	102
4	A novel photobioreactor generating the light/dark cycle to improve microalgae cultivation. <i>Bioresource Technology</i> , 2014, 161, 186-191.	4.8	101
5	Optofluidics based micro-photocatalytic fuel cell for efficient wastewater treatment and electricity generation. <i>Lab on A Chip</i> , 2014, 14, 3368.	3.1	80
6	Optofluidic membrane microreactor for photocatalytic reduction of CO ₂ . <i>International Journal of Hydrogen Energy</i> , 2016, 41, 2457-2465.	3.8	75
7	High-performance optofluidic membrane microreactor with a mesoporous CdS/TiO ₂ /SBA-15@carbon paper composite membrane for the CO ₂ photoreduction. <i>Chemical Engineering Journal</i> , 2017, 316, 911-918.	6.6	73
8	Band Gap Engineering in an Efficient Solar-Driven Interfacial Evaporation System. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 32880-32887.	4.0	73
9	Copper-decorated TiO ₂ nanorod thin films in optofluidic planar reactors for efficient photocatalytic reduction of CO ₂ . <i>International Journal of Hydrogen Energy</i> , 2017, 42, 9722-9732.	3.8	72
10	High-performance gas-liquid-solid microreactor with polydopamine functionalized surface coated by Pd nanocatalyst for nitrobenzene hydrogenation. <i>Chemical Engineering Journal</i> , 2016, 306, 1017-1025.	6.6	67
11	Synthesizing MgO with a high specific surface for carbon dioxide adsorption. <i>RSC Advances</i> , 2015, 5, 30929-30935.	1.7	66
12	Performance characteristics of a membraneless solar responsive photocatalytic fuel cell with an air-breathing cathode under different fuels and electrolytes and air conditions. <i>Electrochimica Acta</i> , 2015, 182, 280-288.	2.6	62
13	Performance of a microfluidic microbial fuel cell based on graphite electrodes. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 15710-15715.	3.8	60
14	Enhancement of photo-hydrogen production in a biofilm photobioreactor using optical fiber with additional rough surface. <i>Bioresource Technology</i> , 2011, 102, 8507-8513.	4.8	58
15	Photothermal trap with multi-scale micro-nano hierarchical structure enhances light absorption and promote photothermal anti-icing/deicing. <i>Chemical Engineering Journal</i> , 2022, 435, 135025.	6.6	58
16	Optofluidic Microreactors with TiO ₂ -Coated Fiberglass. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 12548-12553.	4.0	57
17	Temperature-independent polymer optical fiber evanescent wave sensor. <i>Scientific Reports</i> , 2015, 5, 11508.	1.6	54
18	Catalytic membrane microreactor with Pd/Al ₂ O ₃ coated PDMS film modified by dopamine for hydrogenation of nitrobenzene. <i>Chemical Engineering Journal</i> , 2016, 301, 35-41.	6.6	54

#	ARTICLE	IF	CITATIONS
19	An optofluidic planar microreactor for photocatalytic reduction of CO ₂ in alkaline environment. <i>Energy</i> , 2017, 120, 276-282.	4.5	54
20	Effects of surface roughness on optical properties and sensitivity of fiber-optic evanescent wave sensors. <i>Applied Optics</i> , 2013, 52, 3937.	0.9	50
21	Respective electrode potential characteristics of photocatalytic fuel cell with visible-light responsive photoanode and air-breathing cathode. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 16547-16555.	3.8	47
22	Hydrolysates of lignocellulosic materials for biohydrogen production. <i>BMB Reports</i> , 2013, 46, 244-251.	1.1	46
23	Gas-liquid-solid monolithic microreactor with Pd nanocatalyst coated on polydopamine modified nickel foam for nitrobenzene hydrogenation. <i>Chemical Engineering Journal</i> , 2018, 334, 1897-1904.	6.6	45
24	Enhancing fuel transport in air-breathing microfluidic fuel cells by immersed fuel micro-jet. <i>Journal of Power Sources</i> , 2020, 445, 227326.	4.0	44
25	Visible light responsive CdS sensitized TiO ₂ nanorod array films for efficient photocatalytic reduction of gas phase CO ₂ . <i>Molecular Catalysis</i> , 2018, 448, 185-194.	1.0	42
26	A solar responsive photocatalytic fuel cell with the membrane electrode assembly design for simultaneous wastewater treatment and electricity generation. <i>Journal of Hazardous Materials</i> , 2018, 358, 346-354.	6.5	40
27	ZIF-67-derived Co nanoparticles embedded in N-doped porous carbon composite interconnected by MWCNTs as highly efficient ORR electrocatalysts for a flexible direct formate fuel cell. <i>Chemical Engineering Journal</i> , 2022, 432, 134192.	6.6	39
28	A dual-functional three-dimensional herringbone-like electrode for a membraneless microfluidic fuel cell. <i>Journal of Power Sources</i> , 2019, 438, 227058.	4.0	37
29	A Fiber-Optic Sensor for Accurately Monitoring Biofilm Growth in a Hydrogen Production Photobioreactor. <i>Analytical Chemistry</i> , 2014, 86, 3994-4001.	3.2	36
30	A 3D porous PDMS sponge embedded with carbon nanoparticles for solar driven interfacial evaporation. <i>Separation and Purification Technology</i> , 2022, 292, 120985.	3.9	34
31	A woven thread-based microfluidic fuel cell with graphite rod electrodes. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 22467-22473.	3.8	33
32	High surface area optofluidic microreactor for redox mediated photocatalytic water splitting. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 19270-19276.	3.8	32
33	Tube-in-tube hollow fiber catalytic membrane microreactor for the hydrogenation of nitrobenzene. <i>Chemical Engineering Journal</i> , 2018, 354, 35-41.	6.6	32
34	Two-phase computational modelling of a membraneless microfluidic fuel cell with a flow-through porous anode. <i>Journal of Power Sources</i> , 2019, 420, 88-98.	4.0	32
35	A micro photocatalytic fuel cell with an air-breathing, membraneless and monolithic design. <i>Science Bulletin</i> , 2016, 61, 1699-1710.	4.3	31
36	Mathematical modeling of direct formate fuel cells. <i>Applied Thermal Engineering</i> , 2017, 124, 232-240.	3.0	31

#	ARTICLE	IF	CITATIONS
37	Influence of torrefaction, hydrothermal carbonization and degradative solvent extraction pretreatments on moisture absorption and self-ignition characteristics of biomass. <i>Fuel</i> , 2020, 282, 118843.	3.4	31
38	High performance formic acid fuel cell benefits from Pd@PdO catalyst supported by ordered mesoporous carbon. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 29235-29245.	3.8	31
39	High-quality fiber fabrication in buffered hydrofluoric acid solution with ultrasonic agitation. <i>Applied Optics</i> , 2013, 52, 1432.	0.9	30
40	Dynamic bubbling behaviors on a micro-orifice submerged in stagnant liquid. <i>International Journal of Heat and Mass Transfer</i> , 2014, 68, 324-331.	2.5	30
41	Cassie-to-Wenzel transition of droplet on the superhydrophobic surface caused by light induced evaporation. <i>Applied Thermal Engineering</i> , 2018, 144, 945-959.	3.0	30
42	A cascading gradient pore microstructured photoanode with enhanced photoelectrochemical and photocatalytic activities. <i>Journal of Catalysis</i> , 2016, 344, 411-419.	3.1	29
43	Effect of CO ₂ bubbles behaviors on microalgal cells distribution and growth in bubble column photobioreactor. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 4879-4887.	3.8	28
44	A solar responsive cubic nanosized CuS/Cu ₂ O/Cu photocathode with enhanced photoelectrochemical activity. <i>Journal of Catalysis</i> , 2019, 372, 182-192.	3.1	28
45	Highly Flexible and Ultraprecise Manipulation of Light-Levitated Femtoliter/Picoliter Droplets. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 1068-1077.	2.1	28
46	Single-Stream H ₂ O ₂ Membraneless Microfluidic Fuel Cell and Its Application as a Self-Powered Electrochemical Sensor. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 15447-15453.	1.8	28
47	Bioconversion characteristics of <i>Rhodospseudomonas palustris</i> CQK 01 entrapped in a photobioreactor for hydrogen production. <i>Bioresource Technology</i> , 2013, 135, 331-338.	4.8	27
48	Bench scale study of CO ₂ adsorption performance of MgO in the presence of water vapor. <i>Energy</i> , 2016, 112, 101-110.	4.5	27
49	A ternary hybrid CdS/SiO ₂ /TiO ₂ photoanode with enhanced photoelectrochemical activity. <i>Renewable Energy</i> , 2018, 127, 524-530.	4.3	27
50	Advances and Challenges in Photoelectrochemical Redox Batteries for Solar Energy Conversion and Storage. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	27
51	Enhancement of hydrogen production by optimization of biofilm growth in a photobioreactor. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 4741-4751.	3.8	26
52	A microfluidic all-vanadium photoelectrochemical cell for solar energy storage. <i>Electrochimica Acta</i> , 2017, 258, 842-849.	2.6	26
53	Interaction of the Taylor flow behaviors and catalytic reaction inside a gas-liquid-solid microreactor under long-term operation. <i>Chemical Engineering Science</i> , 2018, 175, 175-184.	1.9	26
54	Layer-by-layer self-assembly of palladium nanocatalysts with polyelectrolytes grafted on the polydopamine functionalized gas-liquid-solid microreactor. <i>Chemical Engineering Journal</i> , 2018, 332, 174-182.	6.6	26

#	ARTICLE	IF	CITATIONS
55	CO2 utilization: Direct power generation by a coupled system that integrates photocatalytic reduction of CO2 with photocatalytic fuel cell. Journal of CO2 Utilization, 2019, 32, 31-36.	3.3	26
56	A direct formate microfluidic fuel cell with cotton thread-based electrodes. International Journal of Hydrogen Energy, 2020, 45, 27665-27674.	3.8	25
57	Liquid and oxygen transport in defective bilayer gas diffusion material of proton exchange membrane fuel cell. International Journal of Hydrogen Energy, 2013, 38, 4067-4078.	3.8	24
58	Hydrogen production by Rhodospseudomonas palustris CQK 01 in a continuous photobioreactor with ultrasonic treatment. International Journal of Hydrogen Energy, 2012, 37, 15450-15457.	3.8	23
59	A membrane-less visible-light responsive micro photocatalytic fuel cell with the laterally-arranged CdS/ZnS-TiO2 photoanode and air-breathing CuO photocathode for simultaneous wastewater treatment and electricity generation. Separation and Purification Technology, 2019, 229, 115821.	3.9	23
60	A microfluidic all-vanadium photoelectrochemical cell with multi-nanostructured TiO2 photoanode. Journal of Power Sources, 2018, 404, 1-6.	4.0	22
61	A ternary hybrid CuS/Cu2O/Cu nanowired photocathode for photocatalytic fuel cell. Journal of Power Sources, 2019, 435, 226766.	4.0	22
62	A self-pumping microfluidic fuel cell powered by formate with Pd coated carbon cloth electrodes. Journal of Power Sources, 2021, 490, 229553.	4.0	22
63	A microfluidic all-vanadium photoelectrochemical cell with the N-doped TiO2 photoanode for enhancing the solar energy storage. Journal of Power Sources, 2019, 419, 162-170.	4.0	21
64	Cyclic voltammetry electrodeposition of well-dispersed Pd nanoparticles on carbon paper as a flow-through anode for microfluidic direct formate fuel cells. Nanoscale, 2020, 12, 20270-20278.	2.8	21
65	Discrete-holes film fueling anode heads for high performance air-breathing microfluidic fuel cell. Journal of Power Sources, 2021, 482, 228966.	4.0	21
66	Dynamic behaviors of the coalescence between two droplets with different temperatures simulated by the VOF method. Applied Thermal Engineering, 2018, 131, 132-140.	3.0	21
67	Two-dimension mathematical modeling of photosynthetic bacterial biofilm growth and formation. International Journal of Hydrogen Energy, 2012, 37, 15607-15615.	3.8	20
68	Numerical investigation of the moving liquid column coalescing with a droplet in triangular microchannels using CLSVOF method. Science Bulletin, 2015, 60, 1911-1926.	4.3	20
69	A membraneless microfluidic fuel cell with continuous multistream flow through cotton threads. International Journal of Energy Research, 2020, 44, 2243-2251.	2.2	20
70	Highly efficient photocatalytic conversion of gas phase CO2 by TiO2 nanotube array sensitized with CdS/ZnS quantum dots under visible light. International Journal of Hydrogen Energy, 2021, 46, 31634-31646.	3.8	20
71	Highly-durable optofluidic microreactor for photocatalytic water splitting. Energy, 2015, 83, 797-804.	4.5	19
72	Simulation on the coalescence of the moving liquid column and droplet in a hydrophilic microchannel by volume of fluid method. Applied Thermal Engineering, 2014, 64, 129-138.	3.0	18

#	ARTICLE	IF	CITATIONS
73	A flexible on-fiber H ₂ O ₂ microfluidic fuel cell with high power density. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 4793-4803.	3.8	18
74	Novel Superaerophobic Anode with Fernâ€ŠShaped Pd Nanoarray for Highâ€ŠPerformance Direct Formic Acid Fuel Cell. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	18
75	Toward CO ₂ utilization for direct power generation using an integrated system consisting of CO ₂ photoreduction with 3D TiO ₂ /Ni-foam and a photocatalytic fuel cell. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6275-6284.	5.2	17
76	Measurements and modeling of heat generation in a trickling biofilter for biodegradation of a low concentration volatile organic compound (VOC). <i>Chemical Engineering Journal</i> , 2008, 140, 221-234.	6.6	16
77	Enhancement of hydrogen production by adsorption of <i>Rhodoseudomonas palustris</i> CQK 01 on a new support material. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 15730-15737.	3.8	16
78	Numerical investigation of the Marangoni convection during the liquid column evaporation in microchannels caused by IR laser heating. <i>International Journal of Heat and Mass Transfer</i> , 2016, 101, 970-980.	2.5	16
79	Optofluidics-Based Membrane Microreactor for Wastewater Treatment by Photocatalytic Ozonation. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 8627-8635.	1.8	16
80	Hierarchical Pd@Ni catalyst with a snow-like nanostructure on Ni foam for nitrobenzene hydrogenation. <i>Applied Catalysis A: General</i> , 2019, 575, 238-245.	2.2	16
81	Current density distribution in air-breathing microfluidic fuel cells with an array of graphite rod anodes. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 2960-2968.	3.8	16
82	Route towards high-performance microfluidic fuel cells: a review. <i>Sustainable Energy and Fuels</i> , 2021, 5, 2840-2859.	2.5	16
83	Effect of methanol concentration on passive DMFC performance. <i>Fuel Cells Bulletin</i> , 2005, 2005, 12-17.	0.7	15
84	A micro membrane-less photoelectrochemical cell for hydrogen and electricity generation in the presence of methanol. <i>Electrochimica Acta</i> , 2017, 245, 549-560.	2.6	15
85	Simulation on the dynamic flow and heat and mass transfer of a liquid column induced by the IR laser photothermal effect actuated evaporation in a microchannel. <i>International Journal of Heat and Mass Transfer</i> , 2017, 113, 975-983.	2.5	15
86	Pore network study of slow evaporation in hydrophobic porous media. <i>International Journal of Heat and Mass Transfer</i> , 2014, 68, 310-323.	2.5	14
87	Experimental study on the durability of the polydopamine functionalized gasâ€Šliquidâ€Šsolid microreactor for nitrobenzene hydrogenation. <i>RSC Advances</i> , 2018, 8, 5661-5669.	1.7	14
88	Droplet Evaporation on a Hydrophobic Photothermal Conversion Substrate. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 3758-3769.	1.8	14
89	Self-assembly of supraparticles on a lubricated-superamphiphobic patterned surface. <i>Applied Surface Science</i> , 2022, 576, 151684.	3.1	14
90	GeO ₂ -SiO ₂ -chitosan-medium-coated hollow optical fiber for cell immobilization. <i>Optics Letters</i> , 2013, 38, 3115.	1.7	13

#	ARTICLE	IF	CITATIONS
91	Light-actuated droplets coalescence and ion detection on the CAHTs-assisted superhydrophobic surface. <i>Sensors and Actuators B: Chemical</i> , 2019, 282, 469-481.	4.0	13
92	In situ visualization of biofilm formation in a microchannel for a microfluidic microbial fuel cell anode. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 14651-14658.	3.8	13
93	Towards flexible fuel cells: development, challenge and prospect. <i>Applied Thermal Engineering</i> , 2022, 203, 117937.	3.0	13
94	IR laser assisted photothermal condensation in a microchannel. <i>Chemical Engineering Science</i> , 2014, 119, 288-294.	1.9	12
95	IR laser caused droplet evaporation on the hydrophobic surface. <i>International Journal of Heat and Mass Transfer</i> , 2016, 94, 180-190.	2.5	12
96	Boosting power density of microfluidic biofuel cell with porous three-dimensional graphene@nickel foam as flow-through anode. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 18516-18520.	3.8	12
97	A visible-light responsive micro photocatalytic fuel cell with laterally arranged electrodes. <i>Applied Thermal Engineering</i> , 2018, 143, 193-199.	3.0	12
98	A microfluidic all-vanadium photoelectrochemical cell with a full-spectrum-responsive Ti2O3 photoanode for efficient solar energy storage. <i>Science China Technological Sciences</i> , 2019, 62, 1628-1635.	2.0	12
99	Simulation on the Marangoni flow and heat transfer in a laser-heated suspended droplet. <i>Chemical Engineering Science</i> , 2019, 209, 115202.	1.9	12
100	A high power density paper-based zinc-air battery with a hollow channel structure. <i>Chemical Communications</i> , 2021, 57, 1258-1261.	2.2	12
101	Droplet Migration and Coalescence in a Microchannel Induced by the Photothermal Effect of a Focused Infrared Laser. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 1912-1925.	1.8	12
102	Synergetic Photo-Thermo Catalytic Hydrogen Production by Carbon Materials. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 1602-1608.	2.1	12
103	A feasibility study on unsaturated flow bioreactor using optical fiber illumination for photo-hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 15666-15671.	3.8	11
104	Lattice Boltzmann simulation of substrate solution through a porous granule immobilized PSB-cell for biohydrogen production. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 15700-15709.	3.8	11
105	High-performance biofilm photobioreactor based on a GeO2-SiO2-chitosan-medium-coated hollow optical fiber. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 10016-10027.	3.8	11
106	A membrane electrode assembled photoelectrochemical cell with a solar-responsive cadmium sulfide-zinc sulfide-titanium dioxide/mesoporous silica photoanode. <i>Journal of Power Sources</i> , 2017, 371, 96-105.	4.0	11
107	Numerical study on dynamic behaviors of the coalescence between the advancing liquid meniscus and multi-droplets in a microchannel using CLSVOF method. <i>Computers and Fluids</i> , 2018, 170, 341-348.	1.3	11
108	Core-shell structured Pd catalyst layer encapsulated by polydopamine for a gas-liquid-solid microreactor. <i>Applied Surface Science</i> , 2019, 487, 416-425.	3.1	11

#	ARTICLE	IF	CITATIONS
109	Simple Method for Directly Synthesizing Ag Nanoparticles with Silver Ammonia and Polydopamine in a Microreactor toward the Conversion of 4-NP to 4-AP. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 16205-16216.	1.8	11
110	One-dimensional TiO ₂ nanotube array photoanode for a microfluidic all-vanadium photoelectrochemical cell for solar energy storage. <i>Catalysis Science and Technology</i> , 2020, 10, 4352-4361.	2.1	11
111	Dynamic behaviors and charge characteristics of droplet in a vertical electric field before bouncing. <i>Experimental Thermal and Fluid Science</i> , 2020, 119, 110213.	1.5	11
112	Catalytic Membrane Microreactors with an Ultrathin Freestanding Membrane for Nitrobenzene Hydrogenation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 9806-9813.	4.0	11
113	Light-Fueled Beating Coffee-Ring Deposition for Droplet Evaporative Crystallization. <i>Analytical Chemistry</i> , 2021, 93, 8817-8825.	3.2	11
114	Solar energy storage by a microfluidic all-vanadium photoelectrochemical flow cell with self-doped TiO ₂ photoanode. <i>Journal of Energy Storage</i> , 2021, 43, 103228.	3.9	11
115	Filter paper membrane based microfluidic fuel cells: Toward next-generation miniaturized and low cost power supply. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 15065-15073.	3.8	11
116	Oxygen self-doping formicary-like electrocatalyst with ultrahigh specific surface area derived from waste pitaya peels for high-yield H ₂ O ₂ electrosynthesis and efficient electro-Fenton degradation. <i>Separation and Purification Technology</i> , 2022, 289, 120687.	3.9	11
117	Role of defects and oxygen-functional groups in carbon paper cathode for high-performance direct liquid fuel cells. <i>Carbon</i> , 2022, 192, 170-178.	5.4	11
118	Emergence of droplets from a bundle of tubes into a micro-channel gas stream: Application to the two-phase dynamics in the cathode of proton exchange membrane fuel cell. <i>International Journal of Heat and Mass Transfer</i> , 2014, 75, 668-684.	2.5	10
119	Control of the droplet generation by an infrared laser. <i>AIP Advances</i> , 2018, 8, .	0.6	10
120	pH response of zwitterionic polydopamine layer to palladium deposition in the microchannel. <i>Chemical Engineering Journal</i> , 2019, 356, 282-291.	6.6	10
121	Anion-Exchange Membrane Electrode Assembled Photoelectrochemical Cell with a Visible Light Responsive Photoanode for Simultaneously Treating Wastewater and Generating Electricity. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 137-145.	1.8	10
122	Direct Formate/Persulfate Microfluidic Fuel Cell with a Catalyst-Free Cathode and High Power Density. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 5623-5630.	3.2	10
123	Water flooding behavior in flow cells for ammonia production via electrocatalytic nitrogen reduction. <i>Fundamental Research</i> , 2022, 2, 757-763.	1.6	10
124	Enhanced gas removal and cell performance of a microfluidic fuel cell by a paper separator embedded in the microchannel. <i>Energy</i> , 2022, 239, 122098.	4.5	10
125	Surface modification of <sc>PTFE</sc>/<sc>SiO₂</sc> composite films through the deposition of polydopamine (<sc>PDA</sc>) and the modified adhesive properties. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	1.3	10
126	How does the electric field make a droplet exhibit the ejection and rebound behaviour on a superhydrophobic surface?. <i>Journal of Fluid Mechanics</i> , 2022, 941, .	1.4	10

#	ARTICLE	IF	CITATIONS
127	Accelerated bubble growth and departure by bioinspired gradient anode in microfluidic fuel cells. <i>Electrochimica Acta</i> , 2022, 424, 140618.	2.6	10
128	Improvement of hydrogen production with <i>Rhodospseudomonas palustris</i> CQK-01 by Ar gas sparging. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 15443-15449.	3.8	9
129	Light-Caused Droplet Bouncing from a Cavity Trap-Assisted Superhydrophobic Surface. <i>Langmuir</i> , 2020, 36, 11068-11078.	1.6	9
130	A 3D oriented CuS/Cu ₂ O/Cu nanowire photocathode. <i>Journal of Materials Chemistry A</i> , 2021, 9, 6971-6980.	5.2	9
131	New insights into the role of CO ₂ in a photocatalytic fuel cell. <i>Journal of Power Sources</i> , 2021, 487, 229438.	4.0	9
132	Bubble-trap layer for effective removing gas bubbles and stabilizing power generation in direct liquid fuel cell. <i>Journal of Power Sources</i> , 2021, 507, 230260.	4.0	9
133	IR laser induced meniscus evaporation from a microchannel. <i>Chemical Engineering Science</i> , 2015, 130, 31-40.	1.9	8
134	Dynamic Behavior of the Liquid Flow Coalescing with a Droplet in Hydrophobic Microchannels. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 2923-2931.	0.9	8
135	A simulation on flow and mass transfer in a packed bed photobioreactor for hydrogen production. <i>International Journal of Heat and Mass Transfer</i> , 2017, 109, 1132-1142.	2.5	8
136	Electricity generation of a laminar-flow microbial fuel cell without any additional power supply. <i>RSC Advances</i> , 2018, 8, 33637-33641.	1.7	8
137	Multilayered Pd nanocatalysts with nano-bulge structure in a microreactor for multiphase catalytic reaction. <i>Chemical Engineering Research and Design</i> , 2018, 138, 190-199.	2.7	8
138	A novel structured foam microreactor with controllable gas and liquid flow paths: Hydrodynamics and nitrobenzene conversion. <i>Chemical Engineering Science</i> , 2021, 229, 116004.	1.9	8
139	Self-doped TiO ₂ nanotube array photoanode for microfluidic all-vanadium photoelectrochemical flow battery. <i>Journal of Electroanalytical Chemistry</i> , 2021, 897, 115598.	1.9	8
140	Laser assisted microfluidic membrane evaporator for sample crystallization separation. <i>Separation and Purification Technology</i> , 2020, 242, 116817.	3.9	8
141	Spontaneous Imbibition in Paper-Based Microfluidic Devices: Experiments and Numerical Simulations. <i>Langmuir</i> , 2022, 38, 2677-2685.	1.6	8
142	Oil/Water Microreactor with a Core-Shell Wetting State on a SOB/OL-SHB/HL Multilevel Patterned Surface. <i>Journal of Physical Chemistry C</i> , 2021, 125, 27771-27783.	1.5	8
143	Characteristics of the IR Laser Photothermally Induced Phase Change in Microchannels with Different Depths. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 8450-8459.	1.8	7
144	Pulsating flow triggered by the laser induced phase change in microchannels with sawtooth-shaped baffles. <i>Sensors and Actuators B: Chemical</i> , 2018, 260, 1018-1024.	4.0	7

#	ARTICLE	IF	CITATIONS
145	Thermal analysis of the photothermal effect based droplet microfluidic system. <i>Chemical Engineering Science</i> , 2018, 186, 191-198.	1.9	7
146	Visualization of two-phase reacting flow behavior in a gas-liquid-solid microreactor. <i>Reaction Chemistry and Engineering</i> , 2019, 4, 715-723.	1.9	7
147	Gas consumption characteristics determined by gas-liquid two-phase flow coupled with catalytic reaction in a gas-liquid-solid microreactor. <i>International Journal of Heat and Mass Transfer</i> , 2019, 135, 897-906.	2.5	7
148	Polydopamine inspired dual-functional templates to prepare photoanode with enhanced photoelectrochemical activity. <i>Journal of Power Sources</i> , 2021, 496, 229831.	4.0	7
149	Light-Fueled Submarine-Like Droplet. <i>Advanced Science</i> , 2022, 9, .	5.6	7
150	Kinetics of light assisted catalytic reduction of 4-NP over Ag/PDA. <i>Chemical Engineering Science</i> , 2022, 259, 117778.	1.9	7
151	Optical droplets sorting assisted by superhydrophobic surface with hydrophilic patterns. <i>International Journal of Heat and Mass Transfer</i> , 2019, 143, 118560.	2.5	6
152	Stacked Catalytic Membrane Microreactor for Nitrobenzene Hydrogenation. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 9469-9477.	1.8	6
153	Electricity generation and electrochemical insight of zinc-air battery via microfluidic flow control. <i>Chemical Engineering Journal</i> , 2022, 429, 132198.	6.6	6
154	Residence Time Characteristics of Taylor Reacting Flow in a Microchannel Reactor during Long-Term Operation. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 4105-4113.	3.2	6
155	Engineering a concordant microenvironment with air-liquid-solid interface to promote electrochemical H ₂ O ₂ generation and wastewater purification. <i>Separation and Purification Technology</i> , 2022, 297, 121527.	3.9	6
156	Numerical study of water droplets impacting on cylindrical heat transfer pipes. <i>Engineering Applications of Computational Fluid Mechanics</i> , 2018, 12, 598-610.	1.5	5
157	Pore engineering of graphene aerogels for vanadium redox flow batteries. <i>Chemical Communications</i> , 2020, 56, 14984-14987.	2.2	5
158	Controllable light-induced droplet evaporative crystallization. <i>Soft Matter</i> , 2021, 17, 8730-8741.	1.2	5
159	Residence time characteristic of Taylor reacting flow in a microchannel reactor. <i>Chemical Engineering Science</i> , 2022, 253, 117575.	1.9	5
160	Micro-object manipulation by decanol liquid lenses. <i>Lab on A Chip</i> , 2022, 22, 2844-2852.	3.1	5
161	Numerical Simulation of Light/Dark Cycle Frequency of Microalgae Fluid in a Helical Tubular Photobioreactor for Carbon Dioxide Capture. <i>International Journal of Green Energy</i> , 2015, 12, 1037-1045.	2.1	4
162	IR laser induced phase change behaviors of the NaCl solution in the microchannel. <i>Chemical Engineering Science</i> , 2018, 187, 318-326.	1.9	4

#	ARTICLE	IF	CITATIONS
163	Synergistic effect of Pd content and polyelectrolyte multilayer structure on nitrobenzene hydrogenation in a microreactor. <i>RSC Advances</i> , 2019, 9, 23560-23569.	1.7	4
164	In Situ Synthesis of a Multilayered (PSS-PAH-Pd) Catalytic Hybrid Film Synthesized by the Layer-by-Layer Self-Assembly. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 9038-9047.	1.8	4
165	Preparation of a Catalyst Layer by Layer-by-Layer Self-Assembly for Plate-Type Catalytic Membrane Microreactors. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 15865-15874.	1.8	4
166	Photothermal reduction of 4-nitrophenol to 4-aminophenol using silver/polydopamine catalysts. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 108253.	3.3	4
167	Coalescence with Droplets Caused Acceleration of the Liquid Movement in Microchannels. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 1161-1169.	1.8	3
168	Renewable Energy Utilization and Energy Conservation in Thermal and Power Systems for China's Sustainable Energy Future. <i>Journal of Energy Engineering - ASCE</i> , 2019, 145, .	1.0	3
169	Reduction of Formate Crossover in Sequential-Flow Microfluidic Fuel Cells. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 1526-1531.	1.8	3
170	Photothermally Caused Propylene Glycol-Water Binary Droplet Evaporation on a Hydrophobic Surface. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 4153-4167.	1.8	3
171	Light fueled mixing in open surface droplet microfluidics for rapid probe preparation. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 26356-26365.	1.3	3
172	Dynamic two-phase flow behaviors in permeable network integrated with microchannel. <i>Applied Thermal Engineering</i> , 2022, , 118639.	3.0	3
173	Light Droplet Levitation in Relation to Interface Morphology and Liquid Property. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 4762-4767.	2.1	3
174	Locomotion of bacteria in liquid flow and the boundary layer effect on bacterial attachment. <i>Biochemical and Biophysical Research Communications</i> , 2015, 461, 671-676.	1.0	2
175	Structured B amorphous alloy catalysts on Ni foam for a gas-liquid-solid microreactor. <i>Catalysis Science and Technology</i> , 2020, 10, 1933-1940.	2.1	2
176	Upper Limit of Light-Levitated Droplet Motion. <i>Analytical Chemistry</i> , 2021, 93, 16008-16016.	3.2	2
177	Elimination of Fuel Crossover in a Single-Flow Microfluidic Fuel Cell with a Selective Catalytic Cathode. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 1955-1964.	1.8	2
178	Light Controlled 3D Crystal Morphology for Droplet Evaporative Crystallization on Photosensitive Hydrophobic Substrate. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 5910-5917.	2.1	2
179	The Effects of Gas Flow Rate and the Interval Time of Water Supplement on Ethanol Production of Rice Straw by Simultaneous Saccharification and Fermentation. <i>International Journal of Green Energy</i> , 2015, 12, 1031-1036.	2.1	1
180	Infrared laser-induced photothermal phase change for liquid actuation in microchannels. <i>Microfluidics and Nanofluidics</i> , 2021, 25, 1.	1.0	1

#	ARTICLE	IF	CITATIONS
181	Highly sensitive detection of Hg ²⁺ employing SPR sensor modified with chitosan/poly (vinyl) Tj ETQq1 1 0.784314 199 /Overlock 10	1.9	10
182	A hollow structure for flow and bendable paper-based zinc-air battery. International Journal of Energy Research, 0, , .	2.2	1
183	Simulation of bacterial locomotion and attachment in the interspaces of packed bed reactors. International Journal of Hydrogen Energy, 2013, 38, 15680-15685.	3.8	0
184	Numerical study on catalytic combustion of methane with ozone using Pd-exchanged zeolite X. Science China Chemistry, 2015, 58, 899-904.	4.2	0
185	Visualization Study on Two-Phase Flow Behaviors in the Gas-Liquid-Solid Microreactor for Hydrogenation of Nitrobenzene. , 2016, , .		0
186	Effect of the Wettability on the IR Laser Photothermally Induced Phase Change in Microchannels. , 2016, , .		0
187	Determination of the Radiative Properties of the TiO ₂ Porous Thin Films in the UV-VIS Spectral Range. Mechanisms and Machine Science, 2021, , 101-112.	0.3	0