

Xiaolei Fan

List of Publications by Year in descending order

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117
papers

4,222
citations

101543

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133252

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118
all docs

118
docs citations

118
times ranked

4614
citing authors

#	ARTICLE	IF	CITATIONS
1	Upcycling Polytetrahydrofuran to Polyester. <i>CCS Chemistry</i> , 2023, 5, 1233-1241.	7.8	10
2	Recent developments in multifunctional catalysts for fatty acid hydrodeoxygenation as a route towards biofuels. <i>Molecular Catalysis</i> , 2022, 523, 111492.	2.0	15
3	Horseradish Peroxidase-catalyzed "Template" Polymerization of Gallic Acid for the Functionalization of Silk Fabrics. <i>Journal of Natural Fibers</i> , 2022, 19, 9486-9499.	3.1	7
4	Structured cobalt-manganese oxides on SiC nano-whisker modified SiC foams for catalytic combustion of toluene. <i>Chemical Engineering Research and Design</i> , 2022, 177, 659-669.	5.6	5
5	Additive manufacturing of sodalite monolith for continuous heavy metal removal from water sources. <i>Chinese Journal of Chemical Engineering</i> , 2022, 42, 82-90.	3.5	3
6	Molecular Insights into Adsorption and Diffusion Mechanism of N-Hexane in MFI Zeolites with Different Si-to-Al Ratios and Counterions. <i>Catalysts</i> , 2022, 12, 144.	3.5	1
7	Catalytic conversion of bioethanol to value-added chemicals and fuels: A review. , 2022, 1, 47-68.		13
8	On understanding the sequential post-synthetic microwave-assisted dealumination and alkaline treatment of Y zeolite. <i>Microporous and Mesoporous Materials</i> , 2022, 333, 111736.	4.4	8
9	Nonthermal Plasma Catalytic Ammonia Synthesis over a Ni Catalyst Supported on MgO/SBA-15. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 3292-3302.	3.7	20
10	Effect of Ball-Milling Pretreatment of Cellulose on Its Photoreforming for H ₂ Production. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 4862-4871.	6.7	22
11	Effect of Starch Chain Structure and Non-starch Components on the Hydrolysis of Starch by α -Amylase. <i>Starch/Staerke</i> , 2022, 74, .	2.1	3
12	A novel microwave-assisted methanol-to-hydrocarbons process with a structured ZSM-5/SiC foam catalyst: Proof-of-concept and environmental impacts. <i>Chemical Engineering Science</i> , 2022, 255, 117669.	3.8	10
13	A rapid way of preparing switchable bacteria-killing and bacteria-releasing cellulosic material with anti-bacteria adhesion capability. <i>Cellulose</i> , 2022, 29, 5305-5323.	4.9	10
14	Nickel encapsulated in silicalite-1 zeolite catalysts for steam reforming of glycerol (SRG) towards renewable hydrogen production. <i>Fuel Processing Technology</i> , 2022, 233, 107306.	7.2	9
15	Microwave-assisted catalytic alcoholysis of fructose to ethoxymethylfurfural (EMF) over carbon-based microwave-responsive catalyst. <i>Fuel Processing Technology</i> , 2022, 233, 107305.	7.2	10
16	Shielding Protection by Mesoporous Catalysts for Improving Plasma-Catalytic Ambient Ammonia Synthesis. <i>Journal of the American Chemical Society</i> , 2022, 144, 12020-12031.	13.7	75
17	Photocatalytic Reforming of Biomass: What Role Will the Technology Play in Future Energy Systems. <i>Topics in Current Chemistry</i> , 2022, 380, .	5.8	16
18	High-Ionic-Strength Wastewater Treatment via Catalytic Wet Oxidation over a MnCeO _x Catalyst. <i>ACS Catalysis</i> , 2022, 12, 7598-7608.	11.2	9

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19	Developing silicalite-1 encapsulated Ni nanoparticles as sintering-/coking-resistant catalysts for dry reforming of methane. <i>Chemical Engineering Journal</i> , 2022, 446, 137439.	12.7	21
20	The effect of oxygen mobility/vacancy on carbon gasification in nano catalytic dry reforming of methane: A review. <i>Journal of CO2 Utilization</i> , 2022, 63, 102109.	6.8	27
21	Thermodynamic analysis of steam reforming of glycerol for hydrogen production at atmospheric pressure. <i>Frontiers of Chemical Science and Engineering</i> , 2021, 15, 60-71.	4.4	10
22	An efficient microwave-assisted chelation (MWAC) post-synthetic modification method to produce hierarchical Y zeolites. <i>Microporous and Mesoporous Materials</i> , 2021, 311, 110715.	4.4	12
23	Growing collaborations between Chinese and UK young scholars on chemical science and technology. <i>Frontiers of Chemical Science and Engineering</i> , 2021, 15, 1-3.	4.4	0
24	Dry reforming of methane on bimetallic Pt@Ni@CeO ₂ catalyst: an in situ DRIFTS-MS mechanistic study. <i>Catalysis Science and Technology</i> , 2021, 11, 5260-5272.	4.1	30
25	A Comparative Study on Mesoporous Y Zeolites Prepared by Hard-Templating and Post-Synthetic Treatment Methods. <i>Applied Catalysis A: General</i> , 2021, 612, 117986.	4.3	17
26	Non-thermal plasma catalysis for CO ₂ conversion and catalyst design for the process. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 233001.	2.8	52
27	An insight into the effects of synthesis methods on catalysts properties for methane reforming. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105052.	6.7	25
28	Modulation of High-Spin Co(II) in Li/Co-MOFs as Efficient Fenton-like Catalysts. <i>Inorganic Chemistry</i> , 2021, 60, 12405-12412.	4.0	9
29	Catalytic combustion of volatile organic compounds (VOCs) over structured Co ₃ O ₄ nano-flowers on silicalite-1/SiC foam catalysts. <i>Microporous and Mesoporous Materials</i> , 2021, 323, 111173.	4.4	25
30	Comparative study of the effect of TiO ₂ support composition and Pt loading on the performance of Pt/TiO ₂ photocatalysts for catalytic photoreforming of cellulose. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 31054-31066.	7.1	18
31	2D boron nitride nanosheets in PIM-1 membranes for CO ₂ /CH ₄ separation. <i>Journal of Membrane Science</i> , 2021, 636, 119527.	8.2	52
32	Structured silicalite-1 encapsulated Ni catalyst supported on SiC foam for dry reforming of methane. <i>AIChE Journal</i> , 2021, 67, e17126.	3.6	24
33	Palladium-doped hierarchical ZSM-5 for catalytic selective oxidation of allylic and benzylic alcohols. <i>Royal Society Open Science</i> , 2021, 8, 211086.	2.4	2
34	On developing ferrisilicate catalysts supported on silicon carbide (SiC) foam catalysts for continuous catalytic wet peroxide oxidation (CWPO) reactions. <i>Catalysis Today</i> , 2020, 356, 631-640.	4.4	19
35	Plasma-assisted catalytic dry reforming of methane (DRM) over metal-organic frameworks (MOFs)-based catalysts. <i>Applied Catalysis B: Environmental</i> , 2020, 260, 118195.	20.2	135
36	Synthesis and modification of moisture-stable coordination pillared-layer metal-organic framework (CPL-MOF) CPL-2 for ethylene/ethane separation. <i>Microporous and Mesoporous Materials</i> , 2020, 293, 109784.	4.4	30

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37	Porous Materials for Catalysis. , 2020, , 115-137.		11
38	Selective adsorption of ethane over ethylene on M(bdc)(ted) _{0.5} (M = Co, Cu, Ni, Zn) metal-organic frameworks (MOFs). Microporous and Mesoporous Materials, 2020, 292, 109724.	4.4	48
39	Nonthermal plasma (NTP) activated metal-organic frameworks (MOFs) catalyst for catalytic CO ₂ hydrogenation. AIChE Journal, 2020, 66, e16853.	3.6	33
40	How starch-g-poly(acrylamide) molecular structure effect sizing properties. International Journal of Biological Macromolecules, 2020, 144, 403-409.	7.5	23
41	Electrospun Composites Made of Reduced Graphene Oxide and Polyacrylonitrile-Based Activated Carbon Nanofibers (rGO/ACNF) for Enhanced CO ₂ Adsorption. Polymers, 2020, 12, 2117.	4.5	17
42	CO Poisoning of Ru Catalysts in CO ₂ Hydrogenation under Thermal and Plasma Conditions: A Combined Kinetic and Diffuse Reflectance Infrared Fourier Transform Spectroscopy-Mass Spectrometry Study. ACS Catalysis, 2020, 10, 12828-12840.	11.2	59
43	PtNi bimetallic structure supported on UiO-67 metal-organic framework (MOF) during CO oxidation. Journal of Catalysis, 2020, 391, 522-529.	6.2	7
44	Structured Ni@NaA zeolite supported on silicon carbide foam catalysts for catalytic carbon dioxide methanation. AIChE Journal, 2020, 66, e17007.	3.6	15
45	Dual cooperative organocatalysts for one-pot synthesis of polyester-polythiocarbonate block copolymers from multiple monomers. Science China Chemistry, 2020, 63, 1807-1814.	8.2	16
46	Kinetic Study of Nonthermal Plasma Activated Catalytic CO ₂ Hydrogenation over Ni Supported on Silica Catalyst. Industrial & Engineering Chemistry Research, 2020, 59, 9478-9487.	3.7	15
47	Recent advances in non-thermal plasma (NTP) catalysis towards C1 chemistry. Chinese Journal of Chemical Engineering, 2020, 28, 2010-2021.	3.5	38
48	Sequential Microwave-Assisted Dealumination and Hydrothermal Alkaline Treatments of Y Zeolite for Preparing Hierarchical Mesoporous Zeolite Catalysts. Topics in Catalysis, 2020, 63, 340-350.	2.8	22
49	In situ modification of ZIF-67 with multi-sulfonated dyes for great enhanced methylene blue adsorption via synergistic effect. Microporous and Mesoporous Materials, 2020, 303, 110304.	4.4	43
50	Structured hierarchical Mn-Co mixed oxides supported on silicalite-1 foam catalyst for catalytic combustion. Chinese Journal of Chemical Engineering, 2020, 28, 2319-2327.	3.5	6
51	Highly Efficient and Selective Adsorption of Cationic Dyes in Aqueous Media on Microporous Hyper Crosslinked Polymer with Abundant and Evenly Dispersed Sulfonic Groups. ChemistrySelect, 2020, 5, 6541-6548.	1.5	9
52	Creation of Al-Enriched Mesoporous ZSM-5 Nanoboxes with High Catalytic Activity: Converting Tetrahedral Extraframework Al into Framework Sites by Post Treatment. Angewandte Chemie - International Edition, 2020, 59, 19478-19486.	13.8	69
53	Adsorptive separation of C ₂ H ₆ /C ₂ H ₄ on metal-organic frameworks (MOFs) with pillared-layer structures. Separation and Purification Technology, 2020, 242, 116819.	7.9	40
54	Creation of Al-Enriched Mesoporous ZSM-5 Nanoboxes with High Catalytic Activity: Converting Tetrahedral Extraframework Al into Framework Sites by Post Treatment. Angewandte Chemie, 2020, 132, 19646-19654.	2.0	12

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55	Using ultrasound to improve the sequential post-synthesis modification method for making mesoporous Y zeolites. <i>Frontiers of Chemical Science and Engineering</i> , 2020, 14, 275-287.	4.4	20
56	Mesoporous Zeolitic Materials (MZMs) Derived From Zeolite Y Using a Microwave Method for Catalysis. <i>Frontiers in Chemistry</i> , 2020, 8, 482.	3.6	24
57	Cellulose nanocrystals (CNCs) as hard templates for preparing mesoporous zeolite Y assemblies with high catalytic activity. <i>Green Chemistry</i> , 2020, 22, 5115-5122.	9.0	23
58	Systematic study of H ₂ production from catalytic photoreforming of cellulose over Pt catalysts supported on TiO ₂ . <i>Chinese Journal of Chemical Engineering</i> , 2020, 28, 2084-2091.	3.5	17
59	Renewable hydrogen production from steam reforming of glycerol (SRG) over ceria-modified γ -alumina supported Ni catalyst. <i>Chinese Journal of Chemical Engineering</i> , 2020, 28, 2328-2336.	3.5	13
60	Understanding ethane/ethylene adsorption selectivity in ethane-selective microporous materials. <i>Separation and Purification Technology</i> , 2020, 241, 116635.	7.9	16
61	Mechanistic study of non-thermal plasma assisted CO ₂ hydrogenation over Ru supported on MgAl layered double hydroxide. <i>Applied Catalysis B: Environmental</i> , 2020, 268, 118752.	20.2	101
62	C ₂ H ₄ and C ₂ H ₆ adsorption-induced structural variation of pillared-layer CPL-2 MOF: A combined experimental and Monte Carlo simulation study. <i>Chemical Engineering Science</i> , 2020, 218, 115566.	3.8	10
63	Effect of metal dispersion and support structure of Ni/silicalite-1 catalysts on non-thermal plasma (NTP) activated CO ₂ hydrogenation. <i>Applied Catalysis B: Environmental</i> , 2020, 272, 119013.	20.2	48
64	Integration of Membrane Separation with Nonthermal Plasma Catalysis: A Proof-of-Concept for CO ₂ Capture and Utilization. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 8202-8211.	3.7	19
65	Structured ZSM-5/SiC foam catalysts for bio-oils upgrading. <i>Applied Catalysis A: General</i> , 2020, 599, 117626.	4.3	22
66	Plasmonic Au nanoparticles supported on both sides of TiO ₂ hollow spheres for maximising photocatalytic activity under visible light. <i>Frontiers of Chemical Science and Engineering</i> , 2019, 13, 665-671.	4.4	14
67	Coupling non-thermal plasma with Ni catalysts supported on BETA zeolite for catalytic CO ₂ methanation. <i>Catalysis Science and Technology</i> , 2019, 9, 4135-4145.	4.1	68
68	Structured ZSM-5 coated SiC foam catalysts for process intensification in catalytic cracking of <i>n</i> -hexane. <i>Reaction Chemistry and Engineering</i> , 2019, 4, 427-435.	3.7	30
69	Breaking the equilibrium at the interface: microwave-assisted reactive distillation (MARD). <i>Reaction Chemistry and Engineering</i> , 2019, 4, 688-694.	3.7	19
70	Microwave-assisted catalyst-free hydrolysis of fibrous cellulose for deriving sugars and biochemicals. <i>Frontiers of Chemical Science and Engineering</i> , 2019, 13, 718-726.	4.4	16
71	Simultaneous determination of sulfoxaflo in 14 daily foods using LC-MS/MS. <i>International Journal of Environmental Analytical Chemistry</i> , 2019, 99, 557-567.	3.3	6
72	Multi-stimuli-responsive hydrogels of gluconamide-tailored anthracene. <i>Soft Matter</i> , 2019, 15, 4662-4668.	2.7	12

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73	Bakelite-type anionic microporous organic polymers with high capacity for selective adsorption of cationic dyes from water. <i>Chemical Engineering Journal</i> , 2019, 366, 404-414.	12.7	61
74	Preface to the CSCST-25 Special Issue. <i>Frontiers of Chemical Science and Engineering</i> , 2019, 13, 629-631.	4.4	1
75	Insights into the synergetic effect for co-pyrolysis of oil sands and biomass using microwave irradiation. <i>Fuel</i> , 2019, 239, 219-229.	6.4	57
76	On the effect of mesoporosity of FAU Y zeolites in the liquid-phase catalysis. <i>Microporous and Mesoporous Materials</i> , 2019, 278, 297-306.	4.4	35
77	PVDF membranes containing reduced graphene oxide: Effect of degree of reduction on membrane distillation performance. <i>Desalination</i> , 2019, 452, 196-207.	8.2	92
78	Hierarchical Fe-ZSM-5/SiC foam catalyst as the foam bed catalytic reactor (FBCR) for catalytic wet peroxide oxidation (CWPO). <i>Chemical Engineering Journal</i> , 2019, 362, 53-62.	12.7	38
79	Defects-healing of SAPO-34 membrane by post-synthesis modification using organosilica for selective CO ₂ separation. <i>Journal of Membrane Science</i> , 2019, 575, 80-88.	8.2	28
80	Sustaining metal-organic frameworks for water-gas shift catalysis by non-thermal plasma. <i>Nature Catalysis</i> , 2019, 2, 142-148.	34.4	123
81	Investigation of pressure drop in 3D replicated open-cell foams: Coupling CFD with experimental data on additively manufactured foams. <i>Chemical Engineering Journal</i> , 2019, 377, 120123.	12.7	67
82	Velocity variation effect in fixed bed columns: A case study of CO ₂ capture using porous solid adsorbents. <i>AIChE Journal</i> , 2018, 64, 2189-2197.	3.6	32
83	MFI zeolite coating with intrazeolitic aluminum (acidic) gradient supported on SiC foams to improve the methanol-to-propylene (MTP) reaction. <i>Applied Catalysis A: General</i> , 2018, 559, 1-9.	4.3	37
84	Understanding the influence of microwave on the relative volatility used in the pyrolysis of Indonesia oil sands. <i>Chinese Journal of Chemical Engineering</i> , 2018, 26, 1485-1492.	3.5	16
85	Investigation of flame structure and burning intensity of partially premixed methane enrichment of syngas using OH-PLIF and kinetic simulation. <i>Combustion Theory and Modelling</i> , 2018, 22, 432-445.	1.9	5
86	Microwave-assisted synthesis of zirconium-based metal organic frameworks (MOFs): Optimization and gas adsorption. <i>Microporous and Mesoporous Materials</i> , 2018, 260, 45-53.	4.4	167
87	High flux and fouling resistant flat sheet polyethersulfone membranes incorporated with graphene oxide for ultrafiltration applications. <i>Chemical Engineering Journal</i> , 2018, 334, 789-799.	12.7	183
88	Study on the laminar burning velocity of Medium-Btu syngas flame with N ₂ dilution based on OH-PLIF technology. <i>Cogent Engineering</i> , 2018, 5, 1536306.	2.2	1
89	On improving the hydrogen and methanol production using an auto-thermal double-membrane reactor: Model prediction and optimisation. <i>Computers and Chemical Engineering</i> , 2018, 119, 258-269.	3.8	9
90	The Investigation of Perfluoroalkyl Substances in Seasonal Freeze-Thaw Rivers During Spring Flood Period: A Case Study in Songhua River and Yalu River, China. <i>Bulletin of Environmental Contamination and Toxicology</i> , 2018, 101, 166-172.	2.7	8

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91	Design of 2D materials for selective adsorption: a comparison between Monte Carlo simulations and direct numerical integration. <i>Molecular Systems Design and Engineering</i> , 2018, 3, 636-644.	3.4	5
92	Understanding the CO Oxidation on Pt Nanoparticles Supported on MOFs by Operando XPS. <i>ChemCatChem</i> , 2018, 10, 4238-4242.	3.7	35
93	Cyclic adsorption of water vapour on CuBTC MOF: Sustaining the hydrothermal stability under non-equilibrium conditions. <i>Chemical Engineering Journal</i> , 2018, 333, 594-602.	12.7	36
94	Flameless combustion with liquid fuel: A review focusing on fundamentals and gas turbine application. <i>Applied Energy</i> , 2017, 193, 28-51.	10.1	111
95	X-ray micro computed tomography characterization of cellular SiC foams for their applications in chemical engineering. <i>Materials Characterization</i> , 2017, 123, 20-28.	4.4	43
96	Adsorption of Cd(II) and Pb(II) ions from aqueous solutions using mesoporous activated carbon adsorbent: Equilibrium, kinetics and characterisation studies. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 679-698.	6.7	199
97	Vapor-phase transport (VPT) modification of ZSM-5/SiC foam catalyst using TPAOH vapor to improve the methanol-to-propylene (MTP) reaction. <i>Applied Catalysis A: General</i> , 2017, 545, 104-112.	4.3	63
98	Creating hierarchies promptly: Microwave-accelerated synthesis of ZSM-5 zeolites on macrocellular silicon carbide (SiC) foams. <i>Chemical Engineering Journal</i> , 2017, 312, 1-9.	12.7	73
99	Assessment of MOFs' Quality: Quantifying Defect Content in Crystalline Porous Materials. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 1490-1494.	4.6	15
100	On thermal stability and catalytic reactivity of Zr-based metal-organic framework (UiO-67) encapsulated Pt catalysts. <i>Journal of Catalysis</i> , 2016, 340, 85-94.	6.2	53
101	Underlying mechanism of the hydrothermal instability of Cu ₃ (BTC) ₂ metal-organic framework. <i>Frontiers of Chemical Science and Engineering</i> , 2016, 10, 103-107.	4.4	48
102	A Facile Post-Synthetic Modification Method To Improve Hydrothermal Stability and CO ₂ Selectivity of CuBTC Metal-Organic Framework. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 7941-7949.	3.7	65
103	Microtomography-based numerical simulations of heat transfer and fluid flow through \hat{I}^2 -SiC open-cell foams for catalysis. <i>Catalysis Today</i> , 2016, 278, 350-360.	4.4	50
104	Solvent-Directed Assembly of a Pyridinium-Tailored Methyl Oleanolate Amphiphile: Stepwise Growth of Microrods and Nanofibers. <i>Langmuir</i> , 2016, 32, 1685-1692.	3.5	34
105	Pd/C catalysts based on synthetic carbons with bi- and tri-modal pore-size distribution: applications in flow chemistry. <i>Catalysis Science and Technology</i> , 2016, 6, 2387-2395.	4.1	10
106	Mapping the Cu-BTC metal-organic framework (HKUST-1) stability envelope in the presence of water vapour for CO ₂ adsorption from flue gases. <i>Chemical Engineering Journal</i> , 2015, 281, 669-677.	12.7	248
107	Photo-induced conversion from supramolecular to covalently linked polymers based on anthracene-appended amphiphiles. <i>Polymer Chemistry</i> , 2015, 6, 4162-4166.	3.9	14
108	Synthesis of the antimalarial API artemether in a flow reactor. <i>Catalysis Today</i> , 2015, 239, 90-96.	4.4	19

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109	Efficient reduction of bromates using carbon nanofibre supported catalysts: Experimental and a comparative life cycle assessment study. <i>Chemical Engineering Journal</i> , 2014, 248, 230-241.	12.7	36
110	The role of multiwalled carbon nanotubes (MWCNTs) in the catalytic ozonation of atrazine. <i>Chemical Engineering Journal</i> , 2014, 241, 66-76.	12.7	69
111	Kinetic Modeling of Nitrate Reduction Catalyzed by Pd-Cu Supported on Carbon Nanotubes. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 4854-4860.	3.7	20
112	Facile Stoichiometric Reductions in Flow: An Example of Artemisinin. <i>Organic Process Research and Development</i> , 2012, 16, 1039-1042.	2.7	37
113	Simulation of catalytic reduction of nitrates based on a mechanistic model. <i>Chemical Engineering Journal</i> , 2011, 175, 458-467.	12.7	18
114	Coupling of Heck and hydrogenation reactions in a continuous compact reactor. <i>Journal of Catalysis</i> , 2009, 267, 114-120.	6.2	40
115	Rheological behaviour of ethylene glycol-titanate nanotube nanofluids. <i>Journal of Nanoparticle Research</i> , 2009, 11, 1513-1520.	1.9	136
116	Liquid phase hydrogenation in a structured multichannel reactor. <i>Catalysis Today</i> , 2009, 147, S313-S318.	4.4	16
117	Potential of nanofluids to further intensify microreactors. <i>Green Chemistry</i> , 2008, 10, 670.	9.0	54