

# Asterios Gavriilidis

## List of Publications by Year in descending order

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181  
papers

6,929  
citations

57681

46  
h-index

84171

75  
g-index

187  
all docs

187  
docs citations

187  
times ranked

6308  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mixing characteristics of T-type microfluidic mixers. <i>Journal of Micromechanics and Microengineering</i> , 2001, 11, 126-132.	1.5	301
2	Gas-Liquid and Gas-Liquid-Solid Microstructured Reactors: Contacting Principles and Applications. <i>Industrial &amp; Engineering Chemistry Research</i> , 2005, 44, 9750-9769.	1.8	269
3	Catalytic combustion assisted methane steam reforming in a catalytic plate reactor. <i>Chemical Engineering Science</i> , 2003, 58, 3947-3960.	1.9	249
4	Flow regimes for adiabatic gas-liquid flow in microchannels. <i>Chemical Engineering Science</i> , 2009, 64, 2749-2761.	1.9	229
5	Technology and Applications of Microengineered Reactors. <i>Chemical Engineering Research and Design</i> , 2002, 80, 3-30.	2.7	199
6	Hydrodynamics of Taylor flow in small channels: A Review. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2008, 222, 737-751.	1.1	178
7	Flow distribution in different microreactor scale-out geometries and the effect of manufacturing tolerances and channel blockage. <i>Chemical Engineering Journal</i> , 2004, 101, 379-390.	6.6	173
8	Design and fabrication of zeolite-based microreactors and membrane microseparators. <i>Microporous and Mesoporous Materials</i> , 2001, 42, 157-175.	2.2	151
9	Supported Au Catalysts for Low-Temperature CO Oxidation Prepared by Impregnation. <i>Journal of Catalysis</i> , 2002, 206, 305-313.	3.1	149
10	Aerobic oxidations in flow: opportunities for the fine chemicals and pharmaceuticals industries. <i>Reaction Chemistry and Engineering</i> , 2016, 1, 595-612.	1.9	145
11	Catalyst preparation and deactivation issues for nitrobenzene hydrogenation in a microstructured falling film reactor. <i>Catalysis Today</i> , 2003, 81, 641-651.	2.2	139
12	Carbon Dioxide Absorption in a Falling Film Microstructured Reactor: Experiments and Modeling. <i>Industrial &amp; Engineering Chemistry Research</i> , 2005, 44, 1742-1751.	1.8	123
13	Unravelling the growth mechanism of the co-precipitation of iron oxide nanoparticles with the aid of synchrotron X-Ray diffraction in solution. <i>Nanoscale</i> , 2019, 11, 6620-6628.	2.8	122
14	Mass transfer during Taylor flow in microchannels with and without chemical reaction. <i>Chemical Engineering Journal</i> , 2010, 160, 873-881.	6.6	112
15	Effect of Drying Conditions of Au-Mn Co-Precipitates for Low-Temperature CO Oxidation. <i>Journal of Catalysis</i> , 2001, 200, 298-308.	3.1	103
16	Incorporating zeolites in microchemical systems. <i>Chemical Engineering Journal</i> , 2002, 88, 187-200.	6.6	92
17	Experimental studies of nitrobenzene hydrogenation in a microstructured falling film reactor. <i>Chemical Engineering Science</i> , 2004, 59, 3491-3494.	1.9	92
18	Optimal Distribution of Catalyst in Pellets. <i>Catalysis Reviews - Science and Engineering</i> , 1993, 35, 399-456.	5.7	88

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19	Co-precipitation synthesis of stable iron oxide nanoparticles with NaOH: New insights and continuous production via flow chemistry. <i>Chemical Engineering Journal</i> , 2020, 399, 125740.	6.6	88
20	TS-1 oxidation of aniline to azoxybenzene in a microstructured reactor. <i>Applied Catalysis A: General</i> , 2005, 281, 285-293.	2.2	87
21	1-Pentene epoxidation in catalytic microfabricated reactors. <i>Journal of Catalysis</i> , 2004, 223, 241-249.	3.1	81
22	Generalized model for prediction of the steady-state drop size distributions in batch stirred vessels. <i>Industrial &amp; Engineering Chemistry Research</i> , 1989, 28, 1704-1711.	1.8	79
23	TS-1 zeolite microengineered reactors for 1-pentene epoxidation. <i>Chemical Communications</i> , 2002, , 878-879.	2.2	70
24	CFD simulations of the effect of inlet conditions on Taylor flow formation. <i>International Journal of Heat and Fluid Flow</i> , 2008, 29, 1603-1611.	1.1	68
25	Continuous flow synthesis of ultrasmall gold nanoparticles in a microreactor using trisodium citrate and their SERS performance. <i>Chemical Engineering Science</i> , 2018, 189, 422-430.	1.9	68
26	Modelling of a catalytic plate reactor for dehydrogenation–combustion coupling. <i>Chemical Engineering Science</i> , 2001, 56, 2671-2683.	1.9	67
27	Design and characterisation of the staggered herringbone mixer. <i>Chemical Engineering Journal</i> , 2008, 142, 109-121.	6.6	66
28	Reaction and Raman spectroscopic studies of alcohol oxidation on gold–palladium catalysts in microstructured reactors. <i>Chemical Engineering Journal</i> , 2011, 167, 734-743.	6.6	65
29	Continuous-Flow Sonocrystallization in Droplet-Based Microfluidics. <i>Crystal Growth and Design</i> , 2015, 15, 5519-5529.	1.4	64
30	Synthesis of silver nanoparticles in a microfluidic coaxial flow reactor. <i>RSC Advances</i> , 2015, 5, 95585-95591.	1.7	61
31	Influence of Flow Arrangement in Catalytic Plate Reactors for Methane Steam Reforming. <i>Chemical Engineering Research and Design</i> , 2004, 82, 252-258.	2.7	59
32	On the formation of Taylor bubbles in small tubes. <i>Chemical Engineering Science</i> , 2006, 61, 6653-6666.	1.9	59
33	Effect of Inlet Conditions on Taylor Bubble Length in Microchannels. <i>Heat Transfer Engineering</i> , 2011, 32, 1117-1125.	1.2	57
34	Selective suppression of disproportionation reaction in solvent-less benzyl alcohol oxidation catalysed by supported Au–Pd nanoparticles. <i>Catalysis Today</i> , 2013, 203, 146-152.	2.2	57
35	Review on gas–liquid separations in microchannel devices. <i>Chemical Engineering Research and Design</i> , 2013, 91, 1941-1953.	2.7	55
36	On the development of kinetic models for solvent-free benzyl alcohol oxidation over a gold-palladium catalyst. <i>Chemical Engineering Journal</i> , 2018, 342, 196-210.	6.6	55

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37	Thiol-Capped Gold Nanoparticles Swell-Encapsulated into Polyurethane as Powerful Antibacterial Surfaces Under Dark and Light Conditions. <i>Scientific Reports</i> , 2016, 6, 39272.	1.6	54
38	Hydrodynamic effects on three phase micro-packed bed reactor performance – Gold–palladium catalysed benzyl alcohol oxidation. <i>Chemical Engineering Science</i> , 2016, 149, 129-142.	1.9	53
39	Controllable Synthesis of Gold Nanoparticles in Aqueous Solution by Microwave Assisted Flow Chemistry. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 6435-6442.	3.2	53
40	Photobactericidal activity activated by thiolated gold nanoclusters at low flux levels of white light. <i>Nature Communications</i> , 2020, 11, 1207.	5.8	52
41	Experimental characterization of axial dispersion in coiled flow inverters. <i>Chemical Engineering Research and Design</i> , 2017, 120, 159-170.	2.7	51
42	Scalable Reactor Design for Pharmaceuticals and Fine Chemicals Production. 1: Potential Scale-up Obstacles. <i>Organic Process Research and Development</i> , 2006, 10, 539-552.	1.3	50
43	Characterisation of liquid film in a microstructured falling film reactor using laser scanning confocal microscopy. <i>Experimental Thermal and Fluid Science</i> , 2006, 30, 463-472.	1.5	49
44	An autonomous microreactor platform for the rapid identification of kinetic models. <i>Reaction Chemistry and Engineering</i> , 2019, 4, 1623-1636.	1.9	49
45	Asymmetric Transfer Hydrogenation of Acetophenone with 1R,2S-Aminoindanol/Pentamethylcyclopentadienylrhodium Catalyst. <i>Organic Process Research and Development</i> , 2004, 8, 909-914.	1.3	48
46	An engineering approach to synthesis of gold and silver nanoparticles by controlling hydrodynamics and mixing based on a coaxial flow reactor. <i>Nanoscale</i> , 2017, 9, 14149-14161.	2.8	48
47	Effects of 1,2 Dichloroethane Addition on the Optimal Silver Catalyst Distribution in Pellets for Epoxidation of Ethylene. <i>Journal of Catalysis</i> , 1998, 174, 1-12.	3.1	47
48	Development of multistage distillation in a microfluidic chip. <i>Lab on A Chip</i> , 2011, 11, 1311.	3.1	47
49	Investigation of the Effect of Ultrasound Parameters on Continuous Sonocrystallization in a Millifluidic Device. <i>Crystal Growth and Design</i> , 2016, 16, 4607-4619.	1.4	47
50	A model for predicting axial mixing during gas–liquid Taylor flow in microchannels at low Bodenstein numbers. <i>Chemical Engineering Journal</i> , 2004, 101, 391-396.	6.6	46
51	Microreaction technology aided catalytic process design. <i>Current Opinion in Chemical Engineering</i> , 2013, 2, 338-345.	3.8	45
52	Ozonolysis in Flow Using Capillary Reactors. <i>Organic Process Research and Development</i> , 2011, 15, 989-996.	1.3	44
53	Preparation of Pt/Al <sub>2</sub> O <sub>3</sub> Pellets with Internal Step-Distribution of Catalyst: Experiments and Theory. <i>Journal of Catalysis</i> , 1996, 158, 439-451.	3.1	43
54	Effect of Microchannel Plate Design on Fluid Flow Uniformity at Low Flow Rates. <i>Chemical Engineering and Technology</i> , 2007, 30, 395-406.	0.9	42

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55	Continuous Heterogeneously Catalyzed Oxidation of Benzyl Alcohol Using a Tube-in-Tube Membrane Microreactor. <i>Industrial &amp; Engineering Chemistry Research</i> , 2015, 54, 4183-4189.	1.8	42
56	A model for the formation of gold nanoparticles in the citrate synthesis method. <i>Chemical Engineering Science</i> , 2018, 191, 318-331.	1.9	41
57	Residence time distributions in microchannels: Comparison between channels with herringbone structures and a rectangular channel. <i>Chemical Engineering Journal</i> , 2010, 160, 834-844.	6.6	40
58	Modelling the synthesis of nanoparticles in continuous microreactors: The role of diffusion and residence time distribution on nanoparticle characteristics. <i>Chemical Engineering Journal</i> , 2018, 350, 1144-1154.	6.6	38
59	Ozonolysis of some complex organic substrates in flow. <i>RSC Advances</i> , 2013, 3, 5076.	1.7	37
60	Oxidation of cinnamyl alcohol using bimetallic Au@Pd/TiO <sub>2</sub> catalysts: a deactivation study in a continuous flow packed bed microreactor. <i>Catalysis Science and Technology</i> , 2016, 6, 4749-4758.	2.1	37
61	Application of microfabricated reactors for operando Raman studies of catalytic oxidation of methanol to formaldehyde on silver. <i>Catalysis Today</i> , 2007, 126, 119-126.	2.2	36
62	Solvent-free aerobic oxidation of alcohols using supported gold palladium nanoalloys prepared by a modified impregnation method. <i>Catalysis Science and Technology</i> , 2014, 4, 3120-3128.	2.1	36
63	Continuous flow synthesis of citrate capped gold nanoparticles using UV induced nucleation. <i>RSC Advances</i> , 2017, 7, 9632-9638.	1.7	36
64	Experimental and computational investigation of heat transfer in a microwave-assisted flow system. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019, 142, 107537.	1.8	35
65	Rapid synthesis of gold nanoparticles with carbon monoxide in a microfluidic segmented flow system. <i>Reaction Chemistry and Engineering</i> , 2019, 4, 884-890.	1.9	35
66	CATALYTIC CONVERTER DESIGN FOR MINIMISATION OF COLD-START EMISSIONS. <i>Chemical Engineering Communications</i> , 1999, 173, 53-77.	1.5	34
67	A joint model-based experimental design approach for the identification of kinetic models in continuous flow laboratory reactors. <i>Computers and Chemical Engineering</i> , 2016, 95, 202-215.	2.0	33
68	Highly reproducible, high-yield flow synthesis of gold nanoparticles based on a rational reactor design exploiting the reduction of passivated Au(III). <i>Reaction Chemistry and Engineering</i> , 2020, 5, 663-676.	1.9	33
69	Microstructure-based intensification of a falling film microreactor through optimal film setting with realistic profiles and in-channel induced mixing. <i>Chemical Engineering Journal</i> , 2012, 179, 318-329.	6.6	32
70	Small iron oxide nanoparticles as MRI T <sub>1</sub> contrast agent: scalable inexpensive water-based synthesis using a flow reactor. <i>Nanoscale</i> , 2021, 13, 8795-8805.	2.8	32
71	1-Pentene Epoxidation in Titanium Silicalite-1 Microchannel Reactor. <i>Chemical Engineering Research and Design</i> , 2003, 81, 753-759.	2.7	31
72	Adipic Acid Primary Nucleation Kinetics from Probability Distributions in Droplet-Based Systems under Stagnant and Flow Conditions. <i>Crystal Growth and Design</i> , 2015, 15, 1784-1791.	1.4	31

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73	Theoretical investigation of axially non-uniform catalytic monoliths for methane combustion. <i>Chemical Engineering Science</i> , 2001, 56, 3455-3468.	1.9	30
74	Model-based design of transient flow experiments for the identification of kinetic parameters. <i>Reaction Chemistry and Engineering</i> , 2020, 5, 112-123.	1.9	30
75	Oxidative dehydrogenation of methanol in a microstructured reactor. <i>Catalysis Today</i> , 2005, 110, 154-163.	2.2	29
76	Stable Iron Oxide Nanoflowers with Exceptional Magnetic Heating Efficiency: Simple and Fast Polyol Synthesis. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 45870-45880.	4.0	28
77	CO <sub>2</sub> Absorption in a Microstructured Mesh Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 1041-1049.	1.8	27
78	CO <sub>2</sub> Absorption in Polytetrafluoroethylene Membrane Microstructured Contactor Using Aqueous Solutions of Amines. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 9236-9242.	1.8	27
79	Effect of shear rate on primary nucleation of para-amino benzoic acid in solution under different fluid dynamic conditions. <i>Chemical Engineering Research and Design</i> , 2018, 136, 48-56.	2.7	26
80	Towards an understanding of the effects of operating conditions on separation by microfluidic distillation. <i>Chemical Engineering Science</i> , 2011, 66, 2098-2106.	1.9	25
81	Axial mass transfer in Taylor flow through circular microchannels. <i>AIChE Journal</i> , 2007, 53, 1413-1428.	1.8	24
82	Continuous flow aerobic oxidation of benzyl alcohol on Ru/Al <sub>2</sub> O <sub>3</sub> catalyst in a flat membrane microchannel reactor: An experimental and modelling study. <i>Chemical Engineering Science</i> , 2019, 201, 386-396.	1.9	23
83	Optimization of a nonisothermal nonadiabatic fixed-bed reactor using dirac-type silver catalysts for ethylene epoxidation. <i>Chemical Engineering Science</i> , 1994, 49, 1925-1936.	1.9	22
84	Oxidative dehydrogenation of 3-Methyl-2-buten-1-ol in microreactors. <i>Chemical Engineering Science</i> , 2004, 59, 4803-4808.	1.9	22
85	Microfluidic synthesis of protein-loaded nanogels in a coaxial flow reactor using a design of experiments approach. <i>Nanoscale Advances</i> , 2021, 3, 2039-2055.	2.2	22
86	Sample Pulse Broadening in Taylor Flow Microchannels for Screening Applications. <i>Chemical Engineering and Technology</i> , 2005, 28, 509-514.	0.9	21
87	Design of a mesh microreactor for even flow distribution and narrow residence time distribution. <i>Chemical Engineering Journal</i> , 2008, 135, S259-S269.	6.6	21
88	Stripping of acetone from water with microfabricated and membrane gas-liquid contactors. <i>Analyst</i> , 2014, 139, 266-272.	1.7	21
89	Synthesis of silver nanoparticles using a microfluidic impinging jet reactor. <i>Journal of Flow Chemistry</i> , 2016, 6, 268-278.	1.2	21
90	Continuous production of iron oxide nanoparticles via fast and economical high temperature synthesis. <i>Reaction Chemistry and Engineering</i> , 2020, 5, 1474-1483.	1.9	21

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91	Single and Multiphase Catalytic Oxidation of Benzyl Alcohol by Tetrapropylammonium Perruthenate in a Mobile Microreactor System. <i>Chemical Engineering and Technology</i> , 2006, 29, 1372-1375.	0.9	20
92	Stripping of acetone from isopropanol solution with membrane and mesh gas-liquid contactors. <i>Chemical Engineering and Processing: Process Intensification</i> , 2011, 50, 991-997.	1.8	20
93	Rapid Millifluidic Synthesis of Stable High Magnetic Moment Fe <sub>x</sub> C <sub>y</sub> Nanoparticles for Hyperthermia. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 28520-28531.	4.0	20
94	Anticipatory life cycle assessment of gold nanoparticles production: Comparison of milli-continuous flow and batch synthesis. <i>Journal of Cleaner Production</i> , 2020, 269, 122335.	4.6	20
95	Continuous Heterogeneously Catalyzed Oxidation of Benzyl Alcohol in a Ceramic Membrane Packed-Bed Reactor. <i>Organic Process Research and Development</i> , 2015, 19, 1973-1979.	1.3	19
96	A Novel Approach for Measuring Gas Solubility in Liquids Using a Tube-in-Tube Membrane Contactor. <i>Chemical Engineering and Technology</i> , 2017, 40, 2346-2350.	0.9	19
97	Closed-Loop Model-Based Design of Experiments for Kinetic Model Discrimination and Parameter Estimation: Benzoic Acid Esterification on a Heterogeneous Catalyst. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 22165-22177.	1.8	19
98	A Modular Millifluidic Platform for the Synthesis of Iron Oxide Nanoparticles with Control over Dissolved Gas and Flow Configuration. <i>Materials</i> , 2020, 13, 1019.	1.3	19
99	Investigation of a rotating disc reactor for acetone stripping and asymmetric transfer hydrogenation: Modelling and experiments. <i>Chemical Engineering Science</i> , 2007, 62, 741-755.	1.9	18
100	Operating ranges of gas-liquid capillary microseparators: Experiments and theory. <i>Chemical Engineering Science</i> , 2014, 114, 30-39.	1.9	18
101	Rapid synthesis of [Au <sub>25</sub> (Cys) <sub>18</sub> ] nanoclusters via carbon monoxide in microfluidic liquid-liquid segmented flow system and their antimicrobial performance. <i>Chemical Engineering Journal</i> , 2020, 383, 123176.	6.6	18
102	Effect of acoustic streaming on continuous flow sonocrystallization in millifluidic channels. <i>Chemical Engineering Journal</i> , 2020, 379, 122221.	6.6	18
103	Optimal catalyst activity profiles in pellets: 9. Study of ethylene epoxidation. <i>AIChE Journal</i> , 1992, 38, 291-296.	1.8	17
104	Scalable Reactor Design for Pharmaceuticals and Fine Chemicals Production. 3. A Novel Gas-Liquid Reactor for Catalytic Asymmetric Transfer Hydrogenation with Simultaneous Acetone Stripping. <i>Organic Process Research and Development</i> , 2008, 12, 1218-1222.	1.3	17
105	Development of a flat membrane microchannel packed-bed reactor for scalable aerobic oxidation of benzyl alcohol in flow. <i>Chemical Engineering Journal</i> , 2019, 377, 120086.	6.6	17
106	Au catalysts supported on anodised aluminium for low-temperature CO oxidation. <i>Catalysis Communications</i> , 2002, 3, 425-428.	1.6	16
107	In situ monitoring of microfluidic distillation. <i>Chemical Engineering Journal</i> , 2013, 227, 13-21.	6.6	16
108	An online reparametrisation approach for robust parameter estimation in automated model identification platforms. <i>Computers and Chemical Engineering</i> , 2019, 124, 270-284.	2.0	16

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109	Microstructured Mesh Contactor for Asymmetric Transfer Hydrogenation with Simultaneous Stripping: Modeling and Experiments. <i>Industrial &amp; Engineering Chemistry Research</i> , 2008, 47, 8995-9005.	1.8	15
110	CO <sub>2</sub> absorption in a high efficiency silicon nitride mesh contactor. <i>Chemical Engineering Journal</i> , 2012, 207-208, 766-771.	6.6	15
111	Application of $\frac{1}{4}$ -PIV for investigating liquid film characteristics in an open inclined microchannel. <i>Experimental Thermal and Fluid Science</i> , 2013, 44, 90-99.	1.5	15
112	A microwave promoted continuous flow approach to self-assembled hierarchical hematite superstructures. <i>Green Chemistry</i> , 2016, 18, 3057-3065.	4.6	15
113	A mathematical investigation of the Turkevich organizer theory in the citrate method for the synthesis of gold nanoparticles. <i>Chemical Engineering Science</i> , 2017, 173, 275-286.	1.9	15
114	New insight into the effect of mass transfer on the synthesis of silver and gold nanoparticles. <i>CrystEngComm</i> , 2018, 20, 7082-7093.	1.3	15
115	Shape controlled iron oxide nanoparticles: inducing branching and controlling particle crystallinity. <i>CrystEngComm</i> , 2021, 23, 550-561.	1.3	15
116	Continuous citrate-capped gold nanoparticle synthesis in a two-phase flow reactor. <i>Journal of Flow Chemistry</i> , 2021, 11, 553-567.	1.2	15
117	Versailles project on advanced materials and standards (VAMAS) interlaboratory study on measuring the number concentration of colloidal gold nanoparticles. <i>Nanoscale</i> , 2022, 14, 4690-4704.	2.8	15
118	Influence of Loading on Metal Surface Area for Ag $\gamma$ -Al <sub>2</sub> O <sub>3</sub> Catalysts. <i>Journal of Catalysis</i> , 1993, 139, 41-47.	3.1	14
119	A micropacked-bed multi-reactor system with in situ raman analysis for catalyst evaluation. <i>Catalysis Today</i> , 2017, 283, 195-201.	2.2	14
120	Preparation of axially non-uniform Pd catalytic monoliths by chemical vapour deposition. <i>Applied Catalysis A: General</i> , 2001, 210, 381-390.	2.2	13
121	Design and Performance of a Microstructured PEEK Reactor for Continuous Poly-l-leucine-Catalysed Chalcone Epoxidation. <i>Organic Process Research and Development</i> , 2009, 13, 941-951.	1.3	13
122	Residence time distribution studies in microstructured plate reactors. <i>Applied Thermal Engineering</i> , 2011, 31, 634-639.	3.0	13
123	Kinetics-based design of a flow platform for highly reproducible on demand synthesis of gold nanoparticles with controlled size between 50 and 150Ånm and their application in SERS and PIERS sensing. <i>Chemical Engineering Journal</i> , 2021, 423, 129069.	6.6	13
124	An investigation of catalytic plate reactors by means of parametric sensitivity analysis. <i>Chemical Engineering Science</i> , 2002, 57, 1653-1659.	1.9	12
125	Parametric sensitivity in catalytic plate reactors with first-order endothermic/exothermic reactions. <i>Chemical Engineering Journal</i> , 2002, 86, 277-286.	6.6	12
126	Recommendations for clinical translation of nanoparticle-enhanced radiotherapy. <i>British Journal of Radiology</i> , 2018, 91, 20180325.	1.0	12



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127	Catalytic Teflon AF-2400 membrane reactor with adsorbed ex situ synthesized Pd-based nanoparticles for nitrobenzene hydrogenation. <i>Catalysis Today</i> , 2021, 362, 104-112.	2.2	12
128	A microstructured reactor based in situ cell for the study of catalysts by X-ray absorption spectroscopy under operating conditions. <i>Catalysis Today</i> , 2007, 125, 24-28.	2.2	11
129	Hydrodynamics and reaction studies in a layered herringbone channel. <i>Chemical Engineering Journal</i> , 2011, 167, 657-665.	6.6	11
130	Study of the hydrodynamic characteristics of a free flowing liquid film in open inclined microchannels. <i>Chemical Engineering Science</i> , 2013, 101, 744-754.	1.9	11
131	Particle Size Evolution during the Synthesis of Gold Nanoparticles Using <i>In Situ</i> Time-Resolved UV-Vis Spectroscopy: An Experimental and Theoretical Study Unravelling the Effect of Adsorbed Gold Precursor Species. <i>Journal of Physical Chemistry C</i> , 2020, 124, 27662-27672.	1.5	11
132	Reaction modelling of a microstructured falling film reactor incorporating staggered herringbone structures using eddy diffusivity concepts. <i>Chemical Engineering Journal</i> , 2013, 227, 34-41.	6.6	10
133	A model-based data mining approach for determining the domain of validity of approximated models. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2018, 172, 58-67.	1.8	10
134	Sublimation and deposition behaviour of palladium (II) acetylacetonate. <i>EPJ Applied Physics</i> , 2001, 15, 23-33.	0.3	9
135	Scalable Reactor Design for Pharmaceuticals and Fine Chemicals Production. 2: Evaluation of Potential Scale-up Obstacles for Asymmetric Transfer Hydrogenation. <i>Organic Process Research and Development</i> , 2007, 11, 966-971.	1.3	9
136	Deactivation Behavior of Supported Gold Palladium Nanoalloy Catalysts during the Selective Oxidation of Benzyl Alcohol in a Micropacked Bed Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 12984-12993.	1.8	9
137	Effects of bovine serum albumin on light activated antimicrobial surfaces. <i>RSC Advances</i> , 2018, 8, 34252-34258.	1.7	9
138	Study of Liquid-Solid Mass Transfer and Hydrodynamics in Micropacked Bed with Gas-Liquid Flow. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 10489-10501.	1.8	9
139	Slurry loop tubular membrane reactor for the catalysed aerobic oxidation of benzyl alcohol. <i>Chemical Engineering Journal</i> , 2019, 378, 122250.	6.6	8
140	Aerobic Oxidation of Benzyl Alcohol in a Continuous Catalytic Membrane Reactor. <i>Topics in Catalysis</i> , 2019, 62, 1126-1131.	1.3	8
141	An Experimental Study of Non-Uniform Pd Catalytic Monoliths. <i>Chemical Engineering Research and Design</i> , 2001, 79, 795-798.	2.7	7
142	Architectural design and performance of zeolite microreactors. <i>Studies in Surface Science and Catalysis</i> , 2005, 158, 2081-2088.	1.5	7
143	Enhanced Performance of Oxidation of Rosalva (9-decen-1-ol) to Costenal (9-decenal) on Porous Silicon-Supported Silver Catalyst in a Microstructured Reactor. <i>Processes</i> , 2014, 2, 141-157.	1.3	7
144	Towards microfluidic reactors for in situ synchrotron infrared studies. <i>Review of Scientific Instruments</i> , 2016, 87, 024101.	0.6	7

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145	CO <sub>2</sub> absorption in flat membrane microstructured contactors of different wettability using aqueous solution of NaOH. <i>Green Processing and Synthesis</i> , 2018, 7, 471-476.	1.3	7
146	A Multi-Objective Optimal Experimental Design Framework for Enhancing the Efficiency of Online Model Identification Platforms. <i>Engineering</i> , 2019, 5, 1049-1059.	3.2	7
147	Continuous Single-Phase Synthesis of [Au <sub>25</sub> (Cys) <sub>18</sub> ] Nanoclusters and their Photobactericidal Enhancement. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 49021-49029.	4.0	7
148	Development of an in-line magnetometer for flow chemistry and its demonstration for magnetic nanoparticle synthesis. <i>Lab on A Chip</i> , 2021, 21, 3775-3783.	3.1	7
149	Preparation and characterisation of Pd and Pt/SiO <sub>2</sub> –Al <sub>2</sub> O <sub>3</sub> non-permselective membranes. <i>Journal of Membrane Science</i> , 2005, 248, 27-36.	4.1	6
150	Merging information from batch and continuous flow experiments for the identification of kinetic models of benzyl alcohol oxidation over Au-Pd catalyst. <i>Computer Aided Chemical Engineering</i> , 2016, 38, 961-966.	0.3	6
151	Silicon microfabricated reactor for <i>operando</i> XAS/DRIFTS studies of heterogeneous catalytic reactions. <i>Catalysis Science and Technology</i> , 2020, 10, 7842-7856.	2.1	6
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