Asterios Gavriilidis

List of Publications by Year
in descending order

181	6,929	50276	74163
papers	citations	46 h-index	75 g-index

187	187	187	5629
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mixing characteristics of T-type microfluidic mixers. Journal of Micromechanics and Microengineering, 2001, 11, 126-132.	2.6	301
2	Gasâ^'Liquid and Gasâ^'Liquidâ^'Solid Microstructured Reactors:Â Contacting Principles and Applications. Industrial & Engineering Chemistry Research, 2005, 44, 9750-9769.	3.7	269
3	Catalytic combustion assisted methane steam reforming in a catalytic plate reactor. Chemical Engineering Science, 2003, 58, 3947-3960.	3.8	249
4	Flow regimes for adiabatic gasâ€“liquid flow in microchannels. Chemical Engineering Science, 2009, 64, 2749-2761.	3.8	229
5	Technology and Applications of Microengineered Reactors. Chemical Engineering Research and Design, 2002, 80, 3-30.	5.6	199
6	Hydrodynamics of Taylor flow in small channels: A Review. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2008, 222, 737-751.	2.1	178
7	Flow distribution in different microreactor scale-out geometries and the effect of manufacturing tolerances and channel blockage. Chemical Engineering Journal, 2004, 101, 379-390.	12.7	173
8	Design and fabrication of zeolite-based microreactors and membrane microseparators. Microporous and Mesoporous Materials, 2001, 42, 157-175.	4.4	151
9	Supported Au Catalysts for Low-Temperature CO Oxidation Prepared by Impregnation. Journal of Catalysis, 2002, 206, 305-313.	6.2	149
10	Aerobic oxidations in flow: opportunities for the fine chemicals and pharmaceuticals industries. Reaction Chemistry and Engineering, 2016, 1, 595-612.	3.7	145
11	Catalyst preparation and deactivation issues for nitrobenzene hydrogenation in a microstructured falling film reactor. Catalysis Today, 2003, 81, 641-651.	4.4	139
12	Carbon Dioxide Absorption in a Falling Film Microstructured Reactor:â€‰ Experiments and Modeling. Industrial & Engineering Chemistry Research, 2005, 44, 1742-1751.	3.7	123
13	Unravelling the growth mechanism of the co-precipitation of iron oxide nanoparticles with the aid of synchrotron X-Ray diffraction in solution. Nanoscale, 2019, 11, 6620-6628.	5.6	122
14	Mass transfer during Taylor flow in microchannels with and without chemical reaction. Chemical Engineering Journal, 2010, 160, 873-881.	12.7	112
15	Effect of Drying Conditions of Auâ€“Mn Co-Precipitates for Low-Temperature CO Oxidation. Journal of Catalysis, 2001, 200, 298-308.	6.2	103
16	Incorporating zeolites in microchemical systems. Chemical Engineering Journal, 2002, 88, 187-200.	12.7	92
17	Experimental studies of nitrobenzene hydrogenation in a microstructured falling film reactor. Chemical Engineering Science, 2004, 59, 3491-3494.	3.8	92
18	Optimal Distribution of Catalyst in Pellets. Catalysis Reviews - Science and Engineering, 1993, 35, 399-456.	12.9	88

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19	Co-precipitation synthesis of stable iron oxide nanoparticles with NaOH: New insights and continuous production via flow chemistry. Chemical Engineering Journal, 2020, 399, 125740.	12.7	88
20	TS-1 oxidation of aniline to azoxybenzene in a microstructured reactor. Applied Catalysis A: General, 2005, 281, 285-293.	4.3	87
21	1-Pentene epoxidation in catalytic microfabricated reactors. Journal of Catalysis, 2004, 223, 241-249.	6.2	81
22	Generalized model for prediction of the steady-state drop size distributions in batch stirred vessels. Industrial & Engineering Chemistry Research, 1989, 28, 1704-1711.	3.7	79
23	TS-1 zeolite microengineered reactors for 1-pentene epoxidation. Chemical Communications, 2002, , 878-879.	4.1	70
24	CFD simulations of the effect of inlet conditions on Taylor flow formation. International Journal of Heat and Fluid Flow, 2008, 29, 1603-1611.	2.4	68
25	Continuous flow synthesis of ultrasmall gold nanoparticles in a microreactor using trisodium citrate and their SERS performance. Chemical Engineering Science, 2018, 189, 422-430.	3.8	68
26	Modelling of a catalytic plate reactor for dehydrogenationâ€“combustion coupling. Chemical Engineering Science, 2001, 56, 2671-2683.	3.8	67
27	Design and characterisation of the staggered herringbone mixer. Chemical Engineering Journal, 2008, 142, 109-121.	12.7	66
28	Reaction and Raman spectroscopic studies of alcohol oxidation on goldâ€“palladium catalysts in microstructured reactors. Chemical Engineering Journal, 2011, 167, 734-743.	12.7	65
29	Continuous-Flow Sonocrystallization in Droplet-Based Microfluidics. Crystal Growth and Design, 2015, 15, 5519-5529.	3.0	64
30	Synthesis of silver nanoparticles in a microfluidic coaxial flow reactor. RSC Advances, 2015, 5, 95585-95591.	3.6	61
31	Influence of Flow Arrangement in Catalytic Plate Reactors for Methane Steam Reforming. Chemical Engineering Research and Design, 2004, 82, 252-258.	5.6	59
32	On the formation of Taylor bubbles in small tubes. Chemical Engineering Science, 2006, 61, 6653-6666.	3.8	59
33	Effect of Inlet Conditions on Taylor Bubble Length in Microchannels. Heat Transfer Engineering, 2011, 32, 1117-1125.	1.9	57
34	Selective suppression of disproportionation reaction in solvent-less benzyl alcohol oxidation catalysed by supported Auâ€“Pd nanoparticles. Catalysis Today, 2013, 203, 146-152.	4.4	57
35	Review on gasâ€“liquid separations in microchannel devices. Chemical Engineering Research and Design, 2013, 91, 1941-1953.	5.6	55
36	On the development of kinetic models for solvent-free benzyl alcohol oxidation over a gold-palladium catalyst. Chemical Engineering Journal, 2018, 342, 196-210.	12.7	55

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37	Thiol-Capped Gold Nanoparticles Swell-Encapsulated into Polyurethane as Powerful Antibacterial Surfaces Under Dark and Light Conditions. Scientific Reports, 2016, 6, 39272.	3.3	54
38	Hydrodynamic effects on three phase micro-packed bed reactor performance â€“ Goldâ€“palladium catalysed benzyl alcohol oxidation. Chemical Engineering Science, 2016, 149, 129-142.	3.8	53
39	Controllable Synthesis of Gold Nanoparticles in Aqueous Solution by Microwave Assisted Flow Chemistry. ACS Sustainable Chemistry and Engineering, 2016, 4, 6435-6442.	6.7	53
40	Photobactericidal activity activated by thiolated gold nanoclusters at low flux levels of white light. Nature Communications, 2020, 11, 1207.	12.8	52
41	Experimental characterization of axial dispersion in coiled flow inverters. Chemical Engineering Research and Design, 2017, 120, 159-170.	5.6	51
42	Scalable Reactor Design for Pharmaceuticals and Fine Chemicals Production. 1:Â Potential Scale-up Obstacles. Organic Process Research and Development, 2006, 10, 539-552.	2.7	50
43	Characterisation of liquid film in a microstructured falling film reactor using laser scanning confocal microscopy. Experimental Thermal and Fluid Science, 2006, 30, 463-472.	2.7	49
44	An autonomous microreactor platform for the rapid identification of kinetic models. Reaction Chemistry and Engineering, 2019, 4, 1623-1636.	3.7	49
45	Asymmetric Transfer Hydrogenation of Acetophenone with 1R,2S-Aminoindanol/Pentamethylcyclopentadienylrhodium Catalyst. Organic Process Research and Development, 2004, 8, 909-914.	2.7	48
46	An engineering approach to synthesis of gold and silver nanoparticles by controlling hydrodynamics and mixing based on a coaxial flow reactor. Nanoscale, 2017, 9, 14149-14161.	5.6	48
47	Effects of 1,2 Dichloroethane Addition on the Optimal Silver Catalyst Distribution in Pellets for Epoxidation of Ethylene. Journal of Catalysis, 1998, 174, 1-12.	6.2	47
48	Development of multistage distillation in a microfluidic chip. Lab on A Chip, 2011, 11, 1311.	6.0	47
49	Investigation of the Effect of Ultrasound Parameters on Continuous Sonocrystallization in a Millifluidic Device. Crystal Growth and Design, 2016, 16, 4607-4619.	3.0	47
50	A model for predicting axial mixing during gasâ€“liquid Taylor flow in microchannels at low Bodenstein numbers. Chemical Engineering Journal, 2004, 101, 391-396.	12.7	46
51	Microreaction technology aided catalytic process design. Current Opinion in Chemical Engineering, 2013, 2, 338-345.	7.8	45
52	Ozonolysis in Flow Using Capillary Reactors. Organic Process Research and Development, 2011, 15, 989-996.	2.7	44
53	Preparation of Pt/Î³-Al2O3Pellets with Internal Step-Distribution of Catalyst: Experiments and Theory. Journal of Catalysis, 1996, 158, 439-451.	6.2	43
54	Effect of Microchannel Plate Design on Fluid Flow Uniformity at Low Flow Rates. Chemical Engineering and Technology, 2007, 30, 395-406.	1.5	42

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55	Continuous Heterogeneously Catalyzed Oxidation of Benzyl Alcohol Using a Tube-in-Tube Membrane Microreactor. Industrial & Engineering Chemistry Research, 2015, 54, 4183-4189.	3.7	42
56	A model for the formation of gold nanoparticles in the citrate synthesis method. Chemical Engineering Science, 2018, 191, 318-331.	3.8	41
57	Residence time distributions in microchannels: Comparison between channels with herringbone structures and a rectangular channel. Chemical Engineering Journal, 2010, 160, 834-844.	12.7	40
58	Modelling the synthesis of nanoparticles in continuous microreactors: The role of diffusion and residence time distribution on nanoparticle characteristics. Chemical Engineering Journal, 2018, 350, 1144-1154.	12.7	38
59	Ozonolysis of some complex organic substrates in flow. RSC Advances, 2013, 3, 5076.	3.6	37
60	Oxidation of cinnamyl alcohol using bimetallic Auâ€“Pd/TiO₂ catalysts: a deactivation study in a continuous flow packed bed microreactor. Catalysis Science and Technology, 2016, 6, 4749-4758.	4.1	37
61	Application of microfabricated reactors for operando Raman studies of catalytic oxidation of methanol to formaldehyde on silver. Catalysis Today, 2007, 126, 119-126.	4.4	36
62	Solvent-free aerobic oxidation of alcohols using supported gold palladium nanoalloys prepared by a modified impregnation method. Catalysis Science and Technology, 2014, 4, 3120-3128.	4.1	36
63	Continuous flow synthesis of citrate capped gold nanoparticles using UV induced nucleation. RSC Advances, 2017, 7, 9632-9638.	3.6	36
64	Experimental and computational investigation of heat transfer in a microwave-assisted flow system. Chemical Engineering and Processing: Process Intensification, 2019, 142, 107537.	3.6	35
65	Rapid synthesis of gold nanoparticles with carbon monoxide in a microfluidic segmented flow system. Reaction Chemistry and Engineering, 2019, 4, 884-890.	3.7	35
66	CATALYTIC CONVERTER DESIGN FOR MINIMISATION OF COLD-START EMISSIONS. Chemical Engineering Communications, 1999, 173, 53-77.	2.6	34
67	A joint model-based experimental design approach for the identification of kinetic models in continuous flow laboratory reactors. Computers and Chemical Engineering, 2016, 95, 202-215.	3.8	33
68	Highly reproducible, high-yield flow synthesis of gold nanoparticles based on a rational reactor design exploiting the reduction of passivated Au(<scp>iii</scp>). Reaction Chemistry and Engineering, 2020, 5, 663-676.	3.7	33
69	Microstructure-based intensification of a falling film microreactor through optimal film setting with realistic profiles and in-channel induced mixing. Chemical Engineering Journal, 2012, 179, 318-329.	12.7	32
70	Small iron oxide nanoparticles as MRI T₁ contrast agent: scalable inexpensive water-based synthesis using a flow reactor. Nanoscale, 2021, 13, 8795-8805.	5.6	32
71	1-Pentene Epoxidation in Titanium Silicalite-1 Microchannel Reactor. Chemical Engineering Research and Design, 2003, 81, 753-759.	5.6	31
72	Adipic Acid Primary Nucleation Kinetics from Probability Distributions in Droplet-Based Systems under Stagnant and Flow Conditions. Crystal Growth and Design, 2015, 15, 1784-1791.	3.0	31

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73	Theoretical investigation of axially non-uniform catalytic monoliths for methane combustion. Chemical Engineering Science, 2001, 56, 3455-3468.	3.8	30
74	Model-based design of transient flow experiments for the identification of kinetic parameters. Reaction Chemistry and Engineering, 2020, 5, 112-123.	3.7	30
75	Oxidative dehydrogenation of methanol in a microstructured reactor. Catalysis Today, 2005, 110, 154-163.	4.4	29
76	Stable Iron Oxide Nanoflowers with Exceptional Magnetic Heating Efficiency: Simple and Fast Polyol Synthesis. ACS Applied Materials & Interfaces, 2021, 13, 45870-45880.	8.0	28
77	CO₂Absorption in a Microstructured Mesh Reactor. Industrial & Engineering Chemistry Research, 2010, 49, 1041-1049.	3.7	27
78	CO2Absorption in Polytetrafluoroethylene Membrane Microstructured Contactor Using Aqueous Solutions of Amines. Industrial & Engineering Chemistry Research, 2014, 53, 9236-9242.	3.7	27
79	Effect of shear rate on primary nucleation of para-amino benzoic acid in solution under different fluid dynamic conditions. Chemical Engineering Research and Design, 2018, 136, 48-56.	5.6	26
80	Towards an understanding of the effects of operating conditions on separation by microfluidic distillation. Chemical Engineering Science, 2011, 66, 2098-2106.	3.8	25
81	Axial mass transfer in Taylor flow through circular microchannels. AICHE Journal, 2007, 53, 1413-1428.	3.6	24
82	Continuous flow aerobic oxidation of benzyl alcohol on Ru/Al2O3 catalyst in a flat membrane microchannel reactor: An experimental and modelling study. Chemical Engineering Science, 2019, 201, 386-396.	3.8	23
83	Optimization of a nonisothermal nonadiabatic fixed-bed reactor using dirac-type silver catalysts for ethylene epoxidation. Chemical Engineering Science, 1994, 49, 1925-1936.	3.8	22
84	Oxidative dehydrogenation of 3-Methyl-2-buten-1-ol in microreactors. Chemical Engineering Science, 2004, 59, 4803-4808.	3.8	22
85	Microfluidic synthesis of protein-loaded nanogels in a coaxial flow reactor using a design of experiments approach. Nanoscale Advances, 2021, 3, 2039-2055.	4.6	22
86	Sample Pulse Broadening in Taylor Flow Microchannels for Screening Applications. Chemical Engineering and Technology, 2005, 28, 509-514.	1.5	21
87	Design of a mesh microreactor for even flow distribution and narrow residence time distribution. Chemical Engineering Journal, 2008, 135, S259-S269.	12.7	21
88	Stripping of acetone from water with microfabricated and membrane gasâ€“liquid contactors. Analyst, The, 2014, 139, 266-272.	3.5	21
89	Synthesis of silver nanoparticles using a microfluidic impinging jet reactor. Journal of Flow Chemistry, 2016, 6, 268-278.	1.9	21
90	Continuous production of iron oxide nanoparticles via fast and economical high temperature synthesis. Reaction Chemistry and Engineering, 2020, 5, 1474-1483.	3.7	21

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91	Single and Multiphase Catalytic Oxidation of Benzyl Alcohol by Tetrapropylammonium Perruthenate in a Mobile Microreactor System. Chemical Engineering and Technology, 2006, 29, 1372-1375.	1.5	20
92	Stripping of acetone from isopropanol solution with membrane and mesh gasâ€“liquid contactors. Chemical Engineering and Processing: Process Intensification, 2011, 50, 991-997.	3.6	20
93	Rapid Millifluidic Synthesis of Stable High Magnetic Moment Fe_xC_y Nanoparticles for Hyperthermia. ACS Applied Materials & Interfaces, 2020, 12, 28520-28531.	8.0	20
94	Anticipatory life cycle assessment of gold nanoparticles production: Comparison of milli-continuous flow and batch synthesis. Journal of Cleaner Production, 2020, 269, 122335.	9.3	20
95	Continuous Heterogeneously Catalyzed Oxidation of Benzyl Alcohol in a Ceramic Membrane Packed-Bed Reactor. Organic Process Research and Development, 2015, 19, 1973-1979.	2.7	19
96	A Novel Approach for Measuring Gas Solubility in Liquids Using a Tubeâ€inâ€Tube Membrane Contactor. Chemical Engineering and Technology, 2017, 40, 2346-2350.	1.5	19
97	Closed-Loop Model-Based Design of Experiments for Kinetic Model Discrimination and Parameter Estimation: Benzoic Acid Esterification on a Heterogeneous Catalyst. Industrial & Engineering Chemistry Research, 2019, 58, 22165-22177.	3.7	19
98	A Modular Millifluidic Platform for the Synthesis of Iron Oxide Nanoparticles with Control over Dissolved Gas and Flow Configuration. Materials, 2020, 13, 1019.	2.9	19
99	Investigation of a rotating disc reactor for acetone stripping and asymmetric transfer hydrogenation: Modelling and experiments. Chemical Engineering Science, 2007, 62, 741-755.	3.8	18
100	Operating ranges of gasâ€“liquid capillary microseparators: Experiments and theory. Chemical Engineering Science, 2014, 114, 30-39.	3.8	18
101	Rapid synthesis of [Au25(Cys)18] nanoclusters via carbon monoxide in microfluidic liquid-liquid segmented flow system and their antimicrobial performance. Chemical Engineering Journal, 2020, 383, 123176.	12.7	18
102	Effect of acoustic streaming on continuous flow sonocrystallization in millifluidic channels. Chemical Engineering Journal, 2020, 379, 122221.	12.7	18
103	Optimal catalyst activity profiles in pellets: 9. Study of ethylene epoxidation. AICHE Journal, 1992, 38, 291-296.	3.6	17
104	Scalable Reactor Design for Pharmaceuticals and Fine Chemicals Production. 3. A Novel Gasâ^'Liquid Reactor for Catalytic Asymmetric Transfer Hydrogenation with Simultaneous Acetone Stripping. Organic Process Research and Development, 2008, 12, 1218-1222.	2.7	17
105	Development of a flat membrane microchannel packed-bed reactor for scalable aerobic oxidation of benzyl alcohol in flow. Chemical Engineering Journal, 2019, 377, 120086.	12.7	17
106	Au catalysts supported on anodised aluminium for low-temperature CO oxidation. Catalysis Communications, 2002, 3, 425-428.	3.3	16
107	In situ monitoring of microfluidic distillation. Chemical Engineering Journal, 2013, 227, 13-21.	12.7	16
108	An online reparametrisation approach for robust parameter estimation in automated model identification platforms. Computers and Chemical Engineering, 2019, 124, 270-284.	3.8	16

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109	Microstructured Mesh Contactor for Asymmetric Transfer Hydrogenation with Simultaneous Stripping: Modeling and Experiments. Industrial & Engineering Chemistry Research, 2008, 47, 8995-9005.	3.7	15
110	CO 2 absorption in a high efficiency silicon nitride mesh contactor. Chemical Engineering Journal, 2012, 207-208, 766-771.	12.7	15
111	Application of Î¼-PIV for investigating liquid film characteristics in an open inclined microchannel. Experimental Thermal and Fluid Science, 2013, 44, 90-99.	2.7	15
112	A microwave promoted continuous flow approach to self-assembled hierarchical hematite superstructures. Green Chemistry, 2016, 18, 3057-3065.	9.0	15
113	A mathematical investigation of the Turkevich organizer theory in the citrate method for the synthesis of gold nanoparticles. Chemical Engineering Science, 2017, 173, 275-286.	3.8	15
114	New insight into the effect of mass transfer on the synthesis of silver and gold nanoparticles. CrystEngComm, 2018, 20, 7082-7093.	2.6	15
115	Shape controlled iron oxide nanoparticles: inducing branching and controlling particle crystallinity. CrystEngComm, 2021, 23, 550-561.	2.6	15
116	Continuous citrateâ€¢capped gold nanoparticle synthesis in a twoâ€phase flow reactor. Journal of Flow Chemistry, 2021, 11, 553-567.	1.9	15
117	Versailles project on advanced materials and standards (VAMAS) interlaboratory study on measuring the number concentration of colloidal gold nanoparticles. Nanoscale, 2022, 14, 4690-4704.	5.6	15
118	Influence of Loading on Metal Surface Area for Ag/Î±-Al2O3 Catalysts. Journal of Catalysis, 1993, 139, 41-47.	6.2	14
119	A micropacked-bed multi-reactor system with in situ raman analysis for catalyst evaluation. Catalysis Today, 2017, 283, 195-201.	4.4	14
120	Preparation of axially non-uniform Pd catalytic monoliths by chemical vapour deposition. Applied Catalysis A: General, 2001, 210, 381-390.	4.3	13
121	Design and Performance of a Microstructured PEEK Reactor for Continuous Poly-l-leucine-Catalysed Chalcone Epoxidation. Organic Process Research and Development, 2009, 13, 941-951.	2.7	13
122	Residence time distribution studies in microstructured plate reactors. Applied Thermal Engineering, 2011, 31, 634-639.	6.0	13
123	Kinetics-based design of a flow platform for highly reproducible on demand synthesis of gold nanoparticles with controlled size between 50 and 150Ânm and their application in SERS and PIERS sensing. Chemical Engineering Journal, 2021, 423, 129069.	12.7	13
124	An investigation of catalytic plate reactors by means of parametric sensitivity analysis. Chemical Engineering Science, 2002, 57, 1653-1659.	3.8	12
125	Parametric sensitivity in catalytic plate reactors with first-order endothermicâ€“exothermic reactions. Chemical Engineering Journal, 2002, 86, 277-286.	12.7	12
126	Recommendations for clinical translation of nanoparticle-enhanced radiotherapy. British Journal of Radiology, 2018, 91, 20180325.	2.2	12

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127	Catalytic Teflon AF-2400 membrane reactor with adsorbed ex situ synthesized Pd-based nanoparticles for nitrobenzene hydrogenation. Catalysis Today, 2021, 362, 104-112.	4.4	12
128	A microstructured reactor based in situ cell for the study of catalysts by X-ray absorption spectroscopy under operating conditions. Catalysis Today, 2007, 125, 24-28.	4.4	11
129	Hydrodynamics and reaction studies in a layered herringbone channel. Chemical Engineering Journal, 2011, 167, 657-665.	12.7	11
130	Study of the hydrodynamic characteristics of a free flowing liquid film in open inclined microchannels. Chemical Engineering Science, 2013, 101, 744-754.	3.8	11
131	Particle Size Evolution during the Synthesis of Gold Nanoparticles Using In Situ Time-Resolved UVâ€“Vis Spectroscopy: An Experimental and Theoretical Study Unravelling the Effect of Adsorbed Gold Precursor Species. Journal of Physical Chemistry C, 2020, 124, 27662-27672.	3.1	11
132	Reaction modelling of a microstructured falling film reactor incorporating staggered herringbone structures using eddy diffusivity concepts. Chemical Engineering Journal, 2013, 227, 34-41.	12.7	10
133	A model-based data mining approach for determining the domain of validity of approximated models. Chemometrics and Intelligent Laboratory Systems, 2018, 172, 58-67.	3.5	10
134	Sublimation and deposition behaviour of palladium (II) acetylacetonate. EPJ Applied Physics, 2001, 15, 23-33.	0.7	9
135	Scalable Reactor Design for Pharmaceuticals and Fine Chemicals Production. 2: Evaluation of Potential Scale-up Obstacles for Asymmetric Transfer Hydrogenation. Organic Process Research and Development, 2007, 11, 966-971.	2.7	9
136	Deactivation Behavior of Supported Gold Palladium Nanoalloy Catalysts during the Selective Oxidation of Benzyl Alcohol in a Micropacked Bed Reactor. Industrial & Engineering Chemistry Research, 2017, 56, 12984-12993.	3.7	9
137	Effects of bovine serum albumin on light activated antimicrobial surfaces. RSC Advances, 2018, 8, 34252-34258.	3.6	9
138	Study of Liquidâ€“Solid Mass Transfer and Hydrodynamics in Micropacked Bed with Gasâ€“Liquid Flow. Industrial & Engineering Chemistry Research, 2021, 60, 10489-10501.	3.7	9
139	Slurry loop tubular membrane reactor for the catalysed aerobic oxidation of benzyl alcohol. Chemical Engineering Journal, 2019, 378, 122250.	12.7	8
140	Aerobic Oxidation of Benzyl Alcohol in a Continuous Catalytic Membrane Reactor. Topics in Catalysis, 2019, 62, 1126-1131.	2.8	8
141	An Experimental Study of Non-Uniform Pd Catalytic Monoliths. Chemical Engineering Research and Design, 2001, 79, 795-798.	5.6	7
142	Architectural design and performance of zeolite microreactors. Studies in Surface Science and Catalysis, 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. Processes, 2014, 2, 141-157.	2.8	7
144	Towards microfluidic reactors for in situ synchrotron infrared studies. Review of Scientific Instruments, 2016, 87, 024101.	1.3	7

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145	CO2 absorption in flat membrane microstructured contactors of different wettability using aqueous solution of NaOH. Green Processing and Synthesis, 2018, 7, 471-476.	3.4	7
146	A Multi-Objective Optimal Experimental Design Framework for Enhancing the Efficiency of Online Model Identification Platforms. Engineering, 2019, 5, 1049-1059.	6.7	7
147	Continuous Single-Phase Synthesis of [Au25(Cys)18] Nanoclusters and their Photobactericidal Enhancement. ACS Applied Materials & Interfaces, 2020, 12, 49021-49029.	8.0	7
148	Development of an in-line magnetometer for flow chemistry and its demonstration for magnetic nanoparticle synthesis. Lab on A Chip, 2021, 21, 3775-3783.	6.0	7
149	Preparation and characterisation of Pd and Pt/SiO2â€“Al2O3 non-permselective membranes. Journal of Membrane Science, 2005, 248, 27-36.	8.2	6
150	Merging information from batch and continuous flow experiments for the identification of kinetic models of benzyl alcohol oxidation over Au-Pd catalyst. Computer Aided Chemical Engineering, 2016, 38, 961-966.	0.5	6
151	Silicon microfabricated reactor for operando XAS/DRIFTS studies of heterogeneous catalytic reactions. Catalysis Science and Technology, 2020, 10, 7842-7856.	4.1	6
152	3D printed catalytic reactors for aerobic selective oxidation of benzyl alcohol into benzaldehyde in continuous multiphase flow. Sustainable Materials and Technologies, 2021, 30, e00329.	3.3	6
153	Fouling-proof triple stream 3D flow focusing based reactor: Design and demonstration for iron oxide nanoparticle co-precipitation synthesis. Chemical Engineering Science, 2022, 251, 117481.	3.8	6
154	A vertically-averaged formulation of wall catalytic reactions in microchannel flows: single isothermal & non-isothermal reactions. , 2001, , 141-149.		5
155	Development of a kinetic model of ethylene methoxycarbonylation with homogeneous Pd catalyst using a capillary microreactor. Chemical Engineering Journal, 2017, 329, 25-34.	12.7	5
156	Hydrodynamic Characterization of Phase Separation in Devices with Microfabricated Capillaries. Langmuir, 2019, 35, 8199-8209.	3.5	5
157	Catalytic combustion of methane in non-permselective membrane reactors with separate reactant feeds. Chemical Engineering Journal, 2004, 100, 23-32.	12.7	4
158	Model-based design of experiments for the identification of kinetic models in microreactor platforms. Computer Aided Chemical Engineering, 2015, 37, 323-328.	0.5	4
159	Identification of kinetic models of methanol oxidation on silver in the presence of uncertain catalyst behavior. AICHE Journal, 2019, 65, e16707.	3.6	4
160	Design and Fabrication of Zeolite-containing Microstructures. , 2001, , 94-102.		4
161	Experimental Evaluation of a Micromesh Gas/Liquid Reactor for Catalytic Asymmetric Transfer Hydrogenation. Chemical Engineering and Technology, 2009, 32, 1318-1325.	1.5	3
162	On the Use of Online Reparametrization in Automated Platforms for Kinetic Model Identification. Chemie-Ingenieur-Technik, 2019, 91, 268-276.	0.8	3

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163	Ultra high molecular weight polyethylene with incorporated crystal violet and gold nanoclusters is antimicrobial in low intensity light and in the dark. Materials Advances, 2020, 1, 3339-3348.	5.4	3
164	4. Continuous synthesis of gold nanoparticles in micro- and millifluidic systems. , 2018, , 157-220.		2
165	Three step synthesis of benzylacetone and 4-(4-methoxyphenyl)butan-2-one in flow using micropacked bed reactors. Chemical Engineering Journal, 2019, 377, 119976.	12.7	2
166	Modelling of Gas-Liquid Catalytic Reactions in Microchannels. , 2000, , 253-259.		2
167	In-Silico Conceptualisation of Continuous Millifluidic Separators for Magnetic Nanoparticles. Materials, 2021, 14, 6635.	2.9	2
168	Process-oriented approach towards catalyst design and optimisation. Catalysis Communications, 2022, 163, 106392.	3.3	2
169	Optimal Distribution of Silver Catalyst for Epoxidation of Ethylene. ACS Symposium Series, 1993, , 410-415.	0.5	1
170	HYDRODEMETALLATION CATALYST PELLETS WITH NONUNIFORM RADIAL PORE SIZE DISTRIBUTION. Chemical Engineering Communications, 1998, 163, 37-54.	2.6	1
171	Special Topic Issueâ€"Reaction Engineering: Microstructured Reactors. Chemical Engineering Research and Design, 2003, 81, 709-710.	5.6	1
172	Optimal Catalyst Distribution in Catalytic Plate Reactors. International Journal of Chemical Reactor Engineering, 2003, 1, .	1.1	1
173	Process intensification through staggered herringbone micro-channels: Mass transfer enhancement to a reactive wall. Chemical Engineering and Processing: Process Intensification, 2020, 157, 108154.	3.6	1
174	Synthetic guidelines for the precision engineering of gold nanoparticles. Current Opinion in Chemical Engineering, 2020, 29, 59-66.	7.8	1
175	Axial dispersion in curved channels in the presence of pulsating flow. Chemical Engineering and Processing: Process Intensification, 2022, 180, 108629.	3.6	1
176	A study of the interaction of cationic dyes with gold nanostructures. RSC Advances, 2021, 11, 17694-17703.	3.6	1
177	Continuous synthesis of gold nanoparticles in micro- and millifluidic systems. ChemistrySelect, 2021, 6, .	1.5	1
178	Special Issueâ€"In Honour of Professor Ryszard Pohorecki on the Occasion of his 70th Birthday. Chemical Engineering Research and Design, 2006, 84, 509-510.	5.6	0
179	Magnetic Nanoparticles: general discussion. Faraday Discussions, 2014, 175, 113-135.	3.2	0
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