

Asterios Gavriilidis

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

176 papers	5,470 citations	40 h-index	66 g-index
187 ext. papers	6,187 ext. citations	6 avg, IF	5.9 L-index

#	Paper	IF	Citations
176	Fouling-proof triple stream 3D flow focusing based reactor: Design and demonstration for iron oxide nanoparticle co-precipitation synthesis. <i>Chemical Engineering Science</i> , 2022 , 251, 117481	4.4	0
175	Process-oriented approach towards catalyst design and optimisation. <i>Catalysis Communications</i> , 2022 , 163, 106392	3.2	
174	Study of Liquid-Solid Mass Transfer and Hydrodynamics in Micropacked Bed with Gas-Liquid Flow. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 10489-10501	3.9	1
173	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	5.3	5
172	Shape controlled iron oxide nanoparticles: inducing branching and controlling particle crystallinity. <i>CrystEngComm</i> , 2021 , 23, 550-561	3.3	8
171	Small iron oxide nanoparticles as MRI contrast agent: scalable inexpensive water-based synthesis using a flow reactor. <i>Nanoscale</i> , 2021 , 13, 8795-8805	7.7	14
170	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	5.1	7
169	Stable Iron Oxide Nanoflowers with Exceptional Magnetic Heating Efficiency: Simple and Fast Polyol Synthesis. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 45870-45880	9.5	4
168	Axial dispersion in curved channels in the presence of pulsating flow. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021 , 108629	3.7	
167	Kinetics-based design of a flow platform for highly reproducible on demand synthesis of gold nanoparticles with controlled size between 50 and 150nm and their application in SERS and PIERS sensing. <i>Chemical Engineering Journal</i> , 2021 , 423, 129069	14.7	3
166	3D printed catalytic reactors for aerobic selective oxidation of benzyl alcohol into benzaldehyde in continuous multiphase flow. <i>Sustainable Materials and Technologies</i> , 2021 , 30, e00329	5.3	1
165	A study of the interaction of cationic dyes with gold nanostructures.. <i>RSC Advances</i> , 2021 , 11, 17694-17703	3.7	1
164	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	7.2	4
163	Particle Size Evolution during the Synthesis of Gold Nanoparticles Using In Situ 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	3.8	5
162	Rapid Millifluidic Synthesis of Stable High Magnetic Moment FeC Nanoparticles for Hyperthermia. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 28520-28531	9.5	12
161	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	14.7	34
160	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	10.3	12

159	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	4.9	22
158	Photobactericidal activity activated by thiolated gold nanoclusters at low flux levels of white light. <i>Nature Communications</i> , 2020 , 11, 1207	17.4	26
157	Continuous production of iron oxide nanoparticles via fast and economical high temperature synthesis. <i>Reaction Chemistry and Engineering</i> , 2020 , 5, 1474-1483	4.9	13
156	Synthetic guidelines for the precision engineering of gold nanoparticles. <i>Current Opinion in Chemical Engineering</i> , 2020 , 29, 59-66	5.4	
155	A Modular Millifluidic Platform for the Synthesis of Iron Oxide Nanoparticles with Control over Dissolved Gas and Flow Configuration. <i>Materials</i> , 2020 , 13,	3.5	11
154	Ultra high molecular weight polyethylene with incorporated crystal violet and gold nanoclusters is antimicrobial in low intensity light and in the dark. <i>Materials Advances</i> , 2020 , 1, 3339-3348	3.3	3
153	Model-based design of transient flow experiments for the identification of kinetic parameters. <i>Reaction Chemistry and Engineering</i> , 2020 , 5, 112-123	4.9	12
152	Continuous Single-Phase Synthesis of [Au(Cys)] Nanoclusters and their Photobactericidal Enhancement. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 49021-49029	9.5	3
151	Silicon microfabricated reactor for operando XAS/DRIFTS studies of heterogeneous catalytic reactions. <i>Catalysis Science and Technology</i> , 2020 , 10, 7842-7856	5.5	1
150	Process intensification through staggered herringbone micro-channels: Mass transfer enhancement to a reactive wall. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020 , 157, 108154	3.7	1
149	Rapid synthesis of [Au ₂₅ (Cys) ₁₈] nanoclusters via carbon monoxide in microfluidic liquid-liquid segmented flow system and their antimicrobial performance. <i>Chemical Engineering Journal</i> , 2020 , 383, 123176	14.7	10
148	Effect of acoustic streaming on continuous flow sonocrystallization in millifluidic channels. <i>Chemical Engineering Journal</i> , 2020 , 379, 122221	14.7	11
147	An online reparametrisation approach for robust parameter estimation in automated model identification platforms. <i>Computers and Chemical Engineering</i> , 2019 , 124, 270-284	4	9
146	Experimental and computational investigation of heat transfer in a microwave-assisted flow system. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019 , 142, 107537	3.7	24
145	Hydrodynamic Characterization of Phase Separation in Devices with Microfabricated Capillaries. <i>Langmuir</i> , 2019 , 35, 8199-8209	4	4
144	An autonomous microreactor platform for the rapid identification of kinetic models. <i>Reaction Chemistry and Engineering</i> , 2019 , 4, 1623-1636	4.9	30
143	On the Use of Online Reparametrization in Automated Platforms for Kinetic Model Identification. <i>Chemie-Ingenieur-Technik</i> , 2019 , 91, 268-276	0.8	1
142	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	7.7	70

141	Continuous flow aerobic oxidation of benzyl alcohol on Ru/Al ₂ O ₃ catalyst in a flat membrane microchannel reactor: An experimental and modelling study. <i>Chemical Engineering Science</i> , 2019 , 201, 386-396	4.4	20
140	Rapid synthesis of gold nanoparticles with carbon monoxide in a microfluidic segmented flow system. <i>Reaction Chemistry and Engineering</i> , 2019 , 4, 884-890	4.9	20
139	Slurry loop tubular membrane reactor for the catalysed aerobic oxidation of benzyl alcohol. <i>Chemical Engineering Journal</i> , 2019 , 378, 122250	14.7	4
138	Identification of kinetic models of methanol oxidation on silver in the presence of uncertain catalyst behavior. <i>AIChE Journal</i> , 2019 , 65, e16707	3.6	2
137	A Multi-Objective Optimal Experimental Design Framework for Enhancing the Efficiency of Online Model Identification Platforms. <i>Engineering</i> , 2019 , 5, 1049-1059	9.7	3
136	Closed-Loop Model-Based Design of Experiments for Kinetic Model Discrimination and Parameter Estimation: Benzoic Acid Esterification on a Heterogeneous Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 22165-22177	3.9	6
135	Aerobic Oxidation of Benzyl Alcohol in a Continuous Catalytic Membrane Reactor. <i>Topics in Catalysis</i> , 2019 , 62, 1126-1131	2.3	4
134	Three step synthesis of benzylacetone and 4-(4-methoxyphenyl)butan-2-one in flow using micropacked bed reactors. <i>Chemical Engineering Journal</i> , 2019 , 377, 119976	14.7	1
133	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	14.7	9
132	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	14.7	21
131	A model for the formation of gold nanoparticles in the citrate synthesis method. <i>Chemical Engineering Science</i> , 2018 , 191, 318-331	4.4	21
130	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	4.4	44
129	CO ₂ absorption in flat membrane microstructured contactors of different wettability using aqueous solution of NaOH. <i>Green Processing and Synthesis</i> , 2018 , 7, 471-476	3.9	3
128	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	14.7	40
127	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	3.8	5
126	New insight into the effect of mass transfer on the synthesis of silver and gold nanoparticles. <i>CrystEngComm</i> , 2018 , 20, 7082-7093	3.3	13
125	Effects of bovine serum albumin on light activated antimicrobial surfaces.. <i>RSC Advances</i> , 2018 , 8, 34252-34258	3.7	4
124	Online model-based redesign of experiments for improving parameter precision in continuous flow reactors. <i>IFAC-PapersOnLine</i> , 2018 , 51, 359-364	0.7	

123	Recommendations for clinical translation of nanoparticle-enhanced radiotherapy. <i>British Journal of Radiology</i> , 2018 , 91, 20180325	3.4	6
122	4. Continuous synthesis of gold nanoparticles in micro- and millifluidic systems 2018 , 157-220		1
121	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	5.5	15
120	Experimental characterization of axial dispersion in coiled flow inverters. <i>Chemical Engineering Research and Design</i> , 2017 , 120, 159-170	5.5	33
119	Continuous flow synthesis of citrate capped gold nanoparticles using UV induced nucleation. <i>RSC Advances</i> , 2017 , 7, 9632-9638	3.7	26
118	Development of a kinetic model of ethylene methoxycarbonylation with homogeneous Pd catalyst using a capillary microreactor. <i>Chemical Engineering Journal</i> , 2017 , 329, 25-34	14.7	2
117	Deactivation Behavior of Supported Gold Palladium Nanoalloy Catalysts during the Selective Oxidation of Benzyl Alcohol in a Micropacked Bed Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 12984-12993	3.9	7
116	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	2	14
115	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	7.7	35
114	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	4.4	13
113	A micropacked-bed multi-reactor system with in situ raman analysis for catalyst evaluation. <i>Catalysis Today</i> , 2017 , 283, 195-201	5.3	12
112	Controllable Synthesis of Gold Nanoparticles in Aqueous Solution by Microwave Assisted Flow Chemistry. <i>ACS Sustainable Chemistry and Engineering</i> , 2016 , 4, 6435-6442	8.3	36
111	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	4	24
110	Investigation of the Effect of Ultrasound Parameters on Continuous Sonocrystallization in a Millifluidic Device. <i>Crystal Growth and Design</i> , 2016 , 16, 4607-4619	3.5	37
109	Towards microfluidic reactors for in situ synchrotron infrared studies. <i>Review of Scientific Instruments</i> , 2016 , 87, 024101	1.7	6
108	A microwave promoted continuous flow approach to self-assembled hierarchical hematite superstructures. <i>Green Chemistry</i> , 2016 , 18, 3057-3065	10	13
107	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	0.6	3
106	Thiol-Capped Gold Nanoparticles Swell-Encapsulated into Polyurethane as Powerful Antibacterial Surfaces Under Dark and Light Conditions. <i>Scientific Reports</i> , 2016 , 6, 39272	4.9	41

105	Synthesis of silver nanoparticles using a microfluidic impinging jet reactor. <i>Journal of Flow Chemistry</i> , 2016 , 6, 268-278	3.3	17
104	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	4.4	40
103	Oxidation of cinnamyl alcohol using bimetallic Au/Pd/TiO ₂ catalysts: a deactivation study in a continuous flow packed bed microreactor. <i>Catalysis Science and Technology</i> , 2016 , 6, 4749-4758	5.5	29
102	Aerobic oxidations in flow: opportunities for the fine chemicals and pharmaceuticals industries. <i>Reaction Chemistry and Engineering</i> , 2016 , 1, 595-612	4.9	109
101	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	3.5	21
100	Continuous-Flow Sonocrystallization in Droplet-Based Microfluidics. <i>Crystal Growth and Design</i> , 2015 , 15, 5519-5529	3.5	53
99	Model-based design of experiments for the identification of kinetic models in microreactor platforms. <i>Computer Aided Chemical Engineering</i> , 2015 , 37, 323-328	0.6	3
98	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	3.9	17
97	Synthesis of silver nanoparticles in a microfluidic coaxial flow reactor. <i>RSC Advances</i> , 2015 , 5, 95585-95591	3.7	40
96	Continuous Heterogeneously Catalyzed Oxidation of Benzyl Alcohol Using a Tube-in-Tube Membrane Microreactor. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 4183-4189	3.9	39
95	Stripping of acetone from water with microfabricated and membrane gas-liquid contactors. <i>Analyst, The</i> , 2014 , 139, 266-72	5	18
94	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	5.5	34
93	CO ₂ Absorption in Polytetrafluoroethylene Membrane Microstructured Contactor Using Aqueous Solutions of Amines. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 9236-9242	3.9	23
92	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	2.9	5
91	Operating ranges of gas-liquid capillary microseparators: Experiments and theory. <i>Chemical Engineering Science</i> , 2014 , 114, 30-39	4.4	13
90	Microreaction technology aided catalytic process design. <i>Current Opinion in Chemical Engineering</i> , 2013 , 2, 338-345	5.4	38
89	Review on gas-liquid separations in microchannel devices. <i>Chemical Engineering Research and Design</i> , 2013 , 91, 1941-1953	5.5	46
88	Ozonolysis of some complex organic substrates in flow. <i>RSC Advances</i> , 2013 , 3, 5076	3.7	27

87	In situ monitoring of microfluidic distillation. <i>Chemical Engineering Journal</i> , 2013 , 227, 13-21	14.7	16
86	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	14.7	9
85	Study of the hydrodynamic characteristics of a free flowing liquid film in open inclined microchannels. <i>Chemical Engineering Science</i> , 2013 , 101, 744-754	4.4	9
84	Application of PIV for investigating liquid film characteristics in an open inclined microchannel. <i>Experimental Thermal and Fluid Science</i> , 2013 , 44, 90-99	3	15
83	Selective suppression of disproportionation reaction in solvent-less benzyl alcohol oxidation catalysed by supported AuPd nanoparticles. <i>Catalysis Today</i> , 2013 , 203, 146-152	5.3	52
82	Mixing and Contacting of Heterogeneous Systems 2013 , 205-251		
81	CO ₂ absorption in a high efficiency silicon nitride mesh contactor. <i>Chemical Engineering Journal</i> , 2012 , 207-208, 766-771	14.7	13
80	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	14.7	26
79	Development of multistage distillation in a microfluidic chip. <i>Lab on A Chip</i> , 2011 , 11, 1311-7	7.2	42
78	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	3.7	15
77	Reaction and Raman spectroscopic studies of alcohol oxidation on gold-palladium catalysts in microstructured reactors. <i>Chemical Engineering Journal</i> , 2011 , 167, 734-743	14.7	63
76	Hydrodynamics and reaction studies in a layered herringbone channel. <i>Chemical Engineering Journal</i> , 2011 , 167, 657-665	14.7	11
75	Towards an understanding of the effects of operating conditions on separation by microfluidic distillation. <i>Chemical Engineering Science</i> , 2011 , 66, 2098-2106	4.4	22
74	Ozonolysis in Flow Using Capillary Reactors. <i>Organic Process Research and Development</i> , 2011 , 15, 989-996	5.9	37
73	Residence time distribution studies in microstructured plate reactors. <i>Applied Thermal Engineering</i> , 2011 , 31, 634-639	5.8	9
72	Effect of Inlet Conditions on Taylor Bubble Length in Microchannels. <i>Heat Transfer Engineering</i> , 2011 , 32, 1117-1125	1.7	17
71	CO ₂ Absorption in a Microstructured Mesh Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 1041-1049	3.9	21
70	Residence time distributions in microchannels: Comparison between channels with herringbone structures and a rectangular channel. <i>Chemical Engineering Journal</i> , 2010 , 160, 834-844	14.7	35

69	Mass transfer during Taylor flow in microchannels with and without chemical reaction. <i>Chemical Engineering Journal</i> , 2010 , 160, 873-881	14.7	92
68	Experimental Evaluation of a Micromesh Gas/Liquid Reactor for Catalytic Asymmetric Transfer Hydrogenation. <i>Chemical Engineering and Technology</i> , 2009 , 32, 1318-1325	2	3
67	Flow regimes for adiabatic gas/liquid flow in microchannels. <i>Chemical Engineering Science</i> , 2009 , 64, 2749-2761	14.7	164
66	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	3.9	12
65	Design and characterisation of the staggered herringbone mixer. <i>Chemical Engineering Journal</i> , 2008 , 142, 109-121	14.7	51
64	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	3.9	15
63	Microstructured Mesh Contactor for Asymmetric Transfer Hydrogenation with Simultaneous Stripping: Modeling and Experiments. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 8995-9005	3.9	12
62	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	1.3	143
61	Design of a mesh microreactor for even flow distribution and narrow residence time distribution. <i>Chemical Engineering Journal</i> , 2008 , 135, S259-S269	14.7	18
60	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	2.4	56
59	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	3.9	7
58	Effect of Microchannel Plate Design on Fluid Flow Uniformity at Low Flow Rates. <i>Chemical Engineering and Technology</i> , 2007 , 30, 395-406	2	34
57	Axial mass transfer in Taylor flow through circular microchannels. <i>AIChE Journal</i> , 2007 , 53, 1413-1428	3.6	23
56	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	4.4	16
55	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	5.3	33
54	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	5.3	10
53	On the formation of Taylor bubbles in small tubes. <i>Chemical Engineering Science</i> , 2006 , 61, 6653-6666	4.4	49
52	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	3	42

51	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	2.5	20
50	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	3.9	35
49	Carbon Dioxide Absorption in a Falling Film Microstructured Reactor: Experiments and Modeling. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 1742-1751	3.9	110
48	Gas-Liquid and Gas-Liquid-Solid Microstructured Reactors: Contacting Principles and Applications. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 9750-9769	3.9	252
47	TS-1 oxidation of aniline to azoxybenzene in a microstructured reactor. <i>Applied Catalysis A: General</i> , 2005 , 281, 285-293	5.1	84
46	Preparation and characterisation of Pd and Pt/SiO ₂ /Al ₂ O ₃ non-permselective membranes. <i>Journal of Membrane Science</i> , 2005 , 248, 27-36	9.6	5
45	Oxidative dehydrogenation of methanol in a microstructured reactor. <i>Catalysis Today</i> , 2005 , 110, 154-163	3.3	24
44	Sample Pulse Broadening in Taylor Flow Microchannels for Screening Applications. <i>Chemical Engineering and Technology</i> , 2005 , 28, 509-514	2	21
43	Architectural design and performance of zeolite microreactors. <i>Studies in Surface Science and Catalysis</i> , 2005 , 158, 2081-2088	1.8	7
42	Influence of Flow Arrangement in Catalytic Plate Reactors for Methane Steam Reforming. <i>Chemical Engineering Research and Design</i> , 2004 , 82, 252-258	5.5	48
41	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	14.7	43
40	Catalytic combustion of methane in non-permselective membrane reactors with separate reactant feeds. <i>Chemical Engineering Journal</i> , 2004 , 100, 23-32	14.7	4
39	Oxidative dehydrogenation of 3-Methyl-2-buten-1-ol in microreactors. <i>Chemical Engineering Science</i> , 2004 , 59, 4803-4808	4.4	20
38	1-Pentene epoxidation in catalytic microfabricated reactors. <i>Journal of Catalysis</i> , 2004 , 223, 241-249	7.3	77
37	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	14.7	148
36	Experimental studies of nitrobenzene hydrogenation in a microstructured falling film reactor. <i>Chemical Engineering Science</i> , 2004 , 59, 3491-3494	4.4	88
35	Asymmetric Transfer Hydrogenation of Acetophenone with 1R,2S-Aminoindanol/Pentamethylcyclopentadienylrhodium Catalyst. <i>Organic Process Research and Development</i> , 2004 , 8, 909-914	3.9	44
34	Special Topic Issue: Reaction Engineering: Microstructured Reactors. <i>Chemical Engineering Research and Design</i> , 2003 , 81, 709-710	5.5	1

33	1-Pentene Epoxidation in Titanium Silicalite-1 Microchannel Reactor. <i>Chemical Engineering Research and Design</i> , 2003 , 81, 753-759	5.5	30
32	Catalytic combustion assisted methane steam reforming in a catalytic plate reactor. <i>Chemical Engineering Science</i> , 2003 , 58, 3947-3960	4.4	213
31	Catalyst preparation and deactivation issues for nitrobenzene hydrogenation in a microstructured falling film reactor. <i>Catalysis Today</i> , 2003 , 81, 641-651	5.3	128
30	Optimal Catalyst Distribution in Catalytic Plate Reactors. <i>International Journal of Chemical Reactor Engineering</i> , 2003 , 1,	1.2	1
29	Incorporating zeolites in microchemical systems. <i>Chemical Engineering Journal</i> , 2002 , 88, 187-200	14.7	84
28	An investigation of catalytic plate reactors by means of parametric sensitivity analysis. <i>Chemical Engineering Science</i> , 2002 , 57, 1653-1659	4.4	9
27	Parametric sensitivity in catalytic plate reactors with first-order endothermic/exothermic reactions. <i>Chemical Engineering Journal</i> , 2002 , 86, 277-286	14.7	10
26	Supported Au Catalysts for Low-Temperature CO Oxidation Prepared by Impregnation. <i>Journal of Catalysis</i> , 2002 , 206, 305-313	7.3	126
25	Technology and Applications of Microengineered Reactors. <i>Chemical Engineering Research and Design</i> , 2002 , 80, 3-30	5.5	182
24	TS-1 zeolite microengineered reactors for 1-pentene epoxidation. <i>Chemical Communications</i> , 2002 , 878-938	5.8	66
23	Au catalysts supported on anodised aluminium for low-temperature CO oxidation. <i>Catalysis Communications</i> , 2002 , 3, 425-428	3.2	15
22	Design and fabrication of zeolite-based microreactors and membrane microseparators. <i>Microporous and Mesoporous Materials</i> , 2001 , 42, 157-175	5.3	127
21	Preparation of axially non-uniform Pd catalytic monoliths by chemical vapour deposition. <i>Applied Catalysis A: General</i> , 2001 , 210, 381-390	5.1	12
20	Theoretical investigation of axially non-uniform catalytic monoliths for methane combustion. <i>Chemical Engineering Science</i> , 2001 , 56, 3455-3468	4.4	28
19	Effect of Drying Conditions of Au/Mn Co-Precipitates for Low-Temperature CO Oxidation. <i>Journal of Catalysis</i> , 2001 , 200, 298-308	7.3	91
18	An Experimental Study of Non-Uniform Pd Catalytic Monoliths. <i>Chemical Engineering Research and Design</i> , 2001 , 79, 795-798	5.5	6
17	Modelling of a catalytic plate reactor for dehydrogenation/combustion coupling. <i>Chemical Engineering Science</i> , 2001 , 56, 2671-2683	4.4	56
16	A vertically-averaged formulation of wall catalytic reactions in microchannel flows: single isothermal & non-isothermal reactions 2001 , 141-149		2

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6	Optimal Distribution of Catalyst in Pellets. <i>Catalysis Reviews - Science and Engineering</i> , 1993 , 35, 399-456	12.6	75
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