Klavs F Jensen

List of Publications by Year
in descending order

524	49,795	952 115	2127 203
papers	citations	h-index	g-index

550	550	550	33311
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	(CdSe)ZnS Coreâ"Shell Quantum Dots:Â Synthesis and Characterization of a Size Series of Highly Luminescent Nanocrystallites. Journal of Physical Chemistry B, 1997, 101, 9463-9475.	2.6	3,916
2	Cells on chips. Nature, 2006, 442, 403-411.	27.8	2,022
3	Microreaction engineering â€" is small better?. Chemical Engineering Science, 2001, 56, 293-303.	3.8	1,042
4	Deciding Whether To Go with the Flow: Evaluating the Merits of Flow Reactors for Synthesis. Angewandte Chemie - International Edition, 2011, 50, 7502-7519.	13.8	868
5	Multiphase microfluidics: from flow characteristics to chemical and materials synthesis. Lab on A Chip, 2006, 6, 1487-1503.	6.0	862
6	Analyzing Learned Molecular Representations for Property Prediction. Journal of Chemical Information and Modeling, 2019, 59, 3370-3388.	5.4	773
7	On-demand continuous-flow production of pharmaceuticals in a compact, reconfigurable system. Science, 2016, 352, 61-67.	12.6	751
8	Full Color Emission from II-VI Semiconductor Quantum Dot-Polymer Composites. Advanced Materials, 2000, 12, 1102-1105.	21.0	709
9	In vitro and ex vivo strategies for intracellular delivery. Nature, 2016, 538, 183-192.	27.8	662
10	Synthesis of micro and nanostructures in microfluidic systems. Chemical Society Reviews, 2010, 39, 1183.	38.1	617
11	A robotic platform for flow synthesis of organic compounds informed by AI planning. Science, 2019, 365, .	12.6	548
12	Endâ€toâ€End Continuous Manufacturing of Pharmaceuticals: Integrated Synthesis, Purification, and Final Dosage Formation. Angewandte Chemie - International Edition, 2013, 52, 12359-12363.	13.8	505
13	Next-generation in vivo optical imaging with short-wave infrared quantum dots. Nature Biomedical Engineering, 2017, 1, .	22.5	490
14	Intracellular Delivery by Membrane Disruption: Mechanisms, Strategies, and Concepts. Chemical Reviews, 2018, 118, 7409-7531.	47.7	490
15	Prediction of Organic Reaction Outcomes Using Machine Learning. ACS Central Science, 2017, 3, 434-443.	11.3	477
16	Transport and reaction in microscale segmented gasâ€"liquid flow. Lab on A Chip, 2004, 4, 278-286.	6.0	465
17	Microchemical systems for continuous-flow synthesis. Lab on A Chip, 2009, 9, 2495.	6.0	463
18	The role of flow in green chemistry and engineering. Green Chemistry, 2013, 15, 1456.	9.0	455

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19	Machine Learning in Computer-Aided Synthesis Planning. Accounts of Chemical Research, 2018, 51, 1281-1289.	15.6	430
20	A graph-convolutional neural network model for the prediction of chemical reactivity. Chemical Science, 2019, 10, 370-377.	7.4	430
21	Microfabricated Multiphase Packed-Bed Reactors:Â Characterization of Mass Transfer and Reactions. Industrial & Engineering Chemistry Research, 2001, 40, 2555-2562.	3.7	407
22	Synthesis of Luminescent Thin-Film CdSe/ZnSe Quantum Dot Composites Using CdSe Quantum Dots Passivated with an Overlayer of ZnSe. Chemistry of Materials, 1996, 8, 173-180.	6.7	399
23	Microfluidic Synthesis of Colloidal Silica. Langmuir, 2004, 20, 8604-8611.	3.5	397
24	Micromixing of Miscible Liquids in Segmented Gasâ^'Liquid Flow. Langmuir, 2005, 21, 1547-1555.	3.5	387
25	A vector-free microfluidic platform for intracellular delivery. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2082-2087.	7.1	386
26	Multistep Continuous-Flow Microchemical Synthesis Involving Multiple Reactions and Separations. Angewandte Chemie - International Edition, 2007, 46, 5704-5708.	13.8	362
27	Microfluidic Shear Devices for Quantitative Analysis of Cell Adhesion. Analytical Chemistry, 2004, 76, 5257-5264.	6.5	361
28	Flow chemistryâ€"Microreaction technology comes of age. AICHE Journal, 2017, 63, 858-869.	3.6	351
29	Integrated continuous microfluidic liquidâ€"liquid extraction. Lab on A Chip, 2007, 7, 256-263.	6.0	341
30	Reconfigurable system for automated optimization of diverse chemical reactions. Science, 2018, 361, 1220-1225.	12.6	339
31	A Continuum Model of DC and RF Discharges. IEEE Transactions on Plasma Science, 1986, 14, 78-91.	1.3	333
32	Integrated Microreactors for Reaction Automation: New Approaches to Reaction Development. Annual Review of Analytical Chemistry, 2010, 3, 19-42.	5.4	324
33	Convolutional Embedding of Attributed Molecular Graphs for Physical Property Prediction. Journal of Chemical Information and Modeling, 2017, 57, 1757-1772.	5.4	317
34	A microfluidic electroporation device for cell lysis. Lab on A Chip, 2005, 5, 23.	6.0	283
35	Flow-induced deformation of shallow microfluidic channels. Lab on A Chip, 2006, 6, 500.	6.0	283
36	A Microfabricated Gas-Liquid Segmented Flow Reactor for High-Temperature Synthesis: The Case of CdSe Quantum Dots. Angewandte Chemie - International Edition, 2005, 44, 5447-5451.	13.8	252

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37	Mass transport and surface reactions in microfluidic systems. Chemical Engineering Science, 2006, 61, 1102-1121.	3.8	248
38	Using Machine Learning To Predict Suitable Conditions for Organic Reactions. ACS Central Science, 2018, 4, 1465-1476.	11.3	245
39	Micromachined reactors for catalytic partial oxidation reactions. AIChE Journal, 1997, 43, 3059-3069.	3.6	243
40	Size-Controlled Flow Synthesis of Gold Nanoparticles Using a Segmented Flow Microfluidic Platform. Langmuir, 2012, 28, 7007-7013.	3.5	236
41	A fully automated flow-based approach for accelerated peptide synthesis. Nature Chemical Biology, 2017, 13, 464-466.	8.0	235
42	A Continuous-Flow Microcapillary Reactor for the Preparation of a Size Series of CdSe Nanocrystals. Advanced Materials, 2003, 15, 1858-1862.	21.0	226
43	Design and global optimization of high-efficiency thermophotovoltaic systems. Optics Express, 2010, 18, A314.	3.4	226
44	Continuous manufacturing â€“ the Green Chemistry promise?. Green Chemistry, 2019, 21, 3481-3498.	9.0	222
45	Overcoming the Challenges of Solid Bridging and Constriction during Pd-Catalyzed Câ^'N Bond Formation in Microreactors. Organic Process Research and Development, 2010, 14, 1347-1357.	2.7	219
46	Feedback in Flow for Accelerated Reaction Development. Accounts of Chemical Research, 2016, 49, 1786-1796.	15.6	214
47	Microfluidic systems with on-line UV detection fabricated in photodefinable epoxy. Journal of Micromechanics and Microengineering, 2001, 11, 263-269.	2.6	210
48	Design and Scaling Up of Microchemical Systems: A Review. Annual Review of Chemical and Biomolecular Engineering, 2017, 8, 285-305.	6.8	208
49	Accelerating Reactions with Microreactors at Elevated Temperatures and Pressures: Profiling Aminocarbonylation Reactions. Angewandte Chemie - International Edition, 2007, 46, 1734-1737.	13.8	207
50	Photochemical reactions and on-line UV detection in microfabricated reactors. Lab on A Chip, 2001, 1, 22.	6.0	206
51	Design and fabrication of microfluidic devices for multiphase mixing and reaction. Journal of Microelectromechanical Systems, 2002, 11, 709-717.	2.5	206
52	Palladium-catalyzed amination reactions in flow: overcoming the challenges of clogging via acoustic irradiation. Chemical Science, 2011, 2, 287-290.	7.4	203
53	Insights into the Kinetics of Semiconductor Nanocrystal Nucleation and Growth. Journal of the American Chemical Society, 2009, 131, 4479-4489.	13.7	201
54	An Integrated Microreactor System for Selfâ€Optimization of a Heck Reaction: From Microâ€to Mesoscale Flow Systems. Angewandte Chemie - International Edition, 2010, 49, 7076-7080.	13.8	200

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55	Computer-Assisted Retrosynthesis Based on Molecular Similarity. ACS Central Science, 2017, 3, 1237-1245.	11.3	200
56	Microfluidic electrochemistry for single-electron transfer redox-neutral reactions. Science, 2020, 368, 1352-1357.	12.6	194
57	Complex flow phenomena in MOCVD reactors. Journal of Crystal Growth, 1986, 77, 108-119.	1.5	192
58	Microchemical systems: Status, challenges, and opportunities. AICHE Journal, 1999, 45, 2051-2054.	3.6	192
59	Reactive Polymer Coatings:Â A First Step toward Surface Engineering of Microfluidic Devices. Analytical Chemistry, 2003, 75, 2117-2122.	6.5	187
60	Membrane-aerated microbioreactor for high-throughput bioprocessing. Biotechnology and Bioengineering, 2004, 87, 243-254.	3.3	186
61	Tools for chemical synthesis in microsystems. Lab on A Chip, 2014, 14, 3206-3212.	6.0	186
62	Autonomous Discovery in the Chemical Sciences Partâ€…I: Progress. Angewandte Chemie - International Edition, 2020, 59, 22858-22893.	13.8	180
63	Microfabricated Multiphase Reactors for the Selective Direct Fluorination of Aromatics. Industrial & Engineering Chemistry Research, 2003, 42, 698-710.	3.7	178
64	SCScore: Synthetic Complexity Learned from a Reaction Corpus. Journal of Chemical Information and Modeling, 2018, 58, 252-261.	5.4	176
65	Flow Phenomena in Chemical Vapor Deposition of Thin Films. Annual Review of Fluid Mechanics, 1991, 23, 197-232.	25.0	173
66	Photo-oxidation of polymers used in electroluminescent devices. Synthetic Metals, 1995, 73, 195-199.	3.9	171
67	Reactive Polymer Coatings:Â A Platform for Patterning Proteins and Mammalian Cells onto a Broad Range of Materials. Langmuir, 2002, 18, 3632-3638.	3.5	171
68	A reaction-transport model for AlGaN MOVPE growth. Journal of Crystal Growth, 1998, 195, 733-739.	1.5	170
69	Microreactor-based reaction optimization in organic chemistryâ€”glycosylation as a challenge. Chemical Communications, 2005, , 578-580.	4.1	162
70	Design and Packaging of Microreactors for High Pressure and High Temperature Applications. Industrial & Engineering Chemistry Research, 2010, 49, 11310-11320.	3.7	162
71	Microfluidics-Based Assessment of Cell Deformability. Analytical Chemistry, 2012, 84, 6438-6443.	6.5	162
72	The bifurcation behavior of tubular reactors. Chemical Engineering Science, 1982, 37, 199-222.	3.8	159

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73	Investigation of high-temperature degradation of platinum thin films with an in situ resistance measurement apparatus. Journal of Microelectromechanical Systems, 1998, 7, 128-135.	2.5	159
74	High-throughput nuclear delivery and rapid expression of DNA via mechanical and electrical cell-membrane disruption. Nature Biomedical Engineering, 2017, 1, .	22.5	158
75	Suzukiâ€“Miyaura Crossâ€Coupling Reactions in Flow: Multistep Synthesis Enabled by a Microfluidic Extraction. Angewandte Chemie - International Edition, 2011, 50, 5943-5946.	13.8	156
76	Membrane-Based, Liquidâ€“Liquid Separator with Integrated Pressure Control. Industrial & Engineering Chemistry Research, 2013, 52, 10802-10808.	3.7	156
77	Continuous Dielectrophoretic Size-Based Particle Sorting. Analytical Chemistry, 2006, 78, 5019-5025.	6.5	155
78	In-Situ Encapsulation of Quantum Dots into Polymer Microspheres. Langmuir, 2006, 22, 3782-3790.	3.5	155
79	Threeâ€Dimensional Flow Effects in Silicon CVD in Horizontal Reactors. Journal of the Electrochemical Society, 1988, 135, 459-471.	2.9	152
80	Measurement of residence time distribution in microfluidic systems. Chemical Engineering Science, 2005, 60, 5729-5737.	3.8	152
81	Density Functional Theory Study of Ligand Binding on CdSe (0001), (000Ì„), and (112Ì„0) Single Crystal Relaxed and Reconstructed Surfaces:Â Implications for Nanocrystalline Growth. Journal of Physical Chemistry B, 2006, 110, 18007-18016.	2.6	152
82	Toward high-energy-density, high-efficiency, and moderate-temperature chip-scale thermophotovoltaics. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5309-5314.	7.1	152
83	Rapid Determination of Reaction Kinetics with an Automated Microfluidic System. Organic Process Research and Development, 2011, 15, 398-407.	2.7	148
84	Transport phenomena in vertical reactors for metalorganic vapor phase epitaxy. Journal of Crystal Growth, 1990, 102, 441-470.	1.5	145
85	Supercritical Continuousâ€Microflow Synthesis of Narrow Size Distribution Quantum Dots. Advanced Materials, 2008, 20, 4830-4834.	21.0	145
86	Mixing and Dispersion in Small-Scale Flow Systems. Organic Process Research and Development, 2012, 16, 976-981.	2.7	144
87	Trimethylamine complexes of alane as precursors for the low-pressure chemical vapor deposition of aluminum. Chemistry of Materials, 1989, 1, 339-343.	6.7	143
88	Development of a Multi-Step Synthesis and Workup Sequence for an Integrated, Continuous Manufacturing Process of a Pharmaceutical. Organic Process Research and Development, 2014, 18, 402-409.	2.7	143
89	In situ mass spectroscopy and thermogravimetric studies of GaAs MOCVD gas phase and surface reactions. Journal of Crystal Growth, 1987, 85, 165-174.	1.5	141
90	Autonomous Discovery in the Chemical Sciences Partâ€…II: Outlook. Angewandte Chemie - International Edition, 2020, 59, 23414-23436.	13.8	139

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91	Rapid Flowâ€Based Peptide Synthesis. ChemBioChem, 2014, 15, 713-720.	2.6	136
92	Flow Distribution and Ozonolysis in Gasâ^'Liquid Multichannel Microreactors. Industrial & Engineering Chemistry Research, 2006, 45, 8036-8042.	3.7	135
93	A microfabricated suspended-tube chemical reactor for thermally efficient fuel processing. Journal of Microelectromechanical Systems, 2003, 12, 600-612.	2.5	134
94	Development of a multiplexed microbioreactor system for high-throughput bioprocessing. Lab on A Chip, 2005, 5, 819.	6.0	134
95	BigSMILES: A Structurally-Based Line Notation for Describing Macromolecules. ACS Central Science, 2019, 5, 1523-1531.	11.3	134
96	In situcharacterization of the oxidative degradation of a polymeric light emitting device. Journal of Applied Physics, 1997, 81, 3716-3720.	2.5	133
97	â€œBatchâ€•Kinetics in Flow: Online IR Analysis and Continuous Control. Angewandte Chemie - International Edition, 2014, 53, 470-473.	13.8	133
98	Cathodoluminescence and photoluminescence of highly luminescent CdSe/ZnS quantum dot composites. Applied Physics Letters, 1997, 70, 2132-2134.	3.3	132
99	A Microfabricated Device for Subcellular Organelle Sorting. Analytical Chemistry, 2004, 76, 5705-5712.	6.5	132
100	Microfabricated Multiphase Reactors for the Direct Synthesis of Hydrogen Peroxide from Hydrogen and Oxygen. Industrial & Engineering Chemistry Research, 2007, 46, 1153-1160.	3.7	131
101	Multistep Microchemical Synthesis Enabled by Microfluidic Distillation. Angewandte Chemie - International Edition, 2010, 49, 899-903.	13.8	131
102	An Automated Microfluidic System for Online Optimization in Chemical Synthesis. Organic Process Research and Development, 2010, 14, 1169-1176.	2.7	129
103	Achieving Continuous Manufacturing: Technologies and Approaches for Synthesis, Workup, and Isolation of Drug Substance May 20â€“21, 2014 Continuous Manufacturing Symposium. Journal of Pharmaceutical Sciences, 2015, 104, 781-791.	3.3	129
104	CVD in Stagnation Point Flow: An Evaluation of the Classical 1D Treatment. Journal of the Electrochemical Society, 1986, 133, 961-970.	2.9	128
105	Microfabricated packed-bed reactor for phosgene synthesis. AICHE Journal, 2001, 47, 1639-1647.	3.6	128
106	A Teflon microreactor with integrated piezoelectric actuator to handle solid forming reactions. Lab on A Chip, 2011, 11, 2488.	6.0	128
107	Investigation of Indium Phosphide Nanocrystal Synthesis Using a Highâ€Temperature and Highâ€Pressure Continuous Flow Microreactor. Angewandte Chemie - International Edition, 2011, 50, 627-630.	13.8	128
108	Aminolysis of Epoxides in a Microreactor System: A Continuous Flow Approach to Î²-Amino Alcohols. Organic Process Research and Development, 2010, 14, 432-440.	2.7	127

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109	Automated Multitrajectory Method for Reaction Optimization in a Microfluidic System using Online IR Analysis. Organic Process Research and Development, 2012, 16, 1409-1415.	2.7	127
110	Scalability of mass transfer in liquidâ€“liquid flow. Chemical Engineering Science, 2014, 116, 1-8.	3.8	126
111	Suzukiâ€“Miyaura cross-coupling optimization enabled by automated feedback. Reaction Chemistry and Engineering, 2016, 1, 658-666.	3.7	125
112	Fabrication and structural characterization of self-supporting electrolyte membranes for a micro solid-oxide fuel cell. Journal of Materials Research, 2004, 19, 2604-2615.	2.6	123
113	Distillation in microchemical systems using capillary forces and segmented flow. Lab on A Chip, 2009, 9, 1843.	6.0	122
114	Silicon-Based Microchemical Systems: Characteristics and Applications. MRS Bulletin, 2006, 31, 101-107.	3.5	121
115	Current and Future Roles of Artificial Intelligence in Medicinal Chemistry Synthesis. Journal of Medicinal Chemistry, 2020, 63, 8667-8682.	6.4	118
116	Gasâ€Phase and Surface Reaction Mechanisms in MOCVD of GaAs with Trimethylâ€Gallium and Arsine. Journal of the Electrochemical Society, 1991, 138, 2426-2439.	2.9	116
117	Estimation of effective transport coefficients in porous solids based on percolation concepts. Chemical Engineering Science, 1985, 40, 1723-1734.	3.8	114
118	Complex flow phenomena in vertical MOCVD reactors: Effects on deposition uniformity and interface abruptness. Journal of Crystal Growth, 1987, 85, 154-164.	1.5	112
119	Microchemostatâ€”microbial continuous culture in a polymer-based, instrumented microbioreactor. Lab on A Chip, 2006, 6, 906-913.	6.0	112
120	The Open Reaction Database. Journal of the American Chemical Society, 2021, 143, 18820-18826.	13.7	112
121	Flow and heat transfer in CVD reactors: Comparison of Raman temperature measurements and finite element model predictions. Journal of Crystal Growth, 1990, 100, 577-599.	1.5	109
122	Microfluidic Synthesis of Titania Shells on Colloidal Silica. Advanced Materials, 2007, 19, 2556-2560.	21.0	109
123	Scaled-Out Multilayer Gasâˆ’Liquid Microreactor with Integrated Velocimetry Sensors. Industrial & Engineering Chemistry Research, 2005, 44, 8997-9013.	3.7	105
124	Characterization of Indium Phosphide Quantum Dot Growth Intermediates Using MALDI-TOF Mass Spectrometry. Journal of the American Chemical Society, 2016, 138, 13469-13472.	13.7	101
125	Photoredox Iridiumâ€“Nickel Dual-Catalyzed Decarboxylative Arylation Cross-Coupling: From Batch to Continuous Flow via Self-Optimizing Segmented Flow Reactor. Organic Process Research and Development, 2018, 22, 542-550.	2.7	101
126	Percolation concepts in modelling of gas-solid reactionsâ€”I. Application to char gasification in the kinetic regime. Chemical Engineering Science, 1986, 41, 333-343.	3.8	99

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127	Mass Transport and Reactions in the Tube-in-Tube Reactor. Organic Process Research and Development, 2013, 17, 927-933.	2.7	99
128	A Rapid Total Synthesis of Ciprofloxacin Hydrochloride in Continuous Flow. Angewandte Chemie - International Edition, 2017, 56, 8870-8873.	13.8	98
129	Synthesis of control structures by singular value analysis: Dynamic measures of sensitivity and interaction. AICHE Journal, 1985, 31, 427-439.	3.6	97
130	Estimation of the molecular weight distribution in batch polymerization. AICHE Journal, 1988, 34, 1341-1353.	3.6	96
131	Development of an Automated Microfluidic Reaction Platform for Multidimensional Screening: Reaction Discovery Employing Bicyclo[3.2.1]octanoid Scaffolds. Journal of Organic Chemistry, 2009, 74, 6169-6180.	3.2	96
132	RDChiral: An RDKit Wrapper for Handling Stereochemistry in Retrosynthetic Template Extraction and Application. Journal of Chemical Information and Modeling, 2019, 59, 2529-2537.	5.4	96
133	Microfabricated Differential Reactor for Heterogeneous Gas Phase Catalyst Testing. Journal of Catalysis, 2002, 209, 401-412.	6.2	94
134	Live-cell protein labelling with nanometre precision by cell squeezing. Nature Communications, 2016, 7, 10372.	12.8	94
135	Facile Soft-Templated Synthesis of High-Surface Area and Highly Porous Carbon Nitrides. Chemistry of Materials, 2017, 29, 1496-1506.	6.7	92
136	Microfluidic based single cell microinjection. Lab on A Chip, 2008, 8, 1258.	6.0	91
137	Low Pressure CVD of Silicon Nitride. Journal of the Electrochemical Society, 1987, 134, 1777-1785.	2.9	89
138	In situ mass spectroscopy studies of the decomposition of organometallic arsenic compounds in the presence of Ga(CH3)3 and Ga(C2H5)3. Journal of Crystal Growth, 1988, 93, 134-142.	1.5	89
139	Detailed models of the MOVPE process. Journal of Crystal Growth, 1991, 107, 1-11.	1.5	89
140	A New Method toward Microengineered Surfaces Based on Reactive Coating. Angewandte Chemie - International Edition, 2001, 40, 3166-3169.	13.8	89
141	An Automated Continuous-Flow Platform for the Estimation of Multistep Reaction Kinetics. Organic Process Research and Development, 2012, 16, 1770-1782.	2.7	89
142	Microfluidic squeezing for intracellular antigen loading in polyclonal B-cells as cellular vaccines. Scientific Reports, 2015, 5, 10276.	3.3	88
143	Transition Metals for Selective Chemical Vapor Deposition of Parylene-Based Polymers. Chemistry of Materials, 2000, 12, 1305-1313.	6.7	87
144	Multiscale modeling of chemical vapor deposition. Journal of Applied Physics, 1998, 83, 524-530.	2.5	86

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145	Simulations and analysis of multiphase transport and reaction in segmented flow microreactors. Chemical Engineering Science, 2017, 169, 106-116.	3.8	86
146	Cell Stimulus and Lysis in a Microfluidic Device with Segmented Gasâ^'Liquid Flow. Analytical Chemistry, 2005, 77, 3629-3636.	6.5	84
147	A well-mixed, polymer-based microbioreactor with integrated optical measurements. Biotechnology and Bioengineering, 2006, 93, 286-296.	3.3	84
148	Kinetic and Scale-Up Investigations of Epoxide Aminolysis in Microreactors at High Temperatures and Pressures. Organic Process Research and Development, 2011, 15, 131-139.	2.7	83
149	On-line molecular weight distribution estimation and control in batch polymerization. AICHE Journal, 1994, 40, 445-462.	3.6	82
150	Smaller, faster chemistry. Nature, 1998, 393, 735-737.	27.8	82
151	Advanced Continuous Flow Platform for Onâ€Demand Pharmaceutical Manufacturing. Chemistry - A European Journal, 2018, 24, 2776-2784.	3.3	81
152	Micro-reaction engineering applications of reaction engineering to processing of electronic and photonic materials. Chemical Engineering Science, 1987, 42, 923-958.	3.8	80
153	Hydrodynamics of Liquidâ€“Liquid Dispersion in an Advanced-Flow Reactor. Industrial & Engineering Chemistry Research, 2012, 51, 16251-16262.	3.7	80
154	Nonendocytic Delivery of Functional Engineered Nanoparticles into the Cytoplasm of Live Cells Using a Novel, High-Throughput Microfluidic Device. Nano Letters, 2012, 12, 6322-6327.	9.1	80
155	Gasâ€“Liquid Flow and Mass Transfer in an Advanced-Flow Reactor. Industrial & Engineering Chemistry Research, 2013, 52, 8996-9010.	3.7	79
156	Simultaneous solvent screening and reaction optimization in microliter slugs. Chemical Communications, 2015, 51, 13290-13293.	4.1	79
157	Analysis of MOCVD of GaAs on patterned substrates. Journal of Crystal Growth, 1991, 114, 581-592.	1.5	78
158	Generative models for molecular discovery: Recent advances and challenges. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2022, 12, .	14.6	78
159	Electromigration of aluminum cathodes in polymerâ€based electroluminescent devices. Applied Physics Letters, 1996, 69, 3941-3943.	3.3	77
160	Electroluminescent Materials with Feature Sizes as Small as 5 Î¼m Using Elastomeric Membranes as Masks for Dry Lift-Off. Advanced Materials, 1999, 11, 546-552.	21.0	77
161	Regio-selectivity prediction with a machine-learned reaction representation and on-the-fly quantum mechanical descriptors. Chemical Science, 2021, 12, 2198-2208.	7.4	75
162	Oscillatory Microprocessor for Growth and in Situ Characterization of Semiconductor Nanocrystals. Chemistry of Materials, 2015, 27, 6131-6138.	6.7	74

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163	Shape-controlled continuous synthesis of metal nanostructures. Nanoscale, 2016, 8, 7534-7543.	5.6	74
164	Ready, Set, Flow! Automated Continuous Synthesis and Optimization. Trends in Chemistry, 2021, 3, 373-386.	8.5	74
165	A segmented flow platform for on-demand medicinal chemistry and compound synthesis in oscillating droplets. Chemical Communications, 2017, 53, 6649-6652.	4.1	73
166	Electrospray organometallic chemical vapor depositionâ€"A novel technique for preparation of IIâ€"VI quantum dot composites. Applied Physics Letters, 1994, 65, 2795-2797.	3.3	72
167	Simulation of micromachined chemical reactors for heterogeneous partial oxidation reactions. Chemical Engineering Science, 2000, 55, 3-13.	3.8	71
168	Properties of the CdSe(0001), (000Ì„), and (112Ì„0) Single Crystal Surfaces:Â Relaxation, Reconstruction, and Adatom and Admolecule Adsorption. Journal of Physical Chemistry B, 2005, 109, 19320-19328.	2.6	71
169	Large-area fabrication of high aspect ratio tantalum photonic crystals for high-temperature selective emitters. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	1.2	71
170	The Unexpected Influence of Precursor Conversion Rate in the Synthesis of IIIâ€"V Quantum Dots. Angewandte Chemie - International Edition, 2015, 54, 14299-14303.	13.8	71
171	Direct oxidative amidation of aromatic aldehydes using aqueous hydrogen peroxide in continuous flow microreactor systems. Green Chemistry, 2012, 14, 1471.	9.0	70
172	Analysis of Multicomponent LPCVD Processes: Deposition of Pure and In Situ Doped Polyâ€Si. Journal of the Electrochemical Society, 1985, 132, 448-454.	2.9	69
173	Heterogeneous catalysis with continuous flow microreactors. Catalysis Science and Technology, 2012, 2, 2134.	4.1	69
174	Optimum catalyst selection over continuous and discrete process variables with a single droplet microfluidic reaction platform. Reaction Chemistry and Engineering, 2018, 3, 301-311.	3.7	69
175	Multistage Microfluidic Platform for the Continuous Synthesis of IIIâ€"V Core/Shell Quantum Dots. Angewandte Chemie - International Edition, 2018, 57, 10915-10918.	13.8	68
176	Hydrodynamics of gasâ€"liquid flow in micropacked beds: Pressure drop, liquid holdup, and twoâ€phase model. AICHE Journal, 2017, 63, 4694-4704.	3.6	67
177	Simulation of carbon doping of GaAs during MOVPE. Journal of Crystal Growth, 1992, 124, 483-492.	1.5	66
178	Surfactant-enhanced liquidâ€"liquid extraction in microfluidic channels with inline electric-field enhanced coalescence. Lab on A Chip, 2005, 5, 531.	6.0	66
179	Toward Machine Learning-Enhanced High-Throughput Experimentation. Trends in Chemistry, 2021, 3, 120-132.	8.5	66
180	Percolation concepts in modelling of gas-solid reactionsâ€"II. Application to char gasification in the diffusion regime. Chemical Engineering Science, 1986, 41, 345-354.	3.8	65

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181	An Evaluation of Density Functional Theory and ab Initio Predictions for Bridge-Bonded Aluminum Compounds. Journal of Physical Chemistry A, 1998, 102, 2613-2623.	2.5	64
182	Sample Dispersion for Segmented Flow in Microchannels with Rectangular Cross Section. Analytical Chemistry, 2008, 80, 1558-1567.	6.5	64
183	Microfluidic Preparative Free-Flow Isoelectric Focusing: System Optimization for Protein Complex Separation. Analytical Chemistry, 2010, 82, 1253-1260.	6.5	64
184	Application of Continuous Crystallization in an Integrated Continuous Pharmaceutical Pilot Plant. Crystal Growth and Design, 2014, 14, 2148-2157.	3.0	64
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