Klavs F Jensen

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1049378/publications.pdf

Version: 2024-02-01

524 papers	49,795 citations	1118 115 h-index	2453 203 g-index
550 all docs	550 docs citations	550 times ranked	37869 citing authors

#	Article	IF	Citations
1	Automated Chemical Reaction Extraction from Scientific Literature. Journal of Chemical Information and Modeling, 2022, 62, 2035-2045.	2.5	26
2	Design and operation of an enhanced pervaporation device with static mixers. AICHE Journal, 2022, 68, e17455.	1.8	7
3	Generating molecules with optimized aqueous solubility using iterative graph translation. Reaction Chemistry and Engineering, 2022, 7, 297-309.	1.9	5
4	Microfluidic Squeezing Enables MHC Class I Antigen Presentation by Diverse Immune Cells to Elicit CD8+ T Cell Responses with Antitumor Activity. Journal of Immunology, 2022, 208, 929-940.	0.4	11
5	Continuous stirred-tank reactor cascade platform for self-optimization of reactions involving solids. Reaction Chemistry and Engineering, 2022, 7, 1315-1327.	1.9	22
6	Generative models for molecular discovery: Recent advances and challenges. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2022, 12, .	6.2	78
7	Automation and Microfluidics for the Efficient, Fast, and Focused Reaction Development of Asymmetric Hydrogenation Catalysis. ChemSusChem, 2022, 15, .	3.6	4
8	Similarity based enzymatic retrosynthesis. Chemical Science, 2022, 13, 6039-6053.	3.7	10
9	Photochemical Synthesis of the Bioactive Fragment of Salbutamol and Derivatives in a Selfâ€Optimizing Flow Chemistry Platform. Chemistry - A European Journal, 2022, 28, .	1.7	8
10	Bayesian Optimization of Computer-Proposed Multistep Synthetic Routes on an Automated Robotic Flow Platform. ACS Central Science, 2022, 8, 825-836.	5.3	47
11	Evaluating and clustering retrosynthesis pathways with learned strategy. Chemical Science, 2021, 12, 1469-1478.	3.7	34
12	Direct Optimization across Computer-Generated Reaction Networks Balances Materials Use and Feasibility of Synthesis Plans for Molecule Libraries. Journal of Chemical Information and Modeling, 2021, 61, 493-504.	2.5	5
13	Design of dynamic trajectories for efficient and data-rich exploration of flow reaction design spaces. Reaction Chemistry and Engineering, 2021, 6, 2306-2314.	1.9	14
14	Regio-selectivity prediction with a machine-learned reaction representation and on-the-fly quantum mechanical descriptors. Chemical Science, 2021, 12, 2198-2208.	3.7	75
15	Toward Machine Learning-Enhanced High-Throughput Experimentation. Trends in Chemistry, 2021, 3, 120-132.	4.4	66
16	Dispersion in coiled tubular reactors: A CFD and experimental analysis on the effect of pitch. Chemical Engineering Science, 2021, 233, 116393.	1.9	5
17	Ready, Set, Flow! Automated Continuous Synthesis and Optimization. Trends in Chemistry, 2021, 3, 373-386.	4.4	74
18	On-Demand Continuous Manufacturing of Ciprofloxacin in Portable Plug-and-Play Factories: Development of a Highly Efficient Synthesis for Ciprofloxacin. Organic Process Research and Development, 2021, 25, 1524-1533.	1.3	14

#	Article	IF	Citations
19	A high-temperature continuous stirred-tank reactor cascade for the multistep synthesis of InP/ZnS quantum dots. Reaction Chemistry and Engineering, 2021, 6, 459-464.	1.9	14
20	Photoredox Iridiumâ€“Nickel Dual Catalyzed Cross-Electrophile Coupling: From a Batch to a Continuous Stirred-Tank Reactor via an Automated Segmented Flow Reactor. Organic Process Research and Development, 2021, 25, 2323-2330.	1.3	12
21	The Open Reaction Database. Journal of the American Chemical Society, 2021, 143, 18820-18826.	6.6	112
22	Autonomous Discovery in the Chemical Sciences Partâ€…I: Progress. Angewandte Chemie - International Edition, 2020, 59, 22858-22893.	7.2	180
23	Autonomous Discovery in the Chemical Sciences Partâ€…II: Outlook. Angewandte Chemie - International Edition, 2020, 59, 23414-23436.	7.2	139
24	Autonome Entdeckung in den chemischen Wissenschaften, Teilâ€…I: Fortschritt. Angewandte Chemie, 2020, 132, 23054-23091.	1.6	11
25	Autonome Entdeckung in den chemischen Wissenschaften, Teil II: Ausblick. Angewandte Chemie, 2020, 132, 23620-23643.	1.6	4
26	Continuous Multistage Synthesis and Functionalization of Sub-100 nm Silica Nanoparticles in 3D-Printed Continuous Stirred-Tank Reactor Cascades. ACS Applied Materials & Interfaces, 2020, 12, 6699-6706.	4.0	13
27	Identifying the roles of acidâ€“base sites in formation pathways of tolualdehydes from acetaldehyde over MgO-based catalysts. Catalysis Science and Technology, 2020, 10, 536-548.	2.1	6
28	Determination of fast gasâ€“liquid reaction kinetics in flow. Reaction Chemistry and Engineering, 2020, 5, 51-57.	1.9	10
29	Accessing multidimensional mixing via 3D printing and showerhead micromixer design. AICHE Journal, 2020, 66, e16873.	1.8	22
30	An automated flow platform for accurate determination of gasâ€“liquidâ€“solid reaction kinetics. Reaction Chemistry and Engineering, 2020, 5, 1751-1758.	1.9	30
31	Characterization of reaction enthalpy and kinetics in a microscale flow platform. Reaction Chemistry and Engineering, 2020, 5, 2115-2122.	1.9	22
32	A Multifunctional Microfluidic Platform for Highâ€Throughput Experimentation of Electroorganic Chemistry. Angewandte Chemie - International Edition, 2020, 59, 20890-20894.	7.2	41
33	A Multifunctional Microfluidic Platform for Highâ€Throughput Experimentation of Electroorganic Chemistry. Angewandte Chemie, 2020, 132, 21076-21080.	1.6	4
34	Towards efficient discovery of green synthetic pathways with Monte Carlo tree search and reinforcement learning. Chemical Science, 2020, 11, 10959-10972.	3.7	31
35	Iterative experimental design based on active machine learning reduces the experimental burden associated with reaction screening. Reaction Chemistry and Engineering, 2020, 5, 1963-1972.	1.9	54
36	Nanocrystal synthesis, Î¼fluidic sample dilution and direct extraction of single emission linewidths in continuous flow. Lab on A Chip, 2020, 20, 1975-1980.	3.1	0

#	Article	IF	Citations
37	Development of a Versatile Modular Flow Chemistry Benchtop System. Organic Process Research and Development, 2020, 24, 2105-2112.	1.3	5
38	Continuous flow Suzukiâ€“Miyaura couplings in water under micellar conditions in a CSTR cascade catalyzed by Fe/ppm Pd nanoparticles. Green Chemistry, 2020, 22, 3441-3444.	4.6	24
39	Continuous Production of Five Active Pharmaceutical Ingredients in Flexible Plug-and-Play Modules: A Demonstration Campaign. Organic Process Research and Development, 2020, 24, 2183-2196.	1.3	50
40	Microfluidic electrochemistry for single-electron transfer redox-neutral reactions. Science, 2020, 368, 1352-1357.	6.0	194
41	Current and Future Roles of Artificial Intelligence in Medicinal Chemistry Synthesis. Journal of Medicinal Chemistry, 2020, 63, 8667-8682.	2.9	118
42	Data Augmentation and Pretraining for Template-Based Retrosynthetic Prediction in Computer-Aided Synthesis Planning. Journal of Chemical Information and Modeling, 2020, 60, 3398-3407.	2.5	44
43	Combining retrosynthesis and mixed-integer optimization for minimizing the chemical inventory needed to realize a WHO essential medicines list. Reaction Chemistry and Engineering, 2020, 5, 367-376.	1.9	5
44	Multitask prediction of site selectivity in aromatic Câ€“H functionalization reactions. Reaction Chemistry and Engineering, 2020, 5, 896-902.	1.9	35
45	Radial flow system decouples reactions in automated synthesis of organic molecules. Nature, 2020, 579, 346-348.	13.7	4
46	Machine learned prediction of reaction template applicability for data-driven retrosynthetic predictions of energetic materials. AIP Conference Proceedings, 2020, , .	0.3	3
47	A robotic platform for flow synthesis of organic compounds informed by AI planning. Science, 2019, 365, .	6.0	548
48	High-Speed Vapor Transport Deposition of Perovskite Thin Films. ACS Applied Materials & Interfaces, 2019, 11, 32928-32936.	4.0	24
49	Use of a Droplet Platform To Optimize Pd-Catalyzed Câ€“N Coupling Reactions Promoted by Organic Bases. Organic Process Research and Development, 2019, 23, 1594-1601.	1.3	50
50	Analyzing Learned Molecular Representations for Property Prediction. Journal of Chemical Information and Modeling, 2019, 59, 3370-3388.	2.5	773
51	A Continuous Stirred-Tank Reactor (CSTR) Cascade for Handling Solid-Containing Photochemical Reactions. Organic Process Research and Development, 2019, 23, 2699-2706.	1.3	64
52	BigSMILES: A Structurally-Based Line Notation for Describing Macromolecules. ACS Central Science, 2019, 5, 1523-1531.	5.3	134
53	Analysis and simulation of multiphase hydrodynamics in capillary microseparators. Lab on A Chip, 2019, 19, 706-715.	3.1	8
54	A graph-convolutional neural network model for the prediction of chemical reactivity. Chemical Science, 2019, 10, 370-377.	3.7	430

#	Article	IF	Citations
55	Revealing the Formation Mechanism of Alloyed Pdâ€“Ru Nanoparticles: A Conversion Measurement Approach Utilizing a Microflow Reactor. Langmuir, 2019, 35, 2236-2243.	1.6	9
56	RDChiral: An RDKit Wrapper for Handling Stereochemistry in Retrosynthetic Template Extraction and Application. Journal of Chemical Information and Modeling, 2019, 59, 2529-2537.	2.5	96
57	Continuous manufacturing â€“ the Green Chemistry promise?. Green Chemistry, 2019, 21, 3481-3498.	4.6	222
58	Flow Toolkit for Measuring Gas Diffusivity in Liquids. Analytical Chemistry, 2019, 91, 4004-4009.	3.2	14
59	Adding Crystals To Minimize Clogging in Continuous Flow Synthesis. Crystal Growth and Design, 2019, 19, 98-105.	1.4	11
60	Optimum catalyst selection over continuous and discrete process variables with a single droplet microfluidic reaction platform. Reaction Chemistry and Engineering, 2018, 3, 301-311.	1.9	69
61	Ligand-Mediated Nanocrystal Growth. Langmuir, 2018, 34, 3307-3315.	1.6	19
62	Continuous, on-demand generation and separation of diphenylphosphoryl azide. Tetrahedron, 2018, 74, 3137-3142.	1.0	8
63	Advanced Continuous Flow Platform for Onâ€Demand Pharmaceutical Manufacturing. Chemistry - A European Journal, 2018, 24, 2776-2784.	1.7	81
64	Catalytic hydrogenation of N-4-nitrophenyl nicotinamide in a micro-packed bed reactor. Green Chemistry, 2018, 20, 886-893.	4.6	52
65	SCScore: Synthetic Complexity Learned from a Reaction Corpus. Journal of Chemical Information and Modeling, 2018, 58, 252-261.	2.5	176
66	Efficient kinetic experiments in continuous flow microreactors. Reaction Chemistry and Engineering, 2018, 3, 94-101.	1.9	63
67	Machine Learning in Computer-Aided Synthesis Planning. Accounts of Chemical Research, 2018, 51, 1281-1289.	7.6	430
68	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.	1.3	101
69	Optimization of Grignard Addition to Esters: Kinetic and Mechanistic Study of Model Phthalide Using Flow Chemistry. Industrial & Engineering Chemistry Research, 2018, 57, 4859-4866.	1.8	12
70	High-performance miniature CSTR for biphasic Câ€“C bond-forming reactions. Chemical Engineering Journal, 2018, 335, 936-944.	6.6	19
71	Automated measurements of gasâ€liquid mass transfer in micropacked bed reactors. AICHE Journal, 2018, 64, 564-570.	1.8	56
72	Continuous purification of active pharmaceutical ingredients utilizing polymer membrane surface wettability. Chemical Communications, 2018, 54, 70-73.	2.2	28

#	Article	IF	Citations
73	Reduction of Dispersion in Ultrasonically-Enhanced Micropacked Beds. Industrial & Engineering Chemistry Research, 2018, 57, 122-128.	1.8	10
74	Liquidâ€“liquid extraction in flow of the radioisotope titanium-45 for positron emission tomography applications. Reaction Chemistry and Engineering, 2018, 3, 898-904.	1.9	22
75	Using Machine Learning To Predict Suitable Conditions for Organic Reactions. ACS Central Science, 2018, 4, 1465-1476.	5.3	245
76	Mechanistic Insights and Controlled Synthesis of Radioluminescent ZnSe Quantum Dots Using a Microfluidic Reactor. Chemistry of Materials, 2018, 30, 8562-8570.	3.2	32
77	Reconfigurable system for automated optimization of diverse chemical reactions. Science, 2018, 361, 1220-1225.	6.0	339
78	Continuous Nâ€Hydroxyphthalimide (NHPI)â€Mediated Electrochemical Aerobic Oxidation of Benzylic Câ^'H Bonds. Chemistry - A European Journal, 2018, 24, 10260-10265.	1.7	48
79	Multistage Microfluidic Platform for the Continuous Synthesis of IIIâ€“V Core/Shell Quantum Dots. Angewandte Chemie, 2018, 130, 11081-11084.	1.6	18
80	Multistage Microfluidic Platform for the Continuous Synthesis of IIIâ€“V Core/Shell Quantum Dots. Angewandte Chemie - International Edition, 2018, 57, 10915-10918.	7.2	68
81	Scalable thin-layer membrane reactor for heterogeneous and homogeneous catalytic gasâ€“liquid reactions. Green Chemistry, 2018, 20, 3867-3874.	4.6	24
82	Intracellular Delivery by Membrane Disruption: Mechanisms, Strategies, and Concepts. Chemical Reviews, 2018, 118, 7409-7531.	23.0	490
83	Thermoformed fluoropolymer tubing for in-line mixing. Reaction Chemistry and Engineering, 2018, 3, 707-713.	1.9	25
84	Flow chemistryâ€”Microreaction technology comes of age. AICHE Journal, 2017, 63, 858-869.	1.8	351
85	Facile Soft-Templated Synthesis of High-Surface Area and Highly Porous Carbon Nitrides. Chemistry of Materials, 2017, 29, 1496-1506.	3.2	92
86	High-throughput nuclear delivery and rapid expression of DNA via mechanical and electrical cell-membrane disruption. Nature Biomedical Engineering, 2017, 1, .	11.6	158
87	A fully automated flow-based approach for accelerated peptide synthesis. Nature Chemical Biology, 2017, 13, 464-466.	3.9	235
88	Next-generation in vivo optical imaging with short-wave infrared quantum dots. Nature Biomedical Engineering, 2017, 1, .	11.6	490
89	Microfluidic Assisted Synthesis of Hybrid Auâ€“Pd Dumbbell-like Nanostructures: Sequential Addition of Reagents and Ultrasonic Radiation. Crystal Growth and Design, 2017, 17, 2700-2710.	1.4	24
90	Prediction of Organic Reaction Outcomes Using Machine Learning. ACS Central Science, 2017, 3, 434-443.	5.3	477

#	Article	IF	Citations
91	A Rapid Total Synthesis of Ciprofloxacin Hydrochloride in Continuous Flow. Angewandte Chemie, 2017, 129, 8996-8999.	1.6	19
92	Multistage extraction platform for highly efficient and fully continuous purification of nanoparticles. Nanoscale, 2017, 9, 7703-7707.	2.8	37
93	A segmented flow platform for on-demand medicinal chemistry and compound synthesis in oscillating droplets. Chemical Communications, 2017, 53, 6649-6652.	2.2	73
94	Hydrodynamics of gasâ€“liquid flow in micropacked beds: Pressure drop, liquid holdup, and twoâ€phase model. AICHE Journal, 2017, 63, 4694-4704.	1.8	67
95	A Rapid Total Synthesis of Ciprofloxacin Hydrochloride in Continuous Flow. Angewandte Chemie - International Edition, 2017, 56, 8870-8873.	7.2	98
96	Design and Scaling Up of Microchemical Systems: A Review. Annual Review of Chemical and Biomolecular Engineering, 2017, 8, 285-305.	3.3	208
97	Design of Multistage Counter-Current Liquidâ€“Liquid Extraction for Small-Scale Applications. Industrial & Engineering Chemistry Research, 2017, 56, 4095-4103.	1.8	59
98	Simulations and analysis of multiphase transport and reaction in segmented flow microreactors. Chemical Engineering Science, 2017, 169, 106-116.	1.9	86
99	Inâ€Situ Microfluidic Study of Biphasic Nanocrystal Ligandâ€Exchange Reactions Using an Oscillatory Flow Reactor. Angewandte Chemie - International Edition, 2017, 56, 16333-16337.	7.2	34
100	Inâ€Situ Microfluidic Study of Biphasic Nanocrystal Ligandâ€Exchange Reactions Using an Oscillatory Flow Reactor. Angewandte Chemie, 2017, 129, 16551-16555.	1.6	5
101	Characterization and Modeling of the Operating Curves of Membrane Microseparators. Industrial & Engineering Chemistry Research, 2017, 56, 12184-12191.	1.8	14
102	Convolutional Embedding of Attributed Molecular Graphs for Physical Property Prediction. Journal of Chemical Information and Modeling, 2017, 57, 1757-1772.	2.5	317
103	Automated in Situ Measurement of Gas Solubility in Liquids with a Simple Tube-in-Tube Reactor. Analytical Chemistry, 2017, 89, 8524-8530.	3.2	33
104	Ozonolysis of quinoline and quinoline derivatives in a Corning low flow reactor. Reaction Chemistry and Engineering, 2017, 2, 696-702.	1.9	12
105	Computer-Assisted Retrosynthesis Based on Molecular Similarity. ACS Central Science, 2017, 3, 1237-1245.	5.3	200
106	Materialâ€Efficient Microfluidic Platform for Exploratory Studies of Visibleâ€Light Photoredox Catalysis. Angewandte Chemie - International Edition, 2017, 56, 9847-9850.	7.2	46
107	Materialâ€Efficient Microfluidic Platform for Exploratory Studies of Visibleâ€Light Photoredox Catalysis. Angewandte Chemie, 2017, 129, 9979-9982.	1.6	11
108	Modeling of the formation kinetics and size distribution evolution of IIâ€“VI quantum dots. Reaction Chemistry and Engineering, 2017, 2, 567-576.	1.9	14

#	Article	IF	Citations
109	Oscillatory multiphase flow strategy for chemistry and biology. Lab on A Chip, 2016, 16, 2775-2784.	3.1	61
110	Portable, Constrictionâ€“Expansion Blood Plasma Separation and Polymerization-Based Malaria Detection. Analytical Chemistry, 2016, 88, 7627-7632.	3.2	15
111	On-demand continuous-flow production of pharmaceuticals in a compact, reconfigurable system. Science, 2016, 352, 61-67.	6.0	751
112	One â€œClickâ€•to controlled bifunctional supported catalysts for the Cu/TEMPO-catalyzed aerobic oxidation of alcohols. RSC Advances, 2016, 6, 36602-36605.	1.7	39
113	A miniature CSTR cascade for continuous flow of reactions containing solids. Reaction Chemistry and Engineering, 2016, 1, 501-507.	1.9	64
114	A Sizeâ€Selective Intracellular Delivery Platform. Small, 2016, 12, 5873-5881.	5.2	24
115	Characterization of Indium Phosphide Quantum Dot Growth Intermediates Using MALDI-TOF Mass Spectrometry. Journal of the American Chemical Society, 2016, 138, 13469-13472.	6.6	101
116	In vitro and ex vivo strategies for intracellular delivery. Nature, 2016, 538, 183-192.	13.7	662
117	Nanoengineering a library of metallic nanostructures using a single microfluidic reactor. Nanoscale, 2016, 8, 15288-15295.	2.8	49
118	Biphasic Catalytic Hydrogen Peroxide Oxidation of Alcohols in Flow: Scale-up and Extraction. Organic Process Research and Development, 2016, 20, 1677-1685.	1.3	39
119	Feedback in Flow for Accelerated Reaction Development. Accounts of Chemical Research, 2016, 49, 1786-1796.	7.6	214
120	Molecular Engineering of Trifunctional Supported Catalysts for the Aerobic Oxidation of Alcohols. Angewandte Chemie, 2016, 128, 11210-11214.	1.6	14
121	Molecular Engineering of Trifunctional Supported Catalysts for the Aerobic Oxidation of Alcohols. Angewandte Chemie - International Edition, 2016, 55, 11044-11048.	7.2	55
122	Suzukiâ€“Miyaura cross-coupling optimization enabled by automated feedback. Reaction Chemistry and Engineering, 2016, 1, 658-666.	1.9	125
123	Compact and Integrated Approach for Advanced End-to-End Production, Purification, and Aqueous Formulation of Lidocaine Hydrochloride. Organic Process Research and Development, 2016, 20, 1347-1353.	1.3	34
124	Continuous synthesis of palladium nanorods in oxidative segmented flow. AICHE Journal, 2016, 62, 373-380.	1.8	34
125	Direct Observation of Early-Stage Quantum Dot Growth Mechanisms with High-Temperature Ab Initio Molecular Dynamics. Journal of Physical Chemistry C, 2016, 120, 2472-2483.	1.5	20
126	Live-cell protein labelling with nanometre precision by cell squeezing. Nature Communications, 2016, 7, 10372.	5.8	94

#	Article	IF	Citations
127	Shape-controlled continuous synthesis of metal nanostructures. Nanoscale, 2016, 8, 7534-7543.	2.8	74
128	Kinetics analysis and automated online screening of aminocarbonylation of aryl halides in flow. Reaction Chemistry and Engineering, 2016, 1, 272-279.	1.9	32
129	Abstract 2293: Vector-free engineering of immune cells for adoptive cell therapy. , 2016, , .		0
130	Mass transfer characteristics of ozonolysis in microreactors and advanced-flow reactors. Journal of Flow Chemistry, 2015, 5, 160-165.	1.2	23
131	The Unexpected Influence of Precursor Conversion Rate in the Synthesis of IIIâ€“V Quantum Dots. Angewandte Chemie - International Edition, 2015, 54, 14299-14303.	7.2	71
132	Ex Vivo Cytosolic Delivery of Functional Macromolecules to Immune Cells. PLoS ONE, 2015, 10, e0118803.	1.1	47
133	Microfluidic squeezing for intracellular antigen loading in polyclonal B-cells as cellular vaccines. Scientific Reports, 2015, 5, 10276.	1.6	88
134	Continuous Thermal Oxidation of Alkenes with Nitrous Oxide in a Packed Bed Reactor. Industrial & Engineering Chemistry Research, 2015, 54, 4166-4173.	1.8	18
135	Characterization and modeling of multiphase flow in structured microreactors: a post microreactor case study. Lab on A Chip, 2015, 15, 3232-3241.	3.1	27
136	Effect of Trace Water on the Growth of Indium Phosphide Quantum Dots. Chemistry of Materials, 2015, 27, 5058-5063.	3.2	57
137	Simultaneous solvent screening and reaction optimization in microliter slugs. Chemical Communications, 2015, 51, 13290-13293.	2.2	79
138	OpenFOAM Computational Fluid Dynamic Simulations of Two-Phase Flow and Mass Transfer in an Advanced-Flow Reactor. Industrial & Engineering Chemistry Research, 2015, 54, 6649-6659.	1.8	56
139	Oscillatory three-phase flow reactor for studies of bi-phasic catalytic reactions. Chemical Communications, 2015, 51, 8916-8919.	2.2	41
140	Continuous Nanofiltration and Recycle of an Asymmetric Ketone Hydrogenation Catalyst. ACS Catalysis, 2015, 5, 2615-2622.	5.5	38
141	Multiphase Oscillatory Flow Strategy forin SituMeasurement and Screening of Partition Coefficients. Analytical Chemistry, 2015, 87, 11130-11136.	3.2	26
142	Oscillatory Microprocessor for Growth and in Situ Characterization of Semiconductor Nanocrystals. Chemistry of Materials, 2015, 27, 6131-6138.	3.2	74
143	OpenFOAM Computational Fluid Dynamic Simulations of Single-Phase Flows in an Advanced-Flow Reactor. Industrial & Engineering Chemistry Research, 2015, 54, 7543-7553.	1.8	25
144	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.	1.6	129

#	Article	IF	Citations
145	Abstract 5538A: Cell size-specific intracellular delivery. , 2015, , .		0
146	Nested potassium hydroxide etching and protective coatings for silicon-based microreactors. Journal of Micromechanics and Microengineering, 2014, 24, 035011.	1.5	1
147	Design, Execution, and Analysis of Time-Varying Experiments for Model Discrimination and Parameter Estimation in Microreactors. Organic Process Research and Development, 2014, 18, 1461-1467.	1.3	22
148	Investigation of Petasis and Ugi reactions in series in an automated microreactor system. RSC Advances, 2014, 4, 63627-63631.	1.7	12
149	Microfluidic Production of Perfluorocarbon-Alginate Coreâ€“Shell Microparticles for Ultrasound Therapeutic Applications. Langmuir, 2014, 30, 12391-12399.	1.6	37
150	Engineering the synthesis of silicaâ€“gold nano-urchin particles using continuous synthesis. Nanoscale, 2014, 6, 13228-13235.	2.8	25
151	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.	1.3	143
152	Rapid Flowâ€Based Peptide Synthesis. ChemBioChem, 2014, 15, 713-720.	1.3	136
153	Scale-Up Investigation of the Continuous Phase-Transfer-Catalyzed Hypochlorite Oxidation of Alcohols and Aldehydes. Organic Process Research and Development, 2014, 18, 1476-1481.	1.3	47
154	Tools for chemical synthesis in microsystems. Lab on A Chip, 2014, 14, 3206-3212.	3.1	186
155	Plasma membrane recovery kinetics of a microfluidic intracellular delivery platform. Integrative Biology (United Kingdom), 2014, 6, 470-475.	0.6	61
156	High Throughput Synthesis of Uniform Biocompatible Polymer Beads with High Quantum Dot Loading Using Microfluidic Jet-Mode Breakup. Langmuir, 2014, 30, 2216-2222.	1.6	15
157	Olefin Autoxidation in Flow. Industrial & Engineering Chemistry Research, 2014, 53, 601-608.	1.8	25
158	Continuous Nanofiltration and Recycle of a Metathesis Catalyst in a Microflow System. ChemCatChem, 2014, 6, 3004-3011.	1.8	24
159	Rapid Wolffâ€“Kishner reductions in a silicon carbide microreactor. Green Chemistry, 2014, 16, 176-180.	4.6	34
160	Scalability of mass transfer in liquidâ€“liquid flow. Chemical Engineering Science, 2014, 116, 1-8.	1.9	126
161	Application of Continuous Crystallization in an Integrated Continuous Pharmaceutical Pilot Plant. Crystal Growth and Design, 2014, 14, 2148-2157.	1.4	64
162	â€œBatchâ€•Kinetics in Flow: Online IR Analysis and Continuous Control. Angewandte Chemie - International Edition, 2014, 53, 470-473.	7.2	133

#	Article	IF	Citations
163	Membrane-Based, Liquidâ€“Liquid Separator with Integrated Pressure Control. Industrial & Engineering Chemistry Research, 2013, 52, 10802-10808.	1.8	156
164	Process intensification and optimization for hydroxyapatite nanoparticles production. Chemical Engineering Science, 2013, 100, 352-359.	1.9	39
165	Endâ€toâ€End Continuous Manufacturing of Pharmaceuticals: Integrated Synthesis, Purification, and Final Dosage Formation. Angewandte Chemie - International Edition, 2013, 52, 12359-12363.	7.2	505
166	Gasâ€“Liquid Flow and Mass Transfer in an Advanced-Flow Reactor. Industrial & Engineering Chemistry Research, 2013, 52, 8996-9010.	1.8	79
167	Cell Squeezing as a Robust, Microfluidic Intracellular Delivery Platform. Journal of Visualized Experiments, 2013, , e50980.	0.2	29
168	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.	3.3	386
169	Automation in Microreactor Systems. , 2013, , 81-100.		8
170	The role of flow in green chemistry and engineering. Green Chemistry, 2013, 15, 1456.	4.6	455
171	A Clock Reaction Based on Molybdenum Blue. Journal of Physical Chemistry A, 2013, 117, 4343-4351.	1.1	15
172	A Microfluidic System for the Continuous Recycling of Unmodified Homogeneous Palladium Catalysts through Liquid/Liquid Phase Separation. ChemCatChem, 2013, 5, 1729-1733.	1.8	22
173	Mass Transport and Reactions in the Tube-in-Tube Reactor. Organic Process Research and Development, 2013, 17, 927-933.	1.3	99
174	Continuous-flow precipitation of hydroxyapatite in ultrasonic microsystems. Chemical Engineering Journal, 2013, 215-216, 979-987.	6.6	52
175	Multistep synthesis of amides from alcohols and amines in continuous flow microreactor systems using oxygen and urea hydrogen peroxide as oxidants. Green Chemistry, 2013, 15, 1538.	4.6	37
176	Flow-Through Comb Electroporation Device for Delivery of Macromolecules. Analytical Chemistry, 2013, 85, 1637-1641.	3.2	49
177	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, .	0.6	71
178	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.	3.3	152
179	Microfluidic jet injection for delivering macromolecules into cells. Journal of Micromechanics and Microengineering, 2013, 23, 035026.	1.5	22
180	Electrode Placement and Fluid Flow Rates in Microfluidic Electrochemical Devices. Journal of the Electrochemical Society, 2012, 159, H853-H856.	1.3	8

#	Article	IF	Citations
181	One-step continuous synthesis of biocompatible gold nanorods for optical coherence tomography. Chemical Communications, 2012, 48, 6654.	2.2	47
182	An Automated Continuous-Flow Platform for the Estimation of Multistep Reaction Kinetics. Organic Process Research and Development, 2012, 16, 1770-1782.	1.3	89
183	A pH-Sensitive Laser-Induced Fluorescence Technique To Monitor Mass Transfer in Multiphase Flows in Microfluidic Devices. Industrial & Engineering Chemistry Research, 2012, 51, 8999-9006.	1.8	57
184	Realization of a salt bridge-free microfluidic reference electrode. Lab on A Chip, 2012, 12, 1431.	3.1	11
185	Size-Controlled Flow Synthesis of Gold Nanoparticles Using a Segmented Flow Microfluidic Platform. Langmuir, 2012, 28, 7007-7013.	1.6	236
186	Microfluidic Continuous Seeded Crystallization: Extraction of Growth Kinetics and Impact of Impurity on Morphology. Crystal Growth and Design, 2012, 12, 6260-6266.	1.4	43
187	Direct fluorination of carbon monoxide in microreactors. Journal of Fluorine Chemistry, 2012, 142, 19-23.	0.9	17
188	Direct oxidative amidation of aromatic aldehydes using aqueous hydrogen peroxide in continuous flow microreactor systems. Green Chemistry, 2012, 14, 1471.	4.6	70
189	Mixing and Dispersion in Small-Scale Flow Systems. Organic Process Research and Development, 2012, 16, 976-981.	1.3	144
190	Hydrodynamics of Liquidâ€“Liquid Dispersion in an Advanced-Flow Reactor. Industrial & Engineering Chemistry Research, 2012, 51, 16251-16262.	1.8	80
191	Heterogeneous catalysis with continuous flow microreactors. Catalysis Science and Technology, 2012, 2, 2134.	2.1	69
192	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.	4.5	80
193	Microfluidics-Based Assessment of Cell Deformability. Analytical Chemistry, 2012, 84, 6438-6443.	3.2	162
194	Automated Multitrajectory Method for Reaction Optimization in a Microfluidic System using Online IR Analysis. Organic Process Research and Development, 2012, 16, 1409-1415.	1.3	127
195	Synthesis, assembly and reaction of a nanocatalyst in microfluidic systems: a general platform. Lab on A Chip, 2012, 12, 4080.	3.1	45
196	Continuous flow metal-free oxidation of picolines using air. Chemical Communications, 2012, 48, 2086.	2.2	33
197	Two-Dimensional Solvent-Mediated Phase Transformation in Lipid Membranes Induced by Sphingomyelinase. Langmuir, 2011, 27, 10050-10060.	1.6	7
198	Portable Thermoelectric Power Generator Based on a Microfabricated Silicon Combustor with Low Resistance to Flow. Industrial & Engineering Chemistry Research, 2011, 50, 8468-8475.	1.8	35

#	Article	IF	Citations
199	Microreactor System for High-Pressure Continuous Flow Homogeneous Catalysis Measurements. Industrial & Engineering Chemistry Research, 2011, 50, 11013-11022.	1.8	52
200	Teflon-Coated Silicon Microreactors: Impact on Segmented Liquidâ"Liquid Multiphase Flows. Langmuir, 2011, 27, 6519-6527.	1.6	55
201	Kinetic and Scale-Up Investigations of Epoxide Aminolysis in Microreactors at High Temperatures and Pressures. Organic Process Research and Development, 2011, 15, 131-139.	1.3	83
202	Palladium-catalyzed amination reactions in flow: overcoming the challenges of clogging via acoustic irradiation. Chemical Science, 2011, 2, 287-290.	3.7	203
203	Rapid Determination of Reaction Kinetics with an Automated Microfluidic System. Organic Process Research and Development, 2011, 15, 398-407.	1.3	148
204	A Teflon microreactor with integrated piezoelectric actuator to handle solid forming reactions. Lab on A Chip, 2011, 11, 2488.	3.1	128
205	Deciding Whether To Go with the Flow: Evaluating the Merits of Flow Reactors for Synthesis. Angewandte Chemie - International Edition, 2011, 50, 7502-7519.	7.2	868
206	Investigation of Indium Phosphide Nanocrystal Synthesis Using a Highâ€Temperature and Highâ€Pressure Continuous Flow Microreactor. Angewandte Chemie - International Edition, 2011, 50, 627-630.	7.2	128
207	Suzukiâ€"Miyaura Crossâ€Coupling Reactions in Flow: Multistep Synthesis Enabled by a Microfluidic Extraction. Angewandte Chemie - International Edition, 2011, 50, 5943-5946.	7.2	156
208	Development of a Photochemical Microfluidics Platform. Journal of Flow Chemistry, 2011, 1, 53-55.	1.2	35
209	Microfluidic preparative freeâ€flow isoelectric focusing in a triangular channel: System development and characterization. Electrophoresis, 2010, 31, 1606-1614.	1.3	19
210	Multistep Microchemical Synthesis Enabled by Microfluidic Distillation. Angewandte Chemie - International Edition, 2010, 49, 899-903.	7.2	131
211	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.	7.2	200
212	An Automated Microfluidic System for Online Optimization in Chemical Synthesis. Organic Process Research and Development, 2010, 14, 1169-1176.	1.3	129
213	Aminolysis of Epoxides in a Microreactor System: A Continuous Flow Approach to Î²-Amino Alcohols. Organic Process Research and Development, 2010, 14, 432-440.	1.3	127
214	Design and Packaging of Microreactors for High Pressure and High Temperature Applications. Industrial & Engineering Chemistry Research, 2010, 49, 11310-11320.	1.8	162
215	Synthesis and Kinetics of Highly Energetic Intermediates by Micromixers: Direct Multistep Synthesis of Sodium Nitrotetrazolate. Industrial & Engineering Chemistry Research, 2010, 49, 4132-4139.	1.8	43
216	Sphingomyelinase-Induced Phase Transformations: Causing Morphology Switches and Multiple-Time-Domain Ceramide Generation in Model Raft Membranes. Langmuir, 2010, 26, 344-356.	1.6	24

#	Article	IF	Citations
217	Design and global optimization of high-efficiency thermophotovoltaic systems. Optics Express, 2010, 18, A314.	1.7	226
218	Integrated Microreactors for Reaction Automation: New Approaches to Reaction Development. Annual Review of Analytical Chemistry, 2010, 3, 19-42.	2.8	324
219	Synthesis of micro and nanostructures in microfluidic systems. Chemical Society Reviews, 2010, 39, 1183.	18.7	617
220	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.	1.3	219
221	Microfluidic Preparative Free-Flow Isoelectric Focusing: System Optimization for Protein Complex Separation. Analytical Chemistry, 2010, 82, 1253-1260.	3.2	64
222	SOI-Supported Microdevice for Hydrogen Purification Using Palladiumâ€“Silver Membranes. Journal of Microelectromechanical Systems, 2010, 19, 402-409.	1.7	16
223	Insights into the Kinetics of Semiconductor Nanocrystal Nucleation and Growth. Journal of the American Chemical Society, 2009, 131, 4479-4489.	6.6	201
224	Increasing Productivity of Microreactors for Fast Gasâ^'Liquid Reactions: The Case of Direct Fluorination of Toluene. Industrial & Engineering Chemistry Research, 2009, 48, 1428-1434.	1.8	47
225	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.	1.7	96
226	Microchemical systems for continuous-flow synthesis. Lab on A Chip, 2009, 9, 2495.	3.1	463
227	Distillation in microchemical systems using capillary forces and segmented flow. Lab on A Chip, 2009, 9, 1843.	3.1	122
228	Supercritical Continuousâ€Microflow Synthesis of Narrow Size Distribution Quantum Dots. Advanced Materials, 2008, 20, 4830-4834.	11.1	145
229	Design of a siliconâ€based microscale trickleâ€bed system for singletâ€oxygen production. AICHE Journal, 2008, 54, 2441-2455.	1.8	17
230	Microfluidic based single cell microinjection. Lab on A Chip, 2008, 8, 1258.	3.1	91
231	Sample Dispersion for Segmented Flow in Microchannels with Rectangular Cross Section. Analytical Chemistry, 2008, 80, 1558-1567.	3.2	64
232	Isotropic etching of silicon in fluorine gas for MEMS micromachining. Journal of Micromechanics and Microengineering, 2007, 17, 384-392.	1.5	42
233	Cascaded Free-Flow Isoelectric Focusing for Improved Focusing Speed and Resolution. Analytical Chemistry, 2007, 79, 9364-9371.	3.2	48
234	Singlet oxygen generator on a chip for MEMS-based COIL. , 2007, , .		0

#	Article	IF	Citations
235	Microfabricated Multiphase Reactors for the Direct Synthesis of Hydrogen Peroxide from Hydrogen and Oxygen. Industrial & Engineering Chemistry Research, 2007, 46, 1153-1160.	1.8	131
236	Integrated continuous microfluidic liquidâ€“liquid extraction. Lab on A Chip, 2007, 7, 256-263.	3.1	341
237	Solder-based chip-to-tube and chip-to-chip packaging for microfluidic devices. Lab on A Chip, 2007, 7, 1309.	3.1	49
238	Integrated Microreactor System for Gas-Phase Catalytic Reactions. 3. Microreactor System Design and System Automation. Industrial & Engineering Chemistry Research, 2007, 46, 8319-8335.	1.8	14
239	Structural and Enzymatic Investigation of theSulfolobus solfataricusUridylate Kinase Shows Competitive UTP Inhibition and the Lack of GTP Stimulationâ€‚â€¡. Biochemistry, 2007, 46, 2745-2757.	1.2	21
240	Directed Growth of Poly(isobenzofuran) Films by Chemical Vapor Deposition on Patterned Self-Assembled Monolayers as Templates. Langmuir, 2007, 23, 2483-2491.	1.6	10
241	Integrated Microreactor System for Gas-Phase Catalytic Reactions. 2. Microreactor Packaging and Testing. Industrial & Engineering Chemistry Research, 2007, 46, 8306-8318.	1.8	11
242	Integrated Microreactor System for Gas-Phase Catalytic Reactions. 1. Scale-up Microreactor Design and Fabrication. Industrial & Engineering Chemistry Research, 2007, 46, 8292-8305.	1.8	16
243	A MEMS Singlet Oxygen Generatorâ€”Part I: Device Fabrication and Proof of Concept Demonstration. Journal of Microelectromechanical Systems, 2007, 16, 1482-1491.	1.7	7
244	A MEMS Singlet Oxygen Generatorâ€”Part II: Experimental Exploration of the Performance Space. Journal of Microelectromechanical Systems, 2007, 16, 1492-1505.	1.7	10
245	Accelerating Reactions with Microreactors at Elevated Temperatures and Pressures: Profiling Aminocarbonylation Reactions. Angewandte Chemie - International Edition, 2007, 46, 1734-1737.	7.2	207
246	Multistep Continuous-Flow Microchemical Synthesis Involving Multiple Reactions and Separations. Angewandte Chemie - International Edition, 2007, 46, 5704-5708.	7.2	362
247	Microfluidic Synthesis of Titania Shells on Colloidal Silica. Advanced Materials, 2007, 19, 2556-2560.	11.1	109
248	Silicon-Based Microchemical Systems: Characteristics and Applications. MRS Bulletin, 2006, 31, 101-107.	1.7	121
249	Flow-induced deformation of shallow microfluidic channels. Lab on A Chip, 2006, 6, 500.	3.1	283
250	Systematic Study of Surface Chemistry and Comprehensive Two-Dimensional Tertiary Current Distribution Model for Copper Electrochemical Deposition. Journal of the Electrochemical Society, 2006, 153, C761.	1.3	11
251	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.	1.2	152
252	Multiphase microfluidics: from flow characteristics to chemical and materials synthesis. Lab on A Chip, 2006, 6, 1487-1503.	3.1	862

#	Article	IF	Citations
253	Continuous Dielectrophoretic Size-Based Particle Sorting. Analytical Chemistry, 2006, 78, 5019-5025.	3.2	155
254	In-Situ Encapsulation of Quantum Dots into Polymer Microspheres. Langmuir, 2006, 22, 3782-3790.	1.6	155
255	Flow Distribution and Ozonolysis in Gasâ^'Liquid Multichannel Microreactors. Industrial & Engineering Chemistry Research, 2006, 45, 8036-8042.	1.8	135
256	Structure and Morphology of Poly(isobenzofuran) Films Grown by Hot-Filament Chemical Vapor Deposition. Chemistry of Materials, 2006, 18, 6339-6344.	3.2	6
257	Differential Gene Expression Profiles and Real-Time Measurements of Growth Parameters in Saccharomyces cerevisiae Grown in Microliter-Scale Bioreactors Equipped with Internal Stirring. Biotechnology Progress, 2006, 22, 710-717.	1.3	35
258	Cells on chips. Nature, 2006, 442, 403-411.	13.7	2,022
259	Mass transport and surface reactions in microfluidic systems. Chemical Engineering Science, 2006, 61, 1102-1121.	1.9	248
260	Microchemostatâ€"microbial continuous culture in a polymer-based, instrumented microbioreactor. Lab on A Chip, 2006, 6, 906-913.	3.1	112
261	A well-mixed, polymer-based microbioreactor with integrated optical measurements. Biotechnology and Bioengineering, 2006, 93, 286-296.	1.7	84
262	In situ measurement of bioluminescence and fluorescence in an integrated microbioreactor. Biotechnology and Bioengineering, 2006, 93, 40-47.	1.7	36
263	Micro freef-low IEF enhanced by active cooling and functionalized gels. Electrophoresis, 2006, 27, 4960-4969.	1.3	63
264	High-Purity Hydrogen Generation in a Microfabricated 23â€‰wtâ€‰% Agâ€“Pd Membrane Device Integrated with 8:1 LaNi0.95Co0.05O3/Al2O3 Catalyst. Advanced Materials, 2006, 18, 1701-1704.	11.1	37
265	Synthesis and Characterization of Poly(isobenzofuran) Films by Chemical Vapor Deposition. Macromolecules, 2006, 39, 4400-4410.	2.2	7
266	Measurement of residence time distribution in microfluidic systems. Chemical Engineering Science, 2005, 60, 5729-5737.	1.9	152
267	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.	7.2	252
268	Gene expression analysis of Escherichia coli grown in miniaturized bioreactor platforms for high-throughput analysis of growth and genomic data. Applied Microbiology and Biotechnology, 2005, 68, 518-532.	1.7	41
269	Scaled-Out Multilayer Gasâ^'Liquid Microreactor with Integrated Velocimetry Sensors. Industrial & Engineering Chemistry Research, 2005, 44, 8997-9013.	1.8	105
270	Silicon-Based Microreactors. ACS Symposium Series, 2005, , 2-22.	0.5	5

#	Article	IF	Citations
271	Sensitive power compensated scanning calorimeter for analysis of phase transformations in small samples. Review of Scientific Instruments, 2005, 76, 065104.	0.6	51
272	Mikroreaktoren zur Synthese und Reaktionsoptimierung. Nachrichten Aus Der Chemie, 2005, 53, 628-632.	0.0	0
273	Surfactant-enhanced liquidâ€“liquid extraction in microfluidic channels with inline electric-field enhanced coalescence. Lab on A Chip, 2005, 5, 531.	3.1	66
274	Microreactor-based reaction optimization in organic chemistryâ€”glycosylation as a challenge. Chemical Communications, 2005, , 578-580.	2.2	162
275	Silicon Micromixers with Infrared Detection for Studies of Liquid-Phase Reactions. Industrial & Engineering Chemistry Research, 2005, 44, 2351-2358.	1.8	63
276	Cell Stimulus and Lysis in a Microfluidic Device with Segmented Gasâ^'Liquid Flow. Analytical Chemistry, 2005, 77, 3629-3636.	3.2	84
277	A microfluidic electroporation device for cell lysis. Lab on A Chip, 2005, 5, 23.	3.1	283
278	Properties of the CdSe(0001), (0001Ì„), and (112Ì„0) Single Crystal Surfaces:Â Relaxation, Reconstruction, and Adatom and Admolecule Adsorption. Journal of Physical Chemistry B, 2005, 109, 19320-19328.	1.2	71
279	Micromixing of Miscible Liquids in Segmented Gasâ^'Liquid Flow. Langmuir, 2005, 21, 1547-1555.	1.6	387
280	Preparation of Sodium Nitrotetrazolate Using Microreactor Technology. , 2005, , .		3
281	Development of a multiplexed microbioreactor system for high-throughput bioprocessing. Lab on A Chip, 2005, 5, 819.	3.1	134
282	Fabrication and structural characterization of self-supporting electrolyte membranes for a micro solid-oxide fuel cell. Journal of Materials Research, 2004, 19, 2604-2615.	1.2	123
283	An integrated multiphase flow sensor for microchannels. Experiments in Fluids, 2004, 36, 819-832.	1.1	40
284	Membrane-aerated microbioreactor for high-throughput bioprocessing. Biotechnology and Bioengineering, 2004, 87, 243-254.	1.7	186
285	A computational study of gas-phase and surface reactions in deposition and etching of GaAs and AlAs in the presence of HCl. Journal of Crystal Growth, 2004, 268, 76-95.	0.7	25
286	Catalyst surface characterization in microfabricated reactors using pulse chemisorption. Chemical Communications, 2004, , 2610.	2.2	16
287	Palladium-Based Micromembranes for Hydrogen Separation:Â Device Performance and Chemical Stability. Industrial & Engineering Chemistry Research, 2004, 43, 7083-7091.	1.8	47
288	Infrared Spectroscopy for Chemically Specific Sensing in Silicon-Based Microreactors. Analytical Chemistry, 2004, 76, 6476-6483.	3.2	46

#	Article	IF	Citations
289	A Microfabricated Device for Subcellular Organelle Sorting. Analytical Chemistry, 2004, 76, 5705-5712.	3.2	132
290	Microfluidic Shear Devices for Quantitative Analysis of Cell Adhesion. Analytical Chemistry, 2004, 76, 5257-5264.	3.2	361
291	Transport and reaction in microscale segmented gasâ€“liquid flow. Lab on A Chip, 2004, 4, 278-286.	3.1	465
292	Microfluidic Synthesis of Colloidal Silica. Langmuir, 2004, 20, 8604-8611.	1.6	397
293	Design of a MEMS-based microchemical oxygen-iodine laser (/spl mu/COIL) system. IEEE Journal of Quantum Electronics, 2004, 40, 1041-1055.	1.0	10
294	A Continuous-Flow Microcapillary Reactor for the Preparation of a Size Series of CdSe Nanocrystals. Advanced Materials, 2003, 15, 1858-1862.	11.1	226
295	A multiscale study of the selective MOVPE of AlxGa1â^'xAs in the presence of HCl. Journal of Crystal Growth, 2003, 248, 411-416.	0.7	15
296	Microfabricated Multiphase Reactors for the Selective Direct Fluorination of Aromatics. Industrial & Engineering Chemistry Research, 2003, 42, 698-710.	1.8	178
297	Reactive Polymer Coatings:Â A First Step toward Surface Engineering of Microfluidic Devices. Analytical Chemistry, 2003, 75, 2117-2122.	3.2	187
298	A microfabricated suspended-tube chemical reactor for thermally efficient fuel processing. Journal of Microelectromechanical Systems, 2003, 12, 600-612.	1.7	134
299	Dissociation reactions of CuI(hfac)L compounds relevant to the chemical vapor deposition of copper. Physical Chemistry Chemical Physics, 2003, 5, 2818.	1.3	26
300	14 Microreactors for measuring catalyst activity and determining reaction kinetics. Studies in Surface Science and Catalysis, 2003, 145, 97-102.	1.5	11
301	Reactive Polymer Coatings:Â A Platform for Patterning Proteins and Mammalian Cells onto a Broad Range of Materials. Langmuir, 2002, 18, 3632-3638.	1.6	171
302	Design and fabrication of microfluidic devices for multiphase mixing and reaction. Journal of Microelectromechanical Systems, 2002, 11, 709-717.	1.7	206
303	Miniaturization and integration of photoacoustic detection. Journal of Applied Physics, 2002, 92, 1555-1563.	1.1	47
304	Microfabricated cross-flow chemical reactor for catalyst testing. Sensors and Actuators B: Chemical, 2002, 82, 297-306.	4.0	56
305	Microfabricated Differential Reactor for Heterogeneous Gas Phase Catalyst Testing. Journal of Catalysis, 2002, 209, 401-412.	3.1	94
306	Gas-Liquid Flows in Microchemical Systems. , 2002, , 353-355.		1

#	Article	IF	Citations
307	Towards Integrated Microsystems for Chemical Synthesis. , 2002, , 642-645.		0
308	Functionalized Parylene Coatings for Microfluidic Applications. , 2002, , 443-445.		0
309	Miniaturization and integration of photoacoustic detection with a microfabricated chemical reactor system. Journal of Microelectromechanical Systems, 2001, 10, 232-237.	1.7	37
310	Microfabricated Multiphase Packed-Bed Reactors:Â Characterization of Mass Transfer and Reactions. Industrial & Engineering Chemistry Research, 2001, 40, 2555-2562.	1.8	407
311	Photochemical reactions and on-line UV detection in microfabricated reactors. Lab on A Chip, 2001, 1, 22.	3.1	206
312	Disproportionation of dimethylalane on aluminum surfaces. Part I. Experimental studies. Surface Science, 2001, 488, 286-302.	0.8	6
313	Disproportionation of dimethylalane on aluminum surfaces. Part II. Quantum chemistry studies. Surface Science, 2001, 488, 303-324.	0.8	3
314	Computational Investigation of Selective Movpe of AlXGa1-XAs in Presence of Hcl. Materials Research Society Symposia Proceedings, 2001, 696, 1.	0.1	0
315	Computational Investigation of Selective MOVPE of AlxGa1-xAs in Presence of Hcl. Materials Research Society Symposia Proceedings, 2001, 701, 341.	0.1	0
316	Microfabricated packed-bed reactor for phosgene synthesis. AICHE Journal, 2001, 47, 1639-1647.	1.8	128
317	A New Method toward Microengineered Surfaces Based on Reactive Coating. Angewandte Chemie - International Edition, 2001, 40, 3166-3169.	7.2	89
318	Microreaction engineering â€" is small better?. Chemical Engineering Science, 2001, 56, 293-303.	1.9	1,042
319	In-situ reflectance monitoring of GaSb substrate oxide desorption. Journal of Crystal Growth, 2001, 225, 420-425.	0.7	47
320	Microfluidic systems with on-line UV detection fabricated in photodefinable epoxy. Journal of Micromechanics and Microengineering, 2001, 11, 263-269.	1.5	210
321	Infrared Spectroscopic Study of Decomposition of Ti(N(CH[sub 3])[sub 2])[sub 4]. Journal of the Electrochemical Society, 2001, 148, G178.	1.3	39
322	A Novel Cross-Flow Microreactor for Kinetic Studies of Catalytic Processes. , 2001, , 414-423.		8
323	Microchemical Systems for Direct Fluorination of Aromatics. , 2001, , 60-67.		14
324	A Combustion-Based MEMS Thermoelectric Power Generator. , 2001, , 30-33.		48

#	Article	IF	Citations
325	Device Level Integration to form a Parallel Microfluidic Reactor System. , 2001, , 661-663.		1
326	Photochemical Reactions and Online Product Detection in Microfabricated Reactors. , 2001, , 175-184.		3
327	Full Color Emission from II-VI Semiconductor Quantum Dot-Polymer Composites. Advanced Materials, 2000, 12, 1102-1105.	11.1	709
328	Simulation of micromachined chemical reactors for heterogeneous partial oxidation reactions. Chemical Engineering Science, 2000, 55, 3-13.	1.9	71
329	A chemical mechanism for in situ boron doping during silicon chemical vapor deposition. Thin Solid Films, 2000, 365, 231-241.	0.8	29
330	Design issues for membrane-based, gas phase microchemical systems. Chemical Engineering Science, 2000, 55, 3065-3075.	1.9	50
331	Modeling of metal thin film growth: Linking angstrom-scale molecular dynamics results to micron-scale film topographies. Physical Review B, 2000, 62, 2869-2878.	1.1	32
332	Transition Metals for Selective Chemical Vapor Deposition of Parylene-Based Polymers. Chemistry of Materials, 2000, 12, 1305-1313.	3.2	87
333	Blue Electroluminescent Copolymers by Parylene-Based Chemical Vapor Deposition. Macromolecules, 2000, 33, 5336-5339.	2.2	25
334	Gas-Phase Reaction Pathways of Aluminum Organometallic Compounds with Dimethylaluminum Hydride and Alane as Model Systems. Journal of Physical Chemistry A, 2000, 104, 7881-7891.	1.1	8
335	Use of Microcontact Printing for Generating Selectively Grown Films of Poly(p-phenylene vinylene) and Parylenes Prepared by Chemical Vapor Deposition. Langmuir, 2000, 16, 8495-8500.	1.6	59
336	Novel Liquid Phase Microreactors for Safe Production of Hazardous Specialty Chemicals. , 2000, , 171-180.		12
337	Expansion of Microreactor Capabilities through Improved Thermal Management and Catalyst Deposition. , 2000, , 197-206.		6
338	Miniaturization and Integration of Photoacoustic Detection with a Microfabricated Chemical Reactor System. , 2000, , 49-52.		10
339	Development of Methods for On-Line Chemical Detection with Liquid-Phase Microchemical Reactors Using Conventional and Unconventional Techniques. , 2000, , 155-158.		7
340	Microchemical systems: Status, challenges, and opportunities. AICHE Journal, 1999, 45, 2051-2054.	1.8	192
341	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.	11.1	77
342	Selective Growth of Poly(p-phenylene vinylene) Prepared by Chemical Vapor Deposition. Advanced Materials, 1999, 11, 814-820.	11.1	45

#	Article	IF	Citations
343	Electroluminescent Materials with Feature Sizes as Small as 5 Î¼m Using Elastomeric Membranes as Masks for Dry Lift-Off. , 1999, 11, 546.		3
344	Synthesis of CdSe quantum dotâ€“ZnS matrix thin films via electrospray organometallic chemical vapor deposition. Journal of Crystal Growth, 1998, 195, 564-568.	0.7	37
345	A reaction-transport model for AlGaN MOVPE growth. Journal of Crystal Growth, 1998, 195, 733-739.	0.7	170
346	In situ monitoring of GaSb, GaInAsSb, and AlGaAsSb. Journal of Crystal Growth, 1998, 195, 181-186.	0.7	19
347	Smaller, faster chemistry. Nature, 1998, 393, 735-737.	13.7	82
348	Simulation of flow and growth phenomena in a close-spaced reactor. Journal of Crystal Growth, 1998, 195, 725-732.	0.7	39
349	Multiscale modeling of thin film growth. Current Opinion in Solid State and Materials Science, 1998, 3, 562-569.	5.6	57
350	The effect of surface roughness on the radiative properties of patterned silicon wafers. IEEE Transactions on Semiconductor Manufacturing, 1998, 11, 607-614.	1.4	20
351	Nonlinear model reduction strategies for rapid thermal processing systems. IEEE Transactions on Semiconductor Manufacturing, 1998, 11, 266-275.	1.4	62
352	Poly(p-phenylene vinylene) Prepared by Chemical Vapor Deposition:Â Influence of Monomer Selection and Reaction Conditions on Film Composition and Luminescence Properties. Macromolecules, 1998, 31, 6789-6793.	2.2	39
353	An Evaluation of Density Functional Theory and ab Initio Predictions for Bridge-Bonded Aluminum Compounds. Journal of Physical Chemistry A, 1998, 102, 2613-2623.	1.1	64
354	Investigation of high-temperature degradation of platinum thin films with an in situ resistance measurement apparatus. Journal of Microelectromechanical Systems, 1998, 7, 128-135.	1.7	159
355	Designing Reducedâ€Order Models for Rapid Thermal Processing Systems. Journal of the Electrochemical Society, 1998, 145, 3974-3981.	1.3	4
356	Multiscale modeling of chemical vapor deposition. Journal of Applied Physics, 1998, 83, 524-530.	1.1	86
357	The effect of patterns on thermal stress during rapid thermal processing of silicon wafers. IEEE Transactions on Semiconductor Manufacturing, 1998, 11, 99-107.	1.4	41
358	Integrated Gas Phase Microreactors. , 1998, , 463-468.		8
359	Chemical vapor deposition of poly (p-phenylene vinylene) based light emitting diodes with low turn-on voltages. Applied Physics Letters, 1997, 71, 2091-2093.	1.5	40
360	Cathodoluminescence and photoluminescence of highly luminescent CdSe/ZnS quantum dot composites. Applied Physics Letters, 1997, 70, 2132-2134.	1.5	132

#	Article	IF	Citations
361	In situcharacterization of the oxidative degradation of a polymeric light emitting device. Journal of Applied Physics, 1997, 81, 3716-3720.	1.1	133
362	Temperature programmed desorption investigations of hydrogen and ammonia reactions on GaN. Surface Science, 1997, 381, L581-L588.	0.8	40
363	(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.	1.2	3,916
364	Evaluation of nucleation activation energy in metal CVD processes. Korean Journal of Chemical Engineering, 1997, 14, 129-135.	1.2	1
365	Computational chemistry predictions of reaction processes in organometallic vapor phase epitaxy. Progress in Crystal Growth and Characterization of Materials, 1997, 35, 117-149.	1.8	45
366	Chemical vapor deposition of thin polymer films used in polymer-based light emitting diodes. Advanced Materials, 1997, 9, 490-493.	11.1	40
367	Micromachined reactors for catalytic partial oxidation reactions. AIChE Journal, 1997, 43, 3059-3069.	1.8	243
368	Characteristics of GaSb growth using various gallium and antimony precursors. Journal of Crystal Growth, 1997, 170, 55-60.	0.7	46
369	Computational Chemistry Predictions of Kinetics and Major Reaction Pathways for Germane Gasâ€Phase Reactions. Journal of the Electrochemical Society, 1996, 143, 2646-2654.	1.3	45
370	The Effect of Multilayer Patterns on Thermal Stress During Rapid Thermal Processing. Materials Research Society Symposia Proceedings, 1996, 429, 43.	0.1	2
371	Nonlinear Model Reduction Strategies for Rapid Thermal Processing Systems. Materials Research Society Symposia Proceedings, 1996, 429, 57.	0.1	0
372	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.	3.2	399
373	Low oxygen and carbon incorporation in AlGaAs using tritertiarybutylaluminum in organometallic vapor phase epitaxy. Journal of Electronic Materials, 1996, 25, 771-774.	1.0	7
374	In situ concentration monitoring in a vertical OMVPE reactor by fiber-optics-based Fourier transform infrared spectroscopy. Journal of Crystal Growth, 1996, 169, 443-449.	0.7	29
375	A Systematic Approach to Simulating Rapid Thermal Processing Systems. Journal of the Electrochemical Society, 1996, 143, 2035-2043.	1.3	27
376	The Effect of Multilayer Patterns on Temperature Uniformity during Rapid Thermal Processing. Journal of the Electrochemical Society, 1996, 143, 1142-1151.	1.3	37
377	nâ€AlGaSb and GaSb/AlGaSb doubleâ€heterostructure lasers grown by organometallic vapor phase epitaxy. Applied Physics Letters, 1996, 68, 400-402.	1.5	30
378	Electromigration of aluminum cathodes in polymerâ€based electroluminescent devices. Applied Physics Letters, 1996, 69, 3941-3943.	1.5	77

#	Article	IF	Citations
379	Monte Carlo Simulation of Optical Temperature Sensors in RTP Systems. Materials Research Society Symposia Proceedings, 1995, 387, 143.	0.1	5
380	The Potential Effect of Multilayer Patterns on Temperature Uniformity During Rapid Thermal Processing. Materials Research Society Symposia Proceedings, 1995, 387, 21.	0.1	10
381	The Potential Effect of Multilayer Patterns on Temperature Uniformity During Rapid Thermal Processing. Materials Research Society Symposia Proceedings, 1995, 389, 293.	0.1	0
382	Analysis of TPD Spectra on Semiconductor Surfaces by Monte Carlo Simulations. Materials Research Society Symposia Proceedings, 1995, 399, 109.	0.1	0
383	Tritertiarybutylaluminum as an organometallic source for epitaxial growth of AlGaSb. Applied Physics Letters, 1995, 67, 1384-1386.	1.5	35
384	Gas-Phase Pyrolysis of tert-Butyl(allyl)selenium, a New Precursor for Organometallic Chemical Vapor Deposition of ZnSe. Chemistry of Materials, 1995, 7, 731-737.	3.2	2
385	Photo-oxidation of polymers used in electroluminescent devices. Synthetic Metals, 1995, 73, 195-199.	2.1	171
386	Chemisorption and decomposition of tris(dimethylamino) phosphine on GaAs(100). Surface Science, 1995, 339, 310-322.	0.8	10
387	Gas-Phase Decomposition Reactions of Tris(dimethylamino)phosphine, -Arsine, and -Stibine Reagents. Chemistry of Materials, 1995, 7, 507-516.	3.2	44
388	Analysis of spherical harmonic expansion approximations for glow discharges. IEEE Transactions on Plasma Science, 1995, 23, 780-787.	0.6	2
389	Kinetic Modeling of the Gas Phase Decomposition of Germane by Computational Chemistry Techniques. European Physical Journal Special Topics, 1995, 05, C5-71-C5-77.	0.2	3
390	Simulation of Rarefied Gas Transport and Profile Evolution in Nonplanar Substrate Chemical Vapor Deposition. Journal of the Electrochemical Society, 1994, 141, 2545-2551.	1.3	36
391	Synthesis of Ge nanocrystals embedded in a Si host matrix. Journal of Applied Physics, 1994, 76, 8201-8203.	1.1	29
392	Combined experimental and modeling studies of laserâ€assisted chemical vapor deposition of copper from copper(I)â€hexafluoroacetylacetonate trimethylvinylsilane. Journal of Applied Physics, 1994, 75, 2240-2250.	1.1	47
393	On-line molecular weight distribution estimation and control in batch polymerization. AICHE Journal, 1994, 40, 445-462.	1.8	82
394	Chemical/surface mechanistic considerations in the design of novel precursors for metalorganic molecular beam epitaxy. Journal of Crystal Growth, 1994, 136, 118-126.	0.7	32
395	Effects of C incorporation on the luminescence properties of ZnSe grown by metalorganic chemical vapor deposition. Journal of Crystal Growth, 1994, 138, 338-345.	0.7	15
396	Monitoring of gas-phase species in metalorganic vapor phase epitaxy by fiber-optics based Fourier transform infrared spectroscopy. Journal of Crystal Growth, 1994, 145, 28-35.	0.7	15

#	Article	IF	Citations
397	Study of silicon incorporation from SiH4 in GaAs layers grown by metalorganic vapor phase epitaxy using tertiarybutylarsine. Journal of Crystal Growth, 1994, 145, 397-402.	0.7	9
398	New allyl selenide and trialkylphosphine selenide precursors for metalorganic vapor phase epitaxy of ZnSe. Journal of Crystal Growth, 1994, 145, 530-536.	0.7	10
399	Preparation of IIâ€“VI quantum dot composites by electrospray organometallic chemical vapor deposition. Journal of Crystal Growth, 1994, 145, 714-720.	0.7	39
400	Electrospray organometallic chemical vapor depositionâ€”A novel technique for preparation of IIâ€“VI quantum dot composites. Applied Physics Letters, 1994, 65, 2795-2797.	1.5	72
401	A Monte Carlo Simulation Study of Radiation Heat Transfer in the Multiwafer LPCVD Reactor. Journal of the Electrochemical Society, 1994, 141, 496-501.	1.3	14
402	Pyrolytic laser assisted chemical vapor deposition of Al from dimethylethylamineâ€alane: Characterization and a new twoâ€step writing process. Applied Physics Letters, 1994, 64, 425-427.	1.5	19
403	Monte Carlo Simulation of Radiative Heat Transfer in Rapid Thermal Processing (RTP) Systems. Materials Research Society Symposia Proceedings, 1994, 342, 425.	0.1	8
404	On the origin of return flows in horizontal chemical vapor deposition reactors. Journal of Crystal Growth, 1993, 132, 483-490.	0.7	8
405	Monte Carlo simulations of very low pressure chemical vapor deposition. Journal of Computer-Aided Materials Design, 1993, 1, 3-26.	0.7	16
406	Low pressure OMVPE of ZnSe with hydrogen selenide and dimethylzinc-triethylamine. Journal of Electronic Materials, 1993, 22, 509-514.	1.0	12
407	Decomposition of allylselenium sources in the metalorganic chemical vapor deposition of zinc selenide. Chemistry of Materials, 1993, 5, 305-310.	3.2	7
408	tert-Butyl(trifluoromethyl)tellurium: a novel organometallic chemical vapor deposition source for zinc telluride. Chemistry of Materials, 1993, 5, 1321-1326.	3.2	7
409	<title>Fiber optics based in-situ FTIR monitoring of organometallic chemical vapor deposition of compound semiconductors</title>. , 1993, 2069, 132.		0
410	Modeling of transport and film growth over patterned substrates. , 1993, , .		1
411	Simulation of Rapid Thermal Processing Equipment and Processes. Materials Research Society Symposia Proceedings, 1993, 303, 197.	0.1	10
412	Gas-Phase and Surface Decomposition of Tris-Dimethylamino Arsenic. Materials Research Society Symposia Proceedings, 1993, 334, 169.	0.1	6
413	Estimation of Arrhenius parameters for the 1,1 elimination of hydrogen from disilane and the role of chemically activated disilane in silane pyrolysis. The Journal of Physical Chemistry, 1992, 96, 7695-7703.	2.9	32
414	Analysis of Transition Regime Flows in Low Pressure Chemical Vapor Deposition Reactors Using the Direct Simulation Monte Carlo Method. Journal of the Electrochemical Society, 1992, 139, 2264-2273.	1.3	37

#	Article	IF	Citations
415	Determination of the Arrhenius parameters for disilane .dblarw. silane + silicon dihydride and .DELTA.H.degree.f (SiH2) by RRKM analysis for forward and reverse reaction rate data. The Journal of Physical Chemistry, 1992, 96, 7683-7695.	2.9	33
416	Monte Carlo Simulations of Film Profile Evolution During Nonplanar CVD Processes. Materials Research Society Symposia Proceedings, 1992, 280, 169.	0.1	0
417	Laser Assisted CVD of Aluminum from a Novel Liquid Alane Precursor. Materials Research Society Symposia Proceedings, 1992, 282, 173.	0.1	2
418	Chemistry at Polyimide-Metal Interfaces: In Situ FTIR Studies of Polymer Curing Processes and Thermal Stability. Materials Research Society Symposia Proceedings, 1992, 282, 581.	0.1	1
419	Characterization of Fluorinated Polyimide Films. Materials Research Society Symposia Proceedings, 1992, 264, 263.	0.1	0
420	The roles of supersaturation, terrace width, and impurities on the formation of macrosteps on crystal surfaces using the terrace-ledge-kink model. Surface Science, 1992, 262, 359-370.	0.8	15
421	Surface reactions of dimethylaminoarsine during MOMBE of GaAs. Journal of Crystal Growth, 1992, 124, 16-22.	0.7	56
422	Simulation of carbon doping of GaAs during MOVPE. Journal of Crystal Growth, 1992, 124, 483-492.	0.7	66
423	A finite element solutionof three-dimensional mixed convection gas flows in horizontal chnnels using preconditioned iterative metrix methods. International Journal for Numerical Methods in Fluids, 1992, 14, 817-841.	0.9	17
424	Computation of transition and molecular diffusivities in fibrous media. AICHE Journal, 1992, 38, 56-66.	1.8	31
425	Gasâ€Phase and Surface Reaction Mechanisms in MOCVD of GaAs with Trimethylâ€Gallium and Arsine. Journal of the Electrochemical Society, 1991, 138, 2426-2439.	1.3	116
426	Flow Phenomena in Chemical Vapor Deposition of Thin Films. Annual Review of Fluid Mechanics, 1991, 23, 197-232.	10.8	173
427	19 Chemical Engineering in the Processing of Electronic and Optical Materials: A Discussion. Advances in Chemical Engineering, 1991, 16, 395-412.	0.5	0
428	Estimation of the Arrhenius parameters for silane .dblarw. silylene + hydrogen and .DELTA.Hfo(SiH2) by a nonlinear regression analysis of the forward and reverse reaction rate data. The Journal of Physical Chemistry, 1991, 95, 145-154.	2.9	39
429	Thermal Chemical Vapor Deposition. , 1991, , 283-368.		21
430	OMVPE of Compound Semiconductors. , 1991, , 369-442.		4
431	Ftir Studies Of Organometallic Surface Chemistry Relevant To Atomic Layer Epitaxy.. Materials Research Society Symposia Proceedings, 1991, 222, 81.	0.1	11
432	Laser Assisted Chemical Vapor Deposition of Cu from a New Cu Organometallic Complex. Materials Research Society Symposia Proceedings, 1991, 236, 97.	0.1	5

#	Article	IF	Citations
433	Analysis of MOCVD of GaAs on patterned substrates. Journal of Crystal Growth, 1991, 114, 581-592.	0.7	78
434	Detailed models of the MOVPE process. Journal of Crystal Growth, 1991, 107, 1-11.	0.7	89
435	Infrared spectroscopic determination of substitutional carbon in MOVPE grown films of GaAs. Journal of Crystal Growth, 1991, 107, 248-253.	0.7	1
436	MOVPE of ZnSe using organometallic allyl selenium precursors. Journal of Crystal Growth, 1991, 107, 390-395.	0.7	29
437	SAXS investigation of model carbon pore structure and its change with gasification. Carbon, 1991, 29, 271-282.	5.4	24
438	MOVPE of AlN and GaN by using novel precursors. Journal of Crystal Growth, 1991, 107, 376-380.	0.7	45
439	Fourier transform infrared studies of polyimide and poly(methylâ€methacrylate) surfaces during downstream microwave plasma etching. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1991, 9, 2948-2962.	0.9	19
440	New Chemical Routes to Metal Nitrides. Materials Research Society Symposia Proceedings, 1990, 180, 1017.	0.1	3
441	Thermocapillary Effects in Laser Direct-Write Metallization. Materials Research Society Symposia Proceedings, 1990, 201, 495.	0.1	0
442	MOCVD of GaN Using Diethylgalliumazide and Ammonia. Materials Research Society Symposia Proceedings, 1990, 204, 101.	0.1	1
443	Analysis of the Physical and Chemical Factors Determining Compositional Variations in the MOCVD Growth of Indium Gallium Arsenide. Materials Research Society Symposia Proceedings, 1990, 204, 207.	0.1	1
444	In-Situ Ftir and Mass Spectrometric Studies of Gallium Arsenide Metalorganic Chemical Vapor Deposition: Trimethyl Gallium and Tertiary-Butyl Arsine on GaAs(100). Materials Research Society Symposia Proceedings, 1990, 204, 53.	0.1	8
445	Trimethylamine Gallane as a Precursor to Cubic Gallium Nitride and Gallium Arsenide. Metal Hydride Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 1990, 204, 83.	0.1	2
446	Investigation of carbon incorporation in znse: Effects on morphology, electrical, and photoluminescence properties. Journal of Electronic Materials, 1990, 19, 453-462.	1.0	19
447	A new reactor system for MOCVD of ZaSe: Modelling and experimental results for growth from dimethylzinc and diethylselenide. Journal of Crystal Growth, 1990, 104, 629-640.	0.7	11
448	Effect of operating conditions and precursors on optoelectronic properties of OMVPE grown ZnSe. Journal of Crystal Growth, 1990, 101, 111-117.	0.7	14
449	Small angle X-ray scattering investigations of pore structure changes during coal gasification. Fuel, 1990, 69, 88-96.	3.4	15
450	Optically induced bifurcations in laser direct-write metallization. Chemical Engineering Science, 1990, 45, 2511-2518.	1.9	1

#	Article	IF	Citations
451	Interpreting scattering from random porous solids: A model of fully penetrable spherical voids. Journal of Colloid and Interface Science, 1990, 135, 132-146.	5.0	8
452	Temperature variations in electrical and photoluminescence properties of ZnSe grown by MOCVD. Journal of Crystal Growth, 1990, 104, 291-296.	0.7	21
453	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.	0.7	109
454	Transport phenomena in vertical reactors for metalorganic vapor phase epitaxy. Journal of Crystal Growth, 1990, 102, 441-470.	0.7	145
455	Thermophoresis of solid particles in horizontal chemical vapor deposition reactors. Journal of Crystal Growth, 1990, 102, 743-761.	0.7	46
456	Microwave plasma generation of arsine from hydrogen and solid arsenic. Applied Physics Letters, 1990, 57, 2543-2545.	1.5	7
457	Combined Experimental and Modeling Study of Spatial Effects in Plasma Etching: â€‰CFâ€‰4â€‰/â€‰â€‰Oâ€‰2 Etching of Silicon. Journal of the Electrochemical Society, 1990, 137, 1062-1078.	1.3	17
458	The importance of free radical recombination reactions in CF4/O2 plasma etching of silicon. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1990, 8, 1648-1653.	0.9	14
459	Application of Specific Deuterium Labeling and Nuclear Magnetic Resonance Spectroscopy to the Study of the Mechanism of Pyrolysis of tert- Butylarsine and tert-Butylarsine-d2. Chemistry of Materials, 1990, 2, 499-505.	3.2	16
460	Cyclotrigallazane, [H2GaNH2]3. Its preparation, structure, and conversion to cubic gallium nitride at 150.degree.C. Chemistry of Materials, 1990, 2, 342-343.	3.2	56
461	Kinetic model for metal-organic chemical vapor deposition of gallium arsenide with organometallic-arsenic precursors. Chemistry of Materials, 1990, 2, 39-49.	3.2	13
462	Carbon incorporation in ZnSe grown by metalorganic chemical vapor deposition. Applied Physics Letters, 1989, 55, 463-465.	1.5	22
463	High quality epitaxial ZnSe and the relationship between electron mobility and photoluminescence characteristics. Applied Physics Letters, 1989, 54, 353-355.	1.5	48
464	Microelectronics Processing. Advances in Chemistry Series, 1989, , 1-33.	0.6	2
465	Multiplicities and periodic behavior in laser direct-write metallization. Chemical Engineering Science, 1989, 44, 1879-1891.	1.9	7
466	Gas diffusion in random-fiber substrates. AICHE Journal, 1989, 35, 1942-1952.	1.8	23
467	Models for catalytic pore plugging: application to hydrodemetallation. Chemical Engineering Science, 1989, 44, 649-663.	1.9	37
468	Application of percolation theory concepts to the analysis of gas-solid reactions. Solid State Ionics, 1989, 32-33, 833-842.	1.3	4

#	Article	IF	Citations
469	Transport phenomena and chemical reaction issues in OMVPE of compound semiconductors. Journal of Crystal Growth, 1989, 98, 148-166.	0.7	59
470	Trimethylamine complexes of alane as precursors for the low-pressure chemical vapor deposition of aluminum. Chemistry of Materials, 1989, 1, 339-343.	3.2	143
471	Chemical Vapor Deposition. Advances in Chemistry Series, 1989, , 199-263.	0.6	38
472	MOCVD of Wide Bandgap III-V Semiconductors by using Novel Precursors. Materials Research Society Symposia Proceedings, 1989, 162, 605.	0.1	4
473	Models and Mechanisms of III-V Compound Semiconductor Growth by Movpe. Materials Research Society Symposia Proceedings, 1989, 145, 107.	0.1	12
474	Ftir and Xps Studies of Polyimide/Metal Interface Formation. Materials Research Society Symposia Proceedings, 1989, 153, 285.	0.1	4
475	FTIR and XPS Studies of Polyimide/Metal Interface Formation. Materials Research Society Symposia Proceedings, 1989, 154, 329.	0.1	0
476	Ftir Investigations of Plasma Modified Polymer Surfaces and Their Interfaces with Plasma Deposited Tungsten. Materials Research Society Symposia Proceedings, 1989, 165, 239.	0.1	0
477	A Model for Chemical Vapor Infiltration of Fibrous Substrates. Materials Research Society Symposia Proceedings, 1989, 168, 67.	0.1	3
478	Estimation of the molecular weight distribution in batch polymerization. AICHE Journal, 1988, 34, 1341-1353.	1.8	96
479	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.	0.7	89
480	CARS in situ diagnostics in MOVPE: The thermal decomposition of AsH3 and PH3. Journal of Crystal Growth, 1988, 93, 151-158.	0.7	54
481	Comments on chemical vapor deposition of silicon under reduced pressure in hot-wall reactors. Chemical Engineering Science, 1988, 43, 983.	1.9	0
482	Application of percolation theory concepts to the analysis of gas-solid reactions. Solid State Ionics, 1988, 26, 172.	1.3	0
483	Gas phase and surface reactions in the MOCVD of GaAs from triethylgallium, trimethylgallium, and tertiarybutylarsine. Journal of Crystal Growth, 1988, 93, 20-28.	0.7	32
484	Gas phase and surface reactions in Si doping of GaAs by silanes. Journal of Crystal Growth, 1988, 93, 594-601.	0.7	41
485	ThreeâEDimensional Flow Effects in Silicon CVD in Horizontal Reactors. Journal of the Electrochemical Society, 1988, 135, 459-471.	1.3	152
486	Limitations to the omvpe growth of Hg compounds due to hydrodynamic effects. Materials Letters, 1988, 6, 123-128.	1.3	17

#	Article	IF	Citations
487	Modeling of pyrolytic laserâ€assisted chemical vapor deposition: Mass transfer and kinetic effects influencing the shape of the deposit. Journal of Applied Physics, 1988, 63, 198-206.	1.1	57
488	Modelling of Pyrolytic Laser Direct-Writing from Thin Metalorganic Films. Materials Research Society Symposia Proceedings, 1988, 129, 107.	0.1	1
489	Gas Phase and Surface Reactions in Mocvd of GaAs from Triethylgallium, Trimethylgallium, and Organometallic Arsenic Precursors. Materials Research Society Symposia Proceedings, 1988, 131, 103.	0.1	1
490	A Kinetic Model for Metalorganic Chemical Vapor Deposition of GaAs from Trimethylgallium and Arsine. Materials Research Society Symposia Proceedings, 1988, 131, 117.	0.1	6
491	New Precursors for the Organometallic Chemical Vapor Deposition of Aluminum Nitride. Materials Research Society Symposia Proceedings, 1988, 131, 447.	0.1	19
492	Effects of the Selenium Precursor on the Growth of ZnSe by Metalorganic Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 1988, 131, 63.	0.1	1
493	Rice-Ramsperger-Kassel-Marcus theoretical prediction of high-pressure Arrhenius parameters by nonlinear regression: application to silane and disilane decomposition [Erratum to document cited in CA107(20):184462J]. The Journal of Physical Chemistry, 1988, 92, 4254-4254.	2.9	6
494	Rice-Ramsperger-Kassel-Marcus theoretical prediction of high-pressure Arrhenius parameters by nonlinear regression: application to silane and disilane decomposition. The Journal of Physical Chemistry, 1987, 91, 5732-5739.	2.9	60
495	Low Pressure CVD of Silicon Nitride. Journal of the Electrochemical Society, 1987, 134, 1777-1785.	1.3	89
496	Growth of Compound Semiconductors and Superlattices by Organometallic Chemical Vapor Deposition. ACS Symposium Series, 1987, , 353-375.	0.5	4
497	Rice-Ramsperger-Kassel-Marcus theoretical prediction of high-pressure Arrhenius parameters by nonlinear regression. The Journal of Physical Chemistry, 1987, 91, 5726-5732.	2.9	5
498	Micro-reaction engineering applications of reaction engineering to processing of electronic and photonic materials. Chemical Engineering Science, 1987, 42, 923-958.	1.9	80
499	Complex flow phenomena in vertical MOCVD reactors: Effects on deposition uniformity and interface abruptness. Journal of Crystal Growth, 1987, 85, 154-164.	0.7	112
500	In situ mass spectroscopy and thermogravimetric studies of GaAs MOCVD gas phase and surface reactions. Journal of Crystal Growth, 1987, 85, 165-174.	0.7	141
501	Percolation concepts in modelling of gas-solid reactions-III. Application to sulphation of calcined limestone. Chemical Engineering Science, 1987, 42, 565-574.	1.9	36
502	A Continuum Model of DC and RF Discharges. IEEE Transactions on Plasma Science, 1986, 14, 78-91.	0.6	333
503	Theoretical and Computational Problems in Modeling Glow Discharges. Materials Research Society Symposia Proceedings, 1986, 68, 219.	0.1	4
504	Bifurcation phenomena in CSTR dynamics: A system with extraneous thermal capacitance. Chemical Engineering Science, 1986, 41, 1497-1523.	1.9	58

#	Article	IF	Citations
505	Percolation concepts in modelling of gas-solid reactionsâ€”I. Application to char gasification in the kinetic regime. Chemical Engineering Science, 1986, 41, 333-343.	1.9	99
506	Percolation concepts in modelling of gas-solid reactionsâ€”II. Application to char gasification in the diffusion regime. Chemical Engineering Science, 1986, 41, 345-354.	1.9	65
507	Modelling of reactors for plasma processing I. Silicon etching by CF4 in a radial flow reactor. Chemical Engineering Science, 1986, 41, 653-660.	1.9	16
508	MOCVD in inverted stagnation point flow. Journal of Crystal Growth, 1986, 77, 120-127.	0.7	35
509	Complex flow phenomena in MOCVD reactors. Journal of Crystal Growth, 1986, 77, 108-119.	0.7	192
510	CVD in Stagnation Point Flow: An Evaluation of the Classical 1D Treatment. Journal of the Electrochemical Society, 1986, 133, 961-970.	1.3	128
511	On-Line Estimation of Molecular Weight Distributions in Methyl Methacrylate Polymerization. , 1986, , .		2
512	Estimation of effective transport coefficients in porous solids based on percolation concepts. Chemical Engineering Science, 1985, 40, 1723-1734.	1.9	114
513	Evaluation of changeover control policies by singular value analysisâ€”Effects of scaling. AIChE Journal, 1985, 31, 135-146.	1.8	15
514	Synthesis of control structures by singular value analysis: Dynamic measures of sensitivity and interaction. AIChE Journal, 1985, 31, 427-439.	1.8	97
515	Analysis of Multicomponent LPCVD Processes: Deposition of Pure and In Situ Doped Polyâ€Si. Journal of the Electrochemical Society, 1985, 132, 448-454.	1.3	69
516	Modeling of catalytic char gasification. Industrial & Engineering Chemistry Fundamentals, 1984, 23, 223-229.	0.7	8
517	Modeling of Chemical Vapor Deposition Reactors for the Fabrication of Microelectronic Devices. ACS Symposium Series, 1984, , 197-213.	0.5	3
518	The bifurcation behavior of tubular reactors. Chemical Engineering Science, 1982, 37, 199-222.	1.9	159
519	A microscopic model for catalyst surfacesâ€”II. Chemical Engineering Science, 1982, 37, 1387-1410.	1.9	23
520	A new view of ignition, extinction, and oscillations on supported catalyst surfaces. Chemical Engineering Science, 1980, 35, 241-248.	1.9	23
521	A microscopic model for catalytic surfacesâ€”I. Catalytic wires and gauzes. Chemical Engineering Science, 1980, 35, 2439-2457.	1.9	39
522	Sulfur dioxide oxidation on supported molten V2O5$z.sbnd;K2S2O7 catalyst Influence of liquid diffusion resistance. Journal of Catalysis, 1976, 45, 216-230.	3.1	28

#	Article	IF	Citations
523	Formation of electric triple layers by interdiffusion of two electrolytes. Journal of the Chemical Society, Faraday Transactions 2, 1975, 71, 1805-1811.	1.1	12
524	Integrated Microreactor System for Gas Phase Reactions. , 0, , 363-406.		2