Marco Mazzotti

List of Publications by Year in descending order

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199 papers	11,002 citations	24978 57 h-index	35952 97 g-index
206 all docs	206 docs citations	206 times ranked	6737 citing authors

#	Article	IF	Citations
1	Heat transfer intensification with packed open-cell foams in TSA processes for CO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1096" altimg="si43.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> capture. Chemical Engineering Journal, 2022, 430, 131000.	6.6	7
2	Stochastic shelf-scale modeling framework for the freezing stage in freeze-drying processes. International Journal of Pharmaceutics, 2022, 613, 121276.	2.6	10
3	Secondary Nucleation by Interparticle Energies. I. Thermodynamics. Crystal Growth and Design, 2022, 22, 87-97.	1.4	13
4	Secondary Nucleation by Interparticle Energies. II. Kinetics. Crystal Growth and Design, 2022, 22, 74-86.	1.4	10
5	Crystallization-Induced Deracemization: Experiments and Modeling. Crystal Growth and Design, 2022, 22, 1427-1436.	1.4	3
6	Perspective on the hydrogen economy as a pathway to reach net-zero CO₂emissions in Europe. Energy and Environmental Science, 2022, 15, 1034-1077.	15.6	132
7	Techno-economic assessment of post-combustion CO2 capture using aqueous piperazine at different flue gas compositions and flowrates via a general optimization methodology. International Journal of Greenhouse Gas Control, 2022, 114, 103587.	2.3	14
8	Potential for hydrogen production from sustainable biomass with carbon capture and storage. Renewable and Sustainable Energy Reviews, 2022, 157, 112123.	8.2	64
9	Solid-State Deracemization via Temperature Cycles in Continuous Operation: Model-Based Process Design. Crystal Growth and Design, 2022, 22, 1846-1856.	1.4	5
10	A two-step carbon pricing scheme enabling a net-zero and net-negative CO$$_2$$-emissions world. Climatic Change, 2022, 171, 1.	1.7	1
11	Comparative assessment and possible applications of three models of Taylor slug flows. Computers and Chemical Engineering, 2022, 161, 107773.	2.0	1
12	On the model-based design and comparison of crystallization-based deracemization techniques. Chemical Engineering Science, 2022, 254, 117595.	1.9	6
13	Accounting for the Presence of Molecular Clusters in Modeling and Interpreting Nucleation and Growth. Crystal Growth and Design, 2022, 22, 661-672.	1.4	6
14	Carbon dioxide capture, transport and storage supply chains: Optimal economic and environmental performance of infrastructure rollout. International Journal of Greenhouse Gas Control, 2022, 117, 103635.	2.3	37
15	Secondary Nucleation by Interparticle Energies. III. Nucleation Rate Model. Crystal Growth and Design, 2022, 22, 3625-3636.	1.4	5
16	Characterization of a small-scale crystallizer using CFD simulations and X-ray CT measurements. Chemical Engineering Science, 2022, 256, 117697.	1.9	5
17	Carbon dioxide mineralization in recycled concrete aggregates can contribute immediately to carbon-neutrality. Resources, Conservation and Recycling, 2022, 184, 106436.	5.3	33
18	Solubility of Organic Salts in Solventâ€“Antisolvent Mixtures: A Combined Experimental and Molecular Dynamics Simulations Approach. Journal of Chemical Theory and Computation, 2022, 18, 4952-4959.	2.3	3

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19	Online Monitoring of the Concentrations of Amorphous and Crystalline Mesoscopic Species Present in Solution. Crystal Growth and Design, 2022, 22, 5071-5080.	1.4	4
20	Role of Carbon Capture, Storage, and Utilization to Enable a Net-Zero-CO₂-Emissions Aviation Sector. Industrial & Engineering Chemistry Research, 2021, 60, 6848-6862.	1.8	76
21	Hydrogen from wood gasification with CCS â€“ a techno-environmental analysis of production and use as transport fuel. Sustainable Energy and Fuels, 2021, 5, 2602-2621.	2.5	36
22	Assessment of carbon dioxide removal potential via BECCS in a carbon-neutral Europe. Energy and Environmental Science, 2021, 14, 3086-3097.	15.6	106
23	Fault sealing and caprock integrity for CO₂ storage: an in situ injection experiment. Solid Earth, 2021, 12, 319-343.	1.2	32
24	Adsorption for efficient low carbon hydrogen production: part 1â€”adsorption equilibrium and breakthrough studies for H2/CO2/CH4 on zeolite 13X. Adsorption, 2021, 27, 541-558.	1.4	23
25	Adsorption for efficient low carbon hydrogen production: part 2â€”Cyclic experiments and model predictions. Adsorption, 2021, 27, 559-575.	1.4	11
26	Density and Viscosity of Aqueous (Ammonia + Carbon Dioxide) Solutions at Atmospheric Pressure and Temperatures between 278.15 and 318.15 K. Journal of Chemical & Engineering Data, 2021, 66, 1787-1801.	1.0	1
27	Optimizing the Yield of a Pure Enantiomer by Integrating Chiral SMB Chromatography and Racemization. Part 1: Experiments. Industrial & Engineering Chemistry Research, 2021, 60, 10710-10719.	1.8	6
28	Optimizing the Yield of a Pure Enantiomer by Integrating Chiral SMB Chromatography and Racemization. Part 2: Theory. Industrial & Engineering Chemistry Research, 2021, 60, 10720-10735.	1.8	3
29	Synergistic material and process development: Application of a metal-organic framework, Cu-TDPAT, in single-cycle hydrogen purification and CO2 capture from synthesis gas. Chemical Engineering Journal, 2021, 414, 128778.	6.6	23
30	Postcombustion CO₂ Capture: A Comparative Techno-Economic Assessment of Three Technologies Using a Solvent, an Adsorbent, and a Membrane. ACS Engineering Au, 2021, 1, 50-72.	2.3	70
31	Solubility Prediction of Organic Molecules with Molecular Dynamics Simulations. Crystal Growth and Design, 2021, 21, 5198-5205.	1.4	14
32	Life Cycle Assessment of Direct Air Carbon Capture and Storage with Low-Carbon Energy Sources. Environmental Science & Technology, 2021, 55, 11397-11411.	4.6	99
33	Optimal design of an MDEA <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e947" altimg="si92.svg"><mml:msub><mml:mrow><mml:mi mathvariant="normal">CO</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> capture plant for low-carbon hydrogen production â€” A rigorous process optimization approach. Separation and Purification Technology, 2021, 279, 119715.	3.9	21
34	Model-based design of pressure-driven product removal from stirred suspensions. Chemical Engineering Research and Design, 2021, 174, 57-70.	2.7	6
35	Advanced configurations for post-combustion CO2 capture processes using an aqueous ammonia solution as absorbent. Separation and Purification Technology, 2021, 274, 118959.	3.9	18
36	Life cycle assessment of carbon dioxide removal technologies: a critical review. Energy and Environmental Science, 2021, 14, 1701-1721.	15.6	141

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37	Characterizing Ensembles of Platelike Particles via Machine Learning. Industrial & Engineering Chemistry Research, 2021, 60, 473-483.	1.8	7
38	Selective Dissolution Process Featuring a Classification Device for the Removal of Fines in Crystallization: Experiments. Industrial & Engineering Chemistry Research, 2021, 60, 15752-15765.	1.8	3
39	Technological Demonstration and Life Cycle Assessment of a Negative Emission Value Chain in the Swiss Concrete Sector. Frontiers in Climate, 2021, 3, .	1.3	17
40	A Selective Dissolution Process Featuring a Classification Device for the Removal of Fines in Crystallization. Industrial & Engineering Chemistry Research, 2021, 60, 614-628.	1.8	3
41	Deracemization via Periodic and Non-periodic Temperature Cycles: Rationalization and Experimental Validation of a Simplified Process Design Approach. Organic Process Research and Development, 2021, 25, 2551-2565.	1.3	4
42	On the climate impacts of blue hydrogen production. Sustainable Energy and Fuels, 2021, 6, 66-75.	2.5	126
43	Seasonal energy storage for zero-emissions multi-energy systems via underground hydrogen storage. Renewable and Sustainable Energy Reviews, 2020, 121, 109629.	8.2	137
44	Modeling of Mixingâ€Precipitation Processes: Agglomeration. Chemical Engineering and Technology, 2020, 43, 1029-1039.	0.9	6
45	Population Balance Modeling of Growth and Secondary Nucleation by Attrition and Ripening. Crystal Growth and Design, 2020, 20, 307-319.	1.4	25
46	A methodology for the heuristic optimization of solvent-based CO2 capture processes when applied to new flue gas compositions: A case study of the Chilled Ammonia Process for capture in cement plants. Chemical Engineering Science: X, 2020, 8, 100074.	1.5	3
47	Performance Analysis and Model-Free Design of Deracemization via Temperature Cycles. Organic Process Research and Development, 2020, 24, 1515-1522.	1.3	9
48	Enabling low-carbon hydrogen supply chains through use of biomass and carbon capture and storage: A Swiss case study. Applied Energy, 2020, 275, 115245.	5.1	45
49	Analysis of direct capture of $${hbox {CO}}_{2}$$ from ambient air via steam-assisted temperatureâ€“vacuum swing adsorption. Adsorption, 2020, 26, 1183-1197.	1.4	38
50	Novel Adsorption Process for Co-Production of Hydrogen and CO₂ from a Multicomponent Streamâ€”Part 2: Application to Steam Methane Reforming and Autothermal Reforming Gases. Industrial & Engineering Chemistry Research, 2020, 59, 10093-10109.	1.8	23
51	The Role of Carbon Capture and Utilization, Carbon Capture and Storage, and Biomass to Enable a Net-Zero-CO₂ Emissions Chemical Industry. Industrial & Engineering Chemistry Research, 2020, 59, 7033-7045.	1.8	286
52	Hydrogen production from natural gas and biomethane with carbon capture and storage â€“ A techno-environmental analysis. Sustainable Energy and Fuels, 2020, 4, 2967-2986.	2.5	164
53	Study of Secondary Nucleation by Attrition of Potassium Alum Crystals Suspended in Different Solvents. Crystal Growth and Design, 2020, 20, 2570-2577.	1.4	11
54	Estimation of the Growth and Dissolution Kinetics of Ammonium Bicarbonate in Aqueous Ammonia Solutions from Batch Crystallization Experiments. 2. The Effect of Sulfate Impurity. Crystal Growth and Design, 2020, 20, 948-963.	1.4	1

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55	Solar-Driven Humidificationâ€“Dehumidification Process for Water Desalination Analyzed and Optimized via Equilibrium Theory. Industrial & Engineering Chemistry Research, 2019, 58, 15244-15261.	1.8	6
56	A Stochastic Population Balance Equation Model for Nucleation and Growth of Crystals with Multiple Polymorphs. Crystal Growth and Design, 2019, 19, 4698-4709.	1.4	15
57	Feedback Control for the Size and Shape Evolution of Needle-like Crystals in Suspension. IV. Modeling and Control of Dissolution. Crystal Growth and Design, 2019, 19, 4029-4043.	1.4	12
58	Novel Adsorption Process for Co-Production of Hydrogen and CO₂ from a Multicomponent Stream. Industrial & Engineering Chemistry Research, 2019, 58, 17489-17506.	1.8	25
59	Estimation of the Growth and the Dissolution Kinetics of Ammonium Bicarbonate in Aqueous Ammonia Solutions from Batch Crystallization Experiments. Crystal Growth and Design, 2019, 19, 5907-5922.	1.4	14
60	Effect of Initial Conditions on Solid-State Deracemization via Temperature Cycles: A Model-Based Study. Crystal Growth and Design, 2019, 19, 6552-6559.	1.4	20
61	Statistical Analysis and Nucleation Parameter Estimation from Nucleation Experiments in Flowing Microdroplets. Crystal Growth and Design, 2019, 19, 6159-6174.	1.4	11
62	From needle-like toward equant particles: A controlled crystal shape engineering pathway. Computers and Chemical Engineering, 2019, 131, 106581.	2.0	18
63	110th Anniversary: Evaluation of CO₂-Based and CO₂-Free Synthetic Fuel Systems Using a Net-Zero-CO₂-Emission Framework. Industrial & Engineering Chemistry Research, 2019, 58, 19958-19972.	1.8	23
64	Robust and optimal design of multi-energy systems with seasonal storage through uncertainty analysis. Applied Energy, 2019, 238, 1192-1210.	5.1	100
65	Combined water desalination and electricity generation through a humidification-dehumidification process integrated with photovoltaic-thermal modules: Design, performance analysis and techno-economic assessment. Energy Conversion and Management: X, 2019, 1, 100004.	0.9	14
66	Estimating speciation of aqueous ammonia solutions of ammonium bicarbonate: application of least squares methods to infrared spectra. Reaction Chemistry and Engineering, 2019, 4, 1284-1302.	1.9	31
67	Naphthalene crystal shape prediction from molecular dynamics simulations. CrystEngComm, 2019, 21, 3280-3288.	1.3	19
68	Role of Racemization Kinetics in the Deracemization Process via Temperature Cycles. Crystal Growth and Design, 2019, 19, 3551-3558.	1.4	22
69	Feedback Control for the Size and Shape Evolution of Needle-like Crystals in Suspension. III. Wet Milling. Crystal Growth and Design, 2019, 19, 2845-2861.	1.4	14
70	Comparison of Technologies for CO2 Capture from Cement Productionâ€”Part 1: Technical Evaluation. Energies, 2019, 12, 559.	1.6	137
71	Comparison of Technologies for CO2 Capture from Cement Productionâ€”Part 2: Cost Analysis. Energies, 2019, 12, 542.	1.6	135
72	Correction to Deracemization of NMPA via Temperature Cycles. Crystal Growth and Design, 2019, 19, 7463-7463.	1.4	0

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73	Efficient assessment of combined crystallization, milling, and dissolution cycles for crystal size and shape manipulation. Chemical Engineering Science: X, 2019, 1, 100004.	1.5	14
74	Filterability prediction of needle-like crystals based on particle size and shape distribution data. Separation and Purification Technology, 2019, 211, 768-781.	3.9	30
75	Two-Phase Flow in Liquid Chromatography, Part 1: Experimental Investigation and Theoretical Description. Industrial & Engineering Chemistry Research, 2018, 57, 3274-3291.	1.8	4
76	Two-Phase Flow in Liquid Chromatography, Part 2: Modeling. Industrial & Engineering Chemistry Research, 2018, 57, 3292-3307.	1.8	4
77	Electrochemical conversion technologies for optimal design of decentralized multi-energy systems: Modeling framework and technology assessment. Applied Energy, 2018, 221, 557-575.	5.1	59
78	Description of Adsorption in Liquid Chromatography under Nonideal Conditions. Langmuir, 2018, 34, 5655-5671.	1.6	4
79	Theoretical Evaluation of Two-Phase Flow in a Chromatographic Reactor. Industrial & Engineering Chemistry Research, 2018, 57, 5639-5652.	1.8	0
80	Deracemization of NMPA via Temperature Cycles. Crystal Growth and Design, 2018, 18, 1873-1881.	1.4	50
81	Optimal design of multi-energy systems with seasonal storage. Applied Energy, 2018, 219, 408-424.	5.1	357
82	Modeling of circulating fluidized beds systems for postâ€combustion CO₂ capture via temperature swing adsorption. AICHE Journal, 2018, 64, 1744-1759.	1.8	20
83	Singular shock solutions in nonlinear chromatography. Nonlinear Analysis: Real World Applications, 2018, 41, 66-81.	0.9	1
84	Experimental Characterization and Mathematical Modeling of Breakage of Needle-like Crystals in a Continuous Rotor-Stator Wet Mill. Crystal Growth and Design, 2018, 18, 5957-5972.	1.4	15
85	Population-Based Mathematical Model of Solid-State Deracemization via Temperature Cycles. Crystal Growth and Design, 2018, 18, 7122-7131.	1.4	33
86	Tuning the Particle Sizes in Spherical Agglomeration. Crystal Growth and Design, 2018, 18, 6257-6265.	1.4	32
87	Feedback Control for the Size and Shape Evolution of Needle-like Crystals in Suspension. II. Cooling Crystallization Experiments. Crystal Growth and Design, 2018, 18, 6185-6196.	1.4	16
88	Characterization of shapes and volumes of droplets generated in PDMS T-junctions to study nucleation. Chemical Engineering Research and Design, 2018, 138, 444-457.	2.7	11
89	MO-MCS, a Derivative-Free Algorithm for the Multiobjective Optimization of Adsorption Processes. Industrial & Engineering Chemistry Research, 2018, 57, 9977-9993.	1.8	22
90	Solid state deracemisation of two imine-derivatives of phenylglycine derivatives via high-pressure homogenisation and temperature cycles. CrystEngComm, 2018, 20, 3828-3838.	1.3	15

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91	Correction to â€œTwo-Phase Flow in Liquid Chromatography, Part 1: Experimental Investigation and Theoretical Descriptionâ€• Industrial & Engineering Chemistry Research, 2018, 57, 5195-5195.	1.8	0
92	Feedback Control for the Size and Shape Evolution of Needle-like Crystals in Suspension. I. Concepts and Simulation Studies. Crystal Growth and Design, 2018, 18, 4470-4483.	1.4	19
93	An Alternative Approach to Estimate Solute Concentration: Exploiting the Information Embedded in the Solid Phase. Journal of Physical Chemistry Letters, 2018, 9, 4210-4214.	2.1	14
94	Process Synthesis, Modeling and Optimization of Continuous Cooling Crystallization with Heat Integrationâ€”Application to the Chilled Ammonia CO₂ Capture Process. Industrial & Engineering Chemistry Research, 2018, 57, 11712-11727.	1.8	8
95	Influence of Liquidâ€Liquid Phase Separation on the Crystallization of Lâ€Menthol from Water. Chemical Engineering and Technology, 2017, 40, 1339-1346.	0.9	19
96	Solubility and Growth Kinetics of Ammonium Bicarbonate in Aqueous Solution. Crystal Growth and Design, 2017, 17, 3048-3054.	1.4	17
97	On the optimal design of forward osmosis desalination systems with NH₃â€“CO₂â€“H₂O solutions. Environmental Science: Water Research and Technology, 2017, 3, 811-829.	1.2	7
98	1,3,5-tris(4-bromophenyl)-benzene Nucleation: From Dimers to Needle-like Clusters. Crystal Growth and Design, 2017, 17, 4137-4143.	1.4	9
99	Ripening of Semiconductor Nanoplatelets. Nano Letters, 2017, 17, 6870-6877.	4.5	56
100	Addressing the Criticalities for the Deployment of Adsorption-based CO2 Capture Processes. Energy Procedia, 2017, 114, 2497-2505.	1.8	23
101	Solid Formation in Ammonia-based Processes for CO2 Capture â€“ Turning a Challenge into an Opportunity. Energy Procedia, 2017, 114, 866-872.	1.8	8
102	Statistical Analysis of Series of Detection Time Measurements for the Estimation of Nucleation Rates. Crystal Growth and Design, 2017, 17, 5488-5498.	1.4	28
103	Manipulation of Particle Morphology by Crystallization, Milling, and Heating Cyclesâ€”A Mathematical Modeling Approach. Industrial & Engineering Chemistry Research, 2017, 56, 9188-9201.	1.8	30
104	A comprehensive shape analysis pipeline for stereoscopic measurements of particulate populations in suspension. Powder Technology, 2017, 321, 479-493.	2.1	45
105	Multi-Objective Path Planning for Single Crystal Size and Shape Modification. Crystal Growth and Design, 2017, 17, 4873-4886.	1.4	9
106	On the climate change mitigation potential of CO₂ conversion to fuels. Energy and Environmental Science, 2017, 10, 2491-2499.	15.6	225
107	Stochastic Nucleation of Polymorphs: Experimental Evidence and Mathematical Modeling. Crystal Growth and Design, 2017, 17, 6703-6711.	1.4	16
108	On the optimal design of membrane-based gas separation processes. Journal of Membrane Science, 2017, 526, 118-130.	4.1	54

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109	Rational design of temperature swing adsorption cycles for post-combustion CO 2 capture. Chemical Engineering Science, 2017, 158, 381-394.	1.9	96
110	Stochasticity in Primary Nucleation: Measuring and Modeling Detection Times. Crystal Growth and Design, 2017, 17, 3625-3635.	1.4	28
111	MO-MCS: An Efficient Multi-objective Optimization Algorithm for the Optimization of Temperature/Pressure Swing Adsorption Cycles. Computer Aided Chemical Engineering, 2016, 38, 1467-1472.	0.3	10
112	Overcoming time scale and finite size limitations to compute nucleation rates from small scale well tempered metadynamics simulations. Journal of Chemical Physics, 2016, 145, 211925.	1.2	40
113	On the potential of phase-change adsorbents for CO₂ capture by temperature swing adsorption. Faraday Discussions, 2016, 192, 153-179.	1.6	78
114	A low-energy chilled ammonia process exploiting controlled solid formation for post-combustion CO₂capture. Faraday Discussions, 2016, 192, 59-83.	1.6	30
115	Effect of needleâ€like crystal shape on measured particle size distributions. AICHE Journal, 2016, 62, 2974-2985.	1.8	23
116	Temperature Swing Adsorption for Postcombustion CO₂ Capture: Single- and Multicolumn Experiments and Simulations. Industrial & Engineering Chemistry Research, 2016, 55, 1401-1412.	1.8	62
117	Absence of experimental evidence of a delta-shock in the system phenetole and 4-tert-butylphenol on Zorbax 300SB-C18. Journal of Chromatography A, 2015, 1425, 116-128.	1.8	6
118	Agglomeration of Needle-like Crystals in Suspension: I. Measurements. Crystal Growth and Design, 2015, 15, 1923-1933.	1.4	30
119	Adsorption equilibrium of binary mixtures of carbon dioxide and nitrogen on zeolites ZSM-5 and 13X. Microporous and Mesoporous Materials, 2015, 215, 215-228.	2.2	121
120	An Experimental and Modeling Study of the Adsorption Equilibrium and Dynamics of Water Vapor on Activated Carbon. Industrial & Engineering Chemistry Research, 2015, 54, 12165-12176.	1.8	25
121	Equilibrium Theory Analysis of a Binary Chromatographic System Subject to a Mixed Generalized Bi-Langmuir Isotherm. Industrial & Engineering Chemistry Research, 2015, 54, 11420-11437.	1.8	17
122	Molecular-dynamics simulations of urea nucleation from aqueous solution. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6-14.	3.3	142
123	Modelling the stochastic behaviour of primary nucleation. Faraday Discussions, 2015, 179, 359-382.	1.6	61
124	Formation of solids in ammonia-based CO2 capture processes â€" Identification of criticalities through thermodynamic analysis of the CO2â€"NH3â€"H2O system. Chemical Engineering Science, 2015, 133, 170-180.	1.9	32
125	CO₂ Capture from a Binary CO₂/N₂ and a Ternary CO₂/N₂/H₂ Mixture by PSA: Experiments and Predictions. Industrial & Engineering Chemistry Research, 2015, 54, 6035-6045.	1.8	18
126	Insight into the nucleation of urea crystals from the melt. Chemical Engineering Science, 2015, 121, 51-59.	1.9	70

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127	Modeling the facet growth rate dispersion of Î² l-glutamic acidâ€"Combining single crystal experiments with nD particle size distribution data. Chemical Engineering Science, 2015, 133, 30-43.	1.9	22
128	Urea homogeneous nucleation mechanism is solvent dependent. Faraday Discussions, 2015, 179, 291-307.	1.6	50
129	Modeling and measurement of abraded particles. Powder Technology, 2015, 271, 134-140.	2.1	9
130	Equilibrium theory analysis of liquid chromatography with non-constant velocity. Journal of Chromatography A, 2014, 1373, 131-140.	1.8	7
131	Prediction of non-isothermal ternary gas-phase breakthrough experiments based on binary data. Adsorption, 2014, 20, 493-510.	1.4	9
132	Modeling water vapor adsorption/desorption cycles. Adsorption, 2014, 20, 359-371.	1.4	22
133	Crystallization Process Design Using Thermodynamics To Avoid Oiling Out in a Mixture of Vanillin and Water. Crystal Growth and Design, 2014, 14, 5617-5625.	1.4	26
134	Growth Rate Estimation of Î² <scp>l</scp>-Glutamic Acid from Online Measurements of Multidimensional Particle Size Distributions and Concentration. Industrial & Engineering Chemistry Research, 2014, 53, 9136-9148.	1.8	52
135	Three-column intermittent simulated moving bed chromatography: 2. Experimental implementation for the separation of TrÃ¶ger's Base. Journal of Chromatography A, 2014, 1364, 107-116.	1.8	12
136	Three column intermittent simulated moving bed chromatography: 1. Process description and comparative assessment. Journal of Chromatography A, 2014, 1361, 125-138.	1.8	15
137	On the Effect of Initial Conditions in Viedma Ripening. Crystal Growth and Design, 2014, 14, 2488-2493.	1.4	25
138	Complete solid state deracemization by High Pressure Homogenization. Chemical Engineering Science, 2014, 111, 106-111.	1.9	39
139	High accuracy online measurement of multidimensional particle size distributions during crystallization. Chemical Engineering Science, 2014, 105, 155-168.	1.9	80
140	Precombustion CO₂ Capture by Pressure Swing Adsorption (PSA): Comparison of Laboratory PSA Experiments and Simulations. Industrial & Engineering Chemistry Research, 2013, 52, 8311-8322.	1.8	54
141	A parametric study of a PSA process for pre-combustion CO2 capture. Separation and Purification Technology, 2013, 104, 183-192.	3.9	102
142	Modeling Nucleation, Growth, and Ostwald Ripening in Crystallization Processes: A Comparison between Population Balance and Kinetic Rate Equation. Crystal Growth and Design, 2013, 13, 4890-4905.	1.4	117
143	Controlling and Predicting Crystal Shapes: The Case of Urea. Angewandte Chemie - International Edition, 2013, 52, 13369-13372.	7.2	89
144	Direct air capture of CO2 with chemicals: optimization of a two-loop hydroxide carbonate system using a countercurrent air-liquid contactor. Climatic Change, 2013, 118, 119-135.	1.7	90

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145	Equilibrium Theoryâ€“Based Analysis of Nonlinear Waves in Separation Processes. Annual Review of Chemical and Biomolecular Engineering, 2013, 4, 119-141.	3.3	53
146	MOF and UiO-67/MCM-41 adsorbents for pre-combustion CO2 capture by PSA: Breakthrough experiments and process design. Separation and Purification Technology, 2013, 112, 34-48.	3.9	65
147	Uncovering Molecular Details of Urea Crystal Growth in the Presence of Additives. Journal of the American Chemical Society, 2012, 134, 17221-17233.	6.6	182
148	Population Balance Modeling with Size-Dependent Solubility: Ostwald Ripening. Crystal Growth and Design, 2012, 12, 1489-1500.	1.4	71
149	Fixed bed adsorption of CO2/H2 mixtures on activated carbon: experiments and modeling. Adsorption, 2012, 18, 143-161.	1.4	115
150	Measuring multidimensional particle size distributions during crystallization. Chemical Engineering Science, 2012, 77, 130-142.	1.9	68
151	MCM-41, MOF and UiO-67/MCM-41 adsorbents for pre-combustion CO2 capture by PSA: adsorption equilibria. Adsorption, 2012, 18, 213-227.	1.4	41
152	Pure and binary adsorption of CO2, H2, and N2 on activated carbon. Adsorption, 2012, 18, 49-65.	1.4	91
153	Slowing the Growth Rate of Ibuprofen Crystals Using the Polymeric Additive Pluronic F127. Crystal Growth and Design, 2011, 11, 3813-3821.	1.4	52
154	A Population Balance Model for Chiral Resolution via Viedma Ripening. Crystal Growth and Design, 2011, 11, 4611-4622.	1.4	96
155	Intermittent simulated moving bed chromatography: 3. Separation of TrÃ¶ger's base enantiomers under nonlinear conditions. Journal of Chromatography A, 2011, 1218, 9345-9352.	1.8	16
156	Continuous precipitation of <scp>L</scp>â€asparagine monohydrate in a micromixer: Estimation of nucleation and growth kinetics. AICHE Journal, 2011, 57, 942-950.	1.8	40
157	Intermittent simulated moving bed chromatography: 1. Design criteria and cyclic steady-state. Journal of Chromatography A, 2010, 1217, 1354-1361.	1.8	65
158	Intermittent simulated moving bed chromatography: 2. Separation of TrÃ¶gerâ€™s base enantiomers. Journal of Chromatography A, 2010, 1217, 3067-3075.	1.8	36
159	Measurement of 3D particle size distributions by stereoscopic imaging. Chemical Engineering Science, 2010, 65, 1362-1373.	1.9	60
160	Precipitation and Transformation of the Three Polymorphs of <scp>d</scp>-Mannitol. Industrial & Engineering Chemistry Research, 2010, 49, 5854-5862.	1.8	56
161	Effect of temperature on the nucleation kinetics of Î± l-glutamic acid. Journal of Crystal Growth, 2009, 311, 1178-1184.	0.7	75
162	Simulated moving bed chromatography for the separation of enantiomers. Journal of Chromatography A, 2009, 1216, 709-738.	1.8	335

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163	Extra-column dead volume in simulated moving bed separations: Theory and experiments. Journal of Chromatography A, 2009, 1216, 1084-1093.	1.8	36
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