

Elena Cândida Dos Santos

List of Publications by Year in Descending Order

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

173
papers

4,361
citations

39
h-index

58
g-index

185
ext. papers

5,457
ext. citations

4.7
avg, IF

6.39
L-index

#	Paper	IF	Citations
173	Techno-economic assessment of post-combustion CO ₂ capture using aqueous piperazine at different flue gas compositions and flowrates via a general optimization methodology. <i>International Journal of Greenhouse Gas Control</i> , 2022 , 114, 103587	4.2	1
172	Solid-State Deracemization via Temperature Cycles in Continuous Operation: Model-Based Process Design.. <i>Crystal Growth and Design</i> , 2022 , 22, 1846-1856	3.5	2
171	Secondary Nucleation by Interparticle Energies. II. Kinetics.. <i>Crystal Growth and Design</i> , 2022 , 22, 74-86	3.5	4
170	Crystallization-Induced Deracemization: Experiments and Modeling.. <i>Crystal Growth and Design</i> , 2022 , 22, 1427-1436	3.5	1
169	A two-step carbon pricing scheme enabling a net-zero and net-negative CO ₂ -emissions world. <i>Climatic Change</i> , 2022 , 171, 1	4.5	
168	Accounting for the Presence of Molecular Clusters in Modeling and Interpreting Nucleation and Growth.. <i>Crystal Growth and Design</i> , 2022 , 22, 661-672	3.5	1
167	Carbon dioxide capture, transport and storage supply chains: Optimal economic and environmental performance of infrastructure rollout. <i>International Journal of Greenhouse Gas Control</i> , 2022 , 117, 103633	4.2	0
166	Deracemization via Periodic and Non-periodic Temperature Cycles: Rationalization and Experimental Validation of a Simplified Process Design Approach. <i>Organic Process Research and Development</i> , 2021 , 25, 2551-2565	3.9	2
165	A Stochastic Shelf-Scale Modeling Framework for the Freezing Stage in Freeze-Drying Processes. <i>International Journal of Pharmaceutics</i> , 2021 , 121276	6.5	2
164	A Selective Dissolution Process Featuring a Classification Device for the Removal of Fines in Crystallization. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 614-628	3.9	1
163	Characterizing Ensembles of Platelike Particles via Machine Learning. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 473-483	3.9	3
162	Adsorption for efficient low carbon hydrogen production: part 1 Adsorption equilibrium and breakthrough studies for H ₂ /CO ₂ /CH ₄ on zeolite 13X. <i>Adsorption</i> , 2021 , 27, 541-558	2.6	9
161	Adsorption for efficient low carbon hydrogen production: part 2 Cyclic experiments and model predictions. <i>Adsorption</i> , 2021 , 27, 559-575	2.6	4
160	Density and Viscosity of Aqueous (Ammonia + Carbon Dioxide) Solutions at Atmospheric Pressure and Temperatures between 278.15 and 318.15 K. <i>Journal of Chemical & Engineering Data</i> , 2021 , 66, 1787-1801	2.8	1
159	Optimizing the Yield of a Pure Enantiomer by Integrating Chiral SMB Chromatography and Racemization. Part 1: Experiments. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 10710-10719	3.9	3
158	Optimizing the Yield of a Pure Enantiomer by Integrating Chiral SMB Chromatography and Racemization. Part 2: Theory. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 10720-10735	3.9	2
157	Solubility Prediction of Organic Molecules with Molecular Dynamics Simulations. <i>Crystal Growth and Design</i> , 2021 , 21, 5198-5205	3.5	4

156	Rigorous rate-based model for CO ₂ capture via monoethanolamine-based solutions: effect of kinetic models, mass transfer, and holdup correlations on prediction accuracy. <i>Separation Science and Technology</i> , 2021 , 56, 1491-1509	2.5	3
155	Role of Carbon Capture, Storage, and Utilization to Enable a Net-Zero-CO ₂ -Emissions Aviation Sector. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 6848-6862	3.9	21
154	Hydrogen from wood gasification with CCS [a] techno-environmental analysis of production and use as transport fuel. <i>Sustainable Energy and Fuels</i> , 2021 , 5, 2602-2621	5.8	10
153	Fully amorphous atactic and isotactic block copolymers and their self-assembly into nano- and microscopic vesicles. <i>Polymer Chemistry</i> , 2021 , 12, 5377-5389	4.9	2
152	Assessment of carbon dioxide removal potential via BECCS in a carbon-neutral Europe. <i>Energy and Environmental Science</i> , 2021 , 14, 3086-3097	35.4	19
151	Life Cycle Assessment of Direct Air Carbon Capture and Storage with Low-Carbon Energy Sources. <i>Environmental Science & Technology</i> , 2021 ,	10.3	14
150	Advanced configurations for post-combustion CO ₂ capture processes using an aqueous ammonia solution as absorbent. <i>Separation and Purification Technology</i> , 2021 , 274, 118959	8.3	5
149	Life cycle assessment of carbon dioxide removal technologies: a critical review. <i>Energy and Environmental Science</i> , 2021 , 14, 1701-1721	35.4	38
148	Novel Adsorption Process for Co-Production of Hydrogen and CO ₂ from a Multicomponent Stream Part 2: Application to Steam Methane Reforming and Autothermal Reforming Gases. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 10093-10109	3.9	9
147	Giant Polymer Compartments for Confined Reactions. <i>Chemistry</i> , 2020 , 2, 470-489	2.1	1
146	The Role of Carbon Capture and Utilization, Carbon Capture and Storage, and Biomass to Enable a Net-Zero-CO ₂ Emissions Chemical Industry. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 7033-7045	3.9	104
145	Hydrogen production from natural gas and biomethane with carbon capture and storage [A] techno-environmental analysis. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 2967-2986	5.8	56
144	Study of Secondary Nucleation by Attrition of Potassium Alum Crystals Suspended in Different Solvents. <i>Crystal Growth and Design</i> , 2020 , 20, 2570-2577	3.5	7
143	Estimation of the Growth and Dissolution Kinetics of Ammonium Bicarbonate in Aqueous Ammonia Solutions from Batch Crystallization Experiments. 2. The Effect of Sulfate Impurity [a] <i>Crystal Growth and Design</i> , 2020 , 20, 948-963	3.5	1
142	Seasonal energy storage for zero-emissions multi-energy systems via underground hydrogen storage. <i>Renewable and Sustainable Energy Reviews</i> , 2020 , 121, 109629	16.2	58
141	Population Balance Modeling of Growth and Secondary Nucleation by Attrition and Ripening. <i>Crystal Growth and Design</i> , 2020 , 20, 307-319	3.5	10
140	A methodology for the heuristic optimization of solvent-based CO ₂ capture processes when applied to new flue gas compositions: A case study of the Chilled Ammonia Process for capture in cement plants. <i>Chemical Engineering Science: X</i> , 2020 , 8, 100074	1.1	3
139	Performance Analysis and Model-Free Design of Deracemization via Temperature Cycles. <i>Organic Process Research and Development</i> , 2020 , 24, 1515-1522	3.9	7

138	Enabling low-carbon hydrogen supply chains through use of biomass and carbon capture and storage: A Swiss case study. <i>Applied Energy</i> , 2020 , 275, 115245	10.7	18
137	Optimization of low-carbon multi-energy systems with seasonal geothermal energy storage: The Energy Grid of ETH Zurich. <i>Energy Conversion and Management: X</i> , 2020 , 8, 100052	2.5	4
136	Combinatorial Strategy for Studying Biochemical Pathways in Double Emulsion Templated Cell-Sized Compartments. <i>Advanced Materials</i> , 2020 , 32, e2004804	24	11
135	Analysis of direct capture of (CO_2) from ambient air via steam-assisted temperature vacuum swing adsorption. <i>Adsorption</i> , 2020 , 26, 1183-1197	2.6	10
134	Novel Adsorption Process for Co-Production of Hydrogen and CO ₂ from a Multicomponent Stream. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 17489-17506	3.9	17
133	Estimation of the Growth and the Dissolution Kinetics of Ammonium Bicarbonate in Aqueous Ammonia Solutions from Batch Crystallization Experiments. <i>Crystal Growth and Design</i> , 2019 , 19, 5907-5922	3.5	8
132	Effect of Initial Conditions on Solid-State Deracemization via Temperature Cycles: A Model-Based Study. <i>Crystal Growth and Design</i> , 2019 , 19, 6552-6559	3.5	11
131	Statistical Analysis and Nucleation Parameter Estimation from Nucleation Experiments in Flowing Microdroplets. <i>Crystal Growth and Design</i> , 2019 , 19, 6159-6174	3.5	4
130	110th Anniversary: Evaluation of CO ₂ -Based and CO ₂ -Free Synthetic Fuel Systems Using a Net-Zero-CO ₂ -Emission Framework. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 19958-19972	3.9	10
129	Robust and optimal design of multi-energy systems with seasonal storage through uncertainty analysis. <i>Applied Energy</i> , 2019 , 238, 1192-1210	10.7	61
128	Estimating speciation of aqueous ammonia solutions of ammonium bicarbonate: application of least squares methods to infrared spectra. <i>Reaction Chemistry and Engineering</i> , 2019 , 4, 1284-1302	4.9	19
127	Naphthalene crystal shape prediction from molecular dynamics simulations. <i>CrystEngComm</i> , 2019 , 21, 3280-3288	3.3	9
126	Feedback Control for the Size and Shape Evolution of Needle-like Crystals in Suspension. III. Wet Milling. <i>Crystal Growth and Design</i> , 2019 , 19, 2845-2861	3.5	11
125	Comparison of Technologies for CO ₂ Capture from Cement Production Part 1: Technical Evaluation. <i>Energies</i> , 2019 , 12, 559	3.1	56
124	A Stochastic Population Balance Equation Model for Nucleation and Growth of Crystals with Multiple Polymorphs. <i>Crystal Growth and Design</i> , 2019 , 19, 4698-4709	3.5	8
123	Feedback Control for the Size and Shape Evolution of Needle-like Crystals in Suspension. IV. Modeling and Control of Dissolution. <i>Crystal Growth and Design</i> , 2019 , 19, 4029-4043	3.5	9
122	Comparison of Technologies for CO ₂ Capture from Cement Production Part 2: Cost Analysis. <i>Energies</i> , 2019 , 12, 542	3.1	67
121	Two-Phase Flow in Liquid Chromatography, Part 1: Experimental Investigation and Theoretical Description. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 3274-3291	3.9	3

120	Two-Phase Flow in Liquid Chromatography, Part 2: Modeling. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 3292-3307	3.9	4
119	Electrochemical conversion technologies for optimal design of decentralized multi-energy systems: Modeling framework and technology assessment. <i>Applied Energy</i> , 2018 , 221, 557-575	10.7	29
118	Description of Adsorption in Liquid Chromatography under Nonideal Conditions. <i>Langmuir</i> , 2018 , 34, 5655-5671	4	4
117	Theoretical Evaluation of Two-Phase Flow in a Chromatographic Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 5639-5652	3.9	
116	Optimal design of multi-energy systems with seasonal storage. <i>Applied Energy</i> , 2018 , 219, 408-424	10.7	198
115	A Time-series-based approach for robust design of multi-energy systems with energy storage. <i>Computer Aided Chemical Engineering</i> , 2018 , 43, 525-530	0.6	2
114	An Alternative Approach to Estimate Solute Concentration: Exploiting the Information Embedded in the Solid Phase. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 4210-4214	6.4	9
113	Characterization of a vibromixer: Experimental and modelling study of mixing in a batch reactor. <i>Chemical Engineering Research and Design</i> , 2018 , 137, 534-543	5.5	2
112	Process Synthesis, Modeling and Optimization of Continuous Cooling Crystallization with Heat Integration Application to the Chilled Ammonia CO2 Capture Process. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 11712-11727	3.9	7
111	Modeling of circulating fluidized beds systems for post-combustion CO2 capture via temperature swing adsorption. <i>AIChE Journal</i> , 2018 , 64, 1744-1759	3.6	16
110	Crystallization Process Modeling 2018 , 285-304		0
109	Nucleation 2018 , 261-283		1
108	Experimental Characterization and Mathematical Modeling of Breakage of Needle-like Crystals in a Continuous Rotor-Stator Wet Mill. <i>Crystal Growth and Design</i> , 2018 , 18, 5957-5972	3.5	12
107	Population-Based Mathematical Model of Solid-State Deracemization via Temperature Cycles. <i>Crystal Growth and Design</i> , 2018 , 18, 7122-7131	3.5	21
106	Postcombustion CO2 Capture from Wet Flue Gas by Temperature Swing Adsorption. <i>Industrial & Engineering Chemistry Research</i> , 2018 ,	3.9	5
105	Manipulation of Particle Morphology by Crystallization, Milling, and Heating Cycles: Experimental Characterization. <i>Industrial & Engineering Chemistry Research</i> , 2018 ,	3.9	9
104	Tuning the Particle Sizes in Spherical Agglomeration. <i>Crystal Growth and Design</i> , 2018 , 18, 6257-6265	3.5	13
103	Feedback Control for the Size and Shape Evolution of Needle-like Crystals in Suspension. II. Cooling Crystallization Experiments. <i>Crystal Growth and Design</i> , 2018 , 18, 6185-6196	3.5	13

102	Characterization of shapes and volumes of droplets generated in PDMS T-junctions to study nucleation. <i>Chemical Engineering Research and Design</i> , 2018 , 138, 444-457	5.5	5
101	MO-MCS, a Derivative-Free Algorithm for the Multiobjective Optimization of Adsorption Processes. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 9977-9993	3.9	15
100	Correction to "Two-Phase Flow in Liquid Chromatography, Part 1: Experimental Investigation and Theoretical Description" <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 5195-5195	3.9	
99	Feedback Control for the Size and Shape Evolution of Needle-like Crystals in Suspension. I. Concepts and Simulation Studies. <i>Crystal Growth and Design</i> , 2018 , 18, 4470-4483	3.5	16
98	Growth Kinetics of Synthetic Hydromagnesite at 90 C. <i>Crystal Growth and Design</i> , 2017 , 17, 317-327	3.5	6
97	Influence of Liquid-Liquid Phase Separation on the Crystallization of L-Menthol from Water. <i>Chemical Engineering and Technology</i> , 2017 , 40, 1339-1346	2	15
96	Solubility and Growth Kinetics of Ammonium Bicarbonate in Aqueous Solution. <i>Crystal Growth and Design</i> , 2017 , 17, 3048-3054	3.5	13
95	On the optimal design of forward osmosis desalination systems with NH ₃ -CO ₂ -H ₂ O solutions. <i>Environmental Science: Water Research and Technology</i> , 2017 , 3, 811-829	4.2	6
94	1,3,5-tris(4-bromophenyl)-benzene Nucleation: From Dimers to Needle-like Clusters. <i>Crystal Growth and Design</i> , 2017 , 17, 4137-4143	3.5	7
93	A MILP model for the design of multi-energy systems with long-term energy storage. <i>Computer Aided Chemical Engineering</i> , 2017 , 40, 2437-2442	0.6	6
92	Interconversion and chromatographic separation of carbohydrate stereoisomers on polystyrene-divinylbenzene resins. <i>Journal of Chromatography A</i> , 2017 , 1517, 54-65	4.5	4
91	Statistical Analysis of Series of Detection Time Measurements for the Estimation of Nucleation Rates. <i>Crystal Growth and Design</i> , 2017 , 17, 5488-5498	3.5	20
90	Multi-Objective Path Planning for Single Crystal Size and Shape Modification. <i>Crystal Growth and Design</i> , 2017 , 17, 4873-4886	3.5	8
89	On the optimal design of membrane-based gas separation processes. <i>Journal of Membrane Science</i> , 2017 , 526, 118-130	9.6	40
88	Rational design of temperature swing adsorption cycles for post-combustion CO ₂ capture. <i>Chemical Engineering Science</i> , 2017 , 158, 381-394	4.4	59
87	Amyloid Templated Gold Aerogels. <i>Advanced Materials</i> , 2016 , 28, 472-8	24	124
86	Effect of needle-like crystal shape on measured particle size distributions. <i>AIChE Journal</i> , 2016 , 62, 2974-2985	3.29	17
85	Temperature Swing Adsorption for Postcombustion CO ₂ Capture: Single- and Multicolumn Experiments and Simulations. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 1401-1412	3.9	48

84	MO-MCS: An Efficient Multi-objective Optimization Algorithm for the Optimization of Temperature/Pressure Swing Adsorption Cycles. <i>Computer Aided Chemical Engineering</i> , 2016 , 38, 1467-1472	3.6	7
83	Overcoming time scale and finite size limitations to compute nucleation rates from small scale well tempered metadynamics simulations. <i>Journal of Chemical Physics</i> , 2016 , 145, 211925	3.9	29
82	On the potential of phase-change adsorbents for CO capture by temperature swing adsorption. <i>Faraday Discussions</i> , 2016 , 192, 153-179	3.6	54
81	A low-energy chilled ammonia process exploiting controlled solid formation for post-combustion CO capture. <i>Faraday Discussions</i> , 2016 , 192, 59-83	3.6	25
80	Modeling for optimal operation of PEM fuel cells and electrolyzers 2016 ,		5
79	Formation of solids in ammonia-based CO ₂ capture processes Identification of criticalities through thermodynamic analysis of the CO ₂ -H ₂ O system. <i>Chemical Engineering Science</i> , 2015 , 133, 170-180	4.4	27
78	CO ₂ Capture from a Binary CO ₂ /N ₂ and a Ternary CO ₂ /N ₂ /H ₂ Mixture by PSA: Experiments and Predictions. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 6035-6045	3.9	13
77	Study of the Preparation of Amorphous Itraconazole Formulations. <i>Crystal Growth and Design</i> , 2015 , 15, 2686-2694	3.5	9
76	Temperature Swing Adsorption for the Recovery of the Heavy Component: An Equilibrium-Based Shortcut Model. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 3027-3038	3.9	40
75	Agglomeration of Needle-like Crystals in Suspension. II. Modeling. <i>Crystal Growth and Design</i> , 2015 , 15, 4296-4310	3.5	23
74	Absence of experimental evidence of a delta-shock in the system phenetole and 4-tert-butylphenol on Zorbax 300SB-C18. <i>Journal of Chromatography A</i> , 2015 , 1425, 116-28	4.5	6
73	Agglomeration of Needle-like Crystals in Suspension: I. Measurements. <i>Crystal Growth and Design</i> , 2015 , 15, 1923-1933	3.5	25
72	An Experimental and Modeling Study of the Adsorption Equilibrium and Dynamics of Water Vapor on Activated Carbon. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 12165-12176	3.9	21
71	Equilibrium Theory Analysis of a Binary Chromatographic System Subject to a Mixed Generalized Bi-Langmuir Isotherm. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 11420-11437	3.9	13
70	Molecular-dynamics simulations of urea nucleation from aqueous solution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, E6-14	11.5	113
69	Three column intermittent simulated moving bed chromatography: 3. Cascade operation for center-cut separations. <i>Journal of Chromatography A</i> , 2015 , 1378, 37-49	4.5	14
68	Prediction of non-isothermal ternary gas-phase breakthrough experiments based on binary data. <i>Adsorption</i> , 2014 , 20, 493-510	2.6	7
67	Modeling water vapor adsorption/desorption cycles. <i>Adsorption</i> , 2014 , 20, 359-371	2.6	19

66	Crystallization Process Design Using Thermodynamics To Avoid Oiling Out in a Mixture of Vanillin and Water. <i>Crystal Growth and Design</i> , 2014 , 14, 5617-5625	3.5	16
65	Growth Rate Estimation of β -Glutamic Acid from Online Measurements of Multidimensional Particle Size Distributions and Concentration. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 9136-9148	3.9	46
64	Three-column intermittent simulated moving bed chromatography: 2. Experimental implementation for the separation of Tröger's Base. <i>Journal of Chromatography A</i> , 2014 , 1364, 107-16	4.5	11
63	Three column intermittent simulated moving bed chromatography: 1. Process description and comparative assessment. <i>Journal of Chromatography A</i> , 2014 , 1361, 125-38	4.5	14
62	On the Effect of Initial Conditions in Viedma Ripening. <i>Crystal Growth and Design</i> , 2014 , 14, 2488-2493	3.5	21
61	Equilibrium theory analysis of liquid chromatography with non-constant velocity. <i>Journal of Chromatography A</i> , 2014 , 1373, 131-40	4.5	6
60	On-line optimizing control of the intermittent simulated moving bed process. <i>Adsorption</i> , 2014 , 20, 109-119		
59	Precombustion CO ₂ Capture by Pressure Swing Adsorption (PSA): Comparison of Laboratory PSA Experiments and Simulations. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 8311-8322	3.9	46
58	Modeling Nucleation, Growth, and Ostwald Ripening in Crystallization Processes: A Comparison between Population Balance and Kinetic Rate Equation. <i>Crystal Growth and Design</i> , 2013 , 13, 4890-4905	3.5	90
57	Solubility of β -carotene in poly-(ϵ -caprolactone) particles produced in colloidal state by Supercritical Fluid Extraction of Emulsions (SFEE). <i>Journal of Supercritical Fluids</i> , 2013 , 84, 105-112	4.2	11
56	Growth Kinetics of S-Mandelic Acid in Aqueous Solutions in the Presence of R-Mandelic Acid. <i>Crystal Growth and Design</i> , 2013 , 13, 652-663	3.5	10
55	Solid state deracemisation through growth, dissolution and solution-phase racemisation. <i>CrystEngComm</i> , 2013 , 15, 2319	3.3	18
54	High Pressure Homogenization as a Novel Approach for the Preparation of Co-Crystals. <i>Crystal Growth and Design</i> , 2013 , 13, 2013-2024	3.5	14
53	Solar-driven steam-based gasification of sugarcane bagasse in a combined drop-tube and fixed-bed reactor \square Thermodynamic, kinetic, and experimental analyses. <i>Biomass and Bioenergy</i> , 2013 , 52, 173-183	5.3	37
52	Equilibrium theory-based analysis of nonlinear waves in separation processes. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2013 , 4, 119-41	8.9	44
51	Pure and binary adsorption of CO ₂ , H ₂ , and N ₂ on activated carbon. <i>Adsorption</i> , 2012 , 18, 49-65	2.6	76
50	Intermittent Simulated Moving Bed Processes for Chromatographic Three-Fraction Separation. <i>Organic Process Research and Development</i> , 2012 , 16, 311-322	3.9	27
49	Phase Diagram of a Chiral Substance Exhibiting Oiling Out. 2. Racemic Compound Forming Ibuprofen in Water. <i>Crystal Growth and Design</i> , 2012 , 12, 5298-5310	3.5	14

48	Population Balance Modeling with Size-Dependent Solubility: Ostwald Ripening. <i>Crystal Growth and Design</i> , 2012 , 12, 1489-1500	3.5	57
47	Fixed bed adsorption of CO ₂ /H ₂ mixtures on activated carbon: experiments and modeling. <i>Adsorption</i> , 2012 , 18, 143-161	2.6	97
46	Modeling the extra-column volume in a small column setup for bulk gas adsorption. <i>Adsorption</i> , 2012 , 18, 381-393	2.6	12
45	MCM-41, MOF and UiO-67/MCM-41 adsorbents for pre-combustion CO ₂ capture by PSA: adsorption equilibria. <i>Adsorption</i> , 2012 , 18, 213-227	2.6	37
44	Design of Crystallization Processes for the Resolution of Conglomerate-Forming Chiral Compounds Exhibiting Oiling Out. <i>Organic Process Research and Development</i> , 2012 , 16, 294-310	3.9	11
43	ATR-FTIR Spectroscopy 2012 , 81-91		1
42	A Population Balance Model for Chiral Resolution via Viedma Ripening. <i>Crystal Growth and Design</i> , 2011 , 11, 4611-4622	3.5	84
41	A model for enhanced coal bed methane recovery aimed at carbon dioxide storage. <i>Adsorption</i> , 2011 , 17, 889-900	2.6	30
40	Continuous precipitation of L-asparagine monohydrate in a micromixer: Estimation of nucleation and growth kinetics. <i>AIChE Journal</i> , 2011 , 57, 942-950	3.6	35
39	Slowing the Growth Rate of Ibuprofen Crystals Using the Polymeric Additive Pluronic F127. <i>Crystal Growth and Design</i> , 2011 , 11, 3813-3821	3.5	45
38	Local Equilibrium Theory for the Binary Chromatography of Species Subject to a Generalized Langmuir Isotherm. 2. Wave Interactions and Chromatographic Cycle. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 352-377	3.9	17
37	Phase Diagram of a Chiral Substance Exhibiting Oiling Out in Cyclohexane. <i>Crystal Growth and Design</i> , 2010 , 10, 4005-4013	3.5	30
36	Precipitation and Transformation of the Three Polymorphs of d-Mannitol. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 5854-5862	3.9	48
35	Prediction of competitive adsorption on coal by a lattice DFT model. <i>Adsorption</i> , 2010 , 16, 37-46	2.6	14
34	Experimental evidence of a delta-shock in nonlinear chromatography. <i>Journal of Chromatography A</i> , 2010 , 1217, 2002-12	4.5	41
33	Near-stoichiometric O ₂ binding on metal centers in Co(salen) nanoparticles. <i>AIChE Journal</i> , 2009 , 55, 1040-1045	3.6	5
32	Estimating Crystal Growth Rates Using in situ ATR-FTIR and Raman Spectroscopy in a Calibration-Free Manner. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 10740-10745	3.9	19
31	Experimental Characterization and Population Balance Modeling of the Polymorph Transformation of l-Glutamic Acid. <i>Crystal Growth and Design</i> , 2009 , 9, 243-252	3.5	74

30	Design and Optimization of a Combined Cooling/Antisolvent Crystallization Process. <i>Crystal Growth and Design</i> , 2009 , 9, 1124-1136	3.5	132
29	Nonclassical Composition Fronts in Nonlinear Chromatography: Delta-Shock. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 7733-7752	3.9	40
28	Quantitative Application of in Situ ATR-FTIR and Raman Spectroscopy in Crystallization Processes. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 4870-4882	3.9	98
27	Experimental characterization and multi-scale modeling of mixing in static mixers. <i>Chemical Engineering Science</i> , 2008 , 63, 4135-4149	4.4	51
26	Multi-rate optimizing control of simulated moving beds 2008 ,		1
25	Near-critical adsorption of CO ₂ on 13X zeolite and N ₂ O on silica gel: lack of evidence of critical phenomena. <i>Adsorption</i> , 2008 , 14, 133-141	2.6	12
24	Optimizing control of simulated moving bed separations of mixtures subject to the generalized Langmuir isotherm. <i>Adsorption</i> , 2008 , 14, 423-432	2.6	10
23	Competitive adsorption equilibria of CO ₂ and CH ₄ on a dry coal. <i>Adsorption</i> , 2008 , 14, 539-556	2.6	172
22	Sorption and swelling of poly(DL-lactic acid) and poly(lactic-co-glycolic acid) in supercritical CO ₂ : An experimental and modeling study. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2008 , 46, 483-496	2.6	56
21	Cycle to cycle optimizing control of simulated moving beds. <i>AIChE Journal</i> , 2008 , 54, 194-208	3.6	43
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