Elena CÃ¢ndida Dos Santos

List of Publications by Year
in descending order

		53751	76872
175 papers	6,757 citations	45 h-index	74 g-index

185 all docs	185 docs citations	185 times ranked	5459 citing authors

#	Article	IF	Citations
1	Stochastic shelf-scale modeling framework for the freezing stage in freeze-drying processes. International Journal of Pharmaceutics, 2022, 613, 121276.	2.6	10
2	Secondary Nucleation by Interparticle Energies. I. Thermodynamics. Crystal Growth and Design, 2022, 22, 87-97.	1.4	13
3	Secondary Nucleation by Interparticle Energies. II. Kinetics. Crystal Growth and Design, 2022, 22, 74-86.	1.4	10
4	Crystallization-Induced Deracemization: Experiments and Modeling. Crystal Growth and Design, 2022, 22, 1427-1436.	1.4	3
5	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
6	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
7	Solid-State Deracemization via Temperature Cycles in Continuous Operation: Model-Based Process Design. Crystal Growth and Design, 2022, 22, 1846-1856.	1.4	5
8	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
9	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
10	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
11	Secondary Nucleation by Interparticle Energies. III. Nucleation Rate Model. Crystal Growth and Design, 2022, 22, 3625-3636.	1.4	5
12	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
13	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
14	Rigorous rate-based model for CO₂ capture via monoethanolamine-based solutions: effect of kinetic models, mass transfer, and holdup correlations on prediction accuracy. Separation Science and Technology, 2021, 56, 1491-1509.	1.3	6
15	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
16	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
17	Fully amorphous atactic and isotactic block copolymers and their self-assembly into nano- and microscopic vesicles. Polymer Chemistry, 2021, 12, 5377-5389.	1.9	5
18	Assessment of carbon dioxide removal potential via BECCS in a carbon-neutral Europe. Energy and Environmental Science, 2021, 14, 3086-3097.	15.6	106

#	Article	IF	Citations
19	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
20	Adsorption for efficient low carbon hydrogen production: part 2â€"Cyclic experiments and model predictions. Adsorption, 2021, 27, 559-575.	1.4	11
21	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
22	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
23	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
24	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
25	Solubility Prediction of Organic Molecules with Molecular Dynamics Simulations. Crystal Growth and Design, 2021, 21, 5198-5205.	1.4	14
26	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
27	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
28	Life cycle assessment of carbon dioxide removal technologies: a critical review. Energy and Environmental Science, 2021, 14, 1701-1721.	15.6	141
29	Characterizing Ensembles of Platelike Particles via Machine Learning. Industrial & Engineering Chemistry Research, 2021, 60, 473-483.	1.8	7
30	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
31	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
32	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
33	Seasonal energy storage for zero-emissions multi-energy systems via underground hydrogen storage. Renewable and Sustainable Energy Reviews, 2020, 121, 109629.	8.2	137
34	Population Balance Modeling of Growth and Secondary Nucleation by Attrition and Ripening. Crystal Growth and Design, 2020, 20, 307-319.	1.4	25
35	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
36	Performance Analysis and Model-Free Design of Deracemization via Temperature Cycles. Organic Process Research and Development, 2020, 24, 1515-1522.	1.3	9

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37	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
38	Optimization of low-carbon multi-energy systems with seasonal geothermal energy storage: The Anergy Grid of ETH Zurich. Energy Conversion and Management: X, 2020, 8, 100052.	0.9	10
39	Combinatorial Strategy for Studying Biochemical Pathways in Double Emulsion Templated Cellâ€sized Compartments. Advanced Materials, 2020, 32, e2004804.	11.1	34
40	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
41	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
42	Giant Polymer Compartments for Confined Reactions. Chemistry, 2020, 2, 470-489.	0.9	6
43	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
44	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
45	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
46	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
47	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
48	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
49	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
50	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
51	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
52	Statistical Analysis and Nucleation Parameter Estimation from Nucleation Experiments in Flowing Microdroplets. Crystal Growth and Design, 2019, 19, 6159-6174.	1.4	11
53	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
54	Robust and optimal design of multi-energy systems with seasonal storage through uncertainty analysis. Applied Energy, 2019, 238, 1192-1210.	5.1	100

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55	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
56	Naphthalene crystal shape prediction from molecular dynamics simulations. CrystEngComm, 2019, 21, 3280-3288.	1.3	19
57	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
58	Comparison of Technologies for CO2 Capture from Cement Productionâ€”Part 1: Technical Evaluation. Energies, 2019, 12, 559.	1.6	137
59	Comparison of Technologies for CO2 Capture from Cement Productionâ€”Part 2: Cost Analysis. Energies, 2019, 12, 542.	1.6	135
60	Two-Phase Flow in Liquid Chromatography, Part 1: Experimental Investigation and Theoretical Description. Industrial & Engineering Chemistry Research, 2018, 57, 3274-3291.	1.8	4
61	Two-Phase Flow in Liquid Chromatography, Part 2: Modeling. Industrial & Engineering Chemistry Research, 2018, 57, 3292-3307.	1.8	4
62	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
63	Description of Adsorption in Liquid Chromatography under Nonideal Conditions. Langmuir, 2018, 34, 5655-5671.	1.6	4
64	Theoretical Evaluation of Two-Phase Flow in a Chromatographic Reactor. Industrial & Engineering Chemistry Research, 2018, 57, 5639-5652.	1.8	0
65	Optimal design of multi-energy systems with seasonal storage. Applied Energy, 2018, 219, 408-424.	5.1	357
66	Modeling of circulating fluidized beds systems for postâ€combustion CO₂ capture via temperature swing adsorption. AICHE Journal, 2018, 64, 1744-1759.	1.8	20
67	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
68	Population-Based Mathematical Model of Solid-State Deracemization via Temperature Cycles. Crystal Growth and Design, 2018, 18, 7122-7131.	1.4	33
69	Tuning the Particle Sizes in Spherical Agglomeration. Crystal Growth and Design, 2018, 18, 6257-6265.	1.4	32
70	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
71	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
72	MO-MCS, a Derivative-Free Algorithm for the Multiobjective Optimization of Adsorption Processes. Industrial & Engineering Chemistry Research, 2018, 57, 9977-9993.	1.8	22

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73	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
74	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
75	A Time-series-based approach for robust design of multi-energy systems with energy storage. Computer Aided Chemical Engineering, 2018, 43, 525-530.	0.3	2
76	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
77	Characterization of a vibromixer: Experimental and modelling study of mixing in a batch reactor. Chemical Engineering Research and Design, 2018, 137, 534-543.	2.7	6
78	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
79	Growth Kinetics of Synthetic Hydromagnesite at 90 Â°C. Crystal Growth and Design, 2017, 17, 317-327.	1.4	9
80	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
81	Solubility and Growth Kinetics of Ammonium Bicarbonate in Aqueous Solution. Crystal Growth and Design, 2017, 17, 3048-3054.	1.4	17
82	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
83	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
84	Interconversion and chromatographic separation of carbohydrate stereoisomers on polystyrene-divinylbenzene resins. Journal of Chromatography A, 2017, 1517, 54-65.	1.8	10
85	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
86	Multi-Objective Path Planning for Single Crystal Size and Shape Modification. Crystal Growth and Design, 2017, 17, 4873-4886.	1.4	9
87	On the optimal design of membrane-based gas separation processes. Journal of Membrane Science, 2017, 526, 118-130.	4.1	54
88	Rational design of temperature swing adsorption cycles for post-combustion CO 2 capture. Chemical Engineering Science, 2017, 158, 381-394.	1.9	96
89	A MILP model for the design of multi-energy systems with long-term energy storage. Computer Aided Chemical Engineering, 2017, 40, 2437-2442.	0.3	8
90	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

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91	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
92	On the potential of phase-change adsorbents for CO₂ capture by temperature swing adsorption. Faraday Discussions, 2016, 192, 153-179.	1.6	78
93	A low-energy chilled ammonia process exploiting controlled solid formation for post-combustion CO₂capture. Faraday Discussions, 2016, 192, 59-83.	1.6	30
94	Modeling for optimal operation of PEM fuel cells and electrolyzers. , 2016, , .		7
95	Amyloid Templated Gold Aerogels. Advanced Materials, 2016, 28, 472-478.	11.1	149
96	Effect of needleâ€like crystal shape on measured particle size distributions. AICHE Journal, 2016, 62, 2974-2985.	1.8	23
97	Temperature Swing Adsorption for Postcombustion CO₂ Capture: Single- and Multicolumn Experiments and Simulations. Industrial & Engineering Chemistry Research, 2016, 55, 1401-1412.	1.8	62
98	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
99	Agglomeration of Needle-like Crystals in Suspension: I. Measurements. Crystal Growth and Design, 2015, 15, 1923-1933.	1.4	30
100	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
101	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
102	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
103	Three column intermittent simulated moving bed chromatography: 3. Cascade operation for center-cut separations. Journal of Chromatography A, 2015, 1378, 37-49.	1.8	15
104	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
105	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
106	Study of the Preparation of Amorphous Itraconazole Formulations. Crystal Growth and Design, 2015, 15, 2686-2694.	1.4	9
107	Temperature Swing Adsorption for the Recovery of the Heavy Component: An Equilibrium-Based Shortcut Model. Industrial & Engineering Chemistry Research, 2015, 54, 3027-3038.	1.8	50
108	Agglomeration of Needle-like Crystals in Suspension. II. Modeling. Crystal Growth and Design, 2015, 15, 4296-4310.	1.4	27

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109	Equilibrium theory analysis of liquid chromatography with non-constant velocity. Journal of Chromatography A, 2014, 1373, 131-140.	1.8	7
110	On-line optimizing control of the intermittent simulated moving bed process. Adsorption, 2014, 20, 109-119.	1.4	0
111	Prediction of non-isothermal ternary gas-phase breakthrough experiments based on binary data. Adsorption, 2014, 20, 493-510.	1.4	9
112	Modeling water vapor adsorption/desorption cycles. Adsorption, 2014, 20, 359-371.	1.4	22
113	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
114	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
115	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
116	Three column intermittent simulated moving bed chromatography: 1. Process description and comparative assessment. Journal of Chromatography A, 2014, 1361, 125-138.	1.8	15
117	On the Effect of Initial Conditions in Viedma Ripening. Crystal Growth and Design, 2014, 14, 2488-2493.	1.4	25
118	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
119	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
120	Solubility of Î²-carotene in poly-(É›-caprolactone) particles produced in colloidal state by Supercritical Fluid Extraction of Emulsions (SFEE). Journal of Supercritical Fluids, 2013, 84, 105-112.	1.6	12
121	Growth Kinetics of S-Mandelic Acid in Aqueous Solutions in the Presence of R-Mandelic Acid. Crystal Growth and Design, 2013, 13, 652-663.	1.4	13
122	Solid state deracemisation through growth, dissolution and solution-phase racemisation. CrystEngComm, 2013, 15, 2319.	1.3	23
123	High Pressure Homogenization as a Novel Approach for the Preparation of Co-Crystals. Crystal Growth and Design, 2013, 13, 2013-2024.	1.4	17
124	Solar-driven steam-based gasification of sugarcane bagasse in a combined drop-tube and fixed-bed reactor â€“ Thermodynamic, kinetic, and experimental analyses. Biomass and Bioenergy, 2013, 52, 173-183.	2.9	42
125	Equilibrium Theoryâ€“Based Analysis of Nonlinear Waves in Separation Processes. Annual Review of Chemical and Biomolecular Engineering, 2013, 4, 119-141.	3.3	53
126	Intermittent Simulated Moving Bed Processes for Chromatographic Three-Fraction Separation. Organic Process Research and Development, 2012, 16, 311-322.	1.3	28

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127	Phase Diagram of a Chiral Substance Exhibiting Oiling Out. 2. Racemic Compound Forming Ibuprofen in Water. Crystal Growth and Design, 2012, 12, 5298-5310.	1.4	16
128	Population Balance Modeling with Size-Dependent Solubility: Ostwald Ripening. Crystal Growth and Design, 2012, 12, 1489-1500.	1.4	71
129	Fixed bed adsorption of CO2/H2 mixtures on activated carbon: experiments and modeling. Adsorption, 2012, 18, 143-161.	1.4	115
130	Modeling the extra-column volume in a small column setup for bulk gas adsorption. Adsorption, 2012, 18, 381-393.	1.4	18
131	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
132	Design of Crystallization Processes for the Resolution of Conglomerate-Forming Chiral Compounds Exhibiting Oiling Out. Organic Process Research and Development, 2012, 16, 294-310.	1.3	12
133	Pure and binary adsorption of CO2, H2, and N2 on activated carbon. Adsorption, 2012, 18, 49-65.	1.4	91
134	Slowing the Growth Rate of Ibuprofen Crystals Using the Polymeric Additive Pluronic F127. Crystal Growth and Design, 2011, 11, 3813-3821.	1.4	52
135	Local Equilibrium Theory for the Binary Chromatography of Species Subject to a Generalized Langmuir Isotherm. 2. Wave Interactions and Chromatographic Cycle. Industrial & Engineering Chemistry Research, 2011, 50, 352-377.	1.8	19
136	A Population Balance Model for Chiral Resolution via Viedma Ripening. Crystal Growth and Design, 2011, 11, 4611-4622.	1.4	96
137	A model for enhanced coal bed methane recovery aimed at carbon dioxide storage. Adsorption, 2011, 17, 889-900.	1.4	36
138	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
139	Prediction of competitive adsorption on coal by a lattice DFTÂmodel. Adsorption, 2010, 16, 37-46.	1.4	15
140	Experimental evidence of a delta-shock in nonlinear chromatography. Journal of Chromatography A, 2010, 1217, 2002-2012.	1.8	48
141	Phase Diagram of a Chiral Substance Exhibiting Oiling Out in Cyclohexane. Crystal Growth and Design, 2010, 10, 4005-4013.	1.4	30
142	Precipitation and Transformation of the Three Polymorphs of <scp>d</scp>-Mannitol. Industrial & Engineering Chemistry Research, 2010, 49, 5854-5862.	1.8	56
143	Nearâ€stoichiometric O₂ binding on metal centers in Co(salen) nanoparticles. AICHE Journal, 2009, 55, 1040-1045.	1.8	7
144	Estimating Crystal Growth Rates Using in situ ATR-FTIR and Raman Spectroscopy in a Calibration-Free Manner. Industrial & Engineering Chemistry Research, 2009, 48, 10740-10745.	1.8	26

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145	Experimental Characterization and Population Balance Modeling of the Polymorph Transformation of <scp>l</scp>-Glutamic Acid. Crystal Growth and Design, 2009, 9, 243-252.	1.4	79
146	Design and Optimization of a Combined Cooling/Antisolvent Crystallization Process. Crystal Growth and Design, 2009, 9, 1124-1136.	1.4	154
147	Nonclassical Composition Fronts in Nonlinear Chromatography: Delta-Shock. Industrial & Engineering Chemistry Research, 2009, 48, 7733-7752.	1.8	45
148	Near-critical adsorption of CO2 on 13X zeolite and N2O onÂsilicaÂgel: lack of evidence of critical phenomena. Adsorption, 2008, 14, 133-141.	1.4	15
149	Optimizing control of simulated moving bed separations ofÂmixtures subject to the generalized Langmuir isotherm. Adsorption, 2008, 14, 423-432.	1.4	12
150	Competitive adsorption equilibria of CO2 and CH4 on a dry coal. Adsorption, 2008, 14, 539-556.	1.4	204
151	Sorption and swelling of poly(<scp>DL</scp>â€lactic acid) and poly(lacticâ€coâ€glycolic acid) in supercritical CO₂: An experimental and modeling study. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 483-496.	2.4	67
152	â€˜Cycle to cycleâ€™ optimizing control of simulated moving beds. AICHE Journal, 2008, 54, 194-208.	1.8	48
153	Quantitative Application of in Situ ATR-FTIR and Raman Spectroscopy in Crystallization Processes. Industrial & Engineering Chemistry Research, 2008, 47, 4870-4882.	1.8	121
154	Experimental characterization and multi-scale modeling of mixing in static mixers. Chemical Engineering Science, 2008, 63, 4135-4149.	1.9	61
155	Multi-rate optimizing control of simulated moving beds. , 2008, , .		1
156	Sorption and Swelling of Poly(D,Lâ€lactic acid) and Poly(lacticâ€coâ€glycolic acid) in Supercritical CO₂. Macromolecular Symposia, 2007, 259, 197-202.	0.4	14
157	Antisolvent Precipitation of PDI 747:â€‰ Kinetics of Particle Formation and Growth. Crystal Growth and Design, 2007, 7, 1653-1661.	1.4	30
158	Occurrence of a delta-shock in non-linear chromatography. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 2040073-2040074.	0.2	4
159	EQUILIBRIUM THEORY-BASED DESIGN OF SMBS FOR A GENERALIZED LANGMUIR ISOTHERM. , 2007, , .		1
160	Design of Simulated Moving Bed Separations:Â Generalized Langmuir Isotherm. Industrial & Engineering Chemistry Research, 2006, 45, 6311-6324.	1.8	40
161	Design of Simulated-Moving-Bed Chromatography with Enriched Extract Operation (EE-SMB):Â Langmuir Isotherms. Industrial & Engineering Chemistry Research, 2006, 45, 6289-6301.	1.8	22
162	Local Equilibrium Theory for the Binary Chromatography of Species Subject to a Generalized Langmuir Isotherm. Industrial & Engineering Chemistry Research, 2006, 45, 5332-5350.	1.8	55

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163	Sorption and swelling of semicrystalline polymers in supercritical CO2. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1531-1546.	2.4	67
164	Equilibrium theory based design of simulated moving bed processes for a generalized Langmuir isotherm. Journal of Chromatography A, 2006, 1126, 311-322.	1.8	165
165	Reliable measurement of near-critical adsorption by gravimetric method. Adsorption, 2006, 12, 393-403.	1.4	52
166	Adsorption of pure carbon dioxide and methane on dry coal from the sulcis coal province (SW) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622	0.8	97
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