T Alan Hatton

List of Publications by Year
in descending order

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184 papers	11,445 citations	34016 52 h-index	32761 100 g-index
190 all docs	190 docs citations	190 times ranked	13003 citing authors

#	Article	IF	Citations
1	Nanoemulsions: formation, properties and applications. Soft Matter, 2016, 12, 2826-2841.	1.2	963
2	Bilayer Surfactant Stabilized Magnetic Fluids:Â Synthesis and Interactions at Interfaces. Langmuir, 1999, 15, 447-453.	1.6	512
3	Synthesis, properties and applications of Janus nanoparticles. Nano Today, 2011, 6, 286-308.	6.2	484
4	Functionalization of Monodisperse Magnetic Nanoparticles. Langmuir, 2007, 23, 2158-2168.	1.6	430
5	Chromium(III) Terephthalate Metal Organic Framework (MIL-101): HF-Free Synthesis, Structure, Polyoxometalate Composites, and Catalytic Properties. Chemistry of Materials, 2012, 24, 1664-1675.	3.2	372
6	Protein Separations Using Colloidal Magnetic Nanoparticles. Biotechnology Progress, 2003, 19, 477-484.	1.3	288
7	Modeling of Oxygen-Inhibited Free Radical Photopolymerization in a PDMS Microfluidic Device. Macromolecules, 2008, 41, 8547-8556.	2.2	250
8	Liquid-Liquid Extraction of Low Molecular-Weight Proteins by Selective Solubilization in Reversed Micelles. Separation Science and Technology, 1987, 22, 831-841.	1.3	240
9	High-gradient magnetic separation of coated magnetic nanoparticles. AICHE Journal, 2004, 50, 2835-2848.	1.8	221
10	Small-Angle Neutron Scattering Study of PEOâ^'PPOâ^'PEO Micelle Structure in the Unimer-to-Micelle Transition Region. Langmuir, 1997, 13, 3659-3664.	1.6	200
11	Preparation and Controlled Self-Assembly of Janus Magnetic Nanoparticles. Journal of the American Chemical Society, 2007, 129, 12878-12889.	6.6	194
12	Electrochemically-mediated selective capture of heavy metal chromium and arsenic oxyanions from water. Nature Communications, 2018, 9, 4701.	5.8	193
13	Alkali Metal Nitrate-Promoted High-Capacity MgO Adsorbents for Regenerable CO₂ Capture at Moderate Temperatures. Chemistry of Materials, 2015, 27, 1943-1949.	3.2	176
14	Faradaic electro-swing reactive adsorption for CO₂ capture. Energy and Environmental Science, 2019, 12, 3530-3547.	15.6	147
15	Model for Formation and Growth of Vesicles in Mixed Anionic/Cationic (SOS/CTAB) Surfactant Systems. Langmuir, 2002, 18, 7341-7348.	1.6	145
16	Self-assembled nanostructures in ionic liquids facilitate charge storage at electrified interfaces. Nature Materials, 2019, 18, 1350-1357.	13.3	144
17	Asymmetric Faradaic systems for selective electrochemical separations. Energy and Environmental Science, 2017, 10, 1272-1283.	15.6	143
18	Photoresponsive Surfactants Exhibiting Unusually Large, Reversible Surface Tension Changes under Varying Illumination Conditions. Langmuir, 2003, 19, 10764-10773.	1.6	142

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19	Dually Responsive Microgels from Polyether-Modified Poly(acrylic acid):Â Swelling and Drug Loading. Langmuir, 2002, 18, 4944-4952.	1.6	134
20	Water-Based Magnetic Fluids as Extractants for Synthetic Organic Compounds. Industrial & Engineering Chemistry Research, 2002, 41, 4739-4749.	1.8	133
21	Redox-electrodes for selective electrochemical separations. Advances in Colloid and Interface Science, 2017, 244, 6-20.	7.0	132
22	Postsynthetic Functionalization of Mg-MOF-74 with Tetraethylenepentamine: Structural Characterization and Enhanced CO₂ Adsorption. ACS Applied Materials & Interfaces, 2017, 9, 11299-11306.	4.0	131
23	Post-combustion carbon dioxide capture using electrochemically mediated amine regeneration. Energy and Environmental Science, 2013, 6, 2505.	15.6	120
24	High-Gradient Magnetic Separation of Magnetic Nanoclusters. Industrial & Engineering Chemistry Research, 2005, 44, 6824-6836.	1.8	111
25	Redox-electrolytes for non-flow electrochemical energy storage: A critical review and best practice. Progress in Materials Science, 2019, 101, 46-89.	16.0	111
26	Anionâ€Selective Redox Electrodes: Electrochemically Mediated Separation with Heterogeneous Organometallic Interfaces. Advanced Functional Materials, 2016, 26, 3394-3404.	7.8	106
27	Stochastic dynamics simulation of surfactant self-assembly. Journal of Chemical Physics, 1997, 106, 9850-9857.	1.2	104
28	Alkali Nitrates Molten Salt Modified Commercial MgO for Intermediate-Temperature CO₂ Capture: Optimization of the Li/Na/K Ratio. Industrial & Engineering Chemistry Research, 2017, 56, 1509-1517.	1.8	102
29	Colloidal Nanoclusters of MgO Coated with Alkali Metal Nitrates/Nitrites for Rapid, High Capacity CO₂ Capture at Moderate Temperature. Chemistry of Materials, 2015, 27, 8153-8161.	3.2	97
30	Protein refolding in reversed micelles. Biotechnology and Bioengineering, 1990, 35, 955-965.	1.7	94
31	Lithium Recovery from Oil and Gas Produced Water: A Need for a Growing Energy Industry. ACS Energy Letters, 2019, 4, 1471-1474.	8.8	92
32	On the size and shape of self-assembled micelles. Journal of Chemical Physics, 1997, 107, 10777-10781.	1.2	89
33	Quinone Reduction in Ionic Liquids for Electrochemical CO₂ Separation. ACS Sustainable Chemistry and Engineering, 2015, 3, 1394-1405.	3.2	89
34	Theory of water treatment by capacitive deionization with redox active porous electrodes. Water Research, 2018, 132, 282-291.	5.3	86
35	Responsive Stabilization of Nanoparticles for Extreme Salinity and High-Temperature Reservoir Applications. ACS Applied Materials & Interfaces, 2015, 7, 19651-19658.	4.0	83
36	Polyamideâ€imide nanofiltration hollow fiber membranes with elongationâ€induced nanoâ€pore evolution. AICHE Journal, 2010, 56, 1481-1494.	1.8	82

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37	Aerosol filtration using electrospun cellulose acetate fibers. Journal of Materials Science, 2016, 51, 204-217.	1.7	82
38	Oxygen transfer enhancement in aqueous/perfluorocarbon fermentation systems: I. experimental observations. Biotechnology and Bioengineering, 1990, 35, 578-585.	1.7	81
39	Electrospun Carbon Nanofiber Webs with Controlled Density of States for Sensor Applications. Advanced Materials, 2013, 25, 1309-1314.	11.1	78
40	Affinity-based reversed micellar protein extraction: I. Principles and protein-ligand systems. Biotechnology and Bioengineering, 1993, 42, 1199-1208.	1.7	73
41	Multifunctional Electrospun Fabrics via Layer-by-Layer Electrostatic Assembly for Chemical and Biological Protection. Chemistry of Materials, 2010, 22, 1429-1436.	3.2	73
42	Electrosorption at functional interfaces: from molecular-level interactions to electrochemical cell design. Physical Chemistry Chemical Physics, 2017, 19, 23570-23584.	1.3	71
43	Electrochemically mediated carbon dioxide separation with quinone chemistry in salt-concentrated aqueous media. Nature Communications, 2020, 11, 2278.	5.8	71
44	Polyethylenimine-impregnated siliceous mesocellular foam particles as high capacity CO2 adsorbents. RSC Advances, 2012, 2, 6509.	1.7	67
45	Electrochemically Nanostructured Polyvinylferrocene/Polypyrrole Hybrids with Synergy for Energy Storage. Advanced Functional Materials, 2015, 25, 4803-4813.	7.8	64
46	Spherical Crystallization of Glycine from Monodisperse Microfluidic Emulsions. Crystal Growth and Design, 2012, 12, 3977-3982.	1.4	61
47	Energetics of electrochemically mediated amine regeneration process for flue gas CO2 capture. International Journal of Greenhouse Gas Control, 2019, 82, 48-58.	2.3	59
48	Optimal Nutrient Retention during the Thermal Processing of Conduction-Heated Canned Foods: Application of the Distributed Minimum Principle. Journal of Food Science, 1985, 50, 1312-1321.	1.5	58
49	Flue gas CO2 capture via electrochemically mediated amine regeneration: System design and performance. Applied Energy, 2019, 255, 113879.	5.1	58
50	Design of surfactants suitable for protein extraction by reversed micelles. , 1997, 54, 26-32.		57
51	Nerve Agent Destruction by Recyclable Catalytic Magnetic Nanoparticles. Industrial & Engineering Chemistry Research, 2005, 44, 7991-7998.	1.8	56
52	Redox-Responsive Gels with Tunable Hydrophobicity for Controlled Solubilization and Release of Organics. ACS Applied Materials & Interfaces, 2011, 3, 1167-1174.	4.0	56
53	Mechanism-guided design of flow systems for multicomponent reactions: conversion of CO2 and olefins to cyclic carbonates. Chemical Science, 2014, 5, 1227.	3.7	55
54	Sorbents for the Capture of CO₂ and Other Acid Gases: A Review. Industrial & Engineering Chemistry Research, 2021, 60, 9313-9346.	1.8	55

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55	Chemical protection fabrics via surface oximation of electrospun polyacrylonitrile fiber mats. Journal of Materials Chemistry, 2009, 19, 2432.	6.7	53
56	Extraction Behavior of Hemoglobin Using Reversed Micelles by Dioleyl Phosphoric Acid. Biotechnology Progress, 1996, 12, 793-800.	1.3	52
57	Bench-scale demonstration of CO2 capture with electrochemically-mediated amine regeneration. RSC Advances, 2014, 4, 5906.	1.7	52
58	Nucleation under Soft Confinement: Role of Polymerâ€“Solute Interactions. Crystal Growth and Design, 2012, 12, 508-517.	1.4	51
59	Functional Magnetic Nanoparticles for Biodefense and Biological Threat Monitoring and Surveillance. Analytical Chemistry, 2009, 81, 5637-5645.	3.2	50
60	Thermally Stable Amine-Grafted Adsorbent Prepared by Impregnating 3-Aminopropyltriethoxysilane on Mesoporous Silica for CO₂ Capture. Industrial & Engineering Chemistry Research, 2016, 55, 7842-7852.	1.8	49
61	CO₂ Capture Using Electrochemically Mediated Amine Regeneration. Industrial & Engineering Chemistry Research, 2020, 59, 7087-7096.	1.8	49
62	Protein refolding by reversed micelles utilizing solid-liquid extraction technique. , 1998, 57, 620-623.		46
63	Dynamics of self-assembled surfactant systems. Journal of Chemical Physics, 1998, 108, 2232-2244.	1.2	46
64	Ion-Exchange Purification of Proteins Using Magnetic Nanoclusters. Biotechnology Progress, 2006, 22, 1153-1162.	1.3	46
65	Polyvinylferrocene for Noncovalent Dispersion and Redox-Controlled Precipitation of Carbon Nanotubes in Nonaqueous Media. Langmuir, 2013, 29, 9626-9634.	1.6	46
66	Nucleophilic Polymers and Gels in Hydrolytic Degradation of Chemical Warfare Agents. ACS Applied Materials & Interfaces, 2015, 7, 22001-22011.	4.0	46
67	An Electrochemically Mediated Amine Regeneration Process with a Mixed Absorbent for Postcombustion CO₂ Capture. Environmental Science & Technology, 2020, 54, 8999-9007.	4.6	46
68	Carbon Dioxide Capture Using an Electrochemically Driven Proton Concentration Process. Cell Reports Physical Science, 2020, 1, 100033.	2.8	46
69	Electrochemical Carbon Dioxide Capture and Release with a Redox-Active Amine. Journal of the American Chemical Society, 2022, 144, 2164-2170.	6.6	45
70	Protein refolding in reversed micelles: Interactions of the protein with micelle components. Biotechnology and Bioengineering, 1990, 35, 966-975.	1.7	44
71	Selective Molecularly Mediated Pseudocapacitive Separation of Ionic Species in Solution. ACS Applied Materials & Interfaces, 2016, 8, 32743-32753.	4.0	44
72	Lithium recovery using electrochemical technologies: Advances and challenges. Water Research, 2022, 221, 118822.	5.3	44

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73	Affinity-based reversed micellar protein extraction: II. Effect of cosurfactant tail length. Biotechnology and Bioengineering, 1993, 42, 1209-1217.	1.7	43
74	Surface design and engineering of hierarchical hybrid nanostructures for asymmetric supercapacitors with improved electrochemical performance. Journal of Colloid and Interface Science, 2015, 447, 282-301.	5.0	43
75	Protein complexation with acrylic polyampholytes. Biotechnology and Bioengineering, 1994, 44, 1031-1039.	1.7	40
76	Alkali Carbonate Molten Salt Coated Calcium Oxide with Highly Improved Carbon Dioxide Capture Capacity. Energy Technology, 2017, 5, 1328-1336.	1.8	40
77	Microfluidic continuous magnetophoretic protein separation using nanoparticle aggregates. Microfluidics and Nanofluidics, 2011, 11, 429-438.	1.0	39
78	Magnetic Surfactants and Polymers with Gadolinium Counterions for Protein Separations. Langmuir, 2016, 32, 699-705.	1.6	39
79	Schizophrenic Diblock-Copolymer-Functionalized Nanoparticles as Temperature-Responsive Pickering Emulsifiers. Langmuir, 2017, 33, 13326-13331.	1.6	39
80	An Asymmetric Ironâ€Based Redoxâ€Active System for Electrochemical Separation of Ions in Aqueous Media. Advanced Functional Materials, 2020, 30, 1910363.	7.8	39
81	Oxygen transfer enhancement in aqueous/perfluorocarbon fermentation systems: II. theoretical analysis. Biotechnology and Bioengineering, 1990, 35, 586-597.	1.7	38
82	Metallocene/carbon hybrids prepared by a solution process for supercapacitor applications. Journal of Materials Chemistry A, 2013, 1, 13120.	5.2	38
83	Rapid Inversion of Surface Charges in Heteroatomâ€Doped Porous Carbon: A Route to Robust Electrochemical Desalination. Advanced Functional Materials, 2020, 30, 1909387.	7.8	38
84	Bench-scale demonstration of CO₂ capture with an electrochemically driven proton concentration process. RSC Advances, 2020, 10, 16832-16843.	1.7	38
85	Toward smart carbon capture with machine learning. Cell Reports Physical Science, 2021, 2, 100396.	2.8	38
86	Electrochemically Mediated Reduction of Nitrosamines by Hemin-Functionalized Redox Electrodes. Environmental Science and Technology Letters, 2017, 4, 161-167.	3.9	36
87	Toward solvent-free continuous-flow electrochemically mediated carbon capture with high-concentration liquid quinone chemistry. Joule, 2022, 6, 221-239.	11.7	36
88	Extraction of Proteins and Amino Acids Using Reversed Micelles. ACS Symposium Series, 1987, , 170-183.	0.5	35
89	Extraction and Activity of Chymotrypsin Using AOT-DOLPA Mixed Reversed Micellar Systems. Biotechnology Progress, 1998, 14, 729-734.	1.3	35
90	Redox Interfaces for Electrochemically Controlled Proteinâ€“Surface Interactions: Bioseparations and Heterogeneous Enzyme Catalysis. Chemistry of Materials, 2017, 29, 5702-5712.	3.2	35

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91	Polymorphism control of nanosized glycine crystals on engineered surfaces. CrystEngComm, 2011, 13, 1127-1131.	1.3	34
92	Electrospun magnetic carbon composite fibers: Synthesis and electromagnetic wave absorption characteristics. Journal of Applied Polymer Science, 2013, 127, 4288-4295.	1.3	34
93	Enhanced gravimetric CO₂ capacity and viscosity for ionic liquids with cyanopyrrolide anion. AICHE Journal, 2015, 61, 2280-2285.	1.8	34
94	Destabilization of Oil-in-Water Emulsions Stabilized by Non-ionic Surfactants: Effect of Particle Hydrophilicity. Langmuir, 2016, 32, 10694-10698.	1.6	33
95	Superhydrophobic, Surfactantâ€doped, Conducting Polymers for Electrochemically Reversible Adsorption of Organic Contaminants. Advanced Functional Materials, 2018, 28, 1801466.	7.8	33
96	General reptation and scaling of 2d athermal polymers on close-packed lattices. Journal of Chemical Physics, 1997, 107, 1269-1278.	1.2	32
97	Decomposition of Toxic Environmental Contaminants by Recyclable Catalytic, Superparamagnetic Nanoparticles. Industrial & Engineering Chemistry Research, 2007, 46, 3296-3303.	1.8	32
98	Amine-Based Ionic Liquid for CO₂ Capture and Electrochemical or Thermal Regeneration. ACS Sustainable Chemistry and Engineering, 2020, 8, 8356-8361.	3.2	32
99	Electrochemically Responsive Heterogeneous Catalysis for Controlling Reaction Kinetics. Journal of the American Chemical Society, 2015, 137, 1348-1355.	6.6	31
100	Energetically efficient electrochemically tunable affinity separation using multicomponent polymeric nanostructures for water treatment. Energy and Environmental Science, 2018, 11, 2954-2963.	15.6	31
101	Electrochemical CO2 capture thermodynamics. International Journal of Greenhouse Gas Control, 2020, 95, 102878.	2.3	31
102	A correlation for the estimation of critical micellization concentrations and temperatures of polyols in aqueous solutions. JAOCS, Journal of the American Oil Chemists' Society, 1995, 72, 823-826.	0.8	30
103	Turbidimetric Titration Study of the Interaction of Proteins with Acrylic Polyampholytes. Biotechnology Progress, 1995, 11, 99-103.	1.3	30
104	Synthesis and bulk assembly behavior of linear-dendritic rod diblock copolymers. Journal of Polymer Science Part A, 2004, 42, 2784-2814.	2.5	30
105	Advances in electrospun carbon fiber-based electrochemical sensing platforms for bioanalytical applications. Analytical and Bioanalytical Chemistry, 2016, 408, 1307-1326.	1.9	30
106	Functional Organicâ€“Inorganic Colloids Modified by Iodoxybenzoic Acid. Chemistry of Materials, 2008, 20, 2001-2008.	3.2	29
107	Degradation of Chemical Threats by Brominated Polymer Networks. Industrial & Engineering Chemistry Research, 2014, 53, 18761-18774.	1.8	28
108	Highly Selective, Kinetically Driven Polymorphic Selection in Microfluidic Emulsion-Based Crystallization and Formulation. Crystal Growth and Design, 2015, 15, 212-218.	1.4	28

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109	Tri-lithium borate (Li₃BO₃); a new highly regenerable high capacity CO₂ adsorbent at intermediate temperature. Journal of Materials Chemistry A, 2017, 5, 22224-22233.	5.2	28
110	Coatable and Resistance-Proof Ionic Liquid for Pathogen Eradication. ACS Nano, 2021, 15, 966-978.	7.3	28
111	Dynamics of AOT and AOT/Nonionic Cosurfactant Microemulsions. An Iodine-Laser Temperature Jump Study. Langmuir, 2000, 16, 5892-5899.	1.6	27
112	Electrically controlled mass transport into microfluidic droplets from nanodroplet carriers with application in controlled nanoparticle flow synthesis. Lab on A Chip, 2018, 18, 1330-1340.	3.1	27
113	Electrochemical and Molecular Assessment of Quinones as CO₂-Binding Redox Molecules for Carbon Capture. Journal of Physical Chemistry C, 2022, 126, 1389-1399.	1.5	27
114	Effect of Temperature on the Dielectric Relaxation in Solvent Mixtures at Microwave Frequencies. Journal of Physical Chemistry A, 1997, 101, 9892-9899.	1.1	26
115	Aldehyde Self-Condensation Catalysis by Aluminum Aminoterephthalate Metalâ€“Organic Frameworks Modified with Aluminum Isopropoxide. Chemistry of Materials, 2013, 25, 1636-1642.	3.2	25
116	Kinetics of the Change in Droplet Size during Nanoemulsion Formation. Langmuir, 2016, 32, 11551-11559.	1.6	25
117	Improved CO₂ Capture Performance of Electrochemically Mediated Amine Regeneration Processes with Ionic Surfactant Additives. ACS Applied Energy Materials, 2020, 3, 10823-10830.	2.5	25
118	Selective adsorption of organic anions in a flow cell with asymmetric redox active electrodes. Water Research, 2020, 182, 115963.	5.3	25
119	Membrane Emulsification and Solvent Pervaporation Processes for the Continuous Synthesis of Functional Magnetic and Janus Nanobeads. Langmuir, 2012, 28, 9748-9758.	1.6	24
120	Ferroceneâ€Containing Inverse Opals by Meltâ€Shear Organization of Core/Shell Particles. Macromolecular Rapid Communications, 2018, 39, e1800428.	2.0	24
121	Technoeconomic Analysis of the Electrochemically Mediated Amine Regeneration CO₂ Capture Process. Industrial & Engineering Chemistry Research, 2020, 59, 14085-14095.	1.8	24
122	Redox-responsive sorbents and mediators for electrochemically based CO2 capture. Current Opinion in Green and Sustainable Chemistry, 2021, 31, 100504.	3.2	24
123	Molten ionic oxides for CO₂ capture at medium to high temperatures. Journal of Materials Chemistry A, 2019, 7, 21827-21834.	5.2	23
124	Flue Gas CO₂ Capture via Electrochemically Mediated Amine Regeneration: Desorption Unit Design and Analysis. Industrial & Engineering Chemistry Research, 2020, 59, 10120-10129.	1.8	23
125	Functionalized Magnetic Silica Nanoparticles for Highly Efficient Adsorption of Sm³⁺ from a Dilute Aqueous Solution. Langmuir, 2018, 34, 2674-2684.	1.6	22
126	Formation of Highly Ordered Rectangular Nanoparticle Superlattices by the Cooperative Self-Assembly of Nanoparticles and Fatty Molecules. Langmuir, 2009, 25, 6407-6412.	1.6	21

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127	Electrochemically mediated separation for carbon capture. Energy Procedia, 2011, 4, 860-867.	1.8	21
128	Nonvolatile Colloidal Dispersion of MgO Nanoparticles in Molten Salts for Continuous CO₂ Capture at Intermediate Temperatures. ACS Sustainable Chemistry and Engineering, 2019, 7, 7979-7986.	3.2	21
129	Toward a Mechanistic Understanding and Optimization of Molten Alkali Metal Borates (A_xB_{1â€“x}O_{1.5â€“x}) for High-Temperature CO₂ Capture. Chemistry of Materials, 2020, 32, 348-359.	3.2	21
130	Asymmetric growth in micelles containing oil. Journal of Chemical Physics, 1999, 110, 9673-9680.	1.2	20
131	A dynamic buildup growth model for magnetic particle accumulation on single wires in highâ€gradient magnetic separation. AICHE Journal, 2012, 58, 2865-2874.	1.8	20
132	Electrochemically Mediated Direct CO₂ Capture by a Stackable Bipolar Cell. ChemSusChem, 2022, 15, .	3.6	20
133	Self-Decontaminating Fibrous Materials Reactive toward Chemical Threats. ACS Applied Materials & Interfaces, 2016, 8, 17555-17564.	4.0	18
134	An Asymmetric Electrochemical System with Complementary Tunability in Hydrophobicity for Selective Separations of Organics. ACS Central Science, 2019, 5, 1396-1406.	5.3	17
135	Continuous Flow Synthesis of Superparamagnetic Nanoparticles in Reverse Miniemulsion Systems. Colloids and Interface Science Communications, 2019, 28, 1-4.	2.0	17
136	Thermodynamic Modeling of CO₂ Separation Systems with Soluble, Redox-Active Capture Species. Industrial & Engineering Chemistry Research, 2022, 61, 10531-10546.	1.8	17
137	Dynamics and Morphological Outcomes in Thin-Film Spherical Crystallization of Glycine from Microfluidic Emulsions: Experimental Studies and Modeling. Crystal Growth and Design, 2014, 14, 3485-3492.	1.4	16
138	Remarkably High Heterogeneous Electron Transfer Activity of Carbon-Nanotube-Supported Reduced Graphene Oxide. Chemistry of Materials, 2016, 28, 7422-7432.	3.2	16
139	Polydiacetylene functionalized with charged termini for device-free colorimetric detection of malathion. Journal of Colloid and Interface Science, 2018, 528, 27-35.	5.0	16
140	Electrochemically mediated gating membrane with dynamically controllable gas transport. Science Advances, 2020, 6, .	4.7	16
141	Electrochemical Selective Recovery of Heavy Metal Vanadium Oxyanion from Continuously Flowing Aqueous Streams. ChemSusChem, 2020, 13, 3865-3874.	3.6	16
142	In-situ measurements of temperature distributions in a microwave-heated cavity. AICHE Journal, 2006, 52, 2727-2735.	1.8	15
143	Microwave-Assisted Oxidation of Electrospun Turbostratic Carbon Nanofibers for Tailoring Energy Storage Capabilities. Chemistry of Materials, 2015, 27, 4574-4585.	3.2	15
144	Oxidation of betrixaban to yield N-nitrosodimethylamine by water disinfectants. Water Research, 2020, 186, 116309.	5.3	15

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145	The potential of molten metal oxide sorbents for carbon capture at high temperature: Conceptual design. Applied Energy, 2020, 280, 116016.	5.1	15
146	Droplet microfluidics with a nanoemulsion continuous phase. Lab on A Chip, 2016, 16, 2694-2700.	3.1	14
147	Bench-Scale Demonstration of Molten Alkali Metal Borates for High-Temperature CO₂ Capture. Industrial & Engineering Chemistry Research, 2020, 59, 8937-8945.	1.8	14
148	Advances and challenges in metal ion separation from water. Trends in Chemistry, 2021, 3, 819-831.	4.4	14
149	Enhancing Performance Stability of Electrochemically Active Polymers by Vaporâ€Deposited Organic Networks. Advanced Functional Materials, 2018, 28, 1706028.	7.8	13
150	An Electrochemically-mediated Gas Separation Process for Carbon Abatement. Energy Procedia, 2013, 37, 1172-1179.	1.8	12
151	Cross-linked Pluronic- g -Polyacrylic acid microgel system for the controlled release of doxorubicin in pharmaceutical formulations. European Journal of Pharmaceutics and Biopharmaceutics, 2017, 114, 230-238.	2.0	11
152	Dropletâ€Templated Antisolvent Spherical Crystallization of Hydrophilic and Hydrophobic Drugs with an in situ Formed Binder. Advanced Healthcare Materials, 2018, 7, 1700797.	3.9	11
153	Acid Gas Capture at High Temperatures Using Molten Alkali Metal Borates. Environmental Science & Technology, 2020, 54, 6319-6328.	4.6	11
154	Redox-Active Magnetic Composites for Anionic Contaminant Removal from Water. ACS Applied Materials & Interfaces, 2022, 14, 8974-8983.	4.0	11
155	Novel membrane processes for the enantiomeric resolution of tryptophan by selective permeation enhancements. AIChE Journal, 2011, 57, 1154-1162.	1.8	10
156	Energetics of Electrochemically-mediated Amine Regeneration. Energy Procedia, 2014, 63, 595-604.	1.8	10
157	Understanding Material Compatibility in CO2 Capture Systems Using Molten Alkali Metal Borates. ACS Applied Materials & Interfaces, 2020, 12, 51468-51477.	4.0	10
158	Net-Negative Emissions through Molten Sorbents and Bioenergy with Carbon Capture and Storage. Industrial & Engineering Chemistry Research, 2020, 59, 22582-22596.	1.8	10
159	Photoreponsive Hybrid Nanoparticles with Inherent FRET Activity. Langmuir, 2016, 32, 5981-5989.	1.6	9
160	Enhanced Redox Transformation Efficiency in Unconjugated Electroactive Polymer/Carbon Nanotube Hybrids. Chemistry of Materials, 2016, 28, 543-548.	3.2	9
161	Magnetic Lyogels for Uranium Recovery from Wet Phosphoric Acid. Industrial & Engineering Chemistry Research, 2017, 56, 12644-12654.	1.8	8
162	Enabling a Stable High-Power Lithium-Bromine Flow Battery Using Task-Specific Ionic Liquids. Journal of the Electrochemical Society, 2021, 168, 070542.	1.3	8

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163	Reversed micelles recognize an active protein. Biotechnology Letters, 1996, 10, 141-144.	0.5	7
164	Redox-Responsive 2-Aminoanthraquinone Coreâ€“Shell Particles for Structural Colors and Carbon Capture. ACS Applied Polymer Materials, 2021, 3, 4651-4660.	2.0	7
165	Protein refolding in reversed micelles. Biotechnology and Bioengineering, 2006, 95, 285-294.	1.7	6
166	Hierarchical materials synthesis at soft all-aqueous interfaces. Soft Matter, 2012, 8, 3924.	1.2	5
167	DEMâ€simulation of the magnetic field enhanced cake filtration. AICHE Journal, 2012, 58, 3633-3644.	1.8	5
168	Iron phosphomolybdate complexes in electrocatalytic reduction of aqueous disinfection byproducts. Chemical Engineering Journal, 2021, 408, 127354.	6.6	5
169	CO₂-Reactive Ionic Liquid Surfactants for the Control of Colloidal Morphology. Langmuir, 2017, 33, 7633-7641.	1.6	4
170	Tuning the Rateâ€Dependent Stiffness of Materials by Exploiting NÃ©el Relaxation of Magnetic Nanoparticles. Advanced Functional Materials, 2008, 18, 462-469.	7.8	3
171	Pervaporation of emulsion droplets for the templated assembly of spherical particles: A population balance model. AICHE Journal, 2013, 59, 3975-3985.	1.8	3
172	Moisture Transport for Reaction Enhancement in Fabrics. Journal of Textiles, 2013, 2013, 1-8.	0.4	3
173	Sensing and inactivation of Bacillus anthracis Sterne by polymerâ€“bromine complexes. Applied Microbiology and Biotechnology, 2016, 100, 6847-6857.	1.7	3
174	Theory of Faradaically Modulated Redox Active Electrodes for Electrochemically Mediated Selective Adsorption Processes. Journal of the Electrochemical Society, 2021, 168, 053501.	1.3	2
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