Ajay K. Ray

List of Publications by Year
in descending order

206	9,820	26610 56	43868 91
papers	citations	h-index	g-index

210	210	210	8783
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Photodegradation kinetics of 4-nitrophenol in TiO2 suspension. Water Research, 1998, 32, 3223-3234.	5.3	459
2	Adsorption of arsenate and arsenite on titanium dioxide suspensions. Journal of Colloid and Interface Science, 2004, 278, 270-275.	5.0	382
3	Removal of toxic metal ions from wastewater by semiconductor photocatalysis. Chemical Engineering Science, 2001, 56, 1561-1570.	1.9	357
4	Photocatalytic Oxidation of Arsenic(III):â€‰ Evidence of Hydroxyl Radicals. Environmental Science & Technology, 2005, 39, 1827-1834.	4.6	299
5	Photocatalytic kinetics of phenol and its derivatives over UV irradiated TiO2. Applied Catalysis B: Environmental, 1999, 23, 143-157.	10.8	297
6	APPLICATIONS OF MULTIOBJECTIVE OPTIMIZATION IN CHEMICAL ENGINEERING. Reviews in Chemical Engineering, 2000, 16, 1-54.	2.3	281
7	Removal of Aqueous Cr(VI) by a Combination of Photocatalytic Reduction and Coprecipitation. Industrial & Engineering Chemistry Research, 2004, 43, 1665-1672.	1.8	256
8	Nonylphenol, octylphenol, and bisphenol-A in the aquatic environment: A review on occurrence, fate, and treatment. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2009, 44, 423-442.	0.9	184
9	Development of a new photocatalytic reactor for water purification. Catalysis Today, 1998, 40, 73-83.	2.2	180
10	Visible-Solar-Light-Driven Photocatalytic Degradation of Phenol with Dye-Sensitized TiO₂: Parametric and Kinetic Study. Industrial & Engineering Chemistry Research, 2012, 51, 4523-4532.	1.8	178
11	Photodegradation of Benzoic Acid over Metal-Doped TiO2. Industrial & Engineering Chemistry Research, 2006, 45, 3503-3511.	1.8	173
12	Major Challenges in the Design of a Large-Scale Photocatalytic Reactor for Water Treatment. Chemical Engineering and Technology, 1999, 22, 253-260.	0.9	168
13	Ferrates (iron(VI) and iron(V)): Environmentally friendly oxidants and disinfectants. Journal of Water and Health, 2005, 3, 45-58.	1.1	137
14	Photo-reduction of hexavalent chromium in aqueous solution in the presence of zinc oxide as semiconductor catalyst. Chemical Engineering Journal, 2009, 153, 86-93.	6.6	133
15	Effect of mass transfer and catalyst layer thickness on photocatalytic reaction. AICHE Journal, 2000, 46, 1034-1045.	1.8	132
16	Multiobjective optimization of SMB and varicol process for chiral separation. AICHE Journal, 2002, 48, 2800-2816.	1.8	130
17	Multiobjective Optimization of Steam Reformer Performance Using Genetic Algorithm. Industrial & Engineering Chemistry Research, 2000, 39, 706-717.	1.8	125
18	External and internal mass transfer effect on photocatalytic degradation. Catalysis Today, 2001, 66, 475-485.	2.2	118

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19	Novel photocatalytic reactor for water purification. AICHE Journal, 1998, 44, 477-483.	1.8	116
20	Multi-objective optimization of industrial hydrogen plants. Chemical Engineering Science, 2001, 56, 999-1010.	1.9	112
21	Enhancement of photocatalytic activity of P25 TiO2 by vanadium-ion implantation under visible light irradiation. Journal of Colloid and Interface Science, 2007, 311, 497-501.	5.0	110
22	Preparation and Characterization of Polycrystalline Bismuth Titanate Bi12TiO20and Its Photocatalytic Properties under Visible Light Irradiation. Industrial & Engineering Chemistry Research, 2007, 46, 745-749.	1.8	108
23	Kinetic Studies of Photocatalytic Degradation in a TiO2Slurry System:Â Distinguishing Working Regimes and Determining Rate Dependences. Industrial & Engineering Chemistry Research, 2003, 42, 2273-2281.	1.8	107
24	Design, modelling and experimentation of a new large-scale photocatalytic reactor for water treatment. Chemical Engineering Science, 1999, 54, 3113-3125.	1.9	103
25	Determination of adsorption and kinetic parameters for methyl acetate esterification and hydrolysis reaction catalyzed by Amberlyst 15. Applied Catalysis A: General, 2004, 260, 191-205.	2.2	102
26	Photocatalytic reduction of Hg(II) on two commercial TiO2 catalysts. Electrochimica Acta, 2004, 49, 1435-1444.	2.6	90
27	Macro kinetic studies for photocatalytic degradation of benzoic acid in immobilized systems. Chemosphere, 2005, 60, 1427-1436.	4.2	88
28	Kinetic assessment of the potassium ferrate(VI) oxidation of antibacterial drug sulfamethoxazole. Chemosphere, 2006, 62, 128-134.	4.2	88
29	Enhanced oxidative transformation of organic contaminants by activation of ferrate(VI): Possible involvement of FeV/FeIV species. Chemical Engineering Journal, 2017, 307, 513-517.	6.6	88
30	Heterogeneous Photocatalysis in Environmental Remediation. Asia-Pacific Journal of Chemical Engineering, 2000, 8, 505-550.	0.0	87
31	Enhanced Solar Photocatalytic Degradation of Phenol with Coupled Graphene-Based Titanium Dioxide and Zinc Oxide. Industrial & Engineering Chemistry Research, 2014, 53, 18824-18832.	1.8	87
32	Experimental investigation of Taylor vortex photocatalytic reactor for water purification. Chemical Engineering Science, 2004, 59, 5249-5259.	1.9	85
33	Pharmaceuticals and pesticides in secondary effluent wastewater: Identification and enhanced removal by acid-activated ferrate(VI). Water Research, 2019, 148, 272-280.	5.3	85
34	Kinetic Studies for Photocatalytic Degradation of Eosin B on a Thin Film of Titanium Dioxide. Industrial & Engineering Chemistry Research, 2003, 42, 6020-6033.	1.8	81
35	Novel swirl-flow reactor for kinetic studies of semiconductor photocatalysis. AICHE Journal, 1997, 43, 2571-2578.	1.8	78
36	Multi-objective Optimization of the Operation of an Industrial Low-Density Polyethylene Tubular Reactor Using Genetic Algorithm and Its Jumping Gene Adaptations. Industrial & Engineering Chemistry Research, 2006, 45, 3182-3199.	1.8	78

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37	Optimal design and operation of SMB bioreactor: production of high fructose syrup by isomerization of glucose. Biochemical Engineering Journal, 2004, 21, 111-121.	1.8	77
38	First-Principles, Data-Based, and Hybrid Modeling and Optimization of an Industrial Hydrocracking Unit. Industrial & Engineering Chemistry Research, 2006, 45, 7807-7816.	1.8	77
39	Multiobjective optimization of an industrial wiped-film pet reactor. AICHE Journal, 2000, 46, 1046-1058.	1.8	76
40	Multiobjective Optimization of an Industrial Ethylene Reactor Using a Nondominated Sorting Genetic Algorithm. Industrial & Engineering Chemistry Research, 2005, 44, 124-141.	1.8	76
41	Sacrificial Hydrogen Generation from Formaldehyde with Pt/TiO₂ Photocatalyst in Solar Radiation. Industrial & Engineering Chemistry Research, 2013, 52, 5023-5029.	1.8	74
42	Review of kinetics of chemical and photocatalytical oxidation of Arsenic(III) as influenced by pH. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2007, 42, 997-1004.	0.9	73
43	Multiobjective optimization of an industrial styrene reactor. Computers and Chemical Engineering, 2003, 27, 111-130.	2.0	72
44	Modeling, Simulation, and Multi-objective Optimization of an Industrial Hydrocracking Unit. Industrial & Engineering Chemistry Research, 2006, 45, 1354-1372.	1.8	72
45	The simulated countercurrent moving bed chromatographic reactor: a novel reactorâ€”separator. Chemical Engineering Science, 1994, 49, 469-480.	1.9	68
46	Experimental study of a laboratory-scale simulated countercurrent moving bed chromatographic reactor. Chemical Engineering Science, 1995, 50, 2195-2202.	1.9	66
47	Ferrate(VI): Green chemistry oxidant for degradation of cationic surfactant. Chemosphere, 2006, 63, 1785-1790.	4.2	66
48	Enhanced photocatalytic degradation of atenolol using graphene TiO2 composite. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 332, 182-187.	2.0	66
49	Multi-objective optimization of membrane separation modules using genetic algorithm. Journal of Membrane Science, 2000, 176, 177-196.	4.1	65
50	Dynamic Model of an Industrial Steam Reformer and Its Use for Multiobjective Optimization. Industrial & Engineering Chemistry Research, 2003, 42, 4028-4042.	1.8	62
51	Visible-solar-light-driven photo-reduction and removal of cadmium ion with Eosin Y-sensitized TiO2 in aqueous solution of triethanolamine. Separation and Purification Technology, 2017, 174, 109-115.	3.9	62
52	Multiobjective optimization of an industrial styrene monomer manufacturing process. Chemical Engineering Science, 2005, 60, 347-363.	1.9	59
53	Enhanced photocatalytic degradation of ofloxacin by co-doped titanium dioxide under solar irradiation. Separation and Purification Technology, 2016, 161, 1-7.	3.9	59
54	Photocatalytic activities of Pt/ZIF-8 loaded highly ordered TiO2 nanotubes. Journal of Materials Chemistry, 2010, 20, 10241.	6.7	58

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55	Mechanistic modeling of vacuum UV advanced oxidation process in an annular photoreactor. Water Research, 2014, 64, 209-225.	5.3	58
56	Multiobjective optimization of an industrial wiped film poly(ethylene terephthalate) reactor: some further insights. Computers and Chemical Engineering, 2001, 25, 391-407.	2.0	56
57	Design stage optimization of an industrial low-density polyethylene tubular reactor for multiple objectives using NSGA-II and its jumping gene adaptations. Chemical Engineering Science, 2007, 62, 2346-2365.	1.9	53
58	Sacrificial hydrogen generation from aqueous triethanolamine with Eosin Y-sensitized Pt/TiO2 photocatalyst in UV, visible and solar light irradiation. Chemosphere, 2015, 121, 54-61.	4.2	53
59	Application of Simulated Countercurrent Moving-Bed Chromatographic Reactor for MTBE Synthesis. Industrial & Engineering Chemistry Research, 2001, 40, 5305-5316.	1.8	52
60	A new photocatalytic reactor for destruction of toxic water pollutants by advanced oxidation process. Catalysis Today, 1998, 44, 357-368.	2.2	50
61	Optimization of reactive SMB and Varicol systems. Computers and Chemical Engineering, 2003, 27, 1883-1901.	2.0	50
62	Inactivation of Murine Norovirus and Fecal Coliforms by Ferrate(VI) in Secondary Effluent Wastewater. Environmental Science & Technology, 2020, 54, 1878-1888.	4.6	49
63	Optimal Operation of an Industrial-Scale Parex Process for the Recovery of p-Xylene from a Mixture of C8 Aromatics. Industrial & Engineering Chemistry Research, 2005, 44, 5703-5714.	1.8	48
64	Silica gel-enhanced oxidation of caffeine by ferrate(VI). Chemical Engineering Journal, 2017, 330, 987-994.	6.6	47
65	Photocatalytic degradation of nonionic surfactant, Brij 35 in aqueous TiO2 suspensions. Chemosphere, 2010, 79, 205-209.	4.2	46
66	A Taylor Vortex Photocatalytic Reactor for Water Purification. Industrial & Engineering Chemistry Research, 2001, 40, 5268-5281.	1.8	45
67	Modeling of the adsorption breakthrough behaviors of Pb2+ in a fixed bed of ETS-10 adsorbent. Journal of Colloid and Interface Science, 2008, 325, 57-63.	5.0	45
68	The simulated countercurrent moving bed chromatographic reactor. Chemical Engineering Science, 1990, 45, 2431-2437.	1.9	43
69	Solar photocatalytic degradation of caffeine with titanium dioxide and zinc oxide nanoparticles. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 377, 1-7.	2.0	43
70	Multiobjective Optimization of Simulated Countercurrent Moving Bed Chromatographic Reactor (SCMCR) for MTBE Synthesis. Industrial & Engineering Chemistry Research, 2002, 41, 3213-3232.	1.8	42
71	Modeling, Simulation, and Experimental Study of a Simulated Moving Bed Reactor for the Synthesis of Methyl Acetate Ester. Industrial & Engineering Chemistry Research, 2003, 42, 6743-6754.	1.8	42
72	Optimal design and operation of SMB bioreactor for sucrose inversion. Chemical Engineering Journal, 2005, 108, 19-33.	6.6	42

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73	Preparation and Characterization of the TiO2 Immobilized Polymeric Photocatalyst for Degradation of Aspirin under UV and Solar Light. Processes, 2014, 2, 12-23.	1.3	42
74	Determination of Adsorption and Kinetic Parameters for Methyl tert-Butyl Ether Synthesis from tert-Butyl Alcohol and Methanol. Journal of Catalysis, 2001, 200, 209-221.	3.1	40
75	Oxidation of caffeine by acidâ€activated ferrate(VI): Effect of ions and natural organic matter. AICHE Journal, 2017, 63, 4998-5006.	1.8	40
76	Optimization of Simulated Moving Bed and Varicol Processes for Glucoseâ€“Fructose Separation. Chemical Engineering Research and Design, 2003, 81, 549-567.	2.7	38
77	Photocatalytic Decomposition of Formic Acid Under Visible Light Irradiation Over V-ion-implanted TiO2 Thin Film Photocatalysts Prepared on Quartz Substrate by Ionized Cluster Beam (ICB) Deposition Method. Catalysis Letters, 2006, 106, 67-70.	1.4	38
78	Factorial design analysis for dye-sensitized hydrogen generation from water. International Journal of Hydrogen Energy, 2011, 36, 13442-13451.	3.8	38
79	Catalytic reaction in a circulating fluidized bed downer: Ozone decomposition. Chemical Engineering Science, 2011, 66, 4615-4623.	1.9	36
80	Enantio-separation of racemic pindolol on <mml:math altimg="si43.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/co	1.9	35
81	Mechanism of Acetyl Salicylic Acid (Aspirin) Degradation under Solar Light in Presence of a TiO2-Polymeric Film Photocatalyst. Processes, 2016, 4, 13.	1.3	35
82	Dye-Sensitized Photocatalytic Water Splitting and Sacrificial Hydrogen Generation: Current Status and Future Prospects. Inorganics, 2017, 5, 34.	1.2	35
83	Coagulation and disinfection by-products formation potential of extracellular and intracellular matter of algae and cyanobacteria. Chemosphere, 2020, 245, 125669.	4.2	35
84	Multiobjective optimization of the continuous casting process for poly (methyl methacrylate) using adapted genetic algorithm. Journal of Applied Polymer Science, 2000, 78, 1439-1458.	1.3	34
85	Applications of Genetic Algorithm in Polymer Science and Engineering. Materials and Manufacturing Processes, 2003, 18, 523-532.	2.7	34
86	Multi-objective optimization of an industrial penicillin V bioreactor train using non-dominated sorting genetic algorithm. Biotechnology and Bioengineering, 2007, 98, 586-598.	1.7	33
87	Application of Multiobjective Optimization in the Design and Operation of Reactive SMB and Its Experimental Verification. Industrial & Engineering Chemistry Research, 2003, 42, 6823-6831.	1.8	32
88	Numerical simulation of a simulated countercurrent moving bed chromatographic reactor. Chemical Engineering Science, 1995, 50, 3033-3041.	1.9	31
89	Optimal operation of a Pseudo-SMB process for ternary separation under non-ideal conditions. Separation and Purification Technology, 2006, 51, 387-403.	3.9	31
90	A comparative study on hydrodynamics of circulating fluidized bed riser and downer. Powder Technology, 2013, 247, 235-259.	2.1	31

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91	Optimization and modeling of coagulation-flocculation to remove algae and organic matter from surface water by response surface methodology. Frontiers of Environmental Science and Engineering, 2019, 13, 1.	3.3	30
92	Simulation and Multiobjective Optimization of an Industrial Hydrogen Plant Based on Refinery Off-Gas. Industrial & Engineering Chemistry Research, 2002, 41, 2248-2261.	1.8	29
93	The fabrication of highly ordered and visible-light-responsive Feâ€“Câ€“N-codoped TiO₂nanotubes. Nanotechnology, 2010, 21, 055706.	1.3	29
94	Multi-objective optimization in solid oxide fuel cell for oxidative coupling of methane. Chemical Engineering Journal, 2010, 165, 639-648.	6.6	29
95	Solar photocatalytic degradation of Zn 2+ using graphene based TiO 2. Separation and Purification Technology, 2016, 168, 294-301.	3.9	29
96	Sustainable Bio-Based Phenol-Formaldehyde Resoles Using Hydrolytically Depolymerized Kraft Lignin. Molecules, 2017, 22, 1850.	1.7	29
97	Multi-objective optimization of simulated moving bed and Varicol processes for enantio-separation of racemic pindolol. Separation and Purification Technology, 2009, 65, 311-321.	3.9	27
98	Applications of the Non-Dominated Sorting Genetic Algorithm (NSGA) in Chemical Reaction Engineering. International Journal of Chemical Reactor Engineering, 2003, 1, .	0.6	26
99	Optimization of reactive simulated moving bed and Varicol systems for hydrolysis of methyl acetate. Chemical Engineering Journal, 2005, 112, 57-72.	6.6	26
100	Modified reactive SMB for production of high concentrated fructose syrup by isomerization of glucose to fructose. Biochemical Engineering Journal, 2007, 35, 341-351.	1.8	26
101	Computer Simulation of a Novel Photocatalytic Reactor Using Distributive Computing Environment. Chemical Engineering and Technology, 1999, 22, 881-888.	0.9	25
102	A study of finding many desirable solutions in multiobjective optimization of chemical processes. Computers and Chemical Engineering, 2007, 31, 1257-1271.	2.0	25
103	Determination of competitive adsorption isotherm of enantiomers on preparative chromatographic columns using inverse method. Journal of Chromatography A, 2013, 1273, 49-56.	1.8	23
104	Intrinsic Kinetic Study for Photocatalytic Degradation of Diclofenac under UV and Visible Light. Industrial & Engineering Chemistry Research, 2014, 53, 18637-18646.	1.8	23
105	Self-Assembled Au/TiO₂/CNTs Ternary Nanocomposites for Photocatalytic Applications. Science of Advanced Materials, 2010, 2, 503-513.	0.1	23
106	Comparative Study of Modified Simulated Moving Bed Systems at Optimal Conditions for the Separation of Ternary Mixtures under Nonideal Conditions. Industrial & Engineering Chemistry Research, 2006, 45, 3902-3915.	1.8	22
107	Determination of competitive adsorption isotherm parameters of pindolol enantiomers on Î±1-acid glycoprotein chiral stationary phase. Journal of Chromatography A, 2006, 1131, 176-184.	1.8	22
108	Measurement and prediction of phase diagrams of the enantiomeric 3-chloromandelic acid system. Chemical Engineering Science, 2009, 64, 192-197.	1.9	22

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109	Integration of photocatalytic and biological processes for treatment of pharmaceutical effluent. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 364, 322-327.	2.0	22
110	Rapid removal of acesulfame potassium by acid-activated ferrate(VI) under mild alkaline conditions. Chemosphere, 2019, 230, 416-423.	4.2	22
111	Hydrogen production from aqueous triethanolamine solution using Eosin Y-sensitized ZnO photocatalyst doped with platinum. International Journal of Hydrogen Energy, 2020, 45, 11097-11107.	3.8	22
112	Optimization of nonvaporizing nylon 6 reactors with stopping conditions and end-point constraints. Polymer Engineering and Science, 1986, 26, 1033-1044.	1.5	21
113	Optimal operating mode for enantioseparation of SB-553261 racemate based on simulated moving bed technology. Biotechnology and Bioengineering, 2004, 87, 704-722.	1.7	21
114	Photoelectrochemical water splitting for hydrogen generation on highly ordered TiO2 nanotubes fabricated by using Ti as cathode. International Journal of Hydrogen Energy, 2012, 37, 103-108.	3.8	21
115	Direct UV photolysis of pharmaceutical compounds: Determination of pH-dependent quantum yield and full-scale performance. Chemical Engineering Journal, 2020, 380, 122460.	6.6	21
116	Modeling and simulation of liquidâ€“solid circulating fluidized bed ion exchange system for continuous protein recovery. Biotechnology and Bioengineering, 2009, 104, 111-126.	1.7	20
117	Multi-objective optimization of simulated countercurrent moving bed chromatographic reactor for oxidative coupling of methane. Chemical Engineering Science, 2009, 64, 4137-4149.	1.9	20
118	Dye-Sensitized Photocatalyst: A Breakthrough in Green Energy and Environmental Detoxification. ACS Symposium Series, 2013, , 231-266.	0.5	20
119	In-situ grown molybdenum sulfide on TiO2 for dye-sensitized solar photocatalytic hydrogen generation. Chemical Engineering Science, 2016, 152, 35-44.	1.9	20
120	Photocatalytic Reactor Configurations for Water Purification. Advances in Chemical Engineering, 2009, 36, 145-184.	0.5	19
121	Chromatographic resolution and isotherm determination of (<scp>R</scp>,<scp>S</scp>)â€mandelic acid on <scp>C</scp>hiralcelâ€<scp>OD</scp> column. Journal of Separation Science, 2012, 35, 2273-2281.	1.3	19
122	Multiobjective Optimization of Industrial Petroleum Processing Units Using Genetic Algorithms. Procedia Chemistry, 2014, 10, 7-14.	0.7	19
123	Study of solar photocatalytic degradation of Acesulfame K to limit the outpouring of artificial sweeteners. Separation and Purification Technology, 2018, 207, 51-57.	3.9	19
124	Oxidation of Xâ€ray compound ditrizoic acid by ferrate(VI). Environmental Technology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 14	1.2	18
125	A novel nanoengineered VOx catalyst supported on highly ordered TiO2 nanotube arrays for partial oxidation reactions. Applied Catalysis A: General, 2012, 417-418, 13-18.	2.2	18
126	Catalytic reaction in a circulating fluidized bed riser: Ozone decomposition. Powder Technology, 2013, 242, 65-73.	2.1	18

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127	Improved performance for continuous separation of 1,1â€²-bi-2-naphthol racemate based on simulated moving bed technology. Separation and Purification Technology, 2005, 46, 168-191.	3.9	17
128	Performance Improvement of Activated Sludge Wastewater Treatment by Nonlinear Natural Oscillations. Chemical Engineering and Technology, 2000, 23, 1115-1122.	0.9	16
129	Comparative Study of Modified Simulated Moving Bed Systems at Optimal Conditions for the Separation of Ternary Mixtures of Xylene Isomers. Industrial & Engineering Chemistry Research, 2006, 45, 6251-6265.	1.8	15
130	Numerical determination of competitive adsorption isotherm of mandelic acid enantiomers on cellulose-based chiral stationary phase. Journal of Chromatography A, 2008, 1202, 34-39.	1.8	15
131	Nucleation and Growth Kinetics of (R)-Mandelic Acid from Aqueous Solution in the Presence of the Opposite Enantiomer. Crystal Growth and Design, 2010, 10, 2879-2887.	1.4	15
132	Assessment of Khibiny Alkaline Massif groundwater quality using statistical methods and water quality index. Canadian Journal of Chemical Engineering, 2020, 98, 205-212.	0.9	15
133	Photocatalytic degradation of atenolol with graphene oxide/zinc oxide composite: Optimization of process parameters using statistical method. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 409, 113136.	2.0	15
134	Modeling and simulation of simulated countercurrent moving bed chromatographic reactor for oxidative coupling of methane. Chemical Engineering Science, 2009, 64, 5143-5152.	1.9	14
135	Optimal design of liquidâ€“solid circulating fluidized bed for continuous protein recovery. Powder Technology, 2010, 199, 32-47.	2.1	13
136	Solar degradation of diclofenac using Eosin-Y-activated TiO2: cost estimation, process optimization and parameter interaction study. Environmental Technology (United Kingdom), 2017, 38, 933-944.	1.2	13
137	Multi-objective optimization of sequential simulated moving bed for the purification of xylo-oligosaccharides. Chemical Engineering Science, 2020, 211, 115279.	1.9	13
138	Modeling of the sheet-molding process for poly(methyl methacrylate). Journal of Applied Polymer Science, 2001, 81, 1951-1971.	1.3	12
139	Optimal operation of reactive simulated moving bed and Varicol systems. Journal of Chemical Technology and Biotechnology, 2003, 78, 287-293.	1.6	12
140	Multiobjective Optimization of Simulated Moving Bed Reactor and its Modification â€” Varicol Process. Canadian Journal of Chemical Engineering, 2004, 82, 590-598.	0.9	12
141	Degradation of Phenolic Compounds Through UV and Visible- Light-Driven Photocatalysis: Technical and Economic Aspects. , 0, , .		12
142	Morphology-Controlled Synthesis of ZnO Nanostructures for Caffeine Degradation and Escherichia coli Inactivation in Water. Catalysts, 2021, 11, 63.	1.6	12
143	Triple-Objective Optimization of an Industrial Hydrogen Plant.. Journal of Chemical Engineering of Japan, 2001, 34, 1341-1355.	0.3	11
144	Multiobjective Optimization of a Porous Ceramic Membrane Reactor for Oxidative Coupling of Methane. Industrial & Engineering Chemistry Research, 2010, 49, 6469-6481.	1.8	11

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145	Degradation of anionic and cationic surfactants in a monolithic swirl-flow photoreactor. Separation and Purification Technology, 2012, 92, 43-49.	3.9	11
146	Modelling, simulation, and experimental study of a simulated moving bed reactor for the synthesis of biodiesel. Canadian Journal of Chemical Engineering, 2016, 94, 913-923.	0.9	11
147	Optimization of Lactoperoxidase and Lactoferrin Separation on an Ion-Exchange Chromatography Step. Separations, 2017, 4, 10.	1.1	11
148	Removal of aluminum from aqueous solution by adsorption on montmorillonite K10, TiO2, and SiO2: kinetics, isotherms, and effect of ions. Adsorption, 2019, 25, 1575-1583.	1.4	11
149	Multi-objective optimization of non-isothermal simulated moving bed reactor: Methyl acetate synthesis. Chemical Engineering Journal, 2020, 395, 125041.	6.6	11
150	Optimization of nonvaporizing nylon 6 reactors with stopping conditions. Journal of Applied Polymer Science, 1985, 30, 4529-4550.	1.3	10
151	MODELING OF AN INDUSTRIAL WIPED FILM POLY(ETHYLENE TEREPHTHALATE) REACTOR. Polymer-Plastics Technology and Engineering, 2001, 9, 71-99.	0.7	10
152	Determination of adsorption isotherm parameters for minor whey proteins by gradient elution preparative liquid chromatography. Journal of Chromatography A, 2015, 1412, 67-74.	1.8	10
153	Determination of adsorption and kinetic parameters for methyl oleate (biodiesel) esterification reaction catalyzed by Amberlyst 15 resin. Canadian Journal of Chemical Engineering, 2016, 94, 738-744.	0.9	10
154	Photocatalytic Degradation of Diazo Dye over Suspended and Immobilized TiO2 Catalyst in Swirl Flow Reactor: Kinetic Modeling. Processes, 2021, 9, 1741.	1.3	10
155	Degradation of methyl orange by TiO₂/polymeric film photocatalyst. Canadian Journal of Chemical Engineering, 2014, 92, 1661-1666.	0.9	9
156	Removal of arsenic(III) from aqueous solution by concreteâ€based adsorbents. Canadian Journal of Chemical Engineering, 2020, 98, 353-359.	0.9	9
157	A microsieve-based filtration process for combined sewer overflow treatment with nutrient control: Modeling and experimental studies. Water Research, 2020, 170, 115328.	5.3	9
158	A comparison between simulated moving bed and sequential simulated moving bed system based on multi-objective optimization. Chemical Engineering Science, 2020, 219, 115562.	1.9	9
159	Multiobjective optimization of the operation of a liquidâ€“solid circulating fluidized bed ionâ€exchange system for continuous protein recovery. Biotechnology and Bioengineering, 2009, 103, 873-890.	1.7	8
160	Kinetics of (R,S)- and (R)-mandelic acid in an unseeded cooling batch crystallizer. Journal of Crystal Growth, 2010, 312, 3340-3348.	0.7	8
161	Numerical simulation and optimisation of unconventional threeâ€section simulated countercurrent moving bed chromatographic reactor for oxidative coupling of methane reaction. Canadian Journal of Chemical Engineering, 2012, 90, 1502-1513.	0.9	8
162	Photocatalytic Performance of Titanium Dioxide Thin Films from Polymer-Encapsulated Titania. Industrial & Engineering Chemistry Research, 2013, 52, 17800-17811.	1.8	8

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163	Treatment of Combined Sewer Overflows Using Ferrate (VI). Water Environment Research, 2014, 86, 2202-2211.	1.3	8
164	Multiobjective Feature Selection Approach to Quantitative Structure Property Relationship Models for Predicting the Octane Number of Compounds Found in Gasoline. Energy & Fuels, 2017, 31, 5828-5839.	2.5	8
165	Size-dependent adsorption and conformational changes induced in bovine serum albumin (BSA) on exposure to titanium dioxide (TiO₂) nanoparticles. Separation Science and Technology, 2017, 52, 421-434.	1.3	8
166	Equilibrium and kinetic differences of XOS2-XOS7 in xylo-oligosaccharides and their effects on the design of simulated moving bed purification process. Separation and Purification Technology, 2019, 215, 360-367.	3.9	8
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