Ajay K. Ray

List of Publications by Year in Descending Order

200 papers	8,299 citations	50 h-index	84 g-index
210 ext. papers	8,988 ext. citations	4.8 avg, IF	6.28 L-index

#	Paper	IF	Citations
200	Combined sewer overflow treatment: Assessing chemical pre-treatment and microsieve-based filtration in enhancing the performance of UV disinfection. *Science of the Total Environment*, **2022**, 807, 150725	10.2	1
199	Statistical study of Khibiny Alkaline Massif (Kola Peninsula) groundwater quality with respect to elevated aluminum concentrations. *Environmental Technology (United Kingdom)*, **2021**, 1-9	2.6	1
198	Morphology-Controlled Synthesis of ZnO Nanostructures for Caffeine Degradation and Escherichia coli Inactivation in Water. *Catalysts*, **2021**, 11, 63	4	6
197	Multi-Objective Optimizations of Non-Isothermal Simulated Moving Bed Reactor: Parametric Analyses. *Processes*, **2021**, 9, 360	2.9	1
196	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	4.7	8
195	Multi-Objective Optimisation of Biodiesel Synthesis in Simulated Moving Bed Reactor. *Separations*, **2021**, 8, 127	3.1	1
194	Photocatalytic Degradation of Diazo Dye over Suspended and Immobilized TiO2 Catalyst in Swirl Flow Reactor: Kinetic Modeling. *Processes*, **2021**, 9, 1741	2.9	2
193	A comparison between simulated moving bed and sequential simulated moving bed system based on multi-objective optimization. *Chemical Engineering Science*, **2020**, 219, 115562	4.4	5
192	Removal of As(V) using low cost adsorbents: aerocrete and vermiculite modified with iron oxy-hydroxide. *Adsorption*, **2020**, 26, 387-396	2.6	4
191	Multi-objective optimization of non-isothermal simulated moving bed reactor: Methyl acetate synthesis. *Chemical Engineering Journal*, **2020**, 395, 125041	14.7	7
190	Response surface optimization of the photocatalytic degradation of atenolol using immobilized graphene-TiO2 composite. *Canadian Journal of Chemical Engineering*, **2020**, 98, 1767-1775	2.3	4
189	Computational studies of 4-nitrophenyl- and 2-benzothiazolyl-substituted formazans and tetrazolium salts. *Chemical Physics*, **2020**, 535, 110790	2.3	2
188	Hydrogen production from aqueous triethanolamine solution using Eosin Y-sensitized ZnO photocatalyst doped with platinum. *International Journal of Hydrogen Energy*, **2020**, 45, 11097-11107	6.7	11
187	Assessment of Khibiny Alkaline Massif groundwater quality using statistical methods and water quality index. *Canadian Journal of Chemical Engineering*, **2020**, 98, 205-212	2.3	9
186	Inactivation of Murine Norovirus and Fecal Coliforms by Ferrate(VI) in Secondary Effluent Wastewater. *Environmental Science & Technology*, **2020**, 54, 1878-1888	10.3	26
185	Coagulation and disinfection by-products formation potential of extracellular and intracellular matter of algae and cyanobacteria. *Chemosphere*, **2020**, 245, 125669	8.4	13
184	A microsieve-based filtration process for combined sewer overflow treatment with nutrient control: Modeling and experimental studies. *Water Research*, **2020**, 170, 115328	12.5	5

183	Modeling of Degradation of Diazo Dye in Swirl-Flow Photocatalytic Reactor: Response Surface Approach. *Catalysts*, **2020**, 10, 1418	4	1
182	Photocatalytic Activity of Aeroxide TiO2 Sensitized by Natural Dye Extracted from Mangosteen Peel. *Catalysts*, **2020**, 10, 917	4	3
181	Study of aluminium in groundwater using chemometric methods. *Environmental Technology (United Kingdom)*, **2020**, 41, 1691-1699	2.6	3
180	Multi-objective optimization of sequential simulated moving bed for the purification of xylo-oligosaccharides. *Chemical Engineering Science*, **2020**, 211, 115279	4.4	7
179	Removal of aluminum from alkaline aqueous solution by adsorption on Degussa P25 TiO2 and vermiculite concrete-supported ferric oxyhydroxide. *Canadian Journal of Chemical Engineering*, **2020**, 98, 373-383	2.3	2
178	Direct UV photolysis of pharmaceutical compounds: Determination of pH-dependent quantum yield and full-scale performance. *Chemical Engineering Journal*, **2020**, 380, 122460	14.7	13
177	Removal of arsenic(III) from aqueous solution by concrete-based adsorbents. *Canadian Journal of Chemical Engineering*, **2020**, 98, 353-359	2.3	6
176	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	8.3	6
175	Rapid removal of acesulfame potassium by acid-activated ferrate(VI) under mild alkaline conditions. *Chemosphere*, **2019**, 230, 416-423	8.4	18
174	Solar photocatalytic degradation of caffeine with titanium dioxide and zinc oxide nanoparticles. *Journal of Photochemistry and Photobiology A: Chemistry*, **2019**, 377, 1-7	4.7	28
173	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	2.6	5
172	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	5.8	18
171	Pharmaceuticals and pesticides in secondary effluent wastewater: Identification and enhanced removal by acid-activated ferrate(VI). *Water Research*, **2019**, 148, 272-280	12.5	63
170	Study of solar photocatalytic degradation of Acesulfame K to limit the outpouring of artificial sweeteners. *Separation and Purification Technology*, **2018**, 207, 51-57	8.3	13
169	Integration of photocatalytic and biological processes for treatment of pharmaceutical effluent. *Journal of Photochemistry and Photobiology A: Chemistry*, **2018**, 364, 322-327	4.7	14
168	Conceptual Approach in Multi-Objective Optimization of Packed Bed Membrane Reactor for Ethylene Epoxidation Using Real-coded Non-Dominating Sorting Genetic Algorithm NSGA-II. *International Journal of Chemical Reactor Engineering*, **2017**, 15,	1.2	2
167	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	4.1	8
166	A Review on Ferrate(VI) and Photocatalysis as Oxidation Processes for the Removal of Organic Pollutants in Water and Wastewater **2017**, 331-390		3

165	Degradation of Phenolic Compounds Through UV and Visible- Light-Driven Photocatalysis: Technical and Economic Aspects **2017**,		7
164	Oxidation of caffeine by acid-activated ferrate(VI): Effect of ions and natural organic matter. *AICHE Journal*, **2017**, 63, 4998-5006	3.6	28
163	Silica gel-enhanced oxidation of caffeine by ferrate(VI). *Chemical Engineering Journal*, **2017**, 330, 987-994	14.7	35
162	Solar degradation of diclofenac using Eosin-Y-activated TiO: cost estimation, process optimization and parameter interaction study. *Environmental Technology (United Kingdom)*, **2017**, 38, 933-944	2.6	12
161	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	8.3	49
160	Enhanced oxidative transformation of organic contaminants by activation of ferrate(VI): Possible involvement of FeV/FeIV species. *Chemical Engineering Journal*, **2017**, 307, 513-517	14.7	61
159	Enhanced photocatalytic degradation of atenolol using graphene TiO2 composite. *Journal of Photochemistry and Photobiology A: Chemistry*, **2017**, 332, 182-187	4.7	53
158	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	2.5	5
157	Dye-Sensitized Photocatalytic Water Splitting and Sacrificial Hydrogen Generation: Current Status and Future Prospects. *Inorganics*, **2017**, 5, 34	2.9	26
156	Sustainable Bio-Based Phenol-Formaldehyde Resoles Using Hydrolytically Depolymerized Kraft Lignin. *Molecules*, **2017**, 22,	4.8	23
155	Optimization of Lactoperoxidase and Lactoferrin Separation on an Ion-Exchange Chromatography Step. *Separations*, **2017**, 4, 10	3.1	8
154	Impact of operating conditions on chromatographic column performance: experimental studies on adsorption of high-value minor whey proteins. *AIMS Bioengineering*, **2017**, 4, 223-238	3.4	1
153	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	2.3	9
152	In-situ grown molybdenum sulfide on TiO2 for dye-sensitized solar photocatalytic hydrogen generation. *Chemical Engineering Science*, **2016**, 152, 35-44	4.4	17
151	Enhanced photocatalytic degradation of ofloxacin by co-doped titanium dioxide under solar irradiation. *Separation and Purification Technology*, **2016**, 161, 1-7	8.3	38
150	Mechanism of Acetyl Salicylic Acid (Aspirin) Degradation under Solar Light in Presence of a TiO2-Polymeric Film Photocatalyst. *Processes*, **2016**, 4, 13	2.9	24
149	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	2.3	9
148	Solar photocatalytic degradation of Zn 2+ using graphene based TiO 2. *Separation and Purification Technology*, **2016**, 168, 294-301	8.3	22

147	Determination of adsorption isotherm parameters for minor whey proteins by gradient elution preparative liquid chromatography. *Journal of Chromatography A*, **2015**, 1412, 67-74	4.5	7
146	Nanoscale Optimization and Statistical Modeling of Photoelectrochemical Water Splitting Efficiency of N-Doped TiO2 Nanotubes. *Topics in Catalysis*, **2015**, 58, 114-122	2.3	6
145	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	8.4	37
144	4. Application of multi-objective optimization in the design and operation of industrial catalytic reactors and processes **2015**, 134-173		
143	Photocatalytic Processes for the Removal of Dye **2015**, 119-137		4
142	Quantifying ultraviolet inactivation kinetics in nearly opaque fluids. *Water Quality Research Journal of Canada*, **2015**, 50, 34-46	1.7	0
141	Oxidative protein refolding on size exclusion chromatography: From batch single-column to multi-column counter-current continuous processing. *Chemical Engineering Science*, **2015**, 138, 375-384	4.4	4
140	Oxidative protein refolding on size exclusion chromatography at high loading concentrations: fundamental studies and mathematical modeling. *Journal of Chromatography A*, **2014**, 1370, 147-55	4.5	4
139	Degradation of methyl orange by TiO2/polymeric film photocatalyst. *Canadian Journal of Chemical Engineering*, **2014**, 92, 1661-1666	2.3	8
138	Enhanced Solar Photocatalytic Degradation of Phenol with Coupled Graphene-Based Titanium Dioxide and Zinc Oxide. *Industrial & Engineering Chemistry Research*, **2014**, 53, 18824-18832	3.9	71
137	Multi-variable operational characteristic studies of on-column oxidative protein refolding at high loading concentrations. *Journal of Chromatography A*, **2014**, 1359, 70-5	4.5	6
136	Mechanistic modeling of vacuum UV advanced oxidation process in an annular photoreactor. *Water Research*, **2014**, 64, 209-225	12.5	43
135	Intrinsic Kinetic Study for Photocatalytic Degradation of Diclofenac under UV and Visible Light. *Industrial & Engineering Chemistry Research*, **2014**, 53, 18637-18646	3.9	19
134	Preparation and Characterization of the TiO2 Immobilized Polymeric Photocatalyst for Degradation of Aspirin under UV and Solar Light. *Processes*, **2014**, 2, 12-23	2.9	35
133	Treatment of combined sewer overflows using ferrate (VI). *Water Environment Research*, **2014**, 86, 2202-11	1.8	8
132	Multiobjective Optimization of Industrial Petroleum Processing Units Using Genetic Algorithms. *Procedia Chemistry*, **2014**, 10, 7-14		14
131	Enantioseparation of racemic mandelic acid by simulated moving bed chromatography using Chiralcel-OD column. *Canadian Journal of Chemical Engineering*, **2014**, 92, 1283-1292	2.3	3
130	Photocatalytic Performance of Titanium Dioxide Thin Films from Polymer-Encapsulated Titania. *Industrial & Engineering Chemistry Research*, **2013**, 52, 17800-17811	3.9	8

129	Analysis of a nonisothermal simulated moving-bed reactor. *AICHE Journal*, **2013**, 59, 4705-4714	3.6	5
128	Determination of competitive adsorption isotherm of enantiomers on preparative chromatographic columns using inverse method. *Journal of Chromatography A*, **2013**, 1273, 49-56	4.5	21
127	Catalytic reaction in a circulating fluidized bed riser: Ozone decomposition. *Powder Technology*, **2013**, 242, 65-73	5.2	16
126	Sacrificial Hydrogen Generation from Formaldehyde with Pt/TiO2 Photocatalyst in Solar Radiation. *Industrial & Engineering Chemistry Research*, **2013**, 52, 5023-5029	3.9	65
125	A comparative study on hydrodynamics of circulating fluidized bed riser and downer. *Powder Technology*, **2013**, 247, 235-259	5.2	27
124	Dye-Sensitized Photocatalyst: A Breakthrough in Green Energy and Environmental Detoxification. *ACS Symposium Series*, **2013**, 231-266	0.4	18
123	Degradation of anionic and cationic surfactants in a monolithic swirl-flow photoreactor. *Separation and Purification Technology*, **2012**, 92, 43-49	8.3	11
122	Visible-Solar-Light-Driven Photocatalytic Degradation of Phenol with Dye-Sensitized TiO2: Parametric and Kinetic Study. *Industrial & Engineering Chemistry Research*, **2012**, 51, 4523-4532	3.9	152
121	Rotational asymmetry of reactant concentration and its evolution in a circulating fluidized bed riser. *Particuology*, **2012**, 10, 573-581	2.8	7
120	Chromatographic resolution and isotherm determination of (R,S)-mandelic acid on Chiralcel-OD column. *Journal of Separation Science*, **2012**, 35, 2273-81	3.4	16
119	Numerical simulation and optimisation of unconventional three-section simulated countercurrent moving bed chromatographic reactor for oxidative coupling of methane reaction. *Canadian Journal of Chemical Engineering*, **2012**, 90, 1502-1513	2.3	6
118	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	6.7	20
117	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	5.1	17
116	An innovative approach to synthesize highly-ordered TiO2 nanotubes. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 1079-83	1.3	3
115	Factorial design analysis for dye-sensitized hydrogen generation from water. *International Journal of Hydrogen Energy*, **2011**, 36, 13442-13451	6.7	36
114	Catalytic reaction in a circulating fluidized bed downer: Ozone decomposition. *Chemical Engineering Science*, **2011**, 66, 4615-4623	4.4	34
113	Oxidation of X-ray compound ditrizoic acid by ferrate(VI). *Environmental Technology (United Kingdom)*, **2011**, 32, 261-7	2.6	15
112	Analysis of a Model for Ethanol Production through Continuous Fermentation: Ethanol Productivity. *International Journal of Chemical Reactor Engineering*, **2010**, 8,	1.2	5

111	Photocatalytic activities of Pt/ZIF-8 loaded highly ordered TiO2 nanotubes. *Journal of Materials Chemistry*, **2010**, 20, 10241		50
110	Multiobjective Optimization of a Porous Ceramic Membrane Reactor for Oxidative Coupling of Methane. *Industrial & Engineering Chemistry Research*, **2010**, 49, 6469-6481	3.9	10
109	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	3.5	9
108	Photocatalytic degradation of nonionic surfactant, Brij 35 in aqueous TiO2 suspensions. *Chemosphere*, **2010**, 79, 205-9	8.4	41
107	The fabrication of highly ordered and visible-light-responsive Fe-C-N-codoped TiO2 nanotubes. *Nanotechnology*, **2010**, 21, 055706	3.4	29
106	Kinetics of (R,S)- and (R)-mandelic acid in an unseeded cooling batch crystallizer. *Journal of Crystal Growth*, **2010**, 312, 3340-3348	1.6	7
105	Optimal design of liquid–solid circulating fluidized bed for continuous protein recovery. *Powder Technology*, **2010**, 199, 32-47	5.2	13
104	Multi-objective optimization in solid oxide fuel cell for oxidative coupling of methane. *Chemical Engineering Journal*, **2010**, 165, 639-648	14.7	18
103	Self-Assembled Au/TiO2/CNTs Ternary Nanocomposites for Photocatalytic Applications. *Science of Advanced Materials*, **2010**, 2, 503-513	2.3	21
102	Multiobjective optimization of the operation of a liquid-solid circulating fluidized bed ion-exchange system for continuous protein recovery. *Biotechnology and Bioengineering*, **2009**, 103, 873-90	4.9	8
101	Modeling and simulation of liquid-solid circulating fluidized bed ion exchange system for continuous protein recovery. *Biotechnology and Bioengineering*, **2009**, 104, 111-26	4.9	18
100	Measurement and prediction of phase diagrams of the enantiomeric 3-chloromandelic acid system. *Chemical Engineering Science*, **2009**, 64, 192-197	4.4	19
99	Multi-objective optimization of simulated moving bed and Varicol processes for enantio-separation of racemic pindolol. *Separation and Purification Technology*, **2009**, 65, 311-321	8.3	27
98	Photo-reduction of hexavalent chromium in aqueous solution in the presence of zinc oxide as semiconductor catalyst. *Chemical Engineering Journal*, **2009**, 153, 86-93	14.7	114
97	Multi-objective optimization of simulated countercurrent moving bed chromatographic reactor for oxidative coupling of methane. *Chemical Engineering Science*, **2009**, 64, 4137-4149	4.4	15
96	Modeling and simulation of simulated countercurrent moving bed chromatographic reactor for oxidative coupling of methane. *Chemical Engineering Science*, **2009**, 64, 5143-5152	4.4	13
95	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, 423-42	2.3	162
94	Photocatalytic Reactor Configurations for Water Purification. *Advances in Chemical Engineering*, **2009**, 36, 145-184	0.6	14

93	Multiobjective Optimization of Simulated Moving Bed Reactor and its Modification Varicol Process. *Canadian Journal of Chemical Engineering*, **2008**, 82, 590-598	2.3	10
92	Heterogeneous Photocatalysis in Environmental Remediation. *Asia-Pacific Journal of Chemical Engineering*, **2008**, 8, 505-550		61
91	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	9.3	36
90	Numerical determination of competitive adsorption isotherm of mandelic acid enantiomers on cellulose-based chiral stationary phase. *Journal of Chromatography A*, **2008**, 1202, 34-9	4.5	14
89	Preparation and Characterization of Polycrystalline Bismuth Titanate Bi12TiO20 and Its Photocatalytic Properties under Visible Light Irradiation. *Industrial & Engineering Chemistry Research*, **2007**, 46, 745-749	3.9	95
88	Multi-objective optimization of an industrial penicillin V bioreactor train using non-dominated sorting genetic algorithm. *Biotechnology and Bioengineering*, **2007**, 98, 586-98	4.9	30
87	A study of finding many desirable solutions in multiobjective optimization of chemical processes. *Computers and Chemical Engineering*, **2007**, 31, 1257-1271	4	16
86	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	4.4	46
85	Modified reactive SMB for production of high concentrated fructose syrup by isomerization of glucose to fructose. *Biochemical Engineering Journal*, **2007**, 35, 341-351	4.2	23
84	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	9.3	98
83	Enantio-separation of racemic pindolol on . *Chemical Engineering Science*, **2007**, 62, 1364-1375	4.4	34
82	A multi-platform, multi-language environment for process modelling, simulation and optimisation. *International Journal of Computer Applications in Technology*, **2007**, 30, 197	0.7	5
81	Performance Improvement and Dynamical Behaviour Analysis of a Cascade of Two CSTRs. *International Journal of Chemical Reactor Engineering*, **2007**, 5,	1.2	2
80	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	2.3	63
79	Photodegradation of Benzoic Acid over Metal-Doped TiO2. *Industrial & Engineering Chemistry Research*, **2006**, 45, 3503-3511	3.9	161
78	Modeling, Simulation, and Multi-objective Optimization of an Industrial Hydrocracking Unit. *Industrial & Engineering Chemistry Research*, **2006**, 45, 1354-1372	3.9	57
77	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	3.9	65
76	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	3.9	22

75	First-Principles, Data-Based, and Hybrid Modeling and Optimization of an Industrial Hydrocracking Unit. *Industrial & Engineering Chemistry Research*, **2006**, 45, 7807-7816	3.9	48
74	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	3.9	14
73	Kinetic assessment of the potassium ferrate(VI) oxidation of antibacterial drug sulfamethoxazole. *Chemosphere*, **2006**, 62, 128-34	8.4	75
72	Ferrate(VI): green chemistry oxidant for degradation of cationic surfactant. *Chemosphere*, **2006**, 63, 1785-90	8.4	56
71	Determination of competitive adsorption isotherm parameters of pindolol enantiomers on alpha1-acid glycoprotein chiral stationary phase. *Journal of Chromatography A*, **2006**, 1131, 176-84	4.5	21
70	Optimal operation of a Pseudo-SMB process for ternary separation under non-ideal conditions. *Separation and Purification Technology*, **2006**, 51, 387-403	8.3	31
69	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	2.8	34
68	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	3.9	46
67	Multiobjective Optimization of an Industrial Ethylene Reactor Using a Nondominated Sorting Genetic Algorithm. *Industrial & Engineering Chemistry Research*, **2005**, 44, 124-141	3.9	60
66	Macro kinetic studies for photocatalytic degradation of benzoic acid in immobilized systems. *Chemosphere*, **2005**, 60, 1427-36	8.4	74
65	Photocatalytic oxidation of arsenic(III): evidence of hydroxyl radicals. *Environmental Science & Technology*, **2005**, 39, 1827-34	10.3	259
64	Improved performance for continuous separation of 1,1?-bi-2-naphthol racemate based on simulated moving bed technology. *Separation and Purification Technology*, **2005**, 46, 168-191	8.3	17
63	Optimal design and operation of SMB bioreactor for sucrose inversion. *Chemical Engineering Journal*, **2005**, 108, 19-33	14.7	39
62	Optimization of reactive simulated moving bed and Varicol systems for hydrolysis of methyl acetate. *Chemical Engineering Journal*, **2005**, 112, 57-72	14.7	25
61	Multiobjective optimization of an industrial styrene monomer manufacturing process. *Chemical Engineering Science*, **2005**, 60, 347-363	4.4	47
60	Ferrates (iron(VI) and iron(V)): Environmentally friendly oxidants and disinfectants. *Journal of Water and Health*, **2005**, 3, 45-58	2.2	117
59	Adsorption of arsenate and arsenite on titanium dioxide suspensions. *Journal of Colloid and Interface Science*, **2004**, 278, 270-5	9.3	346
58	Experimental investigation of Taylor vortex photocatalytic reactor for water purification. *Chemical Engineering Science*, **2004**, 59, 5249-5259	4.4	71

57	Optimal operating mode for enantioseparation of SB-553261 racemate based on simulated moving bed technology. *Biotechnology and Bioengineering*, **2004**, 87, 704-22	4.9	21
56	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	5.1	91
55	Optimal design and operation of SMB bioreactor: production of high fructose syrup by isomerization of glucose. *Biochemical Engineering Journal*, **2004**, 21, 111-121	4.2	67
54	Removal of Aqueous Cr(VI) by a Combination of Photocatalytic Reduction and Coprecipitation. *Industrial & Engineering Chemistry Research*, **2004**, 43, 1665-1672	3.9	221
53	Photocatalytic reduction of Hg(II) on two commercial TiO2 catalysts. *Electrochimica Acta*, **2004**, 49, 1435-1444	3.7	82
52	Optimization of Styrene Reactor Design for Two Objectives using a Genetic Algorithm. *International Journal of Chemical Reactor Engineering*, **2003**, 1,	1.2	2
51	Application of multi-objective optimization in the design of SMB in chemical process industry. *Computer Aided Chemical Engineering*, **2003**, 15, 1118-1122	0.6	
50	Application of multiobjective optimization in the design of chiral drug separators based on SMB technology. *Computer Aided Chemical Engineering*, **2003**, 14, 1145-1150	0.6	
49	Optimization of Simulated Moving Bed and Varicol Processes for Glucose–Fructose Separation. *Chemical Engineering Research and Design*, **2003**, 81, 549-567	5.5	38
48	Optimal operation of reactive simulated moving bed and Varicol systems. *Journal of Chemical Technology and Biotechnology*, **2003**, 78, 287-293	3.5	9
47	Performance enhancement of a chemical reactor utilizing flow instability. *Journal of Chemical Technology and Biotechnology*, **2003**, 78, 314-320	3.5	5
46	Multiobjective optimization of an industrial styrene reactor. *Computers and Chemical Engineering*, **2003**, 27, 111-130	4	53
45	Optimization of reactive SMB and Varicol systems. *Computers and Chemical Engineering*, **2003**, 27, 1883-1901	4	44
44	Dynamic Model of an Industrial Steam Reformer and Its Use for Multiobjective Optimization. *Industrial & Engineering Chemistry Research*, **2003**, 42, 4028-4042	3.9	52
43	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	3.9	38
42	Application of Multiobjective Optimization in the Design and Operation of Reactive SMB and Its Experimental Verification. *Industrial & Engineering Chemistry Research*, **2003**, 42, 6823-6831	3.9	28
41	Kinetic Studies for Photocatalytic Degradation of Eosin B on a Thin Film of Titanium Dioxide. *Industrial & Engineering Chemistry Research*, **2003**, 42, 6020-6033	3.9	71
40	Kinetic Studies of Photocatalytic Degradation in a TiO2Slurry System:Distinguishing Working Regimes and Determining Rate Dependences. *Industrial & Engineering Chemistry Research*, **2003**, 42, 2273-2281	3.9	93

39	Applications of Genetic Algorithm in Polymer Science and Engineering. *Materials and Manufacturing Processes*, **2003**, 18, 523-532	4.1	30
38	Performance Enhancement of Photocatalytic Reactor Utilizing Flow Instability. *International Journal of Chemical Reactor Engineering*, **2003**, 1,	1.2	1
37	Applications of the Non-Dominated Sorting Genetic Algorithm (NSGA) in Chemical Reaction Engineering. *International Journal of Chemical Reactor Engineering*, **2003**, 1,	1.2	18
36	Multiobjective optimization of SMB and varicol process for chiral separation. *AICHE Journal*, **2002**, 48, 2800-2816	3.6	121
35	Multiobjective Optimization of Simulated Countercurrent Moving Bed Chromatographic Reactor (SCMCR) for MTBE Synthesis. *Industrial & Engineering Chemistry Research*, **2002**, 41, 3213-3232	3.9	36
34	Simulation and Multiobjective Optimization of an Industrial Hydrogen Plant Based on Refinery Off-Gas. *Industrial & Engineering Chemistry Research*, **2002**, 41, 2248-2261	3.9	22
33	Multiobjective optimization of an industrial wiped film poly(ethylene terephthalate) reactor: some further insights. *Computers and Chemical Engineering*, **2001**, 25, 391-407	4	49
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