

Diane Hildebrandt

List of Publications by Year in Descending Order

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

235
papers

2,926
citations

27
h-index

44
g-index

250
ext. papers

3,246
ext. citations

4.5
avg, IF

5.35
L-index

#	Paper	IF	Citations
235	The effect of reducing gases on raw iron ore catalyst for Fischer-Tropsch synthesis. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2022 , 131, 104163	5.3	0
234	ZIF-8-derived ZnO/C decorated hydroxyl-functionalized multi-walled carbon nanotubes as a new composite electrode for supercapacitor application. <i>Colloids and Interface Science Communications</i> , 2022 , 47, 100589	5.4	2
233	Adsorption of dibenzothiophene in model diesel fuel by amarula waste biomass as a low-cost adsorbent.. <i>Journal of Environmental Management</i> , 2022 , 309, 114598	7.9	0
232	Effect of Ru-promotion on the catalytic performance of a cobalt-based Fischer-Tropsch catalyst activated in syngas or H ₂ . <i>Fuel</i> , 2022 , 320, 123939	7.1	0
231	Adsorptive desulfurization using period 4 transition metals oxide: A study of Lewis acid strength derived from the adsorbent ionic-covalent parameter. <i>Chemical Engineering Journal</i> , 2022 , 136484	14.7	1
230	Addressing the water-energy nexus: a focus on the barriers and potentials of harnessing wastewater treatment processes for biogas production in Sub Saharan Africa. <i>Heliyon</i> , 2022 , e09385	3.6	1
229	Reduced graphene oxide supported cobalt catalysts for ethylene hydroformylation: Modified cobalt-support interaction by rhodium. <i>Fuel</i> , 2022 , 324, 124479	7.1	0
228	Self-assembled Zn-functionalized Ni-MOF as an efficient electrode for electrochemical energy storage. <i>Journal of Physics and Chemistry of Solids</i> , 2022 , 167, 110779	3.9	0
227	Design of a Fischer-Tropsch multi-tube reactor fitted in a container: A novel design approach for small scale applications. <i>Journal of Cleaner Production</i> , 2022 , 132477	10.3	0
226	The interaction of CO, H ₂ and ethylene over a typical cobalt-based Fischer-Tropsch synthesis catalyst. <i>Applied Catalysis A: General</i> , 2021 , 614, 118024	5.1	
225	Insight into the role of Co ₂ C supported on reduced graphene oxide in Fischer-Tropsch synthesis and ethene hydroformylation. <i>Applied Catalysis A: General</i> , 2021 , 614, 118050	5.1	2
224	Tubular reactor internals for suppressing hot spot formation applied to the Fischer-Tropsch reaction. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021 , 161, 108309	3.7	1
223	Fischer-Tropsch synthesis: The effect of hydrophobicity on silica-supported iron catalysts. <i>Journal of Industrial and Engineering Chemistry</i> , 2021 , 97, 426-433	6.3	2
222	Role of CoO-Co nanoparticles supported on SiO ₂ in Fischer-Tropsch synthesis: Evidence for enhanced CO dissociation and olefin hydrogenation. <i>Fuel Processing Technology</i> , 2021 , 216, 106781	7.2	5
221	The effect of hydrophobicity on SiO ₂ -supported Co catalysts in Fischer-Tropsch synthesis. <i>Fuel</i> , 2021 , 296, 120667	7.1	4
220	Modulated Synthesis of a Novel Nickel-Based Metal-Organic Framework Composite Material for the Adsorptive Desulfurization of Liquid Fuels. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 10997-11008	3.9	1
219	A direct gasoline pre-blending of bioalcohol mixtures as a means of decreasing separation energy losses. <i>Biofuels</i> , 2021 , 12, 615-623	2	1

218	Contributing to energy sustainability: a review of mesoporous material supported catalysts for Fischer-Tropsch synthesis. <i>Sustainable Energy and Fuels</i> , 2021 , 5, 79-107	5.8	3
217	The luck factor of biogas technology: Naturalness concerns, social acceptance and community dynamics in South Africa. <i>Energy Research and Social Science</i> , 2021 , 71, 101846	7.7	8
216	The simultaneous adsorption, activation and in situ reduction of carbon dioxide over Au-loading BiOCl with rich oxygen vacancies. <i>Nanoscale</i> , 2021 , 13, 2585-2592	7.7	17
215	Experimental and simulation study of the temperature distribution in a bench-scale fixed bed Fischer-Tropsch reactor. <i>AIChE Journal</i> , 2021 , 67, e17145	3.6	1
214	Recoverable acrylamide-vinylamine copolymer immobilized TEMPO mediated oxidation of cellulose with good catalytic performance and low cellulose degradation. <i>Cellulose</i> , 2021 , 28, 4151-4164	5.5	1
213	Synthesis, structure, and performance of carbide phases in Fischer-Tropsch synthesis: A critical review. <i>Fuel</i> , 2021 , 296, 120689	7.1	9
212	Effect of Pre-Treatment Conditions on the Activity and Selectivity of Cobalt-Based Catalysts for CO Hydrogenation. <i>Reactions</i> , 2021 , 2, 258-274	1.5	2
211	Effect of ethylene co-feeding in Fischer-Tropsch synthesis: A study of reaction equilibrium and competition. <i>Fuel</i> , 2021 , 302, 121146	7.1	1
210	Modulated synthesized Ni-based MOF with improved adsorptive desulfurization activity. <i>Journal of Cleaner Production</i> , 2021 , 323, 129196	10.3	2
209	Using the G-H space to show heat and work efficiencies associated with nitrogen plasma gasification of wood. <i>Chemical Engineering Science</i> , 2021 , 243, 116793	4.4	1
208	Integrating environmental concerns into the teaching of mathematical optimization. <i>Education for Chemical Engineers</i> , 2020 , 32, 40-49	2.4	
207	Fischer-Tropsch synthesis: A long term comparative study of the product selectivity and paraffin to olefin ratios over an iron-based catalyst activated by syngas or H ₂ . <i>Applied Catalysis A: General</i> , 2020 , 602, 117700	5.1	3
206	Incorporation of solar-thermal energy into a gasification process to co-produce bio-fertilizer and power. <i>Environmental Pollution</i> , 2020 , 266, 115103	9.3	17
205	Metal-organic framework (MOF)-derived catalysts for Fischer-Tropsch synthesis: Recent progress and future perspectives. <i>Journal of Energy Chemistry</i> , 2020 , 51, 230-245	12	25
204	Thermochemical Conversion of Carbon Dioxide to Carbon Monoxide by Reverse Water-Gas Shift Reaction over the Ceria-Based Catalyst. <i>Environmental Chemistry for A Sustainable World</i> , 2020 , 43-61	0.8	1
203	The effect of silanol groups on the metal-support interactions in silica-supported cobalt Fischer-Tropsch catalysts. A temperature programmed surface reaction. <i>Journal of Catalysis</i> , 2020 , 381, 121-129	7.3	19
202	Reaction of ethylene over a typical Fischer-Tropsch synthesis Co/TiO ₂ catalyst. <i>Engineering Reports</i> , 2020 , 2, e12232	1.2	3
201	Production of Fuels and Chemicals from a CO ₂ /H ₂ Mixture. <i>Reactions</i> , 2020 , 1, 130-146	1.5	2

200	Cobalt Catalyst Reduction Thermodynamics in Fischer Tropsch: An Attainable Region Approach. <i>Reactions</i> , 2020 , 1, 115-129	1.5	
199	Toward Respiratory Support of Critically Ill COVID-19 Patients Using Repurposed Kidney Hollow Fiber Membrane Dialysers to Oxygenate the Blood. <i>Journal of Healthcare Engineering</i> , 2020 , 2020, 8862645	3.7	
198	Fischer-Tropsch synthesis with ethene co-feeding: Experimental evidence of the CO-insertion mechanism at low temperature. <i>AIChE Journal</i> , 2020 , 66, e17029	3.6	3
197	Cobalt hybrid catalysts in Fischer-Tropsch synthesis. <i>Reviews in Chemical Engineering</i> , 2020 , 36, 437-457	5	12
196	A critical review of the impact of water on cobalt-based catalysts in Fischer-Tropsch synthesis. <i>Fuel Processing Technology</i> , 2019 , 192, 105-129	7.2	30
195	Ultra-deep desulphurization of both model and commercial diesel fuels by adsorption method. <i>Journal of Environmental Chemical Engineering</i> , 2019 , 7, 102957	6.8	19
194	The influence of hydrophobicity on Fischer-Tropsch synthesis catalysts. <i>Reviews in Chemical Engineering</i> , 2019 ,	5	2
193	Desulphurization of diesel fuels using intermediate Lewis acids loaded on activated charcoal and alumina. <i>Chemical Engineering Communications</i> , 2019 , 206, 572-580	2.2	9
192	Modeling of an open mill with scalped feed for the maximum production of a desired particle size range. <i>Particulate Science and Technology</i> , 2019 , 37, 314-324	2	2
191	Recent developments in catalyst pretreatment technologies for cobalt based Fischer-Tropsch synthesis. <i>Reviews in Chemical Engineering</i> , 2019 ,	5	1
190	Reduction in greenhouse water usage through inlet CO2 enrichment. <i>AIChE Journal</i> , 2018 , 64, 2324-2328	3.6	1
189	Study of the effects of temperature on syngas composition from pyrolysis of wood pellets using a nitrogen plasma torch reactor. <i>Journal of Analytical and Applied Pyrolysis</i> , 2018 , 130, 159-168	6	17
188	Applying thermodynamics to digestion/gasification processes: the Attainable Region approach. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018 , 131, 25-36	4.1	5
187	Optimization of the Thermal Efficiency of a Fixed-Bed Gasifier using Computational Fluid Dynamics. <i>Computer Aided Chemical Engineering</i> , 2018 , 44, 1747-1752	0.6	9
186	Quantitative modeling of a greenhouse as a bioreactor to process power station emissions. <i>Environmental Progress and Sustainable Energy</i> , 2018 , 37, 1774-1780	2.5	
185	Thermodynamic optimization of steady-flow industrial chemical processes. <i>International Journal of Industrial Chemistry</i> , 2018 , 9, 353-361	3.1	1
184	Fischer-Tropsch synthesis: product distribution, operating conditions, iron catalyst deactivation and catalyst speciation. <i>International Journal of Industrial Chemistry</i> , 2018 , 9, 317-333	3.1	12
183	A long term study of the gas phase of low pressure Fischer-Tropsch products when reducing an iron catalyst with three different reducing gases. <i>Applied Catalysis A: General</i> , 2017 , 534, 1-11	5.1	16

182	Variation of the Short-Chain Paraffin and Olefin Formation Rates with Time for a Cobalt Fischer-Tropsch Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 469-478	3.9	10
181	Low-Pressure Fischer-Tropsch Synthesis: In Situ Oxidative Regeneration of Iron Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 4267-4274	3.9	9
180	Lu Plot and Yao Plot: Models To Analyze Product Distribution of Long-Term Gas-Phase Fischer-Tropsch Synthesis Experimental Data on an Iron Catalyst. <i>Energy & Fuels</i> , 2017 , 31, 5682-5690	4.1	4
179	Application of the attainable region method to determine optimal conditions for milling and leaching. <i>Powder Technology</i> , 2017 , 317, 400-407	5.2	6
178	Process flow sheet synthesis: Systems-level design applied to synthetic crude production. <i>AIChE Journal</i> , 2017 , 63, 5413-5424	3.6	4
177	Determining the PGM bearing mineral phase in the UG2 ore. <i>Powder Technology</i> , 2017 , 315, 236-242	5.2	1
176	A Study of the Fischer-Tropsch Synthesis in a Batch Reactor: Rate, Phase of Water, and Catalyst Oxidation. <i>Energy & Fuels</i> , 2017 , 31, 7405-7412	4.1	8
175	The impact and challenges of sustainable biogas implementation: moving towards a bio-based economy. <i>Energy, Sustainability and Society</i> , 2017 , 7,	3.9	20
174	Thermodynamic considerations in renal separation processes. <i>Theoretical Biology and Medical Modelling</i> , 2017 , 14, 2	2.3	1
173	Process Flow-Sheet Synthesis: Systems-Level Design applied to Synthetic Crude Production. <i>Computer Aided Chemical Engineering</i> , 2017 , 40, 643-648	0.6	
172	Higher Dimensional AR Theory 2016 , 145-190		
171	Final Remarks, Further Reading, and Future Directions 2016 , 301-308		
170	The Attainable Region 2016 , 49-61		1
169	Applications of AR Theory 2016 , 191-233		
168	AR Construction Algorithms 2016 , 235-280		
167	A study of Fischer-Tropsch synthesis: Product distribution of the light hydrocarbons. <i>Applied Catalysis A: General</i> , 2016 , 517, 217-226	5.1	23
166	Use of the attainable region approach to determine major trends and optimize particle breakage in a laboratory mill. <i>Powder Technology</i> , 2016 , 291, 414-419	5.2	12
165	Effect of feeding nitrogen to a fixed bed Fischer-Tropsch reactor while keeping the partial pressures of reactants the same. <i>Chemical Engineering Journal</i> , 2016 , 293, 151-160	14.7	9

164	Analysis of the Carbon Efficiency of a Hybrid XTL-CSP process. <i>Computer Aided Chemical Engineering</i> , 2016 , 38, 835-840	0.6	4
163	A fundamental investigation on the breakage of a bed of silica sand particles: An attainable region approach. <i>Powder Technology</i> , 2016 , 301, 1208-1212	5.2	10
162	Kinetics of the Decomposition of Hydrogen Peroxide in Acidic Copper Sulfate Solutions. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 5589-5597	3.9	5
161	Glomerular protein separation as a mechanism for powering renal concentrating processes. <i>Medical Hypotheses</i> , 2015 , 85, 120-3	3.8	1
160	Ball size distribution for the maximum production of a narrowly-sized mill product. <i>Powder Technology</i> , 2015 , 284, 12-18	5.2	17
159	Application of basic process modeling in investigating the breakage behavior of UG2 ore in wet milling. <i>Powder Technology</i> , 2015 , 279, 42-48	5.2	22
158	Geometry and reactor synthesis: maximizing conversion of the ethyl acetate process. <i>International Journal of Industrial Chemistry</i> , 2015 , 6, 77-83	3.1	
157	Distribution between C2 and C3 in low temperature Fischer-Tropsch synthesis over a TiO ₂ -supported cobalt catalyst. <i>Applied Catalysis A: General</i> , 2015 , 506, 67-76	5.1	7
156	Batch Partial Emptying and Filling To Improve the Production Rate of Algae. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 12492-12502	3.9	
155	Use of the attainable region method to simulate a full-scale ball mill with a realistic transport model. <i>Minerals Engineering</i> , 2015 , 73, 116-123	4.9	11
154	Reactive distillation in conventional Fischer-Tropsch reactors. <i>Fuel Processing Technology</i> , 2015 , 130, 54-61	7.2	14
153	A thermodynamic approach toward defining the limits of biogas production. <i>AIChE Journal</i> , 2015 , 61, 4270-4276	3.6	3
152	Making processes work. <i>Computers and Chemical Engineering</i> , 2015 , 81, 22-31	4	6
151	A laboratory scale application of the attainable region technique on a platinum ore. <i>Powder Technology</i> , 2015 , 274, 14-19	5.2	19
150	Experimental Simulation of Three-Dimensional Attainable Region for the Synthesis of Exothermic Reversible Reaction: Ethyl Acetate Synthesis Case Study. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 2619-2626	3.9	7
149	Water free XTL processes: Is it possible and at what cost?. <i>Computer Aided Chemical Engineering</i> , 2015 , 37, 1265-1270	0.6	
148	Turning wine (waste) into water: Toward technological advances in the use of constructed wetlands for winery effluent treatment. <i>AIChE Journal</i> , 2014 , 60, 420-431	3.6	13
147	Experimental Simulation of a Two-Dimensional Attainable Region and Its Application in the Optimization of Production Rate and Process Time of an Adiabatic Batch Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 13308-13319	3.9	4

146	Batch Distillation Targets for Minimum Energy Consumption. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 2751-2757	3.9	5
145	Process flow sheet synthesis: Reaching targets for idealized coal gasification. <i>AIChE Journal</i> , 2014 , 60, 3258-3266	3.6	8
144	Steady-State Attainment Period for Fischer-Tropsch Products. <i>Topics in Catalysis</i> , 2014 , 57, 582-587	2.3	3
143	Estimating rate constants of contaminant removal in constructed wetlands treating winery effluent: A comparison of three different methods. <i>Chemical Engineering Research and Design</i> , 2014 , 92, 903-916	5.5	13
142	Scale-up of batch grinding data for simulation of industrial milling of platinum group minerals ore. <i>Minerals Engineering</i> , 2014 , 63, 100-109	4.9	15
141	Addressing a Design Defect: Process Targets and Flowsheets. <i>Computer Aided Chemical Engineering</i> , 2014 , 34, 134-143	0.6	1
140	Designing a Waste to Energy Plant for Informal Settlements. <i>Computer Aided Chemical Engineering</i> , 2014 , 609-614	0.6	
139	Heat transfer study with and without Fischer-Tropsch reaction in a fixed bed reactor with TiO ₂ , SiO ₂ , and SiC supported cobalt catalysts. <i>Chemical Engineering Journal</i> , 2014 , 247, 75-84	14.7	38
138	Feed distribution in distillation: Assessing benefits and limits with column profile maps and rigorous process simulation. <i>AIChE Journal</i> , 2013 , 59, 1668-1683	3.6	1
137	Application of attainable region theory to batch reactors. <i>Chemical Engineering Science</i> , 2013 , 99, 203-214	4.4	15
136	Liquid Fuels from Alternative Carbon Sources Minimizing Carbon Dioxide Emissions. <i>AIChE Journal</i> , 2013 , 59, 2062-2078	3.6	9
135	Synthesis of Two-Membrane Permeation Processes Using Residue Curve Maps and Node Classification. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 14637-14646	3.9	
134	Vapor recompression for efficient distillation. 1. A new synthesis perspective on standard configurations. <i>AIChE Journal</i> , 2013 , 59, 2977-2992	3.6	28
133	Estimating Thermodynamic and Equilibrium Quantities of Exothermic Reversible Processes. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 7630-7639	3.9	
132	Determination of the milling parameters of a platinum group minerals ore to optimize product size distribution for flotation purposes. <i>Minerals Engineering</i> , 2013 , 43-44, 67-78	4.9	33
131	A graphical approach to process synthesis and its application to steam reforming. <i>AIChE Journal</i> , 2013 , 59, 3714-3729	3.6	13
130	Experimental Measurement of Membrane Residue Curve Maps. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 11142-11150	3.9	
129	Variation of residence time with chain length for products in a slurry-phase Fischer-Tropsch reactor. <i>Journal of Catalysis</i> , 2012 , 287, 93-101	7.3	20

128	Effects of CO ₂ on South African fresh water microalgae growth. <i>Environmental Progress and Sustainable Energy</i> , 2012 , 31, 24-28	2.5	10
127	Application of Column Profile Maps to Alternative Separation Processes: Membrane Permeation 2012 , 296-327		
126	A Thermodynamic Approach to Olefin Product Distribution in Fischer-Tropsch Synthesis. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 16544-16551	3.9	12
125	Attainable regions for a reactor: Application of β - γ plot. <i>Chemical Engineering Research and Design</i> , 2012 , 90, 1590-1609	5.5	3
124	A Graphical Method of Improving the Production Rate from Batch Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 13562-13573	3.9	3
123	Fischer-Tropsch synthesis using H ₂ /CO/CO ₂ syngas mixtures: A comparison of paraffin to olefin ratios for iron and cobalt based catalysts. <i>Applied Catalysis A: General</i> , 2012 , 433-434, 58-68	5.1	29
122	Conversion of Synthesis Gas to Dimethylether Over Gold-based Catalysts. <i>Topics in Catalysis</i> , 2012 , 55, 771-781	2.3	9
121	Recent advances in understanding the Fischer-Tropsch synthesis (FTS) reaction. <i>Current Opinion in Chemical Engineering</i> , 2012 , 1, 296-302	5.4	32
120	Efficient Combustion: A Process Synthesis Approach to Improve the Efficiency of Coal-Fired Power Stations. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 9061-9077	3.9	5
119	Using the attainable region analysis to determine the effect of process parameters on breakage in a ball mill. <i>AIChE Journal</i> , 2012 , 58, 2665-2673	3.6	10
118	Olefin pseudo-equilibrium in the Fischer-Tropsch reaction. <i>Chemical Engineering Journal</i> , 2012 , 181-182, 667-676	14.7	19
117	The effect of CO ₂ on a cobalt-based catalyst for low temperature Fischer-Tropsch synthesis. <i>Chemical Engineering Journal</i> , 2012 , 193-194, 318-327	14.7	28
116	A vapor-liquid equilibrium thermodynamic model for a Fischer-Tropsch reactor. <i>Fluid Phase Equilibria</i> , 2012 , 314, 38-45	2.5	20
115	Environmental impacts of electric vehicles in South Africa. <i>South African Journal of Science</i> , 2012 , 108,	1.3	1
114	Derivation and Properties of Column Profile Maps 2012 , 48-90		
113	Experimental Measurement of Column Profiles 2012 , 91-115		
112	Design of Fully Thermally Coupled Complex Columns Using Column Profile Maps 2012 , 206-260		
111	2012 ,		6

110	Fischer-Tropsch Synthesis Using H ₂ /CO/CO ₂ Syngas Mixtures over an Iron Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 11002-11012	3.9	58
109	Application of Membrane Residue Curve Maps to Batch and Continuous Processes 2011 , 41-64		
108	2011 ,		6
107	Permeation Modeling 2011 , 7-14		
106	Column Profiles for Membrane Column Sections 2011 , 65-106		
105	Properties of Membrane Residue Curve Maps 2011 , 29-39		
104	Synthesis and Design of Hybrid Distillation-Membrane Processes 2011 , 151-167		
103	Introduction to Graphical Techniques in Membrane Separations 2011 , 15-27		
102	Novel Graphical Design Methods for Complex Membrane Configurations 2011 , 107-150		
101	The role of vapour-liquid equilibrium in Fischer-Tropsch product distribution. <i>Chemical Engineering Science</i> , 2011 , 66, 6254-6263	4.4	30
100	Wastewater treatment of reactive dyestuffs by ozonation in a semi-batch reactor. <i>Chemical Engineering Journal</i> , 2011 , 166, 662-668	14.7	38
99	A New Way to Look at Fischer-Tropsch Synthesis Using Flushing Experiments. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 4359-4365	3.9	12
98	Work to Chemical Processes: The Relationship between Heat, Temperature, Pressure, and Process Complexity. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 8603-8619	3.9	9
97	On Column Profile Maps: An Analysis of Sharp Splits. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 6331-6342	3.9	3
96	A new method of locating all pinch points in nonideal distillation systems, and its application to pinch point loci and distillation boundaries. <i>Computers and Chemical Engineering</i> , 2011 , 35, 1072-1087	4	8
95	A comparison of Au/Co/Al ₂ O ₃ and Au/Co/SiO ₂ catalysts in the Fischer-Tropsch reaction. <i>Applied Catalysis A: General</i> , 2011 , 395, 1-9	5.1	31
94	Introducing novel graphical techniques to assess gasification. <i>Energy Conversion and Management</i> , 2011 , 52, 547-563	10.6	2
93	An attainable region analysis of the effect of ball size on milling. <i>Powder Technology</i> , 2011 , 210, 36-46	5.2	27

92	Making Sense of the Fischer-Tropsch Synthesis Reaction: Start-Up. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 9753-9758	3.9	17
91	Study of Radial Heat Transfer in a Tubular Fischer-Tropsch Synthesis Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 10682-10688	3.9	30
90	Classification of Chemical Processes: A Graphical Approach to Process Synthesis To Improve Reactive Process Work Efficiency. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 8227-8237	3.9	21
89	Complex Column Design by Application of Column Profile Map Techniques: Sharp-Split Petlyuk Column Design. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 327-349	3.9	17
88	Adapting Process Unit Relations in Experimental Data Weighting Procedures: A Phase Equilibrium Case Study. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 1975-1981	3.9	
87	A Revised Method of Attainable Region Construction Utilizing Rotated Bounding Hyperplanes. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 10549-10557	3.9	10
86	Fischer-Tropsch Synthesis Using H ₂ /CO/CO ₂ Syngas Mixtures over a Cobalt Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 11061-11066	3.9	67
85	An overall thermodynamic view of processes: Comparison of fuel producing processes. <i>Chemical Engineering Research and Design</i> , 2010 , 88, 844-860	5.5	2
84	The oxidative dehydrogenation of n-butane in a differential side-stream catalytic membrane reactor. <i>Catalysis Today</i> , 2010 , 156, 237-245	5.3	7
83	Column profile maps as a tool for synthesizing complex column configurations. <i>Computers and Chemical Engineering</i> , 2010 , 34, 1487-1496	4	8
82	The effect of poly-L-lysine/alginate bead membrane characteristics on the absorption of heparin. <i>Artificial Cells, Blood Substitutes, and Biotechnology</i> , 2009 , 37, 13-22		2
81	Systems approach to reducing energy usage and carbon dioxide emissions. <i>AIChE Journal</i> , 2009 , 55, 2203-2206		
80	Use of the attainable region analysis to optimize particle breakage in a ball mill. <i>Chemical Engineering Science</i> , 2009 , 64, 3766-3777	4.4	32
79	Recursive constant control policy algorithm for attainable regions analysis. <i>Computers and Chemical Engineering</i> , 2009 , 33, 309-320	4	8
78	Candidate Attainable Regions for the Oxidative Dehydrogenation of n-Butane using the Recursive Constant Control (RCC) Policy Algorithm. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 5214-5222 ¹	3.9	
77	Chemistry. Producing transportation fuels with less work. <i>Science</i> , 2009 , 323, 1680-1	33.3	36
76	Process Synthesis Targets 2009 , 699-708		1
75	Computer-aided Graphical Tools for Synthesizing Complex Column Configurations 2009 , 1007-1015		

74	A Graphical Approach to Process Synthesis Based on the Heat Engine Concept 2009 , 777-784		
73	Crossing Reaction Equilibrium in an Adiabatic Reactor System. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2008 , 6, 41-54		6
72	An unconventional Au/TiO ₂ PROX system for complete removal of CO from non-reformate hydrogen 2008 , 41, 318-325		5
71	Process Synthesis for a Reactor-Separator-Recycle System using the Attainable Region Approach. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2008 , 6, 21-39		3
70	Improving comminution efficiency using classification: An attainable region approach. <i>Powder Technology</i> , 2008 , 187, 252-259	5.2	20
69	Reactive column profile map topology: Continuous distillation column with non-reversible kinetics. <i>Computers and Chemical Engineering</i> , 2008 , 32, 622-629	4	4
68	Application of Membrane Residue Curve Maps to Batch and Continuous Processes. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 2361-2376	3.9	9
67	Synthesis and Integration of Chemical Processes from a Mass, Energy, and Entropy Perspective. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 8756-8766	3.9	15
66	Toward zero waste production in the paint industry. <i>Water S A</i> , 2007 , 30,	1.3	3
65	Fe-Ru small particle bimetallic catalysts supported on carbon nanotubes for use in Fischer-Tropsch synthesis. <i>Applied Catalysis A: General</i> , 2007 , 328, 243-251	5.1	81
64	On-line deactivation of Au/TiO ₂ for CO oxidation in H ₂ -rich gas streams. <i>Catalysis Today</i> , 2007 , 122, 254-259	3.5	21
63	Effect of cobalt carboxylate precursor chain length on Fischer-Tropsch cobalt/alumina catalysts. <i>Applied Catalysis A: General</i> , 2007 , 326, 164-172	5.1	10
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