

# David G Glasser

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/2160216/david-g-glasser-publications-by-citations.pdf>

**Version:** 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

208  
papers

3,070  
citations

29  
h-index

45  
g-index

215  
ext. papers

3,254  
ext. citations

4.4  
avg, IF

4.98  
L-index

#	Paper	IF	Citations
208	A geometric approach to steady flow reactors: the attainable region and optimization in concentration space. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1987</b> , 26, 1803-1810	3.9	184
207	Fischer-Tropsch synthesis over iron catalysts supported on carbon nanotubes. <i>Applied Catalysis A: General</i> , <b>2005</b> , 287, 60-67	5.1	174
206	A study of the low temperature oxidation of coal. <i>Fuel Processing Technology</i> , <b>1989</b> , 21, 81-97	7.2	106
205	The attainable region and optimal reactor structures. <i>Chemical Engineering Science</i> , <b>1990</b> , 45, 2161-2168	4.4	103
204	Geometry of the attainable region generated by reaction and mixing: with and without constraints. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1990</b> , 29, 49-58	3.9	101
203	Fe-Ru small particle bimetallic catalysts supported on carbon nanotubes for use in Fischer-Tropsch synthesis. <i>Applied Catalysis A: General</i> , <b>2007</b> , 328, 243-251	5.1	81
202	A simplified model of spontaneous combustion in coal stockpiles. <i>Fuel</i> , <b>1986</b> , 65, 1035-1041	7.1	77
201	Fischer-Tropsch Synthesis Using H <sub>2</sub> /CO/CO <sub>2</sub> Syngas Mixtures over a Cobalt Catalyst. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 11061-11066	3.9	67
200	Fischer-Tropsch Synthesis Using H <sub>2</sub> /CO/CO <sub>2</sub> Syngas Mixtures over an Iron Catalyst. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 11002-11012	3.9	58
199	Spontaneous combustion of carbonaceous stockpiles. Part II. Factors affecting the rate of the low-temperature oxidation reaction. <i>Fuel</i> , <b>2005</b> , 84, 1161-1170	7.1	48
198	Evaluating the risk of spontaneous combustion in coal stockpiles. <i>Fuel</i> , <b>1988</b> , 67, 651-656	7.1	46
197	Spontaneous combustion of carbonaceous stockpiles. Part I: the relative importance of various intrinsic coal properties and properties of the reaction system. <i>Fuel</i> , <b>2005</b> , 84, 1151-1160	7.1	45
196	Heat transfer study with and without Fischer-Tropsch reaction in a fixed bed reactor with TiO <sub>2</sub> , SiO <sub>2</sub> , and SiC supported cobalt catalysts. <i>Chemical Engineering Journal</i> , <b>2014</b> , 247, 75-84	14.7	38
195	Wastewater treatment of reactive dyestuffs by ozonation in a semi-batch reactor. <i>Chemical Engineering Journal</i> , <b>2011</b> , 166, 662-668	14.7	38
194	The application of the attainable region analysis to comminution. <i>Chemical Engineering Science</i> , <b>2006</b> , 61, 5969-5980	4.4	38
193	Column Profile Maps. 1. Derivation and Interpretation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 364-374	3.9	38
192	Linear programming formulations for attainable region analysis. <i>Chemical Engineering Science</i> , <b>2002</b> , 57, 2015-2028	4.4	38

191	The effect of sulfur on supported cobalt Fischer-Tropsch catalysts. <i>Catalysis Today</i> , <b>1999</b> , 49, 33-40	5.3	38
190	Chemistry. Producing transportation fuels with less work. <i>Science</i> , <b>2009</b> , 323, 1680-1	33.3	36
189	Effect of the addition of Au on Co/TiO <sub>2</sub> catalyst for the Fischer-Tropsch reaction. <i>Topics in Catalysis</i> , <b>2007</b> , 44, 129-136	2.3	34
188	Determination of the milling parameters of a platinum group minerals ore to optimize product size distribution for flotation purposes. <i>Minerals Engineering</i> , <b>2013</b> , 43-44, 67-78	4.9	33
187	Recent advances in understanding the Fischer-Tropsch synthesis (FTS) reaction. <i>Current Opinion in Chemical Engineering</i> , <b>2012</b> , 1, 296-302	5.4	32
186	Use of the attainable region analysis to optimize particle breakage in a ball mill. <i>Chemical Engineering Science</i> , <b>2009</b> , 64, 3766-3777	4.4	32
185	A comparison of Au/Co/Al <sub>2</sub> O <sub>3</sub> and Au/Co/SiO <sub>2</sub> catalysts in the Fischer-Tropsch reaction. <i>Applied Catalysis A: General</i> , <b>2011</b> , 395, 1-9	5.1	31
184	Convex attainable region projections for reactor network synthesis. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 24, 225-229	4	31
183	The role of vapour-liquid equilibrium in Fischer-Tropsch product distribution. <i>Chemical Engineering Science</i> , <b>2011</b> , 66, 6254-6263	4.4	30
182	Study of Radial Heat Transfer in a Tubular Fischer-Tropsch Synthesis Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 10682-10688	3.9	30
181	Optimal mixing for exothermic reversible reactions. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1992</b> , 31, 1541-1549	3.9	30
180	Fischer-Tropsch synthesis using H <sub>2</sub> /CO/CO <sub>2</sub> syngas mixtures: A comparison of paraffin to olefin ratios for iron and cobalt based catalysts. <i>Applied Catalysis A: General</i> , <b>2012</b> , 433-434, 58-68	5.1	29
179	The effect of CO <sub>2</sub> on a cobalt-based catalyst for low temperature Fischer-Tropsch synthesis. <i>Chemical Engineering Journal</i> , <b>2012</b> , 193-194, 318-327	14.7	28
178	Vapor recompression for efficient distillation. 1. A new synthesis perspective on standard configurations. <i>AIChE Journal</i> , <b>2013</b> , 59, 2977-2992	3.6	28
177	An attainable region analysis of the effect of ball size on milling. <i>Powder Technology</i> , <b>2011</b> , 210, 36-46	5.2	27
176	Choosing Optimal Control Policies Using the Attainable Region Approach. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1999</b> , 38, 639-651	3.9	27
175	Reactor and process synthesis. <i>Computers and Chemical Engineering</i> , <b>1997</b> , 21, S775-S783	4	26
174	A study of Fischer-Tropsch synthesis: Product distribution of the light hydrocarbons. <i>Applied Catalysis A: General</i> , <b>2016</b> , 517, 217-226	5.1	23

173	Thermodynamics Analysis of Processes. 1. Implications of Work Integration. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2005</b> , 44, 3529-3537	3.9	23
172	Column Profile Maps. 2. Singular Points and Phase Diagram Behaviour in Ideal and Nonideal Systems. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 3590-3603	3.9	23
171	Spontaneous combustion of coal stockpiles - an unusual chemical reaction engineering problem. <i>Chemical Engineering Science</i> , <b>1988</b> , 43, 2139-2145	4.4	23
170	Application of basic process modeling in investigating the breakage behavior of UG2 ore in wet milling. <i>Powder Technology</i> , <b>2015</b> , 279, 42-48	5.2	22
169	An experimental validation of a specific energy-based approach for comminution. <i>Chemical Engineering Science</i> , <b>2007</b> , 62, 2765-2776	4.4	22
168	Classification of Chemical Processes: A Graphical Approach to Process Synthesis To Improve Reactive Process Work Efficiency. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 8227-8237	3.9	21
167	Optimal reactor structures for exothermic reversible reactions with complex kinetics. <i>Chemical Engineering Science</i> , <b>1996</b> , 51, 2399-2407	4.4	21
166	Variation of residence time with chain length for products in a slurry-phase Fischer-Tropsch reactor. <i>Journal of Catalysis</i> , <b>2012</b> , 287, 93-101	7.3	20
165	A vapor-liquid equilibrium thermodynamic model for a Fischer-Tropsch reactor. <i>Fluid Phase Equilibria</i> , <b>2012</b> , 314, 38-45	2.5	20
164	Improving comminution efficiency using classification: An attainable region approach. <i>Powder Technology</i> , <b>2008</b> , 187, 252-259	5.2	20
163	The Study of Liquid-Phase Kinetics Using Temperature as a Measured Variable. <i>Industrial &amp; Engineering Chemistry Fundamentals</i> , <b>1971</b> , 10, 516-519		20
162	A laboratory scale application of the attainable region technique on a platinum ore. <i>Powder Technology</i> , <b>2015</b> , 274, 14-19	5.2	19
161	Olefin pseudo-equilibrium in the Fischer-Tropsch reaction. <i>Chemical Engineering Journal</i> , <b>2012</b> , 181-182, 667-676	14.7	19
160	The Attainable Region for Segregated, Maximum Mixed, and Other Reactor Models. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1994</b> , 33, 1136-1144	3.9	19
159	SELF-IGNITION AND CONVECTION PATTERNS IN AN INFINITE COAL LAYER. <i>Chemical Engineering Communications</i> , <b>1991</b> , 105, 255-278	2.2	19
158	Packed Bed Liquid Phase Dispersion in Pulsed Gas-Liquid Downflow. <i>Industrial &amp; Engineering Chemistry Fundamentals</i> , <b>1980</b> , 19, 66-71		18
157	Numerical Solution of Two-Point Boundary Value Problems on Total Differential Equations. <i>SIAM Journal on Numerical Analysis</i> , <b>1969</b> , 6, 591-597	2.4	18
156	Making Sense of the Fischer-Tropsch Synthesis Reaction: Start-Up. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 9753-9758	3.9	17

155	Complex Column Design by Application of Column Profile Map Techniques: Sharp-Split Petlyuk Column Design. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 327-349	3.9	17
154	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> , <b>2017</b> , 534, 1-11	5.1	16
153	Analysis of an exothermic reversible reaction in a catalytic reactor with periodic flow reversal. <i>Chemical Engineering Science</i> , <b>1992</b> , 47, 1825-1837	4.4	16
152	Scale-up of batch grinding data for simulation of industrial milling of platinum group minerals ore. <i>Minerals Engineering</i> , <b>2014</b> , 63, 100-109	4.9	15
151	Application of attainable region theory to batch reactors. <i>Chemical Engineering Science</i> , <b>2013</b> , 99, 203-214	4.4	15
150	Synthesis and Integration of Chemical Processes from a Mass, Energy, and Entropy Perspective. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2007</b> , 46, 8756-8766	3.9	15
149	Fischer-Tropsch synthesis over Co/TiO <sub>2</sub> : Effect of ethanol addition. <i>Fuel</i> , <b>2007</b> , 86, 73-80	7.1	15
148	The attainable region and process synthesis: reaction systems with external cooling and heating. <i>Chemical Engineering Science</i> , <b>2001</b> , 56, 173-191	4.4	15
147	Reactive distillation in conventional Fischer-Tropsch reactors. <i>Fuel Processing Technology</i> , <b>2015</b> , 130, 54-61	7.2	14
146	Novel separation system design using moving triangles. <i>Computers and Chemical Engineering</i> , <b>2004</b> , 29, 181-189	4	14
145	Variables indicating the cost of vapour-liquid equilibrium separation processes. <i>Chemical Engineering Science</i> , <b>1996</b> , 51, 4749-4757	4.4	14
144	DRIFT spectroscopy and optical reflectance of heat-treated coal from a quenched gasifier. <i>Fuel</i> , <b>1995</b> , 74, 1216-1219	7.1	14
143	A GENERAL MIXING MODEL FOR STEADY FLOW CHEMICAL REACTORS. <i>Chemical Engineering Communications</i> , <b>1986</b> , 42, 17-35	2.2	14
142	A Continuation Method for Nonlinear Regression. <i>SIAM Journal on Numerical Analysis</i> , <b>1981</b> , 18, 1139-1154	4.4	14
141	Process synthesis for reaction systems with cooling via finding the Attainable Region. <i>Computers and Chemical Engineering</i> , <b>1997</b> , 21, S35-S40	4	14
140	Turning wine (waste) into water: Toward technological advances in the use of constructed wetlands for winery effluent treatment. <i>AIChE Journal</i> , <b>2014</b> , 60, 420-431	3.6	13
139	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> , <b>2014</b> , 92, 903-916	5.5	13
138	A graphical approach to process synthesis and its application to steam reforming. <i>AIChE Journal</i> , <b>2013</b> , 59, 3714-3729	3.6	13

137	A Process Synthesis Approach To Investigate the Effect of the Probability of Chain Growth on the Efficiency of Fischer-Tropsch Synthesis. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2006</b> , 45, 5928-5935	3.9	13
136	Use of the attainable region approach to determine major trends and optimize particle breakage in a laboratory mill. <i>Powder Technology</i> , <b>2016</b> , 291, 414-419	5.2	12
135	A Thermodynamic Approach to Olefin Product Distribution in Fischer-Tropsch Synthesis. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2012</b> , 51, 16544-16551	3.9	12
134	A New Way to Look at Fischer-Tropsch Synthesis Using Flushing Experiments. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 4359-4365	3.9	12
133	The Attainable Region and Pontryagin's Maximum Principle. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>1999</b> , 38, 652-659	3.9	12
132	Analysis of rectilinear rivulet flow. <i>AIChE Journal</i> , <b>1976</b> , 22, 772-779	3.6	12
131	Use of the attainable region method to simulate a full-scale ball mill with a realistic transport model. <i>Minerals Engineering</i> , <b>2015</b> , 73, 116-123	4.9	11
130	ZWIETERING'S MAXIMUM-MIXED REACTOR MODEL AND THE EXISTENCE OF MULTIPLE STEADY STATES. <i>Chemical Engineering Communications</i> , <b>1986</b> , 40, 41-48	2.2	11
129	Kinetics of dissolution of Uranium trioxide in acid and carbonate solutions. <i>Journal of the Chemical Society Dalton Transactions</i> , <b>1977</b> , 1939-1946		11
128	Variation of the Short-Chain Paraffin and Olefin Formation Rates with Time for a Cobalt Fischer-Tropsch Catalyst. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 469-478	3.9	10
127	Effects of CO <sub>2</sub> on South African fresh water microalgae growth. <i>Environmental Progress and Sustainable Energy</i> , <b>2012</b> , 31, 24-28	2.5	10
126	Using the attainable region analysis to determine the effect of process parameters on breakage in a ball mill. <i>AIChE Journal</i> , <b>2012</b> , 58, 2665-2673	3.6	10
125	A Revised Method of Attainable Region Construction Utilizing Rotated Bounding Hyperplanes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2010</b> , 49, 10549-10557	3.9	10
124	Effect of cobalt carboxylate precursor chain length on Fischer-Tropsch cobalt/alumina catalysts. <i>Applied Catalysis A: General</i> , <b>2007</b> , 326, 164-172	5.1	10
123	Low-pressure methanol/ dimethylether synthesis from syngas on gold-based catalysts <b>2007</b> , 40, 219-224		10
122	Fischer-Tropsch Results and Their Analysis for Reactor Synthesis. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2005</b> , 44, 5987-5994	3.9	10
121	Predicting phase and chemical equilibrium using the convex hull of the Gibbs free energy. <i>The Chemical Engineering Journal and the Biochemical Engineering Journal</i> , <b>1994</b> , 54, 187-197		10
120	Optimal catalyst concentration profile for bifunctional catalysts. <i>Journal of Optimization Theory and Applications</i> , <b>1972</b> , 10, 94-108	1.6	10

119	Low-Pressure Fischer-Tropsch Synthesis: In Situ Oxidative Regeneration of Iron Catalysts. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2017</b> , 56, 4267-4274	3.9	9
118	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> , <b>2016</b> , 293, 151-160	14.7	9
117	Liquid Fuels from Alternative Carbon Sources Minimizing Carbon Dioxide Emissions. <i>AIChE Journal</i> , <b>2013</b> , 59, 2062-2078	3.6	9
116	Conversion of Synthesis Gas to Dimethylether Over Gold-based Catalysts. <i>Topics in Catalysis</i> , <b>2012</b> , 55, 771-781	2.3	9
115	Work to Chemical Processes: The Relationship between Heat, Temperature, Pressure, and Process Complexity. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 8603-8619	3.9	9
114	Process synthesis for reaction systems with cooling via finding the Attainable Region. <i>Computers and Chemical Engineering</i> , <b>1997</b> , 21, S35-S40	4	9
113	Application of Membrane Residue Curve Maps to Batch and Continuous Processes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2008</b> , 47, 2361-2376	3.9	9
112	Synthesizing a Process from Experimental Results: A Fischer-Tropsch Case Study. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2007</b> , 46, 156-167	3.9	9
111	Properties of certain zero column-sum matrices with applications to the optimization of chemical reactors. <i>Journal of Mathematical Analysis and Applications</i> , <b>1980</b> , 73, 315-337	1.1	9
110	Desulphurization of diesel fuels using intermediate Lewis acids loaded on activated charcoal and alumina. <i>Chemical Engineering Communications</i> , <b>2019</b> , 206, 572-580	2.2	9
109	Process flow sheet synthesis: Reaching targets for idealized coal gasification. <i>AIChE Journal</i> , <b>2014</b> , 60, 3258-3266	3.6	8
108	A Study of the Fischer-Tropsch Synthesis in a Batch Reactor: Rate, Phase of Water, and Catalyst Oxidation. <i>Energy &amp; Fuels</i> , <b>2017</b> , 31, 7405-7412	4.1	8
107	Recursive constant control policy algorithm for attainable regions analysis. <i>Computers and Chemical Engineering</i> , <b>2009</b> , 33, 309-320	4	8
106	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> , <b>2011</b> , 35, 1072-1087	4	8
105	Column profile maps as a tool for synthesizing complex column configurations. <i>Computers and Chemical Engineering</i> , <b>2010</b> , 34, 1487-1496	4	8
104	Derivation and Properties of Membrane Residue Curve Maps. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2006</b> , 45, 9080-9087	3.9	8
103	Automating reactor network synthesis: finding a candidate attainable region for the water-gas shift (WGS) reaction. <i>Computers and Chemical Engineering</i> , <b>2004</b> , 28, 149-160	4	8
102	The Measurement and Interpretation of Contact Time Distributions for Catalytic Reactor Characterization. <i>Industrial &amp; Engineering Chemistry Fundamentals</i> , <b>1973</b> , 12, 165-173		8

101	Automatically Controlled Adiabatic Reactor for Reaction Rate Studies. <i>Review of Scientific Instruments</i> , <b>1967</b> , 38, 209-214	1.7	8
100	Distribution between C2 and C3 in low temperature Fischer-Tropsch synthesis over a TiO <sub>2</sub> -supported cobalt catalyst. <i>Applied Catalysis A: General</i> , <b>2015</b> , 506, 67-76	5.1	7
99	Gasoline Preblending for Energy-Efficient Bioethanol Recovery. <i>Energy &amp; Fuels</i> , <b>2016</b> , 30, 8286-8294	4.1	7
98	Experimental Simulation of Three-Dimensional Attainable Region for the Synthesis of Exothermic Reversible Reaction: Ethyl Acetate Synthesis Case Study. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2015</b> , 54, 2619-2626	3.9	7
97	The oxidative dehydrogenation of n-butane in a differential side-stream catalytic membrane reactor. <i>Catalysis Today</i> , <b>2010</b> , 156, 237-245	5.3	7
96	Can the Operating Leaves of a Distillation Column Really Be Expanded?. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2005</b> , 44, 7511-7519	3.9	7
95	The Oxidative Dehydrogenation of n-Butane in a Fixed-Bed Reactor and in an Inert Porous Membrane Reactor Maximizing the Production of Butenes and Butadiene. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2006</b> , 45, 2661-2671	3.9	7
94	Thermal convection and surface temperatures in porous media. <i>International Journal of Heat and Mass Transfer</i> , <b>1990</b> , 33, 1321-1330	4.9	7
93	Crystallization of ammonium paratungstate: A comparison between batch and continuous crystallizers. <i>Hydrometallurgy</i> , <b>1976</b> , 2, 185-191	4	7
92	Optimal catalyst concentration profile for bifunctional catalyst: Langmuirian kinetics. <i>Chemical Engineering Science</i> , <b>1973</b> , 28, 1685-1689	4.4	7
91	Application of the attainable region method to determine optimal conditions for milling and leaching. <i>Powder Technology</i> , <b>2017</b> , 317, 400-407	5.2	6
90	Making processes work. <i>Computers and Chemical Engineering</i> , <b>2015</b> , 81, 22-31	4	6
89	<b>2011</b> ,		6
88	Systems approach to reducing energy usage and carbon dioxide emissions. <i>AIChE Journal</i> , <b>2009</b> , 55, 2202-2207	3.8	6
87	Study of Carbon Monoxide Hydrogenation Over Supported Au Catalysts. <i>Studies in Surface Science and Catalysis</i> , <b>2007</b> , 163, 141-151	1.8	6
86	An experimental simulation of distillation column concentration profiles using a batch apparatus. <i>Chemical Engineering Science</i> , <b>2003</b> , 58, 479-486	4.4	6
85	Liquid-phase diffusion and adsorption of pyridine in porous silica-alumina pellets. <i>AIChE Journal</i> , <b>1984</b> , 30, 593-599	3.6	6
84	First order kinetics in continuous reactors. <i>Chemical Engineering Science</i> , <b>1973</b> , 28, 617-621	4.4	6

83	<b>2012,</b>		6
82	Kinetics of the Decomposition of Hydrogen Peroxide in Acidic Copper Sulfate Solutions. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2015</b> , 54, 5589-5597	3.9	5
81	Applying thermodynamics to digestion/gasification processes: the Attainable Region approach. <i>Journal of Thermal Analysis and Calorimetry</i> , <b>2018</b> , 131, 25-36	4.1	5
80	Batch Distillation Targets for Minimum Energy Consumption. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 2751-2757	3.9	5
79	Efficient Combustion: A Process Synthesis Approach to Improve the Efficiency of Coal-Fired Power Stations. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2012</b> , 51, 9061-9077	3.9	5
78	Application of the Attainable Region Concept to the Oxidative Dehydrogenation of 1-Butene in Inert Porous Membrane Reactors. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 1827-1831	3.9	5
77	The cost of crossing reaction equilibrium in a system that is overall adiabatic. <i>Computers and Chemical Engineering</i> , <b>2002</b> , 26, 803-809	4	5
76	An experimental and modeling study of fires in ventilated ducts. Part II: PMMA and stratification. <i>Combustion and Flame</i> , <b>1996</b> , 104, 138-156	5.3	5
75	The attainable region for systems with mixing and multiple-rate processes: finding optimal reactor structures. <i>The Chemical Engineering Journal and the Biochemical Engineering Journal</i> , <b>1994</b> , 54, 175-186		5
74	Continuous Thickening in a Pilot Plant. <i>Industrial &amp; Engineering Chemistry Fundamentals</i> , <b>1976</b> , 15, 23-30		5
73	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 &amp; Fuels</i> , <b>2017</b> , 31, 5682-5690	4.1	4
72	Process flow sheet synthesis: Systems-level design applied to synthetic crude production. <i>AICHE Journal</i> , <b>2017</b> , 63, 5413-5424	3.6	4
71	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 &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 13308-13319	3.9	4
70	Fischer-Tropsch synthesis: DRIFTS and SIMS surface investigation of Co and Co/Ru on titania supports. <i>Studies in Surface Science and Catalysis</i> , <b>1997</b> , 107, 243-248	1.8	4
69	Reactive column profile map topology: Continuous distillation column with non-reversible kinetics. <i>Computers and Chemical Engineering</i> , <b>2008</b> , 32, 622-629	4	4
68	Efficiency of polymer beads in the removal of heparin: toward the development of a novel reactor. <i>Artificial Cells, Blood Substitutes, and Biotechnology</i> , <b>2006</b> , 34, 419-32		4
67	Attainable products for the vapour-liquid separation of homogeneous ternary mixtures. <i>The Chemical Engineering Journal and the Biochemical Engineering Journal</i> , <b>1995</b> , 59, 51-70		4
66	An anatomic and physiological model of hepatic vascular system. <i>Journal of Applied Physiology</i> , <b>1995</b> , 79, 1008-26	3.7	4

65	A periodic flow reversal reactor: An infinitely fast switching model and a practical proposal for its implementation. <i>Canadian Journal of Chemical Engineering</i> , <b>1996</b> , 74, 760-765	2.3	4
64	Bounds and approximate solutions to linear problems with nonlinear boundary conditions: Solidification of a slab. <i>AIChE Journal</i> , <b>1978</b> , 24, 161-170	3.6	4
63	Parameter variation for the solution of two-point boundary-value problems and applications in the calculus of variations. <i>Journal of Optimization Theory and Applications</i> , <b>1974</b> , 13, 164-178	1.6	4
62	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 <sub>2</sub> . <i>Applied Catalysis A: General</i> , <b>2020</b> , 602, 117700	5.1	3
61	Steady-State Attainment Period for Fischer-Tropsch Products. <i>Topics in Catalysis</i> , <b>2014</b> , 57, 582-587	2.3	3
60	A thermodynamic approach toward defining the limits of biogas production. <i>AIChE Journal</i> , <b>2015</b> , 61, 4270-4276	3.6	3
59	Attainable regions for a reactor: Application of H <sub>2</sub> plot. <i>Chemical Engineering Research and Design</i> , <b>2012</b> , 90, 1590-1609	5.5	3
58	A Graphical Method of Improving the Production Rate from Batch Reactors. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2012</b> , 51, 13562-13573	3.9	3
57	On Column Profile Maps: An Analysis of Sharp Splits. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 6331-6342	3.9	3
56	Expanding the operating leaves in distillation column sections by distributed feed addition and sidestream withdrawal. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 15, 1050-1057	0.6	3
55	Costing distillation systems from residue curve based designs. <i>Computers and Chemical Engineering</i> , <b>2000</b> , 24, 1275-1280	4	3
54	A catalytic trap for low-temperature complete NO reduction in oxygen-rich media. <i>Chemical Communications</i> , <b>1996</b> , 2081	5.8	3
53	An experimental and modeling study of fires in ventilated ducts. Part I: Liquid fuels. <i>Combustion and Flame</i> , <b>1994</b> , 96, 428-442	5.3	3
52	Thermal determination of the kinetics of the iron(III) to iron(II) redox reaction in chloride solution. <i>Journal of the Chemical Society Faraday Transactions I</i> , <b>1975</b> , 71, 1413		3
51	The effect of poly-L-lysine/alginate bead membrane characteristics on the absorption of heparin. <i>Artificial Cells, Blood Substitutes, and Biotechnology</i> , <b>2009</b> , 37, 13-22		2
50	Introducing novel graphical techniques to assess gasification. <i>Energy Conversion and Management</i> , <b>2011</b> , 52, 547-563	10.6	2
49	An overall thermodynamic view of processes: Comparison of fuel producing processes. <i>Chemical Engineering Research and Design</i> , <b>2010</b> , 88, 844-860	5.5	2
48	Experimental simulation of distillation concentration profiles using batch apparatus: Column stripping section. <i>Chemical Engineering Science</i> , <b>2005</b> , 60, 6815-6823	4.4	2

47	The Attainable Region <b>2016</b> , 49-61		1
46	Feed distribution in distillation: Assessing benefits and limits with column profile maps and rigorous process simulation. <i>AIChE Journal</i> , <b>2013</b> , 59, 1668-1683	3.6	1
45	Thermodynamic considerations in renal separation processes. <i>Theoretical Biology and Medical Modelling</i> , <b>2017</b> , 14, 2	2.3	1
44	Candidate Attainable Regions for the Oxidative Dehydrogenation of n-Butane using the Recursive Constant Control (RCC) Policy Algorithm. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2009</b> , 48, 5214-5222 <sup>1</sup>	3.9	1
43	Environmental impacts of electric vehicles in South Africa. <i>South African Journal of Science</i> , <b>2012</b> , 108,	1.3	1
42	Experimental Measurement of the Saddle Node Region in a Distillation Column Profile Map by Using a Batch Apparatus. <i>Chemical Engineering Research and Design</i> , <b>2007</b> , 85, 24-30	5.5	1
41	Novel separation system design using moving triangles. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 832-839	0.6	1
40	Automating Reactor Network Synthesis: Finding a Candidate Attainable Region for Water-Gas Shift (WGS) Reaction. <i>Computer Aided Chemical Engineering</i> , <b>2002</b> , 10, 217-222	0.6	1
39	Binding isotherms by continuous-flow dynamic dialysis. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , <b>1986</b> , 4, 461-74	3.5	1
38	The low temperature oxidation of coal taken from near a dolerite intrusion. <i>Fuel Processing Technology</i> , <b>1988</b> , 18, 201-208	7.2	1
37	The response of linear cascades to variations of holding times. <i>Chemical Engineering Science</i> , <b>1980</b> , 35, 2281-2285	4.4	1
36	Process Synthesis Targets <b>2009</b> , 699-708		1
35	Thermodynamic optimization of steady-flow industrial chemical processes. <i>International Journal of Industrial Chemistry</i> , <b>2018</b> , 9, 353-361	3.1	1
34	Geometry and reactor synthesis: maximizing conversion of the ethyl acetate process. <i>International Journal of Industrial Chemistry</i> , <b>2015</b> , 6, 77-83	3.1	
33	Batch Partial Emptying and Filling To Improve the Production Rate of Algae. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2015</b> , 54, 12492-12502	3.9	
32	Development trajectory of the attainable region optimization method: Trends and opportunities for applications in the waste-to-energy field. <i>South African Journal of Chemical Engineering</i> , <b>2020</b> , 32, 13-26	3.2	
31	Final Remarks, Further Reading, and Future Directions <b>2016</b> , 301-308		
30	Reaction <b>2016</b> , 63-107		

29 Two-Dimensional Constructions **2016**, 109-141

28 Applications of AR Theory **2016**, 191-233

27 AR Construction Algorithms **2016**, 235-280

26 Synthesis of Two-Membrane Permeation Processes Using Residue Curve Maps and Node Classification. *Industrial & Engineering Chemistry Research*, **2013**, 52, 14637-14646 3.9

25 Designing a Waste to Energy Plant for Informal Settlements. *Computer Aided Chemical Engineering*, **2014**, 609-614 0.6

24 Application of Column Profile Maps to Alternative Separation Processes: Membrane Permeation **2012**, 296-327

23 Estimating Thermodynamic and Equilibrium Quantities of Exothermic Reversible Processes. *Industrial & Engineering Chemistry Research*, **2013**, 52, 7630-7639 3.9

22 Experimental Measurement of Membrane Residue Curve Maps. *Industrial & Engineering Chemistry Research*, **2013**, 52, 11142-11150 3.9

21 Permeation Modeling **2011**, 7-14

20 Column Profiles for Membrane Column Sections **2011**, 65-106

19 Properties of Membrane Residue Curve Maps **2011**, 29-39

18 Synthesis and Design of Hybrid Distillation Membrane Processes **2011**, 151-167

17 Introduction to Graphical Techniques in Membrane Separations **2011**, 15-27

16 Novel Graphical Design Methods for Complex Membrane Configurations **2011**, 107-150

15 Adapting Process Unit Relations in Experimental Data Weighting Procedures: A Phase Equilibrium Case Study. *Industrial & Engineering Chemistry Research*, **2010**, 49, 1975-1981 3.9

14 Derivation and Properties of Column Profile Maps **2012**, 48-90

13 Experimental Measurement of Column Profiles **2012**, 91-115

12 Design of Fully Thermally Coupled Complex Columns Using Column Profile Maps **2012**, 206-260

- |    |   |     |
|----|---|-----|
| 11 | MaPS (managed process synthesis). A methodology, integrated with the experimental programme, to develop a flow sheet. [A first step. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 1328-1333 | 0.6 |
| 10 | DSR algorithm for construction of Attainable Region structure. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 594-599   | 0.6 |
| 9  | Application of process synthesis methodology to biomedical engineering for the development of artificial organs. <i>Computer Aided Chemical Engineering</i> , <b>2003</b> , 15, 1216-1221                 | 0.6 |
| 8  | Make distillation boundaries work for you!. <i>Computer Aided Chemical Engineering</i> , <b>2004</b> , 18, 499-504  | 0.6 |
| 7  | Modeling Coupled Distillation Column Sections Using Profile Maps. <i>Computer Aided Chemical Engineering</i> , <b>2002</b> , 211-216  | 0.6 |
| 6  | SPONTANEOUS COMBUSTION OF COAL STOCKPILES - AN UNUSUAL CHEMICAL REACTION ENGINEERING PROBLEM <b>1988</b> , 2139-2145  |     |
| 5  | Surface effects in torque transmission experiments in a couette apparatus. <i>Journal of Colloid and Interface Science</i> , <b>1974</b> , 49, 82-88  | 9.3 |
| 4  | Comment on "Evolution of nonlinear boundary value problems" [a. A novel method: general parameter mapping (GPM)] <i>Chemical Engineering Science</i> , <b>1973</b> , 28, 985                              | 4.4 |
| 3  | Process Flow-Sheet Synthesis: Systems-Level Design applied to Synthetic Crude Production. <i>Computer Aided Chemical Engineering</i> , <b>2017</b> , 40, 643-648  | 0.6 |
| 2  | Computer-aided Graphical Tools for Synthesizing Complex Column Configurations <b>2009</b> , 1007-1015   |     |
| 1  | Gasoline pre-blending processes for efficient ethanol recovery: effects of process parameters and process modifications for improved performance. <i>Biofuels</i> , <b>2021</b> , 12, 625-632             | 2   |