

David G Glasser

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2160216/publications.pdf>

Version: 2024-02-01

192
papers

3,481
citations

147726

31
h-index

197736

49
g-index

215
all docs

215
docs citations

215
times ranked

2230
citing authors

#	ARTICLE	IF	CITATIONS
1	A geometric approach to steady flow reactors: the attainable region and optimization in concentration space. <i>Industrial & Engineering Chemistry Research</i> , 1987, 26, 1803-1810.	1.8	210
2	Fischer-Tropsch synthesis over iron catalysts supported on carbon nanotubes. <i>Applied Catalysis A: General</i> , 2005, 287, 60-67.	2.2	189
3	A study of the low temperature oxidation of coal. <i>Fuel Processing Technology</i> , 1989, 21, 81-97.	3.7	118
4	Geometry of the attainable region generated by reaction and mixing: with and without constraints. <i>Industrial & Engineering Chemistry Research</i> , 1990, 29, 49-58.	1.8	116
5	The attainable region and optimal reactor structures. <i>Chemical Engineering Science</i> , 1990, 45, 2161-2168.	1.9	111
6	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.	2.2	96
7	A simplified model of spontaneous combustion in coal stockpiles. <i>Fuel</i> , 1986, 65, 1035-1041.	3.4	82
8	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.	1.8	75
9	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.	1.8	60
10	Spontaneous combustion of carbonaceous stockpiles. Part II. Factors affecting the rate of the low-temperature oxidation reaction. <i>Fuel</i> , 2005, 84, 1161-1170.	3.4	54
11	Evaluating the risk of spontaneous combustion in coal stockpiles. <i>Fuel</i> , 1988, 67, 651-656.	3.4	50
12	Spontaneous combustion of carbonaceous stockpiles. Part I: the relative importance of various intrinsic coal properties and properties of the reaction system. <i>Fuel</i> , 2005, 84, 1151-1160.	3.4	48
13	Wastewater treatment of reactive dyestuffs by ozonation in a semi-batch reactor. <i>Chemical Engineering Journal</i> , 2011, 166, 662-668.	6.6	47
14	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.	6.6	45
15	Column Profile Maps. 1. Derivation and Interpretation. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 364-374.	1.8	44
16	The effect of sulfur on supported cobalt Fischer-Tropsch catalysts. <i>Catalysis Today</i> , 1999, 49, 33-40.	2.2	43
17	Linear programming formulations for attainable region analysis. <i>Chemical Engineering Science</i> , 2002, 57, 2015-2028.	1.9	42
18	The application of the attainable region analysis to comminution. <i>Chemical Engineering Science</i> , 2006, 61, 5969-5980.	1.9	42

#	ARTICLE	IF	CITATIONS
19	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.	1.8	41
20	Producing Transportation Fuels with Less Work. <i>Science</i> , 2009, 323, 1680-1681.	6.0	40
21	Recent advances in understanding the Fischer-Tropsch synthesis (FTS) reaction. <i>Current Opinion in Chemical Engineering</i> , 2012, 1, 296-302.	3.8	38
22	Optimal mixing for exothermic reversible reactions. <i>Industrial & Engineering Chemistry Research</i> , 1992, 31, 1541-1549.	1.8	35
23	Effect of the addition of Au on Co/TiO ₂ catalyst for the Fischer-Tropsch reaction. <i>Topics in Catalysis</i> , 2007, 44, 129-136.	1.3	35
24	Use of the attainable region analysis to optimize particle breakage in a ball mill. <i>Chemical Engineering Science</i> , 2009, 64, 3766-3777.	1.9	35
25	The role of vapour-liquid equilibrium in Fischer-Tropsch product distribution. <i>Chemical Engineering Science</i> , 2011, 66, 6254-6263.	1.9	35
26	Vapor recompression for efficient distillation. 1. A new synthesis perspective on standard configurations. <i>AIChE Journal</i> , 2013, 59, 2977-2992.	1.8	35
27	Convex attainable region projections for reactor network synthesis. <i>Computers and Chemical Engineering</i> , 2000, 24, 225-229.	2.0	33
28	Study of Radial Heat Transfer in a Tubular Fischer-Tropsch Synthesis Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 10682-10688.	1.8	33
29	An attainable region analysis of the effect of ball size on milling. <i>Powder Technology</i> , 2011, 210, 36-46.	2.1	33
30	Reactor and process synthesis. <i>Computers and Chemical Engineering</i> , 1997, 21, S775-S783.	2.0	32
31	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.	2.2	32
32	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.	6.6	32
33	Choosing Optimal Control Policies Using the Attainable Region Approach. <i>Industrial & Engineering Chemistry Research</i> , 1999, 38, 639-651.	1.8	29
34	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.	2.2	29
35	A study of Fischer-Tropsch synthesis: Product distribution of the light hydrocarbons. <i>Applied Catalysis A: General</i> , 2016, 517, 217-226.	2.2	26
36	Column Profile Maps. 2. Singular Points and Phase Diagram Behaviour in Ideal and Nonideal Systems. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 3590-3603.	1.8	25

#	ARTICLE	IF	CITATIONS
37	Thermodynamics Analysis of Processes. 1. Implications of Work Integration. Industrial & Engineering Chemistry Research, 2005, 44, 3529-3537.	1.8	25
38	Application of basic process modeling in investigating the breakage behavior of UG2 ore in wet milling. Powder Technology, 2015, 279, 42-48.	2.1	25
39	The Study of Liquid-Phase Kinetics Using Temperature as a Measured Variable. Industrial & Engineering Chemistry Fundamentals, 1971, 10, 516-519.	0.7	24
40	Spontaneous combustion of coal stockpiles - an unusual chemical reaction engineering problem. Chemical Engineering Science, 1988, 43, 2139-2145.	1.9	24
41	Classification of Chemical Processes: A Graphical Approach to Process Synthesis To Improve Reactive Process Work Efficiency. Industrial & Engineering Chemistry Research, 2010, 49, 8227-8237.	1.8	24
42	Packed Bed Liquid Phase Dispersion in Pulsed Gas-Liquid Downflow. Industrial & Engineering Chemistry Fundamentals, 1980, 19, 66-71.	0.7	23
43	Variation of residence time with chain length for products in a slurry-phase Fischer-Tropsch reactor. Journal of Catalysis, 2012, 287, 93-101.	3.1	23
44	The Attainable Region for Segregated, Maximum Mixed, and Other Reactor Models. Industrial & Engineering Chemistry Research, 1994, 33, 1136-1144.	1.8	22
45	An experimental validation of a specific energy-based approach for comminution. Chemical Engineering Science, 2007, 62, 2765-2776.	1.9	22
46	A laboratory scale application of the attainable region technique on a platinum ore. Powder Technology, 2015, 274, 14-19.	2.1	22
47	SELF-IGNITION AND CONVECTION PATTERNS IN AN INFINITE COAL LAYER. Chemical Engineering Communications, 1991, 105, 255-278.	1.5	21
48	Optimal reactor structures for exothermic reversible reactions with complex kinetics. Chemical Engineering Science, 1996, 51, 2399-2407.	1.9	21
49	Improving comminution efficiency using classification: An attainable region approach. Powder Technology, 2008, 187, 252-259.	2.1	21
50	A vapor-liquid equilibrium thermodynamic model for a Fischer-Tropsch reactor. Fluid Phase Equilibria, 2012, 314, 38-45.	1.4	21
51	A Continuation Method for Nonlinear Regression. SIAM Journal on Numerical Analysis, 1981, 18, 1139-1154.	1.1	20
52	Scale-up of batch grinding data for simulation of industrial milling of platinum group minerals ore. Minerals Engineering, 2014, 63, 100-109.	1.8	20
53	A long term study of the gas phase of low pressure Fischer-Tropsch products when reducing an iron catalyst with three different reducing gases. Applied Catalysis A: General, 2017, 534, 1-11.	2.2	20
54	Olefin pseudo-equilibrium in the Fischer-Tropsch reaction. Chemical Engineering Journal, 2012, 181-182, 667-676.	6.6	19

#	ARTICLE	IF	CITATIONS
55	Numerical Solution of Two-Point Boundary Value Problems on Total Differential Equations. SIAM Journal on Numerical Analysis, 1969, 6, 591-597.	1.1	18
56	Analysis of rectilinear rivulet flow. AIChE Journal, 1976, 22, 772-779.	1.8	18
57	Synthesis and Integration of Chemical Processes from a Mass, Energy, and Entropy Perspective. Industrial & Engineering Chemistry Research, 2007, 46, 8756-8766.	1.8	18
58	Complex Column Design by Application of Column Profile Map Techniques: Sharp-Split Petlyuk Column Design. Industrial & Engineering Chemistry Research, 2010, 49, 327-349.	1.8	18
59	Application of attainable region theory to batch reactors. Chemical Engineering Science, 2013, 99, 203-214.	1.9	18
60	Analysis of an exothermic reversible reaction in a catalytic reactor with periodic flow reversal. Chemical Engineering Science, 1992, 47, 1825-1837.	1.9	17
61	Making Sense of the Fischer-Tropsch Synthesis Reaction: Start-Up. Industrial & Engineering Chemistry Research, 2010, 49, 9753-9758.	1.8	17
62	Estimating rate constants of contaminant removal in constructed wetlands treating winery effluent: A comparison of three different methods. Chemical Engineering Research and Design, 2014, 92, 903-916.	2.7	17
63	Desulphurization of diesel fuels using intermediate Lewis acids loaded on activated charcoal and alumina. Chemical Engineering Communications, 2019, 206, 572-580.	1.5	17
64	DRIFT spectroscopy and optical reflectance of heat-treated coal from a quenched gasifier. Fuel, 1995, 74, 1216-1219.	3.4	16
65	The attainable region and process synthesis: reaction systems with external cooling and heating. Chemical Engineering Science, 2001, 56, 173-191.	1.9	16
66	Novel separation system design using "moving triangles". Computers and Chemical Engineering, 2004, 29, 181-189.	2.0	16
67	Fischer-Tropsch synthesis over Co/TiO ₂ : Effect of ethanol addition. Fuel, 2007, 86, 73-80.	3.4	16
68	Reactive distillation in conventional Fischer-Tropsch reactors. Fuel Processing Technology, 2015, 130, 54-61.	3.7	16
69	Optimal catalyst concentration profile for bifunctional catalysts. Journal of Optimization Theory and Applications, 1972, 10, 94-108.	0.8	14
70	A GENERAL MIXING MODEL FOR STEADY FLOW CHEMICAL REACTORS. Chemical Engineering Communications, 1986, 42, 17-35.	1.5	14
71	Variables indicating the cost of vapour-liquid equilibrium separation processes. Chemical Engineering Science, 1996, 51, 4749-4757.	1.9	14
72	A graphical approach to process synthesis and its application to steam reforming. AIChE Journal, 2013, 59, 3714-3729.	1.8	14

#	ARTICLE	IF	CITATIONS
73	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.	1.8	14
74	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.	1.8	14
75	Process synthesis for reaction systems with cooling via finding the Attainable Region. <i>Computers and Chemical Engineering</i> , 1997, 21, S35-S40.	2.0	14
76	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> , 1994, 54, 187-197.	0.1	13
77	The Attainable Region and Pontryagin's Maximum Principle. <i>Industrial & Engineering Chemistry Research</i> , 1999, 38, 652-659.	1.8	13
78	A Process Synthesis Approach To Investigate the Effect of the Probability of Chain Growth on the Efficiency of Fischer-Tropsch Synthesis. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 5928-5935.	1.8	13
79	A Thermodynamic Approach to Olefin Product Distribution in Fischer-Tropsch Synthesis. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 16544-16551.	1.8	13
80	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.	2.1	13
81	Kinetics of dissolution of U ²³⁵ -uranium trioxide in acid and carbonate solutions. <i>Journal of the Chemical Society Dalton Transactions</i> , 1977, , 1939-1946.	1.1	12
82	Properties of certain zero column-sum matrices with applications to the optimization of chemical reactors. <i>Journal of Mathematical Analysis and Applications</i> , 1980, 73, 315-337.	0.5	12
83	Process synthesis for reaction systems with cooling via finding the Attainable Region. <i>Computers and Chemical Engineering</i> , 1997, 21, S35-S40.	2.0	12
84	Effect of cobalt carboxylate precursor chain length on Fischer-Tropsch cobalt/alumina catalysts. <i>Applied Catalysis A: General</i> , 2007, 326, 164-172.	2.2	12
85	A New Way to Look at Fischer-Tropsch Synthesis Using Flushing Experiments. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 4359-4365.	1.8	12
86	Low-Pressure Fischer-Tropsch Synthesis: In Situ Oxidative Regeneration of Iron Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 4267-4274.	1.8	12
87	The Measurement and Interpretation of Contact Time Distributions for Catalytic Reactor Characterization. <i>Industrial & Engineering Chemistry Fundamentals</i> , 1973, 12, 165-173.	0.7	11
88	ZWIETERING'S MAXIMUM-MIXED REACTOR MODEL AND THE EXISTENCE OF MULTIPLE STEADY STATES. <i>Chemical Engineering Communications</i> , 1986, 40, 41-48.	1.5	11
89	Fischer-Tropsch Results and Their Analysis for Reactor Synthesis. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 5987-5994.	1.8	11
90	Application of Membrane Residue Curve Maps to Batch and Continuous Processes. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 2361-2376.	1.8	11

#	ARTICLE	IF	CITATIONS
91	Recursive constant control policy algorithm for attainable regions analysis. <i>Computers and Chemical Engineering</i> , 2009, 33, 309-320.	2.0	11
92	A Revised Method of Attainable Region Construction Utilizing Rotated Bounding Hyperplanes. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 10549-10557.	1.8	11
93	Work to Chemical Processes: The Relationship between Heat, Temperature, Pressure, and Process Complexity. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 8603-8619.	1.8	11
94	Effects of CO ₂ on South African fresh water microalgae growth. <i>Environmental Progress and Sustainable Energy</i> , 2012, 31, 24-28.	1.3	11
95	Liquid Fuels from Alternative Carbon Sources Minimizing Carbon Dioxide Emissions. <i>AIChE Journal</i> , 2013, 59, 2062-2078.	1.8	11
96	Kinetics of the Decomposition of Hydrogen Peroxide in Acidic Copper Sulfate Solutions. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 5589-5597.	1.8	11
97	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.	1.8	11
98	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.	2.5	11
99	Optimal catalyst concentration profile for bifunctional catalyst: Langmuirian kinetics. <i>Chemical Engineering Science</i> , 1973, 28, 1685-1689.	1.9	10
100	Derivation and Properties of Membrane Residue Curve Maps. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 9080-9087.	1.8	10
101	Synthesizing a Process from Experimental Results: A Fischer-Tropsch Case Study. <i>Industrial & Engineering Chemistry Research</i> , 2007, 46, 156-167.	1.8	10
102	Low-pressure methanol/ dimethylether synthesis from syngas on gold-based catalysts. <i>Gold Bulletin</i> , 2007, 40, 219-224.	3.2	10
103	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.	1.8	10
104	Gasoline Preblending for Energy-Efficient Bioethanol Recovery. <i>Energy & Fuels</i> , 2016, 30, 8286-8291.	2.5	10
105	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.	6.6	10
106	Automatically Controlled Adiabatic Reactor for Reaction Rate Studies. <i>Review of Scientific Instruments</i> , 1967, 38, 209-214.	0.6	9
107	Continuous Thickening in a Pilot Plant. <i>Industrial & Engineering Chemistry Fundamentals</i> , 1976, 15, 23-30.	0.7	9
108	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> , 1994, 54, 175-186.	0.1	9

#	ARTICLE	IF	CITATIONS
109	Automating reactor network synthesis: finding a candidate attainable region for the water-gas shift (WGS) reaction. <i>Computers and Chemical Engineering</i> , 2004, 28, 149-160.	2.0	9
110	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 & Engineering Chemistry Research</i> , 2006, 45, 2661-2671.	1.8	9
111	Conversion of Synthesis Gas to Dimethylether Over Gold-based Catalysts. <i>Topics in Catalysis</i> , 2012, 55, 771-781.	1.3	9
112	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.	2.2	9
113	Crystallization of ammonium paratungstate – a comparison between batch and continuous crystallizers. <i>Hydrometallurgy</i> , 1976, 2, 185-191.	1.8	8
114	Can the Operating Leaves of a Distillation Column Really Be Expanded?. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 7511-7519.	1.8	8
115	The oxidative dehydrogenation of n-butane in a differential side-stream catalytic membrane reactor. <i>Catalysis Today</i> , 2010, 156, 237-245.	2.2	8
116	Column profile maps as a tool for synthesizing complex column configurations. <i>Computers and Chemical Engineering</i> , 2010, 34, 1487-1496.	2.0	8
117	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.	2.0	8
118	Process flow sheet synthesis: Reaching targets for idealized coal gasification. <i>AIChE Journal</i> , 2014, 60, 3258-3266.	1.8	8
119	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.	1.8	8
120	Application of the attainable region method to determine optimal conditions for milling and leaching. <i>Powder Technology</i> , 2017, 317, 400-407.	2.1	8
121	First order kinetics in continuous reactors. <i>Chemical Engineering Science</i> , 1973, 28, 617-621.	1.9	7
122	Thermal convection and surface temperatures in porous media. <i>International Journal of Heat and Mass Transfer</i> , 1990, 33, 1321-1330.	2.5	7
123	Liquid-phase diffusion and adsorption of pyridine in porous silica-alumina pellets. <i>AIChE Journal</i> , 1984, 30, 593-599.	1.8	6
124	An experimental simulation of distillation column concentration profiles using a batch apparatus. <i>Chemical Engineering Science</i> , 2003, 58, 479-486.	1.9	6
125	Application of the Attainable Region Concept to the Oxidative Dehydrogenation of 1-Butene in Inert Porous Membrane Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 1827-1831.	1.8	6
126	Study of Carbon Monoxide Hydrogenation Over Supported Au Catalysts. <i>Studies in Surface Science and Catalysis</i> , 2007, 163, 141-151.	1.5	6

#	ARTICLE	IF	CITATIONS
127	Systems approach to reducing energy usage and carbon dioxide emissions. <i>AICHE Journal</i> , 2009, 55, 2202-2207.	1.8	6
128	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.	1.8	6
129	Batch Distillation Targets for Minimum Energy Consumption. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 2751-2757.	1.8	6
130	Making processes work. <i>Computers and Chemical Engineering</i> , 2015, 81, 22-31.	2.0	6
131	Applying thermodynamics to digestion/gasification processes: the Attainable Region approach. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 131, 25-36.	2.0	6
132	An experimental and modeling study of fires in ventilated ducts. Part I: Liquid fuels. <i>Combustion and Flame</i> , 1994, 96, 428-442.	2.8	5
133	A catalytic trap for low-temperature complete NO reduction in oxygen-rich media. <i>Chemical Communications</i> , 1996, , 2081.	2.2	5
134	A periodic flow reversal reactor: An infinitely fast switching model and a practical proposal for its implementation. <i>Canadian Journal of Chemical Engineering</i> , 1996, 74, 760-765.	0.9	5
135	An experimental and modeling study of fires in ventilated ducts. Part II: PMMA and stratification. <i>Combustion and Flame</i> , 1996, 104, 138-156.	2.8	5
136	Fischer-Tropsch synthesis: DRIFTS and SIMS surface investigation of Co and Co/Ru on titania supports. <i>Studies in Surface Science and Catalysis</i> , 1997, 107, 243-248.	1.5	5
137	The cost of crossing reaction equilibrium in a system that is overall adiabatic. <i>Computers and Chemical Engineering</i> , 2002, 26, 803-809.	2.0	5
138	Reactive column profile map topology: Continuous distillation column with non-reversible kinetics. <i>Computers and Chemical Engineering</i> , 2008, 32, 622-629.	2.0	5
139	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.	1.8	5
140	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.	2.2	5
141	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> , 1974, 13, 164-178.	0.8	4
142	Thermal determination of the kinetics of the iron(III)â€“tin(II) redox reaction in chloride solution. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1975, 71, 1413.	1.0	4
143	Bounds and approximate solutions to linear problems with nonlinear boundary conditions: Solidification of a slab. <i>AICHE Journal</i> , 1978, 24, 161-170.	1.8	4
144	Attainable products for the vapour-liquid separation of homogeneous ternary mixtures. <i>The Chemical Engineering Journal and the Biochemical Engineering Journal</i> , 1995, 59, 51-70.	0.1	4

#	ARTICLE	IF	CITATIONS
145	An anatomic and physiological model of hepatic vascular system. <i>Journal of Applied Physiology</i> , 1995, 79, 1008-1026.	1.2	4
146	Efficiency of Polymer Beads in the Removal of Heparin: Toward the Development of a Novel Reactor. <i>Artificial Cells, Blood Substitutes, and Biotechnology</i> , 2006, 34, 419-432.	0.9	4
147	Environmental impacts of electric vehicles in South Africa. <i>South African Journal of Science</i> , 2012, 108, .	0.3	4
148	Attainable regions for a reactor: Application of \hat{I}^* plot. <i>Chemical Engineering Research and Design</i> , 2012, 90, 1590-1609.	2.7	4
149	A thermodynamic approach toward defining the limits of biogas production. <i>AIChE Journal</i> , 2015, 61, 4270-4276.	1.8	4
150	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.	2.5	4
151	Process flow sheet synthesis: Systems-level design applied to synthetic crude production. <i>AIChE Journal</i> , 2017, 63, 5413-5424.	1.8	4
152	Costing distillation systems from residue curve based designs. <i>Computers and Chemical Engineering</i> , 2000, 24, 1275-1280.	2.0	3
153	Expanding the operating leaves in distillation column sections by distributed feed addition and sidestream withdrawal. <i>Computer Aided Chemical Engineering</i> , 2003, 15, 1050-1057.	0.3	3
154	Experimental simulation of distillation concentration profiles using batch apparatus: Column stripping section. <i>Chemical Engineering Science</i> , 2005, 60, 6815-6823.	1.9	3
155	On Column Profile Maps: An Analysis of Sharp Splits. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 6331-6342.	1.8	3
156	A Graphical Method of Improving the Production Rate from Batch Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 13562-13573.	1.8	3
157	Steady-State Attainment Period for Fischer-Tropsch Products. <i>Topics in Catalysis</i> , 2014, 57, 582-587.	1.3	3
158	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> , 2007, 85, 24-30.	2.7	2
159	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.	0.9	2
160	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, 5211-5222.	1.8	2
161	An overall thermodynamic view of processes: Comparison of fuel producing processes. <i>Chemical Engineering Research and Design</i> , 2010, 88, 844-860.	2.7	2
162	Introducing novel graphical techniques to assess gasification. <i>Energy Conversion and Management</i> , 2011, 52, 547-563.	4.4	2

#	ARTICLE	IF	CITATIONS
163	Thermodynamic considerations in renal separation processes. Theoretical Biology and Medical Modelling, 2017, 14, 2.	2.1	2
164	The response of linear cascades to variations of holding times. Chemical Engineering Science, 1980, 35, 2281-2285.	1.9	1
165	Binding isotherms by continuous-flow dynamic dialysis. Journal of Pharmaceutical and Biomedical Analysis, 1986, 4, 461-474.	1.4	1
166	The low temperature oxidation of coal taken from near a dolerite intrusion. Fuel Processing Technology, 1988, 18, 201-208.	3.7	1
167	Automating Reactor Network Synthesis: Finding a Candidate Attainable Region for Water-Gas Shift(WGS) Reaction. Computer Aided Chemical Engineering, 2002, 10, 217-222.	0.3	1
168	Novel separation system design using "moving triangles". Computer Aided Chemical Engineering, 2003, , 832-839.	0.3	1
169	Feed distribution in distillation: Assessing benefits and limits with column profile maps and rigorous process simulation. AIChE Journal, 2013, 59, 1668-1683.	1.8	1
170	Thermodynamic optimization of steady-flow industrial chemical processes. International Journal of Industrial Chemistry, 2018, 9, 353-361.	3.1	1
171	Development trajectory of the attainable region optimization method: Trends and opportunities for applications in the waste-to-energy field. South African Journal of Chemical Engineering, 2020, 32, 13-26.	1.2	1
172	Process Synthesis Targets. , 2009, , 699-708.		1
173	Comment on "Resolution of nonlinear boundary value problems" Va. A novel method: general parameter mapping (GPM). Chemical Engineering Science, 1973, 28, 985.	1.9	0
174	Surface effects in torque transmission experiments in a couette apparatus. Journal of Colloid and Interface Science, 1974, 49, 82-88.	5.0	0
175	SPONTANEOUS COMBUSTION OF COAL STOCKPILES - AN UNUSUAL CHEMICAL REACTION ENGINEERING PROBLEM. , 1988, , 2139-2145.		0
176	Chemical Engineering research in South Africa. The Chemical Engineering Journal and the Biochemical Engineering Journal, 1994, 54, ix.	0.1	0
177	Modeling Coupled Distillation Column Sections Using Profile Maps. Computer Aided Chemical Engineering, 2002, , 211-216.	0.3	0
178	Application of process synthesis methodology to biomedical engineering for the development of artificial organs. Computer Aided Chemical Engineering, 2003, 15, 1216-1221.	0.3	0
179	MaPS (managed process synthesis). A methodology, integrated with the experimental programme, to develop a flow sheet. " A first step. Computer Aided Chemical Engineering, 2003, , 1328-1333.	0.3	0
180	DSR algorithm for construction of Attainable Region structure. Computer Aided Chemical Engineering, 2003, , 594-599.	0.3	0

#	ARTICLE	IF	CITATIONS
181	Make distillation boundaries work for you!. Computer Aided Chemical Engineering, 2004, 18, 499-504.	0.3	0
182	Adapting Process Unit Relations in Experimental Data Weighting Procedures: A Phase Equilibrium Case Study. Industrial & Engineering Chemistry Research, 2010, 49, 1975-1981.	1.8	0
183	Synthesis of Two-Membrane Permeation Processes Using Residue Curve Maps and Node Classification. Industrial & Engineering Chemistry Research, 2013, 52, 14637-14646.	1.8	0
184	Estimating Thermodynamic and Equilibrium Quantities of Exothermic Reversible Processes. Industrial & Engineering Chemistry Research, 2013, 52, 7630-7639.	1.8	0
185	Experimental Measurement of Membrane Residue Curve Maps. Industrial & Engineering Chemistry Research, 2013, 52, 11142-11150.	1.8	0
186	Designing a Waste to Energy Plant for Informal Settlements. Computer Aided Chemical Engineering, 2014, , 609-614.	0.3	0
187	Geometry and reactor synthesis: maximizing conversion of the ethyl acetate process. International Journal of Industrial Chemistry, 2015, 6, 77-83.	3.1	0
188	Batch Partial Emptying and Filling To Improve the Production Rate of Algae. Industrial & Engineering Chemistry Research, 2015, 54, 12492-12502.	1.8	0
189	Gasoline pre-blending processes for efficient ethanol recovery: effects of process parameters and process modifications for improved performance. Biofuels, 2021, 12, 625-632.	1.4	0
190	Computer-aided Graphical Tools for Synthesizing Complex Column Configurations. , 2009, , 1007-1015.		0
191	Microbial fuel and chemical production using sweet potatoes. , 2010, , .		0
192	Process Flow-Sheet Synthesis: Systems-Level Design applied to Synthetic Crude Production. Computer Aided Chemical Engineering, 2017, 40, 643-648.	0.3	0