

Ben-Guang Rong

List of Publications by Year in descending order

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96
papers

1,831
citations

236612

25
h-index

288905

40
g-index

96
all docs

96
docs citations

96
times ranked

1370
citing authors

#	ARTICLE	IF	CITATIONS
1	Process simulation and economical evaluation of enzymatic biodiesel production plant. <i>Bioresource Technology</i> , 2010, 101, 5266-5274.	4.8	136
2	A review of the current state of biofuels production from lignocellulosic biomass using thermochemical conversion routes. <i>Chinese Journal of Chemical Engineering</i> , 2019, 27, 1523-1535.	1.7	104
3	Techno-economic analysis of different pretreatment processes for lignocellulosic-based bioethanol production. <i>Bioresource Technology</i> , 2016, 218, 561-570.	4.8	93
4	A method for systematic synthesis of multicomponent distillation systems with less than N-1 columns. <i>Chemical Engineering and Processing: Process Intensification</i> , 2009, 48, 907-920.	1.8	77
5	Synthesis of new separation processes for bioethanol production by extractive distillation. <i>Separation and Purification Technology</i> , 2012, 96, 58-67.	3.9	62
6	Optimal Synthesis of Distillation Systems for Bioethanol Separation. Part 1: Extractive Distillation with Simple Columns. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 1612-1619.	1.8	60
7	Synthesis of Functionally Distinct Thermally Coupled Configurations for Quaternary Distillations. <i>Industrial & Engineering Chemistry Research</i> , 2003, 42, 1204-1214.	1.8	59
8	Synthesis of dividing-wall columns (DWC) for multicomponent distillations—A systematic approach. <i>Chemical Engineering Research and Design</i> , 2011, 89, 1281-1294.	2.7	58
9	Economic value and environmental impact analysis of lignocellulosic ethanol production: assessment of different pretreatment processes. <i>Clean Technologies and Environmental Policy</i> , 2019, 21, 637-654.	2.1	58
10	Optimal Synthesis of Distillation Systems for Bioethanol Separation. Part 2. Extractive Distillation with Complex Columns. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 1620-1626.	1.8	57
11	Energy saving and capital cost evaluation in distillation column sequences with a divided wall column. <i>Chemical Engineering Research and Design</i> , 2009, 87, 1649-1657.	2.7	56
12	Synthesis and design of new hybrid configurations for biobutanol purification. <i>Computers and Chemical Engineering</i> , 2016, 84, 482-492.	2.0	54
13	Optimal Design of Distillation Flowsheets with a Lower Number of Thermal Couplings for Multicomponent Separations. <i>Industrial & Engineering Chemistry Research</i> , 2002, 41, 5716-5726.	1.8	41
14	Multiobjective Optimal Acetone–Butanol–Ethanol Separation Systems Using Liquid–Liquid Extraction-Assisted Divided Wall Columns. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 11575-11583.	1.8	41
15	Partially thermally coupled distillation systems for multicomponent separations. <i>AIChE Journal</i> , 2003, 49, 1340-1347.	1.8	37
16	Dynamic Behavior of Alternative Separation Processes for Ethanol Dehydration by Extractive Distillation. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 17554-17561.	1.8	36
17	Design and synthesis of multicomponent thermally coupled distillation flowsheets. <i>Computers and Chemical Engineering</i> , 2001, 25, 807-820.	2.0	35
18	Synthesis of Heat-Integrated Thermally Coupled Distillation Systems for Multicomponent Separations. <i>Industrial & Engineering Chemistry Research</i> , 2003, 42, 4329-4339.	1.8	34

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19	Synthesis and Optimal Design of Thermodynamically Equivalent Thermally Coupled Distillation Systems. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 5904-5915.	1.8	33
20	A New Method for Synthesis of Thermodynamically Equivalent Structures for Petlyuk Arrangements. <i>Chemical Engineering Research and Design</i> , 2006, 84, 1095-1116.	2.7	33
21	Synthesis of intensified simple column configurations for multicomponent distillations. <i>Chemical Engineering and Processing: Process Intensification</i> , 2012, 62, 1-17.	1.8	33
22	Techno-economic analysis of organosolv pretreatment process from lignocellulosic biomass. <i>Clean Technologies and Environmental Policy</i> , 2018, 20, 1401-1412.	2.1	33
23	Design, optimization and controllability of an alternative process based on extractive distillation for an ethane-carbon dioxide mixture. <i>Chemical Engineering and Processing: Process Intensification</i> , 2013, 74, 55-68.	1.8	32
24	The synthesis of thermally coupled distillation flowsheets for separations of five-component mixtures. <i>Computers and Chemical Engineering</i> , 2000, 24, 247-252.	2.0	30
25	Process control analysis for intensified bioethanol separation systems. <i>Chemical Engineering and Processing: Process Intensification</i> , 2014, 75, 119-125.	1.8	27
26	Polymorphic behavior of isonicotinamide in cooling crystallization from various solvents. <i>Journal of Crystal Growth</i> , 2016, 450, 81-90.	0.7	27
27	Evaluation of organosolv pretreatment for bioethanol production from lignocellulosic biomass: solvent recycle and process integration. <i>Biomass Conversion and Biorefinery</i> , 2018, 8, 397-411.	2.9	27
28	The importance of the sequential synthesis methodology in the optimal distillation sequences design. <i>Computers and Chemical Engineering</i> , 2014, 62, 1-9.	2.0	23
29	Controllability analysis of thermodynamically equivalent thermally coupled arrangements for quaternary distillations. <i>Chemical Engineering Research and Design</i> , 2008, 86, 23-37.	2.7	22
30	Modified simple column configurations for quaternary distillations. <i>Computers and Chemical Engineering</i> , 2012, 36, 160-173.	2.0	22
31	A combined method for the design and optimization of intensified distillation systems. <i>Chemical Engineering and Processing: Process Intensification</i> , 2014, 85, 69-76.	1.8	22
32	Design and control of an alternative distillation sequence for bioethanol purification. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 2180-2185.	1.6	22
33	Synthesis of New Distillation Systems by Simultaneous Thermal Coupling and Heat Integration. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 3830-3842.	1.8	20
34	Design and optimization of modified non-sharp column configurations for quaternary distillations. <i>Computers and Chemical Engineering</i> , 2015, 74, 15-27.	2.0	19
35	Process Intensification for the Retrofit of a Multicomponent Distillation Plant An Industrial Case Study. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 1975-1980.	1.8	18
36	Methodology of conceptual process synthesis for process intensification. <i>Computer Aided Chemical Engineering</i> , 2008, 25, 283-288.	0.3	16

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37	Crystallization of Artemisinin from Chromatography Fractions of <i>Artemisia annua</i> Extract. <i>Organic Process Research and Development</i> , 2016, 20, 646-652.	1.3	16
38	Synthesis and Simulation of Efficient Divided Wall Column Sequences for Bioethanol Recovery and Purification from an Actual Lignocellulosic Fermentation Broth. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 7411-7430.	1.8	15
39	A systematic procedure for synthesis of intensified nonsharp distillation systems with fewer columns. <i>Chemical Engineering Research and Design</i> , 2014, 92, 1955-1968.	2.7	14
40	Systematic procedure and framework for synthesis and evaluation of bioethanol production processes from lignocellulosic biomass. <i>Bioresource Technology Reports</i> , 2018, 4, 29-39.	1.5	14
41	Effects of intensification on process features and control properties of lignocellulosic bioethanol separation and dehydration systems. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018, 128, 188-198.	1.8	14
42	Conceptual Process Synthesis for Recovery of Natural Products from Plants: A Case Study of Artemisinin from <i>Artemisia annua</i> . <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 7157-7169.	1.8	13
43	Process intensification for systematic synthesis of new distillation systems with less than N-1 columns. <i>Computer Aided Chemical Engineering</i> , 2006, , 1009-1014.	0.3	11
44	New Heat-Integrated Distillation Configurations for Petlyuk Arrangements. <i>Chemical Engineering Research and Design</i> , 2006, 84, 1117-1133.	2.7	11
45	Multi-objective optimization methodology for process synthesis and intensification: Gasification-based biomass conversion into transportation fuels. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021, 162, 108327.	1.8	11
46	Synthesis, Design, and Rigorous Simulation of the Bioethanol Recovery and Dehydration from an Actual Lignocellulosic Fermentation Broth. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 210-225.	1.8	10
47	Systematic Synthesis and Evaluation of Thermochemical Conversion Processes for Lignocellulosic Biofuels Production: Total Process Evaluation and Integration. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 9925-9942.	1.8	9
48	Alternative Hybrid Liquid-Liquid and Distillation Sequences for the Biobutanol Separation. <i>Computer Aided Chemical Engineering</i> , 2015, , 1127-1132.	0.3	7
49	Dynamic behavior of the intensified alternative configurations for quaternary distillation. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016, 108, 151-163.	1.8	7
50	Detection of Nucleation during Cooling Crystallization through Moving Window PCA Applied to in Situ Infrared Data. <i>Organic Process Research and Development</i> , 2017, 21, 966-975.	1.3	7
51	Optimal synthesis of integrated process for co-production of biodiesel and hydrotreated vegetable oil (HVO) diesel from hybrid oil feedstocks. <i>Computer Aided Chemical Engineering</i> , 2017, 40, 673-678.	0.3	7
52	TRIZ-based creative retrofitting of complex distillation processes – An industrial case study. <i>Computer Aided Chemical Engineering</i> , 2001, 9, 439-444.	0.3	6
53	Synthesis of Reactor/Separator Networks by the Conflict-based Analysis Approach. <i>Computer Aided Chemical Engineering</i> , 2002, , 241-246.	0.3	6
54	New Intensified Distillation Systems for Quaternary Petlyuk Configuration. <i>Computer Aided Chemical Engineering</i> , 2014, , 97-102.	0.3	6

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55	Optimal design of distillation systems with less than $N+1$ columns for a class of four component mixtures. <i>Chemical Engineering Research and Design</i> , 2012, 90, 1425-1447.	2.7	5
56	Purification of artemisinin from quercetin by anti-solvent crystallization. <i>Frontiers of Chemical Science and Engineering</i> , 2013, 7, 72-78.	2.3	5
57	Chemometrics for Analytical Data Mining in Separation Process Design for Recovery of Artemisinin from <i>Artemisia annua</i> . <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 5582-5589.	1.8	5
58	Integrated Methodology for the Optimal Synthesis of Lignocellulosic Biomass-to-Liquid Fuel Production Processes: 1. Simulation-Based Superstructure Synthesis and Development. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 14881-14897.	1.8	5
59	Optimal synthesis and design of extractive distillation systems for bioethanol separation: from simple to complex columns. <i>Computer Aided Chemical Engineering</i> , 2013, , 373-378.	0.3	4
60	Effects of Bioethanol Pretreatments on the Broth Concentration and its Impacts in the Optimal Design of Product Separation and Purification Processes. <i>Computer Aided Chemical Engineering</i> , 2016, , 583-588.	0.3	4
61	Intensified Separation Processes for the Recovery and Dehydration of Bioethanol from an Actual Lignocellulosic Fermentation Broth. <i>Computer Aided Chemical Engineering</i> , 2016, 38, 727-732.	0.3	4
62	Retrofit of an industrial solvent recovery system: Distillation sequence intensification and simulation-based optimization. <i>Chemical Engineering Research and Design</i> , 2022, 180, 164-177.	2.7	4
63	Synthesis of Thermodynamically Efficient Distillation Schemes for Multicomponent Separations. <i>Computer Aided Chemical Engineering</i> , 2002, 10, 319-324.	0.3	3
64	Phenomena-based methodology for process intensification. <i>Computer Aided Chemical Engineering</i> , 2004, 18, 481-486.	0.3	3
65	Systematic synthesis of functionally distinct new distillation systems for five-component separations. <i>Computer Aided Chemical Engineering</i> , 2005, , 823-828.	0.3	3
66	Conceptual process synthesis for isolation and purification of natural products from plants - A case study of artemisinin from <i>Artemisia annua</i> . <i>Computer Aided Chemical Engineering</i> , 2012, 31, 1707-1711.	0.3	3
67	On the synthesis of multicomponent distillation configurations with nonsharp splits. <i>Computer Aided Chemical Engineering</i> , 2013, 32, 331-336.	0.3	3
68	Optimization of Alternative Distillation Sequences for Natural Gas Sweetening. <i>Computer Aided Chemical Engineering</i> , 2014, , 1201-1206.	0.3	3
69	Alternative Petlyuk Distillation Configurations for the Separation of Four-Component Mixtures. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 4788-4794.	1.8	3
70	Biobutanol Purification by Hybrid Extraction-Divided Wall Column Configurations. <i>Computer Aided Chemical Engineering</i> , 2017, 40, 1027-1032.	0.3	3
71	A Dual Methodology for Synthesis of Woody Biomass to Liquid (BtL) Thermochemical Conversion Routes and Bio-oil Upgrading. <i>Computer Aided Chemical Engineering</i> , 2017, 40, 679-684.	0.3	3
72	Integrated Methodology for Optimal Synthesis of Lignocellulosic Biomass-to-Liquid Fuel Production Processes: 2. Superstructure MINLP Modeling and Evaluation for Optimal Biofuel Process Synthesis and Integration. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 14898-14913.	1.8	3

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73	A critical review of separation technologies in lignocellulosic biomass conversion to liquid transportation fuels production processes. <i>Chemical Engineering Communications</i> , 2022, 209, 529-554.	1.5	3
74	Creative design of distillation flowsheets based on theory of solving inventive problems. <i>Computer Aided Chemical Engineering</i> , 2000, 8, 625-630.	0.3	2
75	A conflict-based approach for process synthesis with wastes minimization. <i>Computer Aided Chemical Engineering</i> , 2003, 14, 209-214.	0.3	2
76	Systematic approach for synthesis of intensified biodiesel production processes. <i>Computer Aided Chemical Engineering</i> , 2010, 28, 1099-1104.	0.3	2
77	Systematic Synthesis of Intensified Distillation Systems. , 2016, , 35-64.		2
78	Solvent Recycle and Impurity Purge Evaluation for Organosolv Pretreatment Method for Bioethanol Production from Lignocellulosic Biomass. <i>Computer Aided Chemical Engineering</i> , 2017, , 1141-1146.	0.3	2
79	A shortcut method for design and synthesis of multicomponent thermally coupled distillation flowsheets. <i>Computer Aided Chemical Engineering</i> , 2000, 8, 595-600.	0.3	1
80	Modelling at different stages of process life-cycle. <i>Computer Aided Chemical Engineering</i> , 2003, , 977-982.	0.3	1
81	Synthesis of partially thermally coupled column configurations for multicomponent distillations. <i>Computer Aided Chemical Engineering</i> , 2003, 14, 275-280.	0.3	1
82	Genetic Algorithms in the Design of Configurations for Distillation of Quaternary Mixtures using Less than N-1 columns with Thermally Coupling. <i>Computer Aided Chemical Engineering</i> , 2012, 30, 677-681.	0.3	1
83	New distillation sequences for bioethanol production by extractive distillation. <i>Computer Aided Chemical Engineering</i> , 2012, , 737-741.	0.3	1
84	Design and Optimization of Intensified Quaternary Petlyuk Configuration. <i>Computer Aided Chemical Engineering</i> , 2015, , 1367-1372.	0.3	1
85	Design and Optimization of Intensified Non-sharp Distillation Configurations. <i>Computer Aided Chemical Engineering</i> , 2015, , 1055-1060.	0.3	1
86	Integrated Synthesis and Differential Evolution Methodology for Design and Optimization of Distillation Processes. <i>Advances in Process Systems Engineering</i> , 2017, , 230-259.	0.3	1
87	7. Integrated biofuels process synthesis: integration between bioethanol and biodiesel processes. , 2017, , 241-289.		1
88	8. Process synthesis for natural products from plants based on PAT methodology. , 2017, , 290-324.		1
89	Superstructure-based Rigorous Simulation for Synthesis and Evaluation of Lignocellulosic Biofuels Processes. <i>Computer Aided Chemical Engineering</i> , 2018, , 139-144.	0.3	1
90	Synthesis of heat-integrated thermally coupled column configurations for multicomponent distillations. <i>Computer Aided Chemical Engineering</i> , 2003, , 1352-1357.	0.3	0

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91	Synthesis of new thermally coupled distillation systems by heat integration. Computer Aided Chemical Engineering, 2004, 18, 487-492.	0.3	0
92	A systematic procedure for synthesis of intensified simple column configurations for multicomponent distillations. Computer Aided Chemical Engineering, 2012, , 1572-1576.	0.3	0
93	The Integration of the Synthesis Methodology in the Design of a Five-Component Distillation Sequence. Computer Aided Chemical Engineering, 2014, , 1363-1368.	0.3	0
94	Conceptual reactive crystallization process design for separation and purification of phosphorus from complex sludge ash. Computer Aided Chemical Engineering, 2016, , 667-672.	0.3	0
95	1. Introduction to basic concepts and elements in process synthesis and process intensification. , 2017, , 1-40.		0
96	2. Process synthesis and process intensification for multicomponent distillation systems “ systematic methodology. , 2017, , 41-110.		0