Ali Almansoori

List of Publications by Year
in descending order

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93	3,285	218677	155660
papers	citations	26 h-index	55 g-index

96	96	96	3319
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Readily processed protonic ceramic fuel cells with high performance at low temperatures. Science, 2015, 349, 1321-1326.	12.6	982
2	Design and operation of a future hydrogen supply chain: Multi-period model. International Journal of Hydrogen Energy, 2009, 34, 7883-7897.	7.1	406
3	Design and Operation of a Future Hydrogen Supply Chain. Chemical Engineering Research and Design, 2006, 84, 423-438.	5.6	165
4	Design and operation of a stochastic hydrogen supply chain network under demand uncertainty. International Journal of Hydrogen Energy, 2012, 37, 3965-3977.	7.1	126
5	Design of optimization model for a hydrogen supply chain under emission constraints - A case study of Germany. Energy, 2016, 111, 414-429.	8.8	87
6	Design of a hydrogen supply chain with uncertainty. International Journal of Hydrogen Energy, 2015, 40, 16408-16418.	7.1	71
7	Optimal processing route for the utilization and conversion of municipal solid waste into energy and valuable products. Journal of Cleaner Production, 2018, 174, 857-867.	9.3	57
8	Use of reactive distillation in biodiesel production: A simulation-based comparison of energy requirements and profitability indicators. Applied Energy, 2017, 185, 985-997.	10.1	54
9	Impact of Decomposition on Distributed Model Predictive Control: A Process Network Case Study. Industrial & Engineering Chemistry Research, 2017, 56, 9606-9616.	3.7	53
10	Analysis of Ontario's hydrogen economy demands from hydrogen fuel cell vehicles. International Journal of Hydrogen Energy, 2012, 37, 8905-8916.	7.1	52
11	Design of an energy hub based on natural gas and renewable energy sources. International Journal of Energy Research, 2014, 38, 363-373.	4.5	48
12	Design and control of energy integrated SOFC systems for in situ hydrogen production and power generation. Computers and Chemical Engineering, 2011, 35, 1691-1704.	3.8	46
13	Multi-Objective Robust Optimization Under Interval Uncertainty Using Online Approximation and Constraint Cuts. Journal of Mechanical Design, Transactions of the ASME, 2011, 133, .	2.9	36
14	Energy Hub Based on Nuclear Energy and Hydrogen Energy Storage. Industrial & Engineering Chemistry Research, 2013, 52, 7470-7481.	3.7	36
15	Probing Grain-Boundary Chemistry and Electronic Structure in Proton-Conducting Oxides by Atom Probe Tomography. Nano Letters, 2016, 16, 6924-6930.	9.1	36
16	New Approximation Assisted Multi-objective collaborative Robust Optimization (new AA-McRO) under interval uncertainty. Structural and Multidisciplinary Optimization, 2013, 47, 19-35.	3.5	35
17	Enabling utility-scale electrical energy storage by a power-to-gas energy hub and underground storage of hydrogen and natural gas. Journal of Natural Gas Science and Engineering, 2016, 35, 1180-1199.	4.4	35
18	Adaptive KPCA Modeling of Nonlinear Systems. IEEE Transactions on Signal Processing, 2015, 63, 2364-2376.	5.3	34

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19	Review of technologies for biotreatment of refinery wastewaters: progress, challenges and future opportunities. Environmental Technology Reviews, 2016, 5, 12-38.	4.3	34
20	Integration of hydrogen management in refinery planning with rigorous process models and product quality specifications. International Journal of Process Systems Engineering, 2011, 1, 302.	0.2	29
21	A capacity expansion planning model for integrated water desalination and power supply chain problem. Energy Conversion and Management, 2016, 122, 462-476.	9.2	29
22	Optimal design of split partial second pass reverse osmosis network for desalination applications. AICHE Journal, 2014, 60, 520-532.	3.6	28
23	Design and operation of water desalination supply chain using mathematical modelling approach. Desalination, 2014, 351, 184-201.	8.2	28
24	Distributed Estimation and Nonlinear Model Predictive Control Using Community Detection. Industrial & Engineering Chemistry Research, 2019, 58, 13495-13507.	3.7	28
25	Structural optimization of osmosis processes for water and power production in desalination applications. Desalination, 2014, 344, 12-27.	8.2	27
26	Design optimization model for the integration of renewable and nuclear energy in the United Arab Emiratesâ€™ power system. Applied Energy, 2015, 148, 234-251.	10.1	27
27	Biodiesel Production using Reactive Distillation: A Comparative Simulation Study. Energy Procedia, 2015, 75, 17-22.	1.8	27
28	Modeling of Hydrogen Networks in a Refinery Using a Stochastic Programming Appraoch. Industrial & Engineering Chemistry Research, 2014, 53, 19715-19735.	3.7	25
29	Corporate dashboards for integrated business and engineering decisions in oil refineries: An agent-based approach. Decision Support Systems, 2012, 52, 729-741.	5.9	22
30	Synthesis of reverse osmosis desalination network under boron specifications. Desalination, 2015, 371, 26-36.	8.2	22
31	A mathematical model for optimal compression costs in the hydrogen networks for the petroleum refineries. AICHE Journal, 2017, 63, 3925-3943.	3.6	21
32	Retrofit Design of Hydrogen Network in Refineries: Mathematical Model and Global Optimization. Industrial & Engineering Chemistry Research, 2018, 57, 4996-5023.	3.7	21
33	Distributed Model Predictive Control of an Amine Gas Sweetening Plant. Industrial & Engineering Chemistry Research, 2018, 57, 13103-13115.	3.7	21
34	Generalized mixed-integer nonlinear programming modeling of eco-industrial networks to reduce cost and emissions. Journal of Cleaner Production, 2015, 99, 160-176.	9.3	20
35	Distributed model predictive control of process networks: Impact of control architecture * *Financial support from the Petroleum Institute, Abu Dhabi, UAE is gratefully acknowledged.. IFAC-PapersOnLine, 2017, 50, 12452-12457.	0.9	20
36	System Decomposition for Distributed Multivariate Statistical Process Monitoring by Performance Driven Agglomerative Clustering. Industrial & Engineering Chemistry Research, 2018, 57, 8283-8298.	3.7	20

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37	Comprehensive study of decomposition effects on distributed output tracking of an integrated process over a wide operating range. Chemical Engineering Research and Design, 2018, 134, 553-563.	5.6	20
38	Stochastic Modeling of the Oil Sands Operations under Greenhouse Gas Emission Restrictions and Water Management. Energy & Fuels, 2013, 27, 5559-5578.	5.1	19
39	Anomalous low-temperature proton conductivity enhancement in a novel protonic nanocomposite. Physical Chemistry Chemical Physics, 2014, 16, 5076-5080.	2.8	19
40	Graph representation and decomposition of ODE/hyperbolic PDE systems. Computers and Chemical Engineering, 2017, 106, 532-543.	3.8	19
41	OVERALL INTEGRATION OF THE MANAGEMENT OF H2AND CO2WITHIN REFINERY PLANNING USING RIGOROUS PROCESS MODELS. Chemical Engineering Communications, 2013, 200, 139-161.	2.6	17
42	Optimal renewable energy integration into the process industry using multi-energy hub approach with economic and environmental considerations: Refinery-wide case study. Computers and Chemical Engineering, 2021, 151, 107345.	3.8	17
43	Design multiperiod optimization model for the electricity sector under uncertainty â€“ A case study of the Emirate of Abu Dhabi. Energy Conversion and Management, 2015, 100, 177-190.	9.2	16
44	Sequential synthesis of heat integrated water networks: A new approach and its application to small and medium sized examples. Computers and Chemical Engineering, 2016, 90, 44-61.	3.8	16
45	A multiobjective optimization framework for sustainable design of municipal solid waste processing pathways to energy and materials. International Journal of Energy Research, 2020, 44, 771-783.	4.5	16
46	Optimization of catalyst preparation conditions for direct sodium borohydride fuel cell using response surface methodology. Energy, 2014, 67, 97-105.	8.8	14
47	Optimal dynamic operation of microalgae cultivation coupled with recovery of flue gas CO2 and waste heat. Computers and Chemical Engineering, 2017, 105, 317-327.	3.8	14
48	An Optimization Framework for the Climate, Land, Energy, and Water (CLEWS) Nexus by a Discrete Optimization Model. Energy Procedia, 2017, 105, 3232-3238.	1.8	14
49	Municipality solid waste supply chain optimization to power production under uncertainty. Computers and Chemical Engineering, 2019, 121, 338-353.	3.8	14
50	Municipal solid waste supply chain management under an integrated optimization of sustainability targets. Computers and Chemical Engineering, 2022, 160, 107725.	3.8	14
51	Integrated multi-objective robust optimization and sensitivity analysis with irreducible and reducible interval uncertainty. Engineering Optimization, 2009, 41, 889-908.	2.6	13
52	Thermal Management of a Waterâ€“Gas-Shift Membrane Reactor for High-Purity Hydrogen Production and Carbon Capture. Industrial & Engineering Chemistry Research, 2014, 53, 7461-7469.	3.7	13
53	An overview on synthesis and design of microalgal biorefinery configurations by employing superstructure-based optimization approach. Energy Systems, 2019, 10, 941-966.	3.0	13
54	Modeling of complex dynamic systems using differential neural networks with the incorporation of a priori knowledge. Applied Mathematics and Computation, 2015, 266, 515-526.	2.2	12

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55	Tapping Singular Middle Eastern Ultrasour Gas Resources Combining Membrane and Absorption Systems: Potential for Energy Intensity Reduction. Industrial & Engineering Chemistry Research, 2018, 57, 5748-5763.	3.7	12
56	Environmental Performance of Municipal Solid Waste Processing Pathways. Energy Procedia, 2019, 158, 3363-3368.	1.8	12
57	A realistic framework to a greener supply chain for electric vehicles. International Journal of Energy Research, 2019, 43, 2369-2390.	4.5	12
58	Impact of Cofiring Ceria in Ni/YSZ SOFC Anodes for Operation With Syngas and n-Butane. Journal of Fuel Cell Science and Technology, 2012, 9, .	0.8	11
59	A circular economy solid waste supply chain management based approach under uncertainty. Energy Procedia, 2017, 142, 2971-2976.	1.8	11
60	Understanding the Role of Asphaltene in Wettability Alteration Using Î¶ Potential Measurements. Energy & Fuels, 2016, 30, 1927-1932.	5.1	10
61	Integrated Design and Operation Optimization of Hydrogen Commingled with Natural Gas in Pipeline Networks. Industrial & Engineering Chemistry Research, 2020, 59, 1584-1595.	3.7	10
62	Sustainable management and design of the energyâ€waterâ€food nexus using a mathematical programming approach. Canadian Journal of Chemical Engineering, 2020, 98, 2056-2078.	1.7	9
63	Wastewater Minimization in Pulp and Paper Industries through Energy-Efficient Reverse-Osmosis Membrane Processes. Chemical Engineering and Technology, 2013, 36, 419-425.	1.5	8
64	Wheat straw fibre size effects on the mechanical properties of polypropylene composites. Canadian Journal of Chemical Engineering, 2014, 92, 1700-1708.	1.7	8
65	Multi-period Optimization Model for the UAE Power Sector. Energy Procedia, 2015, 75, 2791-2797.	1.8	8
66	Environmental and Economics Trade-Offs for the Optimal Design of a Bitumen Upgrading Plant. Industrial & Engineering Chemistry Research, 2016, 55, 11996-12013.	3.7	8
67	Improving Multi-Objective Robust Optimization Under Interval Uncertainty Using Worst Possible Point Constraint Cuts. , 2009, , .		7
68	The influence of South Korean energy policy on OPEC oil exports. Energy Policy, 2014, 67, 572-582.	8.8	7
69	Modeling the Impact of Wettability Alterations on Calcium Carbonate System for Crude Oil and Asphaltenic Solutions. Industrial & Engineering Chemistry Research, 2014, 53, 4773-4777.	3.7	7
70	Accurate Predictions of the Effect of Hydrogen Composition on the Thermodynamics and Transport Properties of Natural Gas. Industrial & Engineering Chemistry Research, 2022, 61, 6214-6234.	3.7	7
71	Comparison of life cycle greenhouse gas emissions from unconventional ultra-sour and conventional gas feedstock for power: A case study of the United Arab Emirates. Journal of Cleaner Production, 2018, 197, 908-918.	9.3	6
72	Graph representation and distributed control of diffusion-convection-reaction system networks. Chemical Engineering Science, 2019, 204, 128-139.	3.8	6

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73	MINLP Model for Reverse Osmosis Network Design under Time-Variant Operation Constraints. Industrial & Engineering Chemistry Research, 2019, 58, 22315-22323.	3.7	6
74	Rapid determination of complex oil well cement properties using mathematical models. RSC Advances, 2017, 7, 5148-5157.	3.6	5
75	A decomposition algorithm for organic solid waste supply chain optimization under uncertainty. Energy Procedia, 2019, 158, 3284-3289.	1.8	4
76	An integrated electric vehicle network planning with economic and ecological assessment: Application to the incipient middle Eastern market in transition towards sustainability. Journal of Cleaner Production, 2021, 302, 126980.	9.3	4
77	Modeling and control of a water gas shift membrane reactor for hydrogen production. , 2012, , .		3
78	A computerâ€aided framework for product design with application to wheat straw polypropylene composites. Canadian Journal of Chemical Engineering, 2015, 93, 2141-2149.	1.7	3
79	A mixedâ€integer programming approach for clustering demand data for multiscale mathematical programming applications. AICHE Journal, 2019, 65, e16578.	3.6	2
80	Sustainable optimization of waste management network over extended planning time horizon. AICHE Journal, 2021, 67, e17256.	3.6	2
81	Regularized error-in-variable estimation for big data modeling and process analytics. Control Engineering Practice, 2022, 121, 105060.	5.5	2
82	Approximation Assisted Multi-objective collaborative Robust Optimization (AA-McRO) Under Interval Uncertainty. , 2010, , .		1
83	Energy consumption and emission policies for the US and China. Energy Sources, Part B: Economics, Planning and Policy, 2017, 12, 91-95.	3.4	1
84	Modularity-based control structure selection for process networks: An extension to distributed parameter systems. , 2017, , .		1
85	Design and Operation of a Supply Chain Model for Electric and Plug-in Hybrid Electric Vehicles: Snapshot Model. Computer Aided Chemical Engineering, 2017, , 883-888.	0.5	1
86	Decomposition and Distributed Control of Integrated Lumped and Distributed Parameter Process Networks. , 2018, , .		1
87	Numerical simulation of distributed dynamic systems using hybrid intelligent computing combined with generalized similarity analysis. Applied Mathematics and Computation, 2013, 223, 88-100.	2.2	0
88	Design optimization model for the United Arab Emirates power sector under uncertainty. , 2015, , .		0
89	Design and operation of a hydrogen supply chain considering CO<inf>2</inf> mitigation strategies - A case study of the United Arab Emirates. , 2015, , .		0
90	Assessing CO2Mitigation Options Utilizing Detailed Electricity Characteristics and Including Renewable Generation. IOP Conference Series: Earth and Environmental Science, 2017, 83, 012019.	0.3	0

#	Article	IF	Citations
91	3.18 Energy Production From Oil Sands. , 2018, , 755-787.		0
92	Design and Operation Optimization for Water and Power Cogeneration System by Reverse Osmosis and Renewable Energy Technologies. Computer Aided Chemical Engineering, 2019, , 229-234.	0.5	0
93	Assessing the GHG emissions footprints of newly ultra-sour gas developments in the Middle East region for electricity production. Computer Aided Chemical Engineering, 2018, , 91-96.	0.5	0