

Masoud Soroush

List of Publications by Citations

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

166 papers	4,146 citations	35 h-index	57 g-index
178 ext. papers	4,888 ext. citations	4.3 avg, IF	5.94 L-index

#	Paper	IF	Citations
166	Model Predictive Control Tuning Methods: A Review. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 3505-3515	3.9	221
165	Mathematical modeling of solid oxide fuel cells: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2011 , 15, 1893-1917	16.2	200
164	Nonlinear state-observer design with application to reactors. <i>Chemical Engineering Science</i> , 1997 , 52, 387-404	4.4	125
163	Nonlinear control of a batch polymerization reactor: An experimental study. <i>AIChE Journal</i> , 1992 , 38, 1429-1448	3.6	125
162	A method of sensor fault detection and identification. <i>Journal of Process Control</i> , 2005 , 15, 321-339	3.9	124
161	Mitigation of Thin-Film Composite Membrane Biofouling via Immobilizing Nano-Sized Biocidal Reservoirs in the Membrane Active Layer. <i>Environmental Science & Technology</i> , 2017 , 51, 5511-5522	10.3	117
160	State and parameter estimations and their applications in process control. <i>Computers and Chemical Engineering</i> , 1998 , 23, 229-245	4	113
159	Synthesis of multivariable nonlinear controllers by input/output linearization. <i>AIChE Journal</i> , 1990 , 36, 249-264	3.6	102
158	Feedforward/feedback control of multivariable nonlinear processes. <i>AIChE Journal</i> , 1990 , 36, 1471-1484	3.6	101
157	Exploiting Synergetic Effects of Graphene Oxide and a Silver-Based Metal-Organic Framework To Enhance Antifouling and Anti-Biofouling Properties of Thin-Film Nanocomposite Membranes. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 42967-42978	9.5	101
156	Antimicrobial Mode-of-Action of Colloidal Ti ₃ C ₂ TxMXene Nanosheets. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 16586-16596	8.3	92
155	Mathematical Modeling, Steady-State and Dynamic Behavior, and Control of Fuel Cells: A Review. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 7922-7950	3.9	73
154	High-Temperature Homopolymerization of Ethyl Acrylate and n-Butyl Acrylate: Polymer Characterization. <i>Macromolecules</i> , 2005 , 38, 7619-7628	5.5	73
153	Efficient CO ₂ -removal using novel mixed-matrix membranes with modified TiO ₂ nanoparticles. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 4011-4025	13	72
152	Enhancing performance and surface antifouling properties of polysulfone ultrafiltration membranes with salicylate-alumoxane nanoparticles. <i>Applied Surface Science</i> , 2017 , 393, 93-102	6.7	67
151	Simultaneous Improvement of Antimicrobial, Antifouling, and Transport Properties of Forward Osmosis Membranes with Immobilized Highly-Compatible Polyrhodanine Nanoparticles. <i>Environmental Science & Technology</i> , 2018 , 52, 5246-5258	10.3	66
150	A Novel Nanocomposite with Superior Antibacterial Activity: A Silver-Based Metal Organic Framework Embellished with Graphene Oxide. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1701365	4.6	64

149	Surface Modification of a MXene by an Aminosilane Coupling Agent. <i>Advanced Materials Interfaces</i> , 2020 , 7, 1902008	4.6	62
148	Discrete-time nonlinear controller synthesis by input/output linearization. <i>AIChE Journal</i> , 1992 , 38, 1923-1945	3.6	60
147	Multirate nonlinear state estimation with application to a polymerization reactor. <i>AIChE Journal</i> , 1999 , 45, 769-780	3.6	59
146	Engineering Ultrathin Polyaniline in Micro/Mesoporous Carbon Supercapacitor Electrodes Using Oxidative Chemical Vapor Deposition. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1601201	4.6	57
145	Optimal design and operation of batch reactors. 2. A case study. <i>Industrial & Engineering Chemistry Research</i> , 1993 , 32, 882-893	3.9	57
144	Improved performance and antifouling properties of thin-film composite polyamide membranes modified with nano-sized bactericidal graphene quantum dots for forward osmosis. <i>Chemical Engineering Research and Design</i> , 2018 , 139, 321-334	5.5	57
143	Probabilistic model for sensor fault detection and identification. <i>AIChE Journal</i> , 2003 , 49, 1787-1802	3.6	56
142	Dynamic risk analysis using alarm databases to improve process safety and product quality: Part II Bayesian analysis. <i>AIChE Journal</i> , 2012 , 58, 826-841	3.6	49
141	Multi-rate nonlinear state and parameter estimation in a bioreactor. <i>Biotechnology and Bioengineering</i> , 1999 , 63, 22-32	4.9	49
140	Multivariable nonlinear control of a continuous polymerization reactor: An experimental study. <i>AIChE Journal</i> , 1993 , 39, 1920-1937	3.6	48
139	Spontaneous polymerization and chain microstructure evolution in high-temperature solution polymerization of n-butyl acrylate. <i>Polymer</i> , 2006 , 47, 1423-1435	3.9	47
138	Facile Cu-BTC surface modification of thin chitosan film coated polyethersulfone membranes with improved antifouling properties for sustainable removal of manganese. <i>Journal of Membrane Science</i> , 2019 , 588, 117200	9.6	45
137	Pushing Rubbery Polymer Membranes To Be Economic for CO Separation: Embedment with TiCT MXene Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 3984-3992	9.5	43
136	Optimal design and operation of batch reactors. 1. Theoretical framework. <i>Industrial & Engineering Chemistry Research</i> , 1993 , 32, 866-881	3.9	42
135	Self-initiation mechanism in spontaneous thermal polymerization of ethyl and n-butyl acrylate: a theoretical study. <i>Journal of Physical Chemistry A</i> , 2010 , 114, 7975-83	2.8	38
134	Process systems opportunities in power generation, storage and distribution. <i>Computers and Chemical Engineering</i> , 2013 , 51, 86-95	4	37
133	Strong acid equivalent control of pH processes: an experimental study. <i>Industrial & Engineering Chemistry Research</i> , 1991 , 30, 2437-2444	3.9	37
132	Engineering the dispersion of nanoparticles in polyurethane membranes to control membrane physical and transport properties. <i>Chemical Engineering Science</i> , 2018 , 192, 688-698	4.4	35

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| 131 | Dynamic risk analysis using alarm databases to improve process safety and product quality: Part I Data compaction. <i>AIChE Journal</i> , 2012 , 58, 812-825 | 3.6 | 34 |
| 130 | Incidents Investigation and Dynamic Analysis of Large Alarm Databases in Chemical Plants: A Fluidized-Catalytic-Cracking Unit Case Study <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 8062-8079 | 3.9 | 34 |
| 129 | Nonlinear State Estimation in a Polymerization Reactor. <i>Industrial & Engineering Chemistry Research</i> , 1997 , 36, 2679-2690 | 3.9 | 34 |
| 128 | A continuous-time formulation of nonlinear model predictive control. <i>International Journal of Control</i> , 1996 , 63, 121-146 | 1.5 | 34 |
| 127 | Computational evidence for self-initiation in spontaneous high-temperature polymerization of methyl methacrylate. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 1125-32 | 2.8 | 33 |
| 126 | MXene-Based Nanocomposite Sensors. <i>ACS Omega</i> , 2021 , 6, 11103-11112 | 3.9 | 33 |
| 125 | Backbiting and scission reactions in free-radical polymerization of methyl acrylate. <i>International Journal of Quantum Chemistry</i> , 2014 , 114, 345-360 | 2.1 | 31 |
| 124 | Dynamics and Control of a Tubular Solid-Oxide Fuel Cell. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 6112-6125 | 3.9 | 31 |
| 123 | Computational study of the self-initiation mechanism in thermal polymerization of methyl acrylate. <i>Journal of Physical Chemistry A</i> , 2009 , 113, 10787-94 | 2.8 | 30 |
| 122 | Nonlinear control of a polymerization CSTR with singular characteristic matrix. <i>AIChE Journal</i> , 1994 , 40, 980-990 | 3.6 | 29 |
| 121 | Oxidative chemical vapor deposition of polyaniline thin films. <i>Beilstein Journal of Nanotechnology</i> , 2017 , 8, 1266-1276 | 3 | 28 |
| 120 | Optimal directionality compensation in processes with input saturation non-linearities. <i>International Journal of Control</i> , 1999 , 72, 1555-1564 | 1.5 | 28 |
| 119 | Computational study of chain transfer to monomer reactions in high-temperature polymerization of alkyl acrylates. <i>Journal of Physical Chemistry A</i> , 2013 , 117, 2605-18 | 2.8 | 27 |
| 118 | Modeling spin-forbidden monomer self-initiation reactions in spontaneous free-radical polymerization of acrylates and methacrylates. <i>Journal of Physical Chemistry A</i> , 2014 , 118, 9310-8 | 2.8 | 26 |
| 117 | Shortest-prediction-horizon non-linear model-predictive control. <i>Chemical Engineering Science</i> , 1998 , 53, 273-292 | 4.4 | 26 |
| 116 | Ti3C2 MXene-Polymer nanocomposites and their applications. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 8051-8098 | 13 | 26 |
| 115 | Theoretical and Experimental Study of a Dye-Sensitized Solar Cell. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 5234-5247 | 3.9 | 25 |
| 114 | Analytical control of SISO nonlinear processes with input constraints. <i>AIChE Journal</i> , 1998 , 44, 116-130 | 3.6 | 25 |

113	A New Pentiptycene-Based Dianhydride and Its High-Free-Volume Polymer for Carbon Dioxide Removal. <i>ChemSusChem</i> , 2018 , 11, 472-482	8.3	24
112	Tailoring the Biocidal Activity of Novel Silver-Based Metal Azolate Frameworks. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 7588-7599	8.3	23
111	Effects of polymer chemistry on polymer-electrolyte dye sensitized solar cell performance: A theoretical and experimental investigation. <i>Journal of Power Sources</i> , 2015 , 274, 156-164	8.9	22
110	Computational study of cyclohexanone-monomer co-initiation mechanism in thermal homo-polymerization of methyl acrylate and methyl methacrylate. <i>Journal of Physical Chemistry A</i> , 2012 , 116, 5337-48	2.8	22
109	Discrete-time nonlinear feedback control of multivariable processes. <i>AIChE Journal</i> , 1996 , 42, 187-203	3.6	21
108	Game theoretic approach to multiobjective designs: Focus on inherent safety. <i>AIChE Journal</i> , 2006 , 52, 228-246	3.6	20
107	Next generation polymers of intrinsic microporosity with tunable moieties for ultrahigh permeation and precise molecular CO ₂ separation. <i>Progress in Energy and Combustion Science</i> , 2021 , 84, 100903	33.6	20
106	Novel Application of a Polyurethane Membrane for Efficient Separation of Hydrogen Sulfide from Binary and Ternary Gas Mixtures. <i>ChemistrySelect</i> , 2018 , 3, 3302-3308	1.8	19
105	Rolling Pin Method: Efficient General Method of Joint Probability Modeling. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 20191-20203	3.9	19
104	Model-predictive safety system for proactive detection of operation hazards. <i>AIChE Journal</i> , 2016 , 62, 2024-2042	3.6	18
103	Real-time multirate state estimation in a pilot-scale polymerization reactor. <i>AIChE Journal</i> , 2002 , 48, 1022-1033	3.6	18
102	A method of robust multi-rate state estimation. <i>Journal of Process Control</i> , 2003 , 13, 337-355	3.9	18
101	Influence of oCVD Polyaniline Film Chemistry in Carbon-Based Supercapacitors. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 6221-6228	3.9	17
100	On the Thermal Self-Initiation Reaction of n-Butyl Acrylate in Free-Radical Polymerization. <i>Processes</i> , 2018 , 6, 3	2.9	17
99	Maximum-likelihood maximum-entropy constrained probability density function estimation for prediction of rare events. <i>AIChE Journal</i> , 2014 , 60, 1013-1026	3.6	17
98	Model-Based Controller Design for Unstable, Non-Minimum-Phase, Nonlinear Processes. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 2758-2768	3.9	17
97	Parameter Estimator Design with Application to a Chemical Reactor. <i>Industrial & Engineering Chemistry Research</i> , 1998 , 37, 455-463	3.9	17
96	Adaptive Temperature Control of Multiproduct Jacketed Reactors. <i>Industrial & Engineering Chemistry Research</i> , 1999 , 38, 4337-4344	3.9	17

95	Experimental and Theoretical Study of the Self-Initiation Reaction of Methyl Acrylate in Free-Radical Polymerization. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 532-539	3.9	16
94	Synthesis and integration of poly(1-vinylimidazole) polymer electrolyte in dye sensitized solar cells by initiated chemical vapor deposition. <i>Chemical Engineering Science</i> , 2016 , 154, 136-142	4.4	16
93	Mathematical modeling and steady-state analysis of a proton-conducting solid oxide fuel cell. <i>Journal of Process Control</i> , 2012 , 22, 1521-1530	3.9	16
92	Input-output linearizing nonlinear model predictive control. <i>International Journal of Control</i> , 1997 , 68, 1449-1474	1.5	16
91	Nonlinear State Estimation in the Presence of Multiple Steady States. <i>Industrial & Engineering Chemistry Research</i> , 1996 , 35, 2645-2659	3.9	16
90	Theoretical Study of Intermolecular Chain Transfer to Polymer Reactions of Alkyl Acrylates. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 4148-4165	3.9	14
89	Analytical Model Predictive Control 2000 , 163-179		14
88	Nonlinear feedback control of multivariable non-minimum-phase processes. <i>Journal of Process Control</i> , 2002 , 12, 667-686	3.9	13
87	Continuous-Time, Nonlinear Feedback Control of Stable Processes. <i>Industrial & Engineering Chemistry Research</i> , 2001 , 40, 2069-2078	3.9	13
86	Study of n-Butyl Acrylate Self-Initiation Reaction Experimentally and via Macroscopic Mechanistic Modeling. <i>Processes</i> , 2016 , 4, 15	2.9	13
85	Theoretical study of chain transfer to solvent reactions of alkyl acrylates. <i>Journal of Physical Chemistry A</i> , 2014 , 118, 5474-87	2.8	12
84	Applications of the Rolling Pin Method. 1. An Efficient Alternative to Bayesian Network Modeling and Inference. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 4316-4325	3.9	12
83	Steady-state multiplicity in a solid oxide fuel cell: Practical considerations. <i>Chemical Engineering Science</i> , 2012 , 67, 2-14	4.4	12
82	Evaluation of achievable control quality in nonlinear processes. <i>Computers and Chemical Engineering</i> , 1996 , 20, 357-364	4	12
81	Kinetic analysis of the initiated chemical vapor deposition of poly(vinylpyrrolidone) and poly(4-vinylpyridine). <i>Thin Solid Films</i> , 2015 , 595, 244-250	2.2	11
80	Physical aging of polyetherimide membranes. <i>Journal of Natural Gas Science and Engineering</i> , 2015 , 27, 651-660	4.6	11
79	Estimation of Complete Discrete Multivariate Probability Distributions from Scarce Data with Application to Risk Assessment and Fault Detection. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 7538-7547	3.9	11
78	Nonlinear Controller Design for Input-Constrained, Multivariable Processes. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 3735-3744	3.9	11

77	MPC formulation of GLC. <i>AIChE Journal</i> , 1996 , 42, 2377-2381	3.6	11
76	Ion-Selective MXene-Based Membranes: Current Status and Prospects. <i>Advanced Materials Technologies</i> , 2021 , 6, 2001189	6.8	11
75	Molecular Dynamics Insights into the Structural and Water Transport Properties of a Forward Osmosis Polyamide Thin-Film Nanocomposite Membrane Modified with Graphene Quantum Dots. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 14447-14457	3.9	10
74	Free-radical polymerization at higher temperatures: Systems impacts of secondary reactions. <i>Computers and Chemical Engineering</i> , 2008 , 32, 2155-2167	4	10
73	Tuning Guidelines for Model-Predictive Control. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 4177-4191	3.9	10
72	Experimental study of the spontaneous thermal homopolymerization of methyl and n-butyl acrylate. <i>Journal of Applied Polymer Science</i> , 2010 , 118, n/a-n/a	2.9	9
71	Model predictive controller tuning via eigenvalue placement 2008 ,		9
70	Shortest-prediction-horizon non-linear model-predictive control with guaranteed asymptotic stability. <i>International Journal of Control</i> , 2007 , 80, 1533-1543	1.5	9
69	Surface functionalization of MXenes. <i>Materials Advances</i> ,	3.3	9
68	Experimental and theoretical investigation of dye sensitized solar cells integrated with crosslinked poly(vinylpyrrolidone) polymer electrolyte using initiated chemical vapor deposition. <i>Thin Solid Films</i> , 2017 , 635, 9-16	2.2	8
67	Chemical Process Simulation for Dynamic Risk Analysis: A SteamMethane Reformer Case Study. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 4347-4359	3.9	8
66	Modeling of a Tubular-SOFC: The Effect of the Thermal Radiation of Fuel Components and CO Participating in the Electrochemical Process. <i>Fuel Cells</i> , 2012 , 12, 761-772	2.9	8
65	Discrete-Time nonlinear control of processes with actuator saturation. <i>AIChE Journal</i> , 1998 , 44, 1701-1705	3.5	8
64	Nonlinear control of input-constrained systems. <i>Computers and Chemical Engineering</i> , 2005 , 30, 158-181	4	8
63	Nonlinear output feedback control of a class of polymerization reactors. <i>IEEE Transactions on Control Systems Technology</i> , 2000 , 8, 310-320	4.8	8
62	Experimental and Mechanistic Modeling Study of Self-Initiated High-Temperature Polymerization of Ethyl Acrylate. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 2621-2630	3.9	8
61	Overview of Dye-Sensitized Solar Cells 2019 , 1-49		7
60	Polysulfone Membranes Incorporated with Reduced Graphene Oxide Nanoparticles for Enhanced Olefin/Paraffin Separation. <i>ChemistrySelect</i> , 2020 , 5, 3675-3681	1.8	7

59	Method of Moments Applied to Most-Likely High-Temperature Free-Radical Polymerization Reactions. <i>Processes</i> , 2019 , 7, 656	2.9	7
58	A non-linear controller design method for processes with saturating actuators. <i>International Journal of Control</i> , 2003 , 76, 698-716	1.5	7
57	Photochromic dye-sensitized solar cells. <i>AIMS Materials Science</i> , 2015 , 2, 503-509	1.9	7
56	Improving the Transport and Antifouling Properties of Poly(vinyl chloride) Hollow-Fiber Ultrafiltration Membranes by Incorporating Silica Nanoparticles. <i>ACS Omega</i> , 2018 , 3, 17439-17446	3.9	7
55	Gas Separation Polysulfone Membranes Modified by Cadmium-based Nanoparticles. <i>Fibers and Polymers</i> , 2018 , 19, 2049-2055	2	7
54	Modeling and Bifurcation Analysis of a Coionic Conducting Solid Oxide Fuel Cell. <i>Industrial & Engineering Chemistry Research</i> , 2013 , 52, 3165-3177	3.9	6
53	Improving Process Safety and Product Quality using Large Databases. <i>Computer Aided Chemical Engineering</i> , 2010 , 28, 175-180	0.6	6
52	Multivariable Nonlinear Control of a Continuous Polymerization Reactor 1992 ,		6
51	High-resolution extrusion printing of Ti3C2-based inks for wearable human motion monitoring and electromagnetic interference shielding. <i>Carbon</i> , 2022 , 191, 277-289	10.4	6
50	Suitability of N-propanoic acid spiropyrans and spirooxazines for use as sensitizing dyes in dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 2981-2989	3.6	5
49	Synthesis of discrete-time nonlinear feedforward/feedback controllers. <i>AIChE Journal</i> , 1994 , 40, 473-495	3.6	5
48	Optimal Membrane-Process Design (OMPD): A software product for optimal design of membrane gas separation processes. <i>Computers and Chemical Engineering</i> , 2020 , 135, 106724	4	5
47	Improved gas transport properties of polyurethaneUrea membranes through incorporating a cadmium-based metal organic framework. <i>Journal of Applied Polymer Science</i> , 2020 , 137, 48704	2.9	5
46	First-principles modeling for optimal design, operation, and integration of energy conversion and storage systems. <i>AIChE Journal</i> , 2019 , 65, e16482	3.6	5
45	Model-predictive safety optimal actions to detect and handle process operation hazards. <i>AIChE Journal</i> , 2020 , 66, e16932	3.6	4
44	Improved predictions of alarm and safety system performance through process and operator response-time modeling. <i>AIChE Journal</i> , 2016 , 62, 3461-3472	3.6	4
43	Real-time, nonlinear control of a constrained, nonminimum-phase process. <i>AIChE Journal</i> , 2002 , 48, 2247-2254	3.6	4
42	Optimal compensation for directionality in processes with a saturating actuator. <i>Computers and Chemical Engineering</i> , 2002 , 26, 1633-1641	4	4

41	Scalable manufacturing of flexible and highly conductive Ti3C2Tx/PEDOT:PSS thin films for electromagnetic interference shielding. <i>New Journal of Chemistry</i> ,	3.6	4
40	Sustainable Recovery of Silver from Deactivated Catalysts Using a Novel Process Combining Leaching and Emulsion Liquid Membrane Techniques. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 13821-13832	3.9	4
39	An efficient copula-based method of identifying regression models of non-monotonic relationships in processing plants. <i>Chemical Engineering Science</i> , 2015 , 136, 106-114	4.4	3
38	Design of Smart Wellhead Controllers for Optimal Fluid Injection Policy and Producibility in Petroleum Reservoirs: A Neuro-Geometric Approach 1997 ,		3
37	Mathematical Modeling and Optimization of a Semi-Batch Polymerization Reactor. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2000 , 33, 983-988		3
36	A Continuous-Time Formulation of Nonlinear Model Predictive Control 1992 ,		3
35	Introduction to Dynamic Risk Analyses. <i>Methods in Chemical Process Safety</i> , 2017 , 1, 201-254	1.1	2
34	Multilinear-Model Predictive Control of a Tubular Solid Oxide Fuel Cell System. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 121218163527007	3.9	2
33	On the Effects of Tunable Parameters of Model Predictive Control on the Locations of Closed-Loop Eigenvalues <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 7951-7956	3.9	2
32	Macroscopic mechanistic modeling and optimization of a self-initiated high-temperature polymerization reactor 2011 ,		2
31	On-Line Parameter Estimation through Dynamic Inversion: A Real-Time Study. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 2503-2507	3.9	2
30	5,7,12,14-Tetrahydro-5,14:7,12-bis([1,2]benzeno)pentacene-6,13-diol dimethylformamide disolvate. <i>IUCrData</i> , 2016 , 1,	0.7	2
29	Model Predictive Control of Multivariable Nonlinear Processes in Continuous-Time 1993 ,		2
28	Windup and Directionality Compensation in Nonlinear Model-Based Control 1998 , 173-208		2
27	Computational methods for pipeline leakage detection and localization: A review and comparative study. <i>Journal of Loss Prevention in the Process Industries</i> , 2022 , 77, 104771	3.5	2
26	Insights Into Dye-Sensitized Solar Cells From Macroscopic-Scale First-Principles Mathematical Modeling 2019 , 83-119		1
25	Rebuttal to the Comment on Rolling Pin Method: Efficient General Method of Joint Probability Modeling <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 2416-2417	3.9	1
24	Model-predictive safety: A new evolution in functional safety 2020 , 283-321		1

23	Design for Process Safety [A Perspective. <i>Computer Aided Chemical Engineering</i> , 2014 , 34, 795-800	0.6	1
22	Control of a heat-integrated co-ionic-conducting solid oxide fuel cell system 2013 ,		1
21	Steady-state multiplicity in a solid oxide fuel cell 2011 ,		1
20	Reduced-order model for monitoring spectroscopic and chromatographic polymer properties. <i>Journal of Chemometrics</i> , 2007 , 21, 612-620	1.6	1
19	Differential-geometric model-based control (DGMBC): A software package for controller design. <i>Computers and Chemical Engineering</i> , 2008 , 32, 1569-1588	4	1
18	Plants for Which Model Predictive Control Admits an Analytical Solution. <i>Proceedings of the American Control Conference</i> , 2007 ,	1.2	1
17	Control Quality Loss in Analytical Control of Input-Constrained Processes. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 8528-8538	3.9	1
16	MXene-based molecular sieving membranes for highly efficient gas separation 2022 , 595-616		1
15	Crystal structure of 5,7,12,14-tetra-hydro-5,14:7,12-bis-([1,2]benzeno)-penta-cene-6,13-dione. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2016 , 72, 1734-1738	0.7	1
14	Control of Polymerization Processes. <i>The Electrical Engineering Handbook</i> , 2010 , 12-1-12-23		1
13	Polymers, Polymerization Reactions, and Computational Quantum Chemistry 2019 , 1-16		1
12	Distributed State Estimation in Large-scale Processes Decomposed into Observable Subsystems Using Community Detection. <i>Computers and Chemical Engineering</i> , 2021 , 156, 107544	4	1
11	Theoretical Insights Into Thermal Self-Initiation Reactions of Acrylates 2019 , 99-134		0
10	An efficient algorithm for community detection in complex weighted networks. <i>AIChE Journal</i> , 2021 , 67, e17205	3.6	0
9	Mixed Matrix Membranes for CO ₂ Separations 2018 , 103-153		0
8	Oxygen-Initiated Free-Radical Polymerization of Alkyl Acrylates at High Temperatures. <i>Macromolecules</i> , 2021 , 54, 7925-7930	5.5	0
7	Efficient mercury removal from aqueous solutions using carboxylated TiCT MXene.. <i>Journal of Hazardous Materials</i> , 2022 , 434, 128780	12.8	0
6	Theoretical Insights Into Chain Transfer Reactions of Acrylates 2019 , 135-193		

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- 4 A Method of Controlling Unstable, Non-Minimum-Phase, Nonlinear Processes. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2004**, 37, 821-826
- 3 Control System Selection: A Measure of Control Quality Loss in Analytical Control. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2004**, 37, 913-918
- 2 Continuous-Time Nonlinear Control of Stable Non-Minimum-Phase Processes. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2000**, 33, 401-406
- 1 Smart manufacturing of paints and coatings **2020**, 179-218