

Masoud Soroush

List of Publications by Year in Descending Order

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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	MXene-based molecular sieving membranes for highly efficient gas separation 2022 , 595-616		1
165	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
164	Efficient mercury removal from aqueous solutions using carboxylated TiCT MXene.. <i>Journal of Hazardous Materials</i> , 2022 , 434, 128780	12.8	0
163	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
162	Ion-Selective MXene-Based Membranes: Current Status and Prospects. <i>Advanced Materials Technologies</i> , 2021 , 6, 2001189	6.8	11
161	MXene-Based Nanocomposite Sensors. <i>ACS Omega</i> , 2021 , 6, 11103-11112	3.9	33
160	Next generation polymers of intrinsic microporosity with tunable moieties for ultrahigh permeation and precise molecular CO2 separation. <i>Progress in Energy and Combustion Science</i> , 2021 , 84, 100903	33.6	20
159	An efficient algorithm for community detection in complex weighted networks. <i>AIChE Journal</i> , 2021 , 67, e17205	3.6	0
158	Oxygen-Initiated Free-Radical Polymerization of Alkyl Acrylates at High Temperatures. <i>Macromolecules</i> , 2021 , 54, 7925-7930	5.5	0
157	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
156	Ti3C2 MXene/Polymer nanocomposites and their applications. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 8051-8098	13	26
155	Model-predictive safety: A new evolution in functional safety 2020 , 283-321		1
154	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
153	Polysulfone Membranes Incorporated with Reduced Graphene Oxide Nanoparticles for Enhanced Olefin/Paraffin Separation. <i>ChemistrySelect</i> , 2020 , 5, 3675-3681	1.8	7
152	Model-predictive safety optimal actions to detect and handle process operation hazards. <i>AIChE Journal</i> , 2020 , 66, e16932	3.6	4
151	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
150	Smart manufacturing of paints and coatings 2020 , 179-218		

149	Tuning Guidelines for Model-Predictive Control. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 4177-4191	3.9	10
148	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
147	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
146	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
145	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
144	Surface Modification of a MXene by an Aminosilane Coupling Agent. <i>Advanced Materials Interfaces</i> , 2020 , 7, 1902008	4.6	62
143	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
142	Overview of Dye-Sensitized Solar Cells 2019 , 1-49		7
141	Insights Into Dye-Sensitized Solar Cells From Macroscopic-Scale First-Principles Mathematical Modeling 2019 , 83-119		1
140	Theoretical Insights Into Thermal Self-Initiation Reactions of Acrylates 2019 , 99-134		0
139	Theoretical Insights Into Chain Transfer Reactions of Acrylates 2019 , 135-193		
138	Method of Moments Applied to Most-Likely High-Temperature Free-Radical Polymerization Reactions. <i>Processes</i> , 2019 , 7, 656	2.9	7
137	Polymers, Polymerization Reactions, and Computational Quantum Chemistry 2019 , 1-16		1
136	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
135	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
134	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
133	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
132	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

131	On the Thermal Self-Initiation Reaction of n-Butyl Acrylate in Free-Radical Polymerization. <i>Processes</i> , 2018 , 6, 3	2.9	17
130	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
129	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
128	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
127	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
126	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
125	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
124	Antimicrobial Mode-of-Action of Colloidal Ti ₃ C ₂ T _x MXene Nanosheets. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 16586-16596	8.3	92
123	Mixed Matrix Membranes for CO ₂ Separations 2018 , 103-153		0
122	Gas Separation Polysulfone Membranes Modified by Cadmium-based Nanoparticles. <i>Fibers and Polymers</i> , 2018 , 19, 2049-2055	2	7
121	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
120	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
119	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
118	Influence of oCVD Polyaniline Film Chemistry in Carbon-Based Supercapacitors. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 6221-6228	3.9	17
117	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
116	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
115	Oxidative chemical vapor deposition of polyaniline thin films. <i>Beilstein Journal of Nanotechnology</i> , 2017 , 8, 1266-1276	3	28
114	Introduction to Dynamic Risk Analyses. <i>Methods in Chemical Process Safety</i> , 2017 , 1, 201-254	1.1	2

113	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
112	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
111	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
110	Model-predictive safety system for proactive detection of operation hazards. <i>AIChE Journal</i> , 2016 , 62, 2024-2042	3.6	18
109	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
108	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
107	Study of n-Butyl Acrylate Self-Initiation Reaction Experimentally and via Macroscopic Mechanistic Modeling. <i>Processes</i> , 2016 , 4, 15	2.9	13
106	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
105	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
104	Physical aging of polyetherimide membranes. <i>Journal of Natural Gas Science and Engineering</i> , 2015 , 27, 651-660	4.6	11
103	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
102	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
101	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
100	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
99	Chemical Process Simulation for Dynamic Risk Analysis: A Steam Methane Reformer Case Study. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 4347-4359	3.9	8
98	Photochromic dye-sensitized solar cells. <i>AIMS Materials Science</i> , 2015 , 2, 503-509	1.9	7
97	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
96	Theoretical and Experimental Study of a Dye-Sensitized Solar Cell. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 5234-5247	3.9	25

95	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
94	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
93	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
92	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
91	Design for Process Safety: A Perspective. <i>Computer Aided Chemical Engineering</i> , 2014 , 34, 795-800	0.6	1
90	Rolling Pin Method: Efficient General Method of Joint Probability Modeling. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 20191-20203	3.9	19
89	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
88	Process systems opportunities in power generation, storage and distribution. <i>Computers and Chemical Engineering</i> , 2013 , 51, 86-95	4	37
87	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
86	Control of a heat-integrated co-ionic-conducting solid oxide fuel cell system 2013 ,		1
85	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
84	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
83	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
82	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
81	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
80	Multilinear-Model Predictive Control of a Tubular Solid Oxide Fuel Cell System. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 12121-12135	3.9	2
79	Steady-state multiplicity in a solid oxide fuel cell: Practical considerations. <i>Chemical Engineering Science</i> , 2012 , 67, 2-14	4.4	12
78	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

77	Mathematical modeling of solid oxide fuel cells: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2011 , 15, 1893-1917	16.2	200
76	Macroscopic mechanistic modeling and optimization of a self-initiated high-temperature polymerization reactor 2011 ,		2
75	Steady-state multiplicity in a solid oxide fuel cell 2011 ,		1
74	Improving Process Safety and Product Quality using Large Databases. <i>Computer Aided Chemical Engineering</i> , 2010 , 28, 175-180	0.6	6
73	Model Predictive Control Tuning Methods: A Review. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 3505-3515	3.9	221
72	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
71	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
70	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
69	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
68	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
67	Control of Polymerization Processes. <i>The Electrical Engineering Handbook</i> , 2010 , 12-1-12-23		1
66	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
65	Dynamics and Control of a Tubular Solid-Oxide Fuel Cell. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 6112-6125	3.9	31
64	Model predictive controller tuning via eigenvalue placement 2008 ,		9
63	Differential-geometric model-based control (DGMBC): A software package for controller design. <i>Computers and Chemical Engineering</i> , 2008 , 32, 1569-1588	4	1
62	Free-radical polymerization at higher temperatures: Systems impacts of secondary reactions. <i>Computers and Chemical Engineering</i> , 2008 , 32, 2155-2167	4	10
61	On-Line Parameter Estimation through Dynamic Inversion: A Real-Time Study. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 2503-2507	3.9	2
60	Reduced-order model for monitoring spectroscopic and chromatographic polymer properties. <i>Journal of Chemometrics</i> , 2007 , 21, 612-620	1.6	1

59	Plants for Which Model Predictive Control Admits an Analytical Solution. <i>Proceedings of the American Control Conference</i> , 2007 ,	1.2	1
58	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
57	Game theoretic approach to multiobjective designs: Focus on inherent safety. <i>AIChE Journal</i> , 2006 , 52, 228-246	3.6	20
56	Model-Based Controller Design for Unstable, Non-Minimum-Phase, Nonlinear Processes. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 2758-2768	3.9	17
55	Control Quality Loss in Analytical Control of Input-Constrained Processes. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 8528-8538	3.9	1
54	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
53	High-Temperature Homopolymerization of Ethyl Acrylate and n-Butyl Acrylate: Polymer Characterization. <i>Macromolecules</i> , 2005 , 38, 7619-7628	5.5	73
52	A method of sensor fault detection and identification. <i>Journal of Process Control</i> , 2005 , 15, 321-339	3.9	124
51	Nonlinear control of input-constrained systems. <i>Computers and Chemical Engineering</i> , 2005 , 30, 158-181	4	8
50	A Method of Controlling Unstable, Non-Minimum-Phase, Nonlinear Processes. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004 , 37, 821-826		
49	Control System Selection: A Measure of Control Quality Loss in Analytical Control. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004 , 37, 913-918		
48	Probabilistic model for sensor fault detection and identification. <i>AIChE Journal</i> , 2003 , 49, 1787-1802	3.6	56
47	A method of robust multi-rate state estimation. <i>Journal of Process Control</i> , 2003 , 13, 337-355	3.9	18
46	A non-linear controller design method for processes with saturating actuators. <i>International Journal of Control</i> , 2003 , 76, 698-716	1.5	7
45	Real-time multirate state estimation in a pilot-scale polymerization reactor. <i>AIChE Journal</i> , 2002 , 48, 1022-1033	3.6	18
44	Real-time, nonlinear control of a constrained, nonminimum-phase process. <i>AIChE Journal</i> , 2002 , 48, 2247-2254	3.6	4
43	Nonlinear feedback control of multivariable non-minimum-phase processes. <i>Journal of Process Control</i> , 2002 , 12, 667-686	3.9	13
42	Optimal compensation for directionality in processes with a saturating actuator. <i>Computers and Chemical Engineering</i> , 2002 , 26, 1633-1641	4	4

41	Nonlinear Controller Design for Input-Constrained, Multivariable Processes. <i>Industrial & Engineering Chemistry Research</i> , 2002 , 41, 3735-3744	3.9	11
40	Continuous-Time, Nonlinear Feedback Control of Stable Processes. <i>Industrial & Engineering Chemistry Research</i> , 2001 , 40, 2069-2078	3.9	13
39	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
38	Continuous-Time Nonlinear Control of Stable Non-Minimum-Phase Processes. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2000 , 33, 401-406		
37	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
36	Analytical Model Predictive Control 2000 , 163-179		14
35	Optimal directionality compensation in processes with input saturation non-linearities. <i>International Journal of Control</i> , 1999 , 72, 1555-1564	1.5	28
34	Multirate nonlinear state estimation with application to a polymerization reactor. <i>AIChE Journal</i> , 1999 , 45, 769-780	3.6	59
33	Multi-rate nonlinear state and parameter estimation in a bioreactor. <i>Biotechnology and Bioengineering</i> , 1999 , 63, 22-32	4.9	49
32	Adaptive Temperature Control of Multiproduct Jacketed Reactors. <i>Industrial & Engineering Chemistry Research</i> , 1999 , 38, 4337-4344	3.9	17
31	Shortest-prediction-horizon non-linear model-predictive control. <i>Chemical Engineering Science</i> , 1998 , 53, 273-292	4.4	26
30	Analytical control of SISO nonlinear processes with input constraints. <i>AIChE Journal</i> , 1998 , 44, 116-130	3.6	25
29	Discrete-Time nonlinear control of processes with actuator saturation. <i>AIChE Journal</i> , 1998 , 44, 1701-1705	3.5	8
28	Multivariable nonlinear controller synthesis in discrete-time. <i>Computers and Chemical Engineering</i> , 1998 , 22, 1065-1088	4	
27	State and parameter estimations and their applications in process control. <i>Computers and Chemical Engineering</i> , 1998 , 23, 229-245	4	113
26	Parameter Estimator Design with Application to a Chemical Reactor. <i>Industrial & Engineering Chemistry Research</i> , 1998 , 37, 455-463	3.9	17
25	Windup and Directionality Compensation in Nonlinear Model-Based Control 1998 , 173-208		2
24	Design of Smart Wellhead Controllers for Optimal Fluid Injection Policy and Producibility in Petroleum Reservoirs: A Neuro-Geometric Approach 1997 ,		3

- 23 Input-output linearizing nonlinear model predictive control. *International Journal of Control*, **1997**, 68, 1449-1474 1.5 16
- 22 Nonlinear State Estimation in a Polymerization Reactor. *Industrial & Engineering Chemistry Research*, **1997**, 36, 2679-2690 3.9 34
- 21 Nonlinear state-observer design with application to reactors. *Chemical Engineering Science*, **1997**, 52, 387-404 4.4 125
- 20 Nonlinear State Estimation in the Presence of Multiple Steady States. *Industrial & Engineering Chemistry Research*, **1996**, 35, 2645-2659 3.9 16
- 19 Discrete-time nonlinear feedback control of multivariable processes. *AIChE Journal*, **1996**, 42, 187-203 3.6 21
- 18 MPC formulation of GLC. *AIChE Journal*, **1996**, 42, 2377-2381 3.6 11
- 17 Evaluation of achievable control quality in nonlinear processes. *Computers and Chemical Engineering*, **1996**, 20, 357-364 4 12
- 16 A continuous-time formulation of nonlinear model predictive control. *International Journal of Control*, **1996**, 63, 121-146 1.5 34
- 15 Synthesis of discrete-time nonlinear feedforward/feedback controllers. *AIChE Journal*, **1994**, 40, 473-495.6 5
- 14 Nonlinear control of a polymerization CSTR with singular characteristic matrix. *AIChE Journal*, **1994**, 40, 980-990 3.6 29
- 13 Optimal design and operation of batch reactors. 1. Theoretical framework. *Industrial & Engineering Chemistry Research*, **1993**, 32, 866-881 3.9 42
- 12 Optimal design and operation of batch reactors. 2. A case study. *Industrial & Engineering Chemistry Research*, **1993**, 32, 882-893 3.9 57
- 11 Multivariable nonlinear control of a continuous polymerization reactor: An experimental study. *AIChE Journal*, **1993**, 39, 1920-1937 3.6 48
- 10 Model Predictive Control of Multivariable Nonlinear Processes in Continuous-Time **1993**, 2
- 9 Multivariable Nonlinear Control of a Continuous Polymerization Reactor **1992**, 6
- 8 A Continuous-Time Formulation of Nonlinear Model Predictive Control **1992**, 3
- 7 Nonlinear control of a batch polymerization reactor: An experimental study. *AIChE Journal*, **1992**, 38, 1429-1448 3.6 125
- 6 Discrete-time nonlinear controller synthesis by input/output linearization. *AIChE Journal*, **1992**, 38, 1923-1945 3.6 60

5	Strong acid equivalent control of pH processes: an experimental study. <i>Industrial & Engineering Chemistry Research</i> , 1991 , 30, 2437-2444	3.9	37
4	Synthesis of multivariable nonlinear controllers by input/output linearization. <i>AIChE Journal</i> , 1990 , 36, 249-264	3.6	102
3	Feedforward/feedback control of multivariable nonlinear processes. <i>AIChE Journal</i> , 1990 , 36, 1471-1484	3.6	101
2	Scalable manufacturing of flexible and highly conductive Ti ₃ C ₂ T _x /PEDOT:PSS thin films for electromagnetic interference shielding. <i>New Journal of Chemistry</i> ,	3.6	4
1	Surface functionalization of MXenes. <i>Materials Advances</i> ,	3.3	9