Panagiotis D Christofides

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.

402 papers

11,984 citations

57 h-index 92 g-index

469 ext. papers

14,279 ext. citations

avg, IF

6.93 L-index

#	Paper	IF	Citations
402	Distributed model predictive control: A tutorial review and future research directions. <i>Computers and Chemical Engineering</i> , 2013 , 51, 21-41	4	499
401	A tutorial review of economic model predictive control methods. <i>Journal of Process Control</i> , 2014 , 24, 1156-1178	3.9	400
400	Nonlinear and Robust Control of PDE Systems. <i>Systems and Control: Foundations and Applications</i> , 2001 ,	0.3	273
399	Economic model predictive control of nonlinear process systems using Lyapunov techniques. <i>AICHE Journal</i> , 2012 , 58, 855-870	3.6	240
398	Finite-Dimensional Control of Parabolic PDE Systems Using Approximate Inertial Manifolds. <i>Journal of Mathematical Analysis and Applications</i> , 1997 , 216, 398-420	1.1	222
397	Stabilization of nonlinear systems with state and control constraints using Lyapunov-based predictive control. <i>Systems and Control Letters</i> , 2006 , 55, 650-659	2.4	220
396	Output feedback control of switched nonlinear systems using multiple Lyapunov functions. <i>Systems and Control Letters</i> , 2005 , 54, 1163-1182	2.4	220
395	Lyapunov-Based Model Predictive Control of Nonlinear Systems Subject to Data Losses. <i>IEEE Transactions on Automatic Control</i> , 2008 , 53, 2076-2089	5.9	187
394	Distributed model predictive control of nonlinear process systems. <i>AICHE Journal</i> , 2009 , 55, 1171-1184	3.6	171
393	Finite-dimensional approximation and control of non-linear parabolic PDE systems. <i>International Journal of Control</i> , 2000 , 73, 439-456	1.5	166
392	Effect of Thermodynamic Restriction on Energy Cost Optimization of RO Membrane Water Desalination. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 6010-6021	3.9	162
391	Predictive control of particle size distribution in particulate processes. <i>Chemical Engineering Science</i> , 2006 , 61, 268-281	4.4	158
390	Dynamic optimization of dissipative PDE systems using nonlinear order reduction. <i>Chemical Engineering Science</i> , 2002 , 57, 5083-5114	4.4	152
389	Feedback control of hyperbolic PDE systems. AICHE Journal, 1996, 42, 3063-3086	3.6	136
388	Isolation and handling of actuator faults in nonlinear systems. <i>Automatica</i> , 2008 , 44, 53-62	5.7	134
387	Bounded robust control of constrained multivariable nonlinear processes. <i>Chemical Engineering Science</i> , 2003 , 58, 3025-3047	4.4	134
386	Supervisory Predictive Control of Standalone Wind/Solar Energy Generation Systems. <i>IEEE Transactions on Control Systems Technology</i> , 2011 , 19, 199-207	4.8	121

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385	Analysis and control of parabolic PDE systems with input constraints. <i>Automatica</i> , 2003 , 39, 715-725	5.7	120
384	Smart plant operations: Vision, progress and challenges. <i>AICHE Journal</i> , 2007 , 53, 2734-2741	3.6	115
383	Robust control of parabolic PDE systems. <i>Chemical Engineering Science</i> , 1998 , 53, 2949-2965	4.4	114
382	Integrating robustness, optimality and constraints in control of nonlinear processes. <i>Chemical Engineering Science</i> , 2001 , 56, 1841-1868	4.4	113
381	Multi-scale modeling and analysis of an industrial HVOF thermal spray process. <i>Chemical Engineering Science</i> , 2005 , 60, 3649-3669	4.4	106
380	Control of nonlinear distributed process systems: Recent developments and challenges. <i>AICHE Journal</i> , 2001 , 47, 514-518	3.6	103
379	Nonlinear control of particulate processes. AICHE Journal, 1999, 45, 1279-1297	3.6	102
378	Integrated fault-detection and fault-tolerant control of process systems. AICHE Journal, 2006, 52, 2129-	2 1648	100
377	Global stabilization of the KuramotoBivashinsky equation via distributed output feedback control. <i>Systems and Control Letters</i> , 2000 , 39, 283-294	2.4	96
376	Energy Consumption Optimization of Reverse Osmosis Membrane Water Desalination Subject to Feed Salinity Fluctuation. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 9581-9589	3.9	95
375	Distributed model predictive control of nonlinear systems subject to asynchronous and delayed measurements. <i>Automatica</i> , 2010 , 46, 52-61	5.7	95
374	Predictive control of crystal size distribution in protein crystallization. <i>Nanotechnology</i> , 2005 , 16, S562-7	'\$.4	92
373	Wave suppression by nonlinear finite-dimensional control. Chemical Engineering Science, 2000, 55, 2627-	-4640	90
372	On RO membrane and energy costs and associated incentives for future enhancements of membrane permeability. <i>Journal of Membrane Science</i> , 2009 , 344, 1-5	9.6	89
371	Feedback control of the KuramotoBivashinsky equation. <i>Physica D: Nonlinear Phenomena</i> , 2000 , 137, 49-61	3.3	89
370	Robust control of hyperbolic PDE systems. <i>Chemical Engineering Science</i> , 1998 , 53, 85-105	4.4	88
369	Predictive control of transport-reaction processes. Computers and Chemical Engineering, 2005, 29, 2335-	-2 345	86
368	Minimization of energy consumption for a two-pass membrane desalination: Effect of energy recovery, membrane rejection and retentate recycling. <i>Journal of Membrane Science</i> , 2009 , 339, 126-137	,9.6	85

367	Computational study of particle in-flight behavior in the HVOF thermal spray process. <i>Chemical Engineering Science</i> , 2006 , 61, 6540-6552	4.4	83
366	Predictive control of parabolic PDEs with state and control constraints. <i>International Journal of Robust and Nonlinear Control</i> , 2006 , 16, 749-772	3.6	78
365	Robust hybrid predictive control of nonlinear systems. <i>Automatica</i> , 2005 , 41, 209-217	5.7	78
364	Coordinating feedback and switching for control of hybrid nonlinear processes. <i>AICHE Journal</i> , 2003 , 49, 2079-2098	3.6	76
363	Reverse osmosis desalination with high permeability membranes ©ost optimization and research needs. <i>Desalination and Water Treatment</i> , 2010 , 15, 256-266		75
362	Estimation and control of surface roughness in thin film growth using kinetic Monte-Carlo models. <i>Chemical Engineering Science</i> , 2003 , 58, 3115-3129	4.4	75
361	Crystal shape and size control using a plug flow crystallization configuration. <i>Chemical Engineering Science</i> , 2014 , 119, 30-39	4.4	71
360	Predictive control of parabolic PDEs with boundary control actuation. <i>Chemical Engineering Science</i> , 2006 , 61, 6239-6248	4.4	71
359	CFD modeling and control of a steam methane reforming reactor. <i>Chemical Engineering Science</i> , 2016 , 148, 78-92	4.4	69
358	Modeling and control of crystal shape in continuous protein crystallization. <i>Chemical Engineering Science</i> , 2014 , 107, 47-57	4.4	69
357	Integrating dynamic economic optimization and model predictive control for optimal operation of nonlinear process systems. <i>Control Engineering Practice</i> , 2014 , 22, 242-251	3.9	68
356	Singular perturbation modeling of nonlinear processes with nonexplicit time-scale multiplicity. <i>Chemical Engineering Science</i> , 1998 , 53, 1491-1504	4.4	68
355	Modeling and Control of High-Velocity Oxygen-Fuel (HVOF) Thermal Spray: A Tutorial Review. <i>Journal of Thermal Spray Technology</i> , 2009 , 18, 753-768	2.5	67
354	CFD modeling of a industrial-scale steam methane reforming furnace. <i>Chemical Engineering Science</i> , 2017 , 171, 576-598	4.4	66
353	Fault-tolerant control of nonlinear process systems subject to sensor faults. <i>AICHE Journal</i> , 2007 , 53, 654-668	3.6	65
352	Distributed economic MPC: Application to a nonlinear chemical process network. <i>Journal of Process Control</i> , 2012 , 22, 689-699	3.9	63
351	Integrating nonlinear output feedback control and optimal actuator/sensor placement for transport-reaction processes. <i>Chemical Engineering Science</i> , 2001 , 56, 4517-4535	4.4	63
350	Minimizing energy consumption in reverse osmosis membrane desalination using optimization-based control. <i>Journal of Process Control</i> , 2010 , 20, 1261-1269	3.9	62

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349	Fault-tolerant control of nonlinear processes: performance-based reconfiguration and robustness. International Journal of Robust and Nonlinear Control, 2006 , 16, 91-111	6	62
348	A distributed control framework for smart grid development: Energy/water system optimal operation and electric grid integration. <i>Journal of Process Control</i> , 2011 , 21, 1504-1516	9	61
347	Coordinating feedback and switching for control of spatially distributed processes. <i>Computers and Chemical Engineering</i> , 2004 , 28, 111-128		59
346	Plasma enhanced chemical vapor deposition: Modeling and control. <i>Chemical Engineering Science</i> , 1999 , 54, 3305-3314	4	59
345	Nonlinear Model-Based Control of an Experimental Reverse-Osmosis Water Desalination System. <i>Industrial & Desalination System.</i> 3-9-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	9	57
344	Robust control of parabolic PDE systems with time-dependent spatial domains. <i>Automatica</i> , 2001 , 37, 61-69	7	57
343	Robust control of particulate processes using uncertain population balances. <i>AICHE Journal</i> , 2000 , 46, 266-280	6	57
342	Optimization of transport-reaction processes using nonlinear model reduction. <i>Chemical Engineering Science</i> , 2000 , 55, 4349-4366	4	57
341	. IEEE Transactions on Control Systems Technology, 2013 , 21, 504-512	8	55
340	Nonlinear Control of Incompressible Fluid Flow: Application to Burgers' Equation and 2D Channel Flow. <i>Journal of Mathematical Analysis and Applications</i> , 2000 , 252, 230-255	1	55
339	Robust predictive control of switched systems: Satisfying uncertain schedules subject to state and control constraints. <i>International Journal of Adaptive Control and Signal Processing</i> , 2008 , 22, 161-179	8	54
338	Supervisory Predictive Control for Long-Term Scheduling of an Integrated Wind/Solar Energy Generation and Water Desalination System. <i>IEEE Transactions on Control Systems Technology</i> , 2012 , 4. 20, 504-512	8	53
337	Multivariable Predictive Control of Thin Film Deposition Using a Stochastic PDE Model. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 2416-2427	9	52
336	Diamond Jet Hybrid HVOF Thermal Spray: Gas-Phase and Particle Behavior Modeling and Feedback Control Design. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 3632-3652	9	51
335	Feedback control of growth rate and surface roughness in thin film growth. <i>AICHE Journal</i> , 2003 , 49, 2099-2113	6	51
334	Modeling and control of HVOF thermal spray processing of WCTo coatings. <i>Powder Technology</i> , 2005 , 156, 177-194	2	50
333	Fault-tolerant control of process systems using communication networks. <i>AICHE Journal</i> , 2005 , 51, 1665 ₃ 1	6 82	50
332	Robust output feedback control of nonlinear singularly perturbed systems. <i>Automatica</i> , 2000 , 36, 45-52 5.	7	50

331	Multiscale modeling and operation of PECVD of thin film solar cells. <i>Chemical Engineering Science</i> , 2015 , 136, 50-61	4.4	48
330	Mineral scale monitoring for reverse osmosis desalination via real-time membrane surface image analysis. <i>Desalination</i> , 2011 , 273, 64-71	10.3	48
329	Model-based control of particulate processes. Chemical Engineering Science, 2008, 63, 1156-1172	4.4	48
328	Modeling and control of protein crystal shape and size in batch crystallization. <i>AICHE Journal</i> , 2013 , 59, 2317-2327	3.6	46
327	A two-tier architecture for networked process control. <i>Chemical Engineering Science</i> , 2008 , 63, 5394-546	09.4	45
326	Hybrid predictive control of nonlinear systems: method and applications to chemical processes. <i>International Journal of Robust and Nonlinear Control</i> , 2004 , 14, 199-225	3.6	45
325	Robust stabilization of infinite-dimensional systems using sliding-mode output feedback control. <i>International Journal of Control</i> , 2004 , 77, 1115-1136	1.5	45
324	Robust output feedback control of quasi-linear parabolic PDE systems. <i>Systems and Control Letters</i> , 1999 , 36, 307-316	2.4	45
323	On finite-time and infinite-time cost improvement of economic model predictive control for nonlinear systems. <i>Automatica</i> , 2014 , 50, 2561-2569	5.7	44
322	Optimal control of diffusion-convection-reaction processes using reduced-order models. <i>Computers and Chemical Engineering</i> , 2008 , 32, 2123-2135	4	44
321	Output Feedback Control of Parabolic PDE Systems with Nonlinear Spatial Differential Operators. <i>Industrial & Differential Chemistry Research</i> , 1999 , 38, 4372-4380	3.9	44
320	Multiscale modeling and run-to-run control of PECVD of thin film solar cells. <i>Renewable Energy</i> , 2017 , 100, 129-140	8.1	43
319	Iterative Distributed Model Predictive Control of Nonlinear Systems: Handling Asynchronous, Delayed Measurements. <i>IEEE Transactions on Automatic Control</i> , 2012 , 57, 528-534	5.9	43
318	Feedback control of two-time-scale nonlinear systems. <i>International Journal of Control</i> , 1996 , 63, 965-99	9 4 .5	43
317	Networked and Distributed Predictive Control. Advances in Industrial Control, 2011,	0.3	42
316	Uniting bounded control and MPC for stabilization of constrained linear systems. <i>Automatica</i> , 2004 , 40, 101-110	5.7	42
315	Economic model predictive control with time-varying objective function for nonlinear process systems. <i>AICHE Journal</i> , 2014 , 60, 507-519	3.6	41
314	Economic model predictive control of nonlinear process systems using empirical models. <i>AICHE Journal</i> , 2015 , 61, 816-830	3.6	41

313	Hybrid predictive control of process systems. AICHE Journal, 2004, 50, 1242-1259	3.6	41
312	Model-predictive control of feed flow reversal in a reverse osmosis desalination process. <i>Journal of Process Control</i> , 2009 , 19, 433-442	3.9	40
311	Analysis and control of particulate processes with input constraints. AICHE Journal, 2001, 47, 1849-1865	i 3.6	40
310	Modeling and analysis of HVOF thermal spray process accounting for powder size distribution. <i>Chemical Engineering Science</i> , 2003 , 58, 849-857	4.4	39
309	Detection, isolation and handling of actuator faults in distributed model predictive control systems. Journal of Process Control, 2010 , 20, 1059-1075	3.9	38
308	Machine learning-based predictive control of nonlinear processes. Part I: Theory. <i>AICHE Journal</i> , 2019 , 65, e16729	3.6	37
307	Diamond Jet Hybrid HVOF Thermal Spray: Rule-Based Modeling of Coating Microstructure. <i>Industrial & Diamong: Engineering Chemistry Research</i> , 2004 , 43, 3653-3665	3.9	37
306	Simulation, estimation and control of size distribution in aerosol processes with simultaneous reaction, nucleation, condensation and coagulation. <i>Computers and Chemical Engineering</i> , 2002 , 26, 1153	3 ⁴ 1169	, 37
305	Lyapunov-based model predictive control of nonlinear systems subject to time-varying measurement delays. <i>International Journal of Adaptive Control and Signal Processing</i> , 2009 , 23, 788-807	2.8	36
304	Control and optimization of multiscale process systems. <i>Computers and Chemical Engineering</i> , 2006 , 30, 1670-1686	4	36
303	Robust moving horizon estimation based output feedback economic model predictive control. <i>Systems and Control Letters</i> , 2014 , 68, 101-109	2.4	35
302	Self-adaptive feed flow reversal operation of reverse osmosis desalination. <i>Desalination</i> , 2013 , 308, 63-7	72 0.3	35
301	Regulation of film thickness, surface roughness and porosity in thin film growth using deposition rate. <i>Chemical Engineering Science</i> , 2009 , 64, 3903-3913	4.4	35
300	Integrated optimal actuator/sensor placement and robust control of uncertain transport-reaction processes. <i>Computers and Chemical Engineering</i> , 2002 , 26, 187-203	4	35
299	Economic model predictive control of switched nonlinear systems. <i>Systems and Control Letters</i> , 2013 , 62, 77-84	2.4	34
298	Sequential and iterative architectures for distributed model predictive control of nonlinear process systems. <i>AICHE Journal</i> , 2010 , 56, NA-NA	3.6	34
297	Nonlinear Feedback Control of Parabolic Partial Differential Equation Systems with Time-dependent Spatial Domains. <i>Journal of Mathematical Analysis and Applications</i> , 1999 , 239, 124-157	, 1.1	34
296	Feedback control of nonlinear differential difference equation systems. <i>Chemical Engineering Science</i> , 1999 , 54, 5677-5709	4.4	33

295	Process operational safety using model predictive control based on a process Safeness Index. <i>Computers and Chemical Engineering</i> , 2017 , 104, 76-88	4	32
294	Model predictive control of nonlinear singularly perturbed systems: Application to a large-scale process network. <i>Journal of Process Control</i> , 2011 , 21, 1296-1305	3.9	32
293	Dynamic output feedback covariance control of stochastic dissipative partial differential equations. <i>Chemical Engineering Science</i> , 2008 , 63, 4531-4542	4.4	32
292	Economic Model Predictive Control of Transport-Reaction Processes. <i>Industrial & Description of Transport Research</i> , 2014 , 53, 7382-7396	3.9	31
291	Composite fast-slow MPC design for nonlinear singularly perturbed systems. <i>AICHE Journal</i> , 2012 , 58, 1802-1811	3.6	31
290	Control of particulate processes: Recent results and future challenges. <i>Powder Technology</i> , 2007 , 175, 1-7	5.2	31
289	Distributed nonlinear control of diffusionEeaction processes. <i>International Journal of Robust and Nonlinear Control</i> , 2004 , 14, 133-156	3.6	31
288	Temperature balancing in steam methane reforming furnace via an integrated CFD/data-based optimization approach. <i>Computers and Chemical Engineering</i> , 2017 , 104, 185-200	4	30
287	Process structure-based recurrent neural network modeling for model predictive control of nonlinear processes. <i>Journal of Process Control</i> , 2020 , 89, 74-84	3.9	30
286	Novel design and operational control of integrated ultrafiltration IReverse osmosis system with RO concentrate backwash. <i>Desalination</i> , 2016 , 382, 43-52	10.3	30
285	Crystal shape modeling and control in protein crystal growth. <i>Chemical Engineering Science</i> , 2013 , 87, 216-223	4.4	30
284	A method for handling batch-to-batch parametric drift using moving horizon estimation: Application to run-to-run MPC of batch crystallization. <i>Chemical Engineering Science</i> , 2015 , 127, 210-219	4.4	30
283	State-estimation-based economic model predictive control of nonlinear systems. <i>Systems and Control Letters</i> , 2012 , 61, 926-935	2.4	30
282	Multirate Lyapunov-based distributed model predictive control of nonlinear uncertain systems. Journal of Process Control, 2011 , 21, 1231-1242	3.9	30
281	Control and Monitoring of a High Recovery Reverse Osmosis Desalination Process. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 6698-6710	3.9	30
2 80	Fault-Tolerant Process Control 2013,		29
279	Economic model predictive control of nonlinear singularly perturbed systems. <i>Journal of Process Control</i> , 2013 , 23, 743-754	3.9	29
278	Feedback control of surface roughness of GaAs (0 0 1) thin films using kinetic Monte Carlo models. <i>Computers and Chemical Engineering</i> , 2004 , 29, 225-241	4	29

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277	Feedback control of surface roughness using stochastic PDEs. AICHE Journal, 2005, 51, 345-352	3.6	29
276	Real-Time Adaptive Machine-Learning-Based Predictive Control of Nonlinear Processes. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 2275-2290	3.9	29
275	Multiscale, Multidomain Modeling and Parallel Computation: Application to Crystal Shape Evolution in Crystallization. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 11903-11914	3.9	28
274	Modeling and control of film porosity in thin film deposition. <i>Chemical Engineering Science</i> , 2009 , 64, 3668-3682	4.4	28
273	Selection of control configurations for economic model predictive control systems. <i>AICHE Journal</i> , 2014 , 60, 3230-3242	3.6	27
272	Crystal temperature control in the Czochralski crystal growth process. AICHE Journal, 2001, 47, 79-106	3.6	27
271	Nonlinear control of spatially inhomogenous aerosol processes. <i>Chemical Engineering Science</i> , 1999 , 54, 2669-2678	4.4	27
270	Robust semi-global output tracking for nonlinear singularly perturbed systems. <i>International Journal of Control</i> , 1996 , 65, 639-666	1.5	27
269	On integration of feedback control and safety systems: Analyzing two chemical process applications. <i>Chemical Engineering Research and Design</i> , 2018 , 132, 616-626	5.5	26
268	Proactive fault-tolerant model predictive control. AICHE Journal, 2013, 59, 2810-2820	3.6	26
267	Run-to-Run-Based Model Predictive Control of Protein Crystal Shape in Batch Crystallization. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 4293-4302	3.9	26
266	Fault-tolerant control of a polyethylene reactor. <i>Journal of Process Control</i> , 2007 , 17, 439-451	3.9	26
265	Model predictive control of nonlinear stochastic partial differential equations with application to a sputtering process. <i>AICHE Journal</i> , 2008 , 54, 2065-2081	3.6	26
264	Investigation of film surface roughness and porosity dependence on lattice size in a porous thin film deposition process. <i>Physical Review E</i> , 2009 , 80, 041122	2.4	25
263	Enhancing data-based fault isolation through nonlinear control. AICHE Journal, 2008, 54, 223-241	3.6	25
262	Modeling and control of ibuprofen crystal growth and size distribution. <i>Chemical Engineering Science</i> , 2015 , 134, 414-422	4.4	24
261	Machine-learning-based predictive control of nonlinear processes. Part II: Computational implementation. <i>AICHE Journal</i> , 2019 , 65, e16734	3.6	24
260	Real-Time Optimization and Control of Nonlinear Processes Using Machine Learning. <i>Mathematics</i> , 2019 , 7, 890	2.3	24

259	Enhancing the Crystal Production Rate and Reducing Polydispersity in Continuous Protein Crystallization. <i>Industrial & Discours and Chemistry Research</i> , 2014 , 53, 15538-15548	3.9	24
258	Modeling and control of shape distribution of protein crystal aggregates. <i>Chemical Engineering Science</i> , 2013 , 104, 484-497	4.4	24
257	Algorithms for improved fixed-time performance of Lyapunov-based economic model predictive control of nonlinear systems. <i>Journal of Process Control</i> , 2013 , 23, 404-414	3.9	24
256	Handling communication disruptions in distributed model predictive control. <i>Journal of Process Control</i> , 2011 , 21, 173-181	3.9	24
255	Nonlinear Feedback Control of Surface Roughness Using a Stochastic PDE: Design and Application to a Sputtering Process. <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 7177-7189	3.9	24
254	Predictive Output Feedback Control of Parabolic Partial Differential Equations (PDEs). <i>Industrial & Engineering Chemistry Research</i> , 2006 , 45, 8421-8429	3.9	24
253	Feedback control of HVOF thermal spray process accounting for powder size distribution. <i>Journal of Thermal Spray Technology</i> , 2004 , 13, 108-120	2.5	24
252	Multiscale three-dimensional CFD modeling for PECVD of amorphous silicon thin films. <i>Computers and Chemical Engineering</i> , 2018 , 113, 184-195	4	23
251	Protein Crystal Shape and Size Control in Batch Crystallization: Comparing Model Predictive Control with Conventional Operating Policies. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 5002-5014	3.9	23
250	Feedback control of surface roughness in sputtering processes using the stochastic KuramotoBivashinsky equation. <i>Computers and Chemical Engineering</i> , 2005 , 29, 741-759	4	23
249	Robust near-optimal output feedback control of non-linear systems. <i>International Journal of Control</i> , 2001 , 74, 133-157	1.5	23
248	Model-Based Control of Particulate Processes. Particle Technology Series, 2002,	О	23
247	Economic model predictive control of parabolic PDE systems: Addressing state estimation and computational efficiency. <i>Journal of Process Control</i> , 2014 , 24, 448-462	3.9	22
246	Stability of nonlinear asynchronous systems. Systems and Control Letters, 2008, 57, 465-473	2.4	22
245	Output feedback control of nonlinear systems subject to sensor data losses. <i>Systems and Control Letters</i> , 2008 , 57, 631-642	2.4	22
244	Studies on nonlinear dynamics and control of a tubular reactor with recycle. <i>Nonlinear Analysis:</i> Theory, Methods & Applications, 2001 , 47, 5933-5944	1.3	22
243	Energy-Optimal Control of RO Desalination. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 7409-7420	3.9	21
242	A feedback control framework for safe and economically-optimal operation of nonlinear processes. AICHE Journal, 2016 , 62, 2391-2409	3.6	21

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241	Detecting and Handling Cyber-Attacks in Model Predictive Control of Chemical Processes. <i>Mathematics</i> , 2018 , 6, 173	2.3	21
240	Multiscale computational fluid dynamics modeling of thermal atomic layer deposition with application to chamber design. <i>Chemical Engineering Research and Design</i> , 2019 , 147, 529-544	5.5	20
239	Smart manufacturing: Handling preventive actuator maintenance and economics using model predictive control. <i>AICHE Journal</i> , 2014 , 60, 2179-2196	3.6	20
238	Stochastic Modeling and Simultaneous Regulation of Surface Roughness and Porosity in Thin Film Deposition. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 6690-6700	3.9	20
237	Computation of optimal actuator locations for nonlinear controllers in transport-reaction processes. <i>Computers and Chemical Engineering</i> , 2000 , 24, 577-583	4	20
236	Economic model predictive control designs for input rate-of-change constraint handling and guaranteed economic performance. <i>Computers and Chemical Engineering</i> , 2016 , 92, 18-36	4	20
235	Economic Machine-Learning-Based Predictive Control of Nonlinear Systems. <i>Mathematics</i> , 2019 , 7, 494	2.3	20
234	Machine learning-based modeling and operation for ALD of SiO2 thin-films using data from a multiscale CFD simulation. <i>Chemical Engineering Research and Design</i> , 2019 , 151, 131-145	5.5	19
233	Self-adaptive cycle-to-cycle control of in-line coagulant dosing in ultrafiltration for pre-treatment of reverse osmosis feed water. <i>Desalination</i> , 2017 , 401, 22-31	10.3	19
232	On identification of well-conditioned nonlinear systems: Application to economic model predictive control of nonlinear processes. <i>AICHE Journal</i> , 2015 , 61, 3353-3373	3.6	19
231	Robust control of multivariable two-time-scale nonlinear systems. <i>Journal of Process Control</i> , 1997 , 7, 313-328	3.9	19
230	Model-based estimation and control of particle velocity and melting in HVOF thermal spray. <i>Chemical Engineering Science</i> , 2004 , 59, 5647-5656	4.4	19
229	Dynamics and control of thin film surface microstructure in a complex deposition process. <i>Chemical Engineering Science</i> , 2005 , 60, 1603-1617	4.4	19
228	Model Predictive Control of a Steam Methane Reforming Reactor Described by a Computational Fluid Dynamics Model. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 6002-6011	3.9	18
227	Real-time furnace balancing of steam methane reforming furnaces. <i>Chemical Engineering Research and Design</i> , 2018 , 134, 238-256	5.5	18
226	Control Lyapunov-Barrier function-based model predictive control of nonlinear systems. <i>Automatica</i> , 2019 , 109, 108508	5.7	18
225	Data-based monitoring and reconfiguration of a distributed model predictive control system. <i>International Journal of Robust and Nonlinear Control</i> , 2012 , 22, 68-88	3.6	18
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