Panagiotis D Christofides

List of Publications by Year in Descending Order

402 papers	11,984 citations	57 h-index	92 g-index
469 ext. papers	14,279 ext. citations	3.6 avg, IF	6.93 L-index

#	Paper	IF	Citations
402	Handling noisy data in sparse model identification using subsampling and co-teaching. *Computers and Chemical Engineering*, **2022**, 157, 107628	4	1
401	Barrier-function-based distributed predictive control for operational safety of nonlinear processes. *Computers and Chemical Engineering*, **2022**, 159, 107690	4	
400	Process structure-based recurrent neural network modeling for predictive control: A comparative study. *Chemical Engineering Research and Design*, **2022**, 179, 77-77	5.5	5
399	Microscopic and data-driven modeling and operation of thermal atomic layer etching of aluminum oxide thin films. *Chemical Engineering Research and Design*, **2022**, 177, 96-107	5.5	4
398	Multiscale computational fluid dynamics modeling of thermal atomic layer etching: Application to chamber configuration design. *Computers and Chemical Engineering*, **2022**, 161, 107757	4	3
397	Multivariable run-to-run control of thermal atomic layer etching of aluminum oxide thin films. *Chemical Engineering Research and Design*, **2022**, 182, 1-12	5.5	1
396	Recurrent Neural-Network-Based Model Predictive Control of a Plasma Etch Process. *Industrial & Engineering Chemistry Research*, **2022**, 61, 638-652	3.9	0
395	In-situ infrared thermographic inspection for local powder layer thickness measurement in laser powder bed fusion. *Additive Manufacturing*, **2022**, 55, 102873	6.1	0
394	Statistical machine-learning-based predictive control using barrier functions for process operational safety. *Computers and Chemical Engineering*, **2022**, 163, 107860	4	0
393	Multiscale computational fluid dynamics modeling of spatial thermal atomic layer etching. *Computers and Chemical Engineering*, **2022**, 163, 107861	4	1
392	Machine-learning-based state estimation and predictive control of nonlinear processes. *Chemical Engineering Research and Design*, **2021**, 167, 268-280	5.5	7
391	Machine learning-based predictive control using noisy data: evaluating performance and robustness via a large-scale process simulator. *Chemical Engineering Research and Design*, **2021**, 168, 275-287	5.5	10
390	Integration of feedback control and run-to-run control for plasma enhanced atomic layer deposition of hafnium oxide thin films. *Computers and Chemical Engineering*, **2021**, 148, 107267	4	4
389	Cyber-security of centralized, decentralized, and distributed control-detector architectures for nonlinear processes. *Chemical Engineering Research and Design*, **2021**, 165, 25-39	5.5	6
388	Machine learning-based modeling and operation of plasma-enhanced atomic layer deposition of hafnium oxide thin films. *Computers and Chemical Engineering*, **2021**, 144, 107148	4	6
387	Robust detection of intermittent multiplicative sensor fault. *Asian Journal of Control*, **2021**, 23, 463-473	1.7	2
386	Estimation-Based Predictive Control of Nonlinear Processes Using Recurrent Neural Networks. *IFAC-PapersOnLine*, **2021**, 54, 91-96	0.7	

385	Co-Teaching Approach to Machine Learning-based Predictive Control of Nonlinear Processes. *IFAC-PapersOnLine*, **2021**, 54, 639-646	0.7	0
384	Data-based reduced-order modeling of nonlinear two-time-scale processes. *Chemical Engineering Research and Design*, **2021**, 166, 1-9	5.5	4
383	Finite element modeling of direct metal laser solidification process: Sensor data replication and use in defect detection and data reduction via machine learning. *Chemical Engineering Research and Design*, **2021**, 171, 254-267	5.5	2
382	Statistical Machine Learning in Model Predictive Control of Nonlinear Processes. *Mathematics*, **2021**, 9, 1912	2.3	9
381	Machine learning-based model predictive control of diffusion-reaction processes. *Chemical Engineering Research and Design*, **2021**, 173, 129-139	5.5	2
380	Modeling UF fouling and backwash in seawater RO feedwater treatment using neural networks with evolutionary algorithm and Bayesian binary classification. *Desalination*, **2021**, 513, 115129	10.3	5
379	Sparse-identification-based model predictive control of nonlinear two-time-scale processes. *Computers and Chemical Engineering*, **2021**, 153, 107411	4	4
378	A three-level hierachical framework for additive manufacturing. *Digital Chemical Engineering*, **2021**, 1, 100001		0
377	Machine learning modeling and predictive control of nonlinear processes using noisy data. *AICHE Journal*, **2021**, 67, e17164	3.6	11
376	Multiscale computational fluid dynamics modeling and reactor design of plasma-enhanced atomic layer deposition. *Computers and Chemical Engineering*, **2020**, 142, 107066	4	7
375	Cyber-attack detection and resilient operation of nonlinear processes under economic model predictive control. *Computers and Chemical Engineering*, **2020**, 136, 106806	4	9
374	Post cyber-attack state reconstruction for nonlinear processes using machine learning. *Chemical Engineering Research and Design*, **2020**, 159, 248-261	5.5	7
373	Microscopic modeling and optimal operation of plasma enhanced atomic layer deposition. *Chemical Engineering Research and Design*, **2020**, 159, 439-454	5.5	7
372	Integrating Feedback Control and Run-to-Run Control in Multi-Wafer Thermal Atomic Layer Deposition of Thin Films. *Processes*, **2020**, 8, 18	2.9	6
371	Real-time machine learning for operational safety of nonlinear processes via barrier-function based predictive control. *Chemical Engineering Research and Design*, **2020**, 155, 88-97	5.5	3
370	A cyber-secure control-detector architecture for nonlinear processes. *AICHE Journal*, **2020**, 66, e16907	3.6	12
369	Process structure-based recurrent neural network modeling for model predictive control of nonlinear processes. *Journal of Process Control*, **2020**, 89, 74-84	3.9	30
368	Economic MPC of Nonlinear Processes via Recurrent Neural Networks Using Structural Process Knowledge. *IFAC-PapersOnLine*, **2020**, 53, 11607-11613	0.7	

367	Smart manufacturing: Machine learning-based economic MPC and preventive maintenance **2020**, 477-497		
366	Real-time Machine Learning-Based CLBF-MPC of Nonlinear Systems. *IFAC-PapersOnLine*, **2020**, 53, 11589-11594	0.7	1
365	Operational trend prediction and classification for chemical processes: A novel convolutional neural network method based on symbolic hierarchical clustering. *Chemical Engineering Science*, **2020**, 225, 115796	4.4	8
364	Control Lyapunov-Barrier function-based predictive control of nonlinear processes using machine learning modeling. *Computers and Chemical Engineering*, **2020**, 134, 106706	4	10
363	Computational fluid dynamics-based in-situ sensor analytics of direct metal laser solidification process using machine learning. *Computers and Chemical Engineering*, **2020**, 143, 107069	4	5
362	Decentralized machine-learning-based predictive control of nonlinear processes. *Chemical Engineering Research and Design*, **2020**, 162, 45-60	5.5	1
361	Machine learning-based distributed model predictive control of nonlinear processes. *AICHE Journal*, **2020**, 66, e17013	3.6	8
360	Intermittent sensor fault detection for stochastic LTV systems with parameter uncertainty and limited resolution. *International Journal of Control*, **2020**, 93, 788-796	1.5	9
359	Real-Time Adaptive Machine-Learning-Based Predictive Control of Nonlinear Processes. *Industrial & Engineering Chemistry Research*, **2020**, 59, 2275-2290	3.9	29
358	Machine Learning-Based Model Predictive Control of Distributed Chemical Processes. *IFAC-PapersOnLine*, **2019**, 52, 120-127	0.7	3
357	Multiscale computational fluid dynamics modeling of thermal atomic layer deposition with application to chamber design. *Chemical Engineering Research and Design*, **2019**, 147, 529-544	5.5	20
356	Operational safety of an ammonia process network via model predictive control. *Chemical Engineering Research and Design*, **2019**, 146, 277-289	5.5	2
355	Model predictive control of phthalic anhydride synthesis in a fixed-bed catalytic reactor via machine learning modeling. *Chemical Engineering Research and Design*, **2019**, 145, 173-183	5.5	14
354	Microscopic modeling and optimal operation of thermal atomic layer deposition. *Chemical Engineering Research and Design*, **2019**, 145, 159-172	5.5	17
353	Operational safety of chemical processes via Safeness-Index based MPC: Two large-scale case studies. *Computers and Chemical Engineering*, **2019**, 125, 204-215	4	10
352	Control Lyapunov-Barrier function-based model predictive control of nonlinear systems. *Automatica*, **2019**, 109, 108508	5.7	18
351	Operational safety via model predictive control: The Torrance refinery accident revisited. *Chemical Engineering Research and Design*, **2019**, 149, 138-146	5.5	2
350	Machine learning-based predictive control of nonlinear processes. Part I: Theory. *AICHE Journal*, **2019**, 65, e16729	3.6	37

349	Machine-learning-based predictive control of nonlinear processes. Part II: Computational implementation. *AICHE Journal*, **2019**, 65, e16734	3.6	24
348	Machine learning-based modeling and operation for ALD of SiO2 thin-films using data from a multiscale CFD simulation. *Chemical Engineering Research and Design*, **2019**, 151, 131-145	5.5	19
347	Real-Time Optimization and Control of Nonlinear Processes Using Machine Learning. *Mathematics*, **2019**, 7, 890	2.3	24
346	Optimizing process economics and operational safety via economic MPC using barrier functions and recurrent neural network models. *Chemical Engineering Research and Design*, **2019**, 152, 455-465	5.5	8
345	Economic Machine-Learning-Based Predictive Control of Nonlinear Systems. *Mathematics*, **2019**, 7, 494	2.3	20
344	Improving Diabetes Conventional Therapy via Machine Learning Modeling **2019**,		1
343	Run-to-run control of PECVD systems: Application to a multiscale three-dimensional CFD model of silicon thin film deposition. *AICHE Journal*, **2019**, 65, e16400	3.6	2
342	Handling bounded and unbounded unsafe sets in Control Lyapunov-Barrier function-based model predictive control of nonlinear processes. *Chemical Engineering Research and Design*, **2019**, 143, 140-149	5.5	8
341	Economic model predictive control of stochastic nonlinear systems. *AICHE Journal*, **2018**, 64, 3312-3322	3.6	14
340	Real-time furnace balancing of steam methane reforming furnaces. *Chemical Engineering Research and Design*, **2018**, 134, 238-256	5.5	18
339	On integration of feedback control and safety systems: Analyzing two chemical process applications. *Chemical Engineering Research and Design*, **2018**, 132, 616-626	5.5	26
338	Process operational safety via model predictive control: Recent results and future research directions. *Computers and Chemical Engineering*, **2018**, 114, 171-190	4	17
337	Fouling indicators for field monitoring the effectiveness of operational strategies of ultrafiltration as pretreatment for seawater desalination. *Desalination*, **2018**, 431, 86-99	10.3	15
336	Multiscale three-dimensional CFD modeling for PECVD of amorphous silicon thin films. *Computers and Chemical Engineering*, **2018**, 113, 184-195	4	23
335	Achieving operational process safety via model predictive control. *Journal of Loss Prevention in the Process Industries*, **2018**, 53, 74-88	3.5	8
334	Bayesian model averaging for estimating the spatial temperature distribution in a steam methane reforming furnace. *Chemical Engineering Research and Design*, **2018**, 131, 465-487	5.5	8
333	Elucidating and handling effects of valve-induced nonlinearities in industrial feedback control loops. *Computers and Chemical Engineering*, **2018**, 116, 156-175	4	3
332	Model Predictive Control for Process Operational Safety: Utilizing Safeness Index-Based Constraints and Control Lyapunov-Barrier Functions. *Computer Aided Chemical Engineering*, **2018**, 44, 505-510	0.6	1

331	Run-to-Run Control of Film Thickness in PECVD: Application to a Multiscale CFD Model of Amorphous Silicon Deposition. *Computer Aided Chemical Engineering*, **2018**, 44, 511-516	0.6	
330	Event-triggered filtering and intermittent fault detection for time-varying systems with stochastic parameter uncertainty and sensor saturation. *International Journal of Robust and Nonlinear Control*, **2018**, 28, 4666-4680	3.6	13
329	Safeness Index-Based Economic Model Predictive Control of Stochastic Nonlinear Systems. *Mathematics*, **2018**, 6, 69	2.3	4
328	Economic Model Predictive Control: Handling Valve Actuator Dynamics and Process Equipment Considerations. *Foundations and Trends in Systems and Control*, **2018**, 5, 293-350	4	4
327	Optimal operation of batch enantiomer crystallization: From ternary diagrams to predictive control. *AICHE Journal*, **2018**, 64, 1618-1637	3.6	5
326	Estimating the Spatial Temperature Distribution in a Steam Methane Reforming Furnace Using Bayesian Modelling. *Computer Aided Chemical Engineering*, **2018**, 2017-2022	0.6	0
325	Handling Process Safety and Stochastic Uncertainty in Economic Model Predictive Control. *IFAC-PapersOnLine*, **2018**, 51, 424-429	0.7	
324	Control Lyapunov-Barrier Function-Based Economic Model Predictive Control of Nonlinear Systems. *IFAC-PapersOnLine*, **2018**, 51, 48-53	0.7	
323	Optimal Enantiomer Crystallization Operation using Ternary Diagram Information. *Computer Aided Chemical Engineering*, **2018**, 44, 499-504	0.6	1
322	Multiscale Three-Dimensional CFD Modeling for PECVD of Amorphous Silicon Thin Films. *Computer Aided Chemical Engineering*, **2018**, 44, 2431-2436	0.6	
321	Detecting and Handling Cyber-Attacks in Model Predictive Control of Chemical Processes. *Mathematics*, **2018**, 6, 173	2.3	21
320	Control Lyapunov-Barrier Function-Based Model Predictive Control of Nonlinear Systems **2018**,		3
319	On Integration of Model Predictive Control with Safety System: Preventing Thermal Runaway. *Computer Aided Chemical Engineering*, **2018**, 44, 2011-2016	0.6	1
318	Safe economic model predictive control of nonlinear systems. *Systems and Control Letters*, **2018**, 118, 69-76	2.4	16
317	Distributed economic model predictive control for operational safety of nonlinear processes. *AICHE Journal*, **2017**, 63, 3404-3418	3.6	13
316	Process operational safety using model predictive control based on a process Safeness Index. *Computers and Chemical Engineering*, **2017**, 104, 76-88	4	32
315	Model Predictive Control of a Steam Methane Reforming Reactor Described by a Computational Fluid Dynamics Model. *Industrial & Engineering Chemistry Research*, **2017**, 56, 6002-6011	3.9	18
314	Temperature balancing in steam methane reforming furnace via an integrated CFD/data-based optimization approach. *Computers and Chemical Engineering*, **2017**, 104, 185-200	4	30

313	Fault-Tolerant Economic Model Predictive Control Using Error-Triggered Online Model Identification. *Industrial & Engineering Chemistry Research*, **2017**, 56, 5652-5667	3.9	12
312	Integrating Process Safety Considerations in Lyapunov-Based Model Predictive Control. *IFAC-PapersOnLine*, **2017**, 50, 15910-15915	0.7	
311	Fault-Tolerant Economic Model Predictive Control Using Empirical Models * *Financial support from the National Science Foundation and the Department of Energy is gratefully acknowledged. *IFAC-PapersOnLine*, **2017**, 50, 3517-3523	0.7	1
310	Steam methane reforming furnace temperature balancing via CFD model-based optimization **2017**,		2
309	Economic Model Predictive Control of Transport-Reaction Processes **2017**, 547-589		
308	An improved approach for H□design of linear quadratic tracking control for chemical processes with partial actuator failure. *Journal of Process Control*, **2017**, 58, 63-72	3.9	13
307	Distributed economic model predictive control with Safeness-Index based constraints for nonlinear systems. *Systems and Control Letters*, **2017**, 110, 21-28	2.4	7
306	CFD modeling of a industrial-scale steam methane reforming furnace. *Chemical Engineering Science*, **2017**, 171, 576-598	4.4	66
305	CFD Modeling of a Pilot-Scale Steam Methane Reforming Furnace **2017**, 75-117		0
304	An economic model predictive control approach to integrated production management and process operation. *AICHE Journal*, **2017**, 63, 1892-1906	3.6	8
303	EMPC Systems: Computational Efficiency and Real-Time Implementation. *Advances in Industrial Control*, **2017**, 233-289	0.3	
302	Brief Overview of EMPC Methods and Some Preliminary Results. *Advances in Industrial Control*, **2017**, 57-73	0.3	
301	State Estimation and EMPC. *Advances in Industrial Control*, **2017**, 135-170	0.3	
300	Two-Layer EMPC Systems. *Advances in Industrial Control*, **2017**, 171-232	0.3	
299	Multiscale modeling and run-to-run control of PECVD of thin film solar cells. *Renewable Energy*, **2017**, 100, 129-140	8.1	43
298	Lyapunov-Based EMPC: Closed-Loop Stability, Robustness, and Performance. *Advances in Industrial Control*, **2017**, 75-133	0.3	
297	Self-adaptive cycle-to-cycle control of in-line coagulant dosing in ultrafiltration for pre-treatment of reverse osmosis feed water. *Desalination*, **2017**, 401, 22-31	10.3	19
296	Error-triggered on-line model identification for model-based feedback control. *AICHE Journal*, **2017**, 63, 949-966	3.6	11

295	Distributed Economic MPC with Safety-Based Constraints for Nonlinear Systems * *Financial support from the National Science Foundation and the Department of Energy is gratefully acknowledged.. *IFAC-PapersOnLine*, **2017**, 50, 12033-12040	0.7	1
294	Multiscale Computational Fluid Dynamics: Methodology and Application to PECVD of Thin Film Solar Cells. *Coatings*, **2017**, 7, 22	2.9	12
293	Ultrafiltration with self-generated RO concentrate pulse backwash in a novel integrated seawater desalination UF-RO system. *Journal of Membrane Science*, **2016**, 520, 111-119	9.6	17
292	Elucidation of the role of constraints in economic model predictive control. *Annual Reviews in Control*, **2016**, 41, 208-217	10.3	10
291	Novel design and operational control of integrated ultrafiltration Reverse osmosis system with RO concentrate backwash. *Desalination*, **2016**, 382, 43-52	10.3	30
290	CFD modeling and control of a steam methane reforming reactor. *Chemical Engineering Science*, **2016**, 148, 78-92	4.4	69
289	Actuator stiction compensation via model predictive control for nonlinear processes. *AICHE Journal* , **2016**, 62, 2004-2023	3.6	15
288	A feedback control framework for safe and economically-optimal operation of nonlinear processes. *AICHE Journal*, **2016**, 62, 2391-2409	3.6	21
287	Economic model predictive control for nonlinear processes incorporating actuator magnitude and rate of change constraints **2016**,		1
286	Simultaneous control of safety constraint sets and process economics using economic model predictive control **2016**,		1
285	Empirical Modeling of Control Valve Layer with Application to Model Predictive Control-Based Stiction Compensation**Financial support from the National Science Foundation and the Department of Energy is gratefully acknowledged.. *IFAC-PapersOnLine*, **2016**, 49, 41-46	0.7	1
284	Handling Plant Variation via Error-Triggered On-line Model Identification: Application to Economic Model Predictive Control**Financial support from the National Science Foundation and the Department of Energy is gratefully acknowledged.. *IFAC-PapersOnLine*, **2016**, 49, 790-795	0.7	
283	Economic model predictive control designs for input rate-of-change constraint handling and guaranteed economic performance. *Computers and Chemical Engineering*, **2016**, 92, 18-36	4	20
282	On closed-loop economic performance under Lyapunov-based economic model predictive control **2016**,		1
281	Multiscale modeling and operation of PECVD of thin film solar cells. *Chemical Engineering Science*, **2015**, 136, 50-61	4.4	48
280	Handling state constraints and economics in feedback control of transport-reaction processes. *Journal of Process Control*, **2015**, 32, 98-108	3.9	9
279	Detection and Isolation of Batch-to-Batch Parametric Drift in Crystallization Using In-Batch and Post-Batch Measurements. *Industrial & Engineering Chemistry Research*, **2015**, 54, 5514-5526	3.9	4
278	Modeling and control of ibuprofen crystal growth and size distribution. *Chemical Engineering Science*, **2015**, 134, 414-422	4.4	24

277	Economic model predictive control of nonlinear process systems using multiple empirical models **2015**,		2
276	Improved postprandial glucose control with a customized Model Predictive Controller **2015**,		15
275	Multiscale, Multidomain Modeling and Parallel Computation: Application to Crystal Shape Evolution in Crystallization. *Industrial & Engineering Chemistry Research*, **2015**, 54, 11903-11914	3.9	28
274	Distributed Economic Model Predictive Control of a Catalytic Reactor: Evaluation of Sequential and Iterative Architectures. *IFAC-PapersOnLine*, **2015**, 48, 26-31	0.7	5
273	Economic Model Predictive Control: Elucidation of the Role of Constraints. *IFAC-PapersOnLine*, **2015**, 48, 47-56	0.7	2
272	Real-time preventive sensor maintenance using robust moving horizon estimation and economic model predictive control. *AICHE Journal*, **2015**, 61, 3374-3389	3.6	16
271	On identification of well-conditioned nonlinear systems: Application to economic model predictive control of nonlinear processes. *AICHE Journal*, **2015**, 61, 3353-3373	3.6	19
270	Economic model predictive control of nonlinear time-delay systems: Closed-loop stability and delay compensation. *AICHE Journal*, **2015**, 61, 4152-4165	3.6	9
269	On Operation of PECVD of Thin Film Solar Cells. *IFAC-PapersOnLine*, **2015**, 48, 278-283	0.7	0
268	Economic model predictive control of nonlinear process systems using empirical models. *AICHE Journal*, **2015**, 61, 816-830	3.6	41
267	A method for handling batch-to-batch parametric drift using moving horizon estimation: Application to run-to-run MPC of batch crystallization. *Chemical Engineering Science*, **2015**, 127, 210-219	4.4	30
266	Real-time economic model predictive control of nonlinear process systems. *AICHE Journal*, **2015**, 61, 555-571	3.6	17
265	Run-to-Run-Based Model Predictive Control of Protein Crystal Shape in Batch Crystallization. *Industrial & Engineering Chemistry Research*, **2015**, 54, 4293-4302	3.9	26
264	Economic model predictive control with time-varying objective function for nonlinear process systems. *AICHE Journal*, **2014**, 60, 507-519	3.6	41
263	A tutorial review of economic model predictive control methods. *Journal of Process Control*, **2014**, 24, 1156-1178	3.9	400
262	Robust moving horizon estimation based output feedback economic model predictive control. *Systems and Control Letters*, **2014**, 68, 101-109	2.4	35
261	Stabilization of nonlinear sampled-data systems and economic model predictive control application **2014**,		5
260	Enhancing the Crystal Production Rate and Reducing Polydispersity in Continuous Protein Crystallization. *Industrial & Engineering Chemistry Research*, **2014**, 53, 15538-15548	3.9	24

259	Crystal shape and size control using a plug flow crystallization configuration. *Chemical Engineering Science*, **2014**, 119, 30-39	4.4	71
258	Fault Detection and Isolation in a Spiral-Wound Reverse Osmosis (RO) Desalination Plant. *Industrial & Engineering Chemistry Research*, **2014**, 53, 3257-3271	3.9	3
257	On finite-time and infinite-time cost improvement of economic model predictive control for nonlinear systems. *Automatica*, **2014**, 50, 2561-2569	5.7	44
256	Performance Monitoring of Economic Model Predictive Control Systems. *Industrial & Engineering Chemistry Research*, **2014**, 53, 15406-15413	3.9	2
255	Modeling and control of crystal shape in continuous protein crystallization. *Chemical Engineering Science*, **2014**, 107, 47-57	4.4	69
254	Economic model predictive control of parabolic PDE systems: Addressing state estimation and computational efficiency. *Journal of Process Control*, **2014**, 24, 448-462	3.9	22
253	Energy-Optimal Control of RO Desalination. *Industrial & Engineering Chemistry Research*, **2014**, 53, 7409-7420	3.9	21
252	Protein Crystal Shape and Size Control in Batch Crystallization: Comparing Model Predictive Control with Conventional Operating Policies. *Industrial & Engineering Chemistry Research*, **2014**, 53, 5002-5014	3.9	23
251	Economic Model Predictive Control of Transport-Reaction Processes. *Industrial & Engineering Chemistry Research*, **2014**, 53, 7382-7396	3.9	31
250	Integrated Design of Control Actuator Layer and Economic Model Predictive Control for Nonlinear Processes. *Industrial & Engineering Chemistry Research*, **2014**, 53, 20000-20012	3.9	4
249	Smart manufacturing: Handling preventive actuator maintenance and economics using model predictive control. *AICHE Journal*, **2014**, 60, 2179-2196	3.6	20
248	Selection of control configurations for economic model predictive control systems. *AICHE Journal*, **2014**, 60, 3230-3242	3.6	27
247	**2014**,		1
246	Integrating dynamic economic optimization and model predictive control for optimal operation of nonlinear process systems. *Control Engineering Practice*, **2014**, 22, 242-251	3.9	68
245	Optimal Time-varying Operation of Nonlinear Process Systems with Economic Model Predictive Control. *Industrial & Engineering Chemistry Research*, **2014**, 53, 4991-5001	3.9	15
244	Distributed model predictive control: A tutorial review and future research directions. *Computers and Chemical Engineering*, **2013**, 51, 21-41	4	499
243	Simulation and Control of Porosity in a Three-Dimensional Thin-Film Solar Cell. *Industrial & Engineering Chemistry Research*, **2013**, 52, 11246-11252	3.9	2
242	Model Predictive Control of a Nonlinear Large-Scale Process Network Used in the Production of Vinyl Acetate. *Industrial & Engineering Chemistry Research*, **2013**, 52, 12463-12481	3.9	7

241	Data-driven models of steady state and transient operations of spiral-wound RO plant. *Desalination* , **2013**, 316, 154-161	10.3	12
240	Fault-Tolerant Process Control **2013**,		29
239	Crystal shape modeling and control in protein crystal growth. *Chemical Engineering Science*, **2013**, 87, 216-223	4.4	30
238	Economic model predictive control of nonlinear two-time-scale systems **2013**,		2
237	. *IEEE Transactions on Control Systems Technology*, **2013**, 21, 504-512	4.8	55
236	Economic model predictive control of nonlinear singularly perturbed systems. *Journal of Process Control*, **2013**, 23, 743-754	3.9	29
235	Economic model predictive control of switched nonlinear systems. *Systems and Control Letters*, **2013**, 62, 77-84	2.4	34
234	Modeling and control of shape distribution of protein crystal aggregates. *Chemical Engineering Science*, **2013**, 104, 484-497	4.4	24
233	Porosity control in thin film solar cells. *Chemical Engineering Science*, **2013**, 94, 44-53	4.4	4
232	Algorithms for improved fixed-time performance of Lyapunov-based economic model predictive control of nonlinear systems. *Journal of Process Control*, **2013**, 23, 404-414	3.9	24
231	Proactive fault-tolerant model predictive control. *AICHE Journal*, **2013**, 59, 2810-2820	3.6	26
230	Distributed model predictive control of switched nonlinear systems with scheduled mode transitions. *AICHE Journal*, **2013**, 59, 860-871	3.6	5
229	Modeling and control of protein crystal shape and size in batch crystallization. *AICHE Journal*, **2013**, 59, 2317-2327	3.6	46
228	Self-adaptive feed flow reversal operation of reverse osmosis desalination. *Desalination*, **2013**, 308, 63-72	20.3	35
227	Unifying dynamic economic optimization and model predictive control for optimal process operation **2013**,		1
226	Control and Fault-Handling Subject to Asynchronous Measurements **2013**, 205-252		1
225	Integrated Fault-Detection and Isolation and Fault-Tolerant Control **2013**, 55-84		
224	Utilizing FDI Insights in Controller Design and PID Monitoring **2013**, 125-177		

223	Integrated Fault-Detection and Fault-Tolerant Control **2013**, 29-54		
222	Safe-Parking **2013**, 85-103		
221	Isolation and Handling of Sensor Faults **2013**, 179-203		
220	Fault Diagnosis and Robust Safe-Parking **2013**, 105-124		
219	Distributed economic MPC: Application to a nonlinear chemical process network. *Journal of Process Control*, **2012**, 22, 689-699	3.9	63
218	Economic model predictive control of nonlinear process systems using Lyapunov techniques. *AICHE Journal*, **2012**, 58, 855-870	3.6	240
217	Iterative Distributed Model Predictive Control of Nonlinear Systems: Handling Asynchronous, Delayed Measurements. *IEEE Transactions on Automatic Control*, **2012**, 57, 528-534	5.9	43
216	Composite fast-slow MPC design for nonlinear singularly perturbed systems: Stability analysis **2012** ,		1
215	Fault detection and isolation and fault tolerant control of a catalytic alkylation of benzene process. *Chemical Engineering Science*, **2012**, 78, 155-166	4.4	11
214	Surface morphology control of Transparent Conducting Oxide layers for improved light trapping using wafer grating and feedback control. *Chemical Engineering Science*, **2012**, 81, 191-201	4.4	6
213	Supervisory Predictive Control for Long-Term Scheduling of an Integrated Wind/Solar Energy Generation and Water Desalination System. *IEEE Transactions on Control Systems Technology*, **2012**, 20, 504-512	4.8	53
212	State-estimation-based economic model predictive control of nonlinear systems. *Systems and Control Letters*, **2012**, 61, 926-935	2.4	30
211	Data-based monitoring and reconfiguration of a distributed model predictive control system. *International Journal of Robust and Nonlinear Control*, **2012**, 22, 68-88	3.6	18
210	Composite fast-slow MPC design for nonlinear singularly perturbed systems. *AICHE Journal*, **2012**, 58, 1802-1811	3.6	31
209	Controlling aggregate thin film surface morphology for improved light trapping using a patterned deposition rate profile. *Chemical Engineering Science*, **2012**, 67, 101-110	4.4	3
208	Monitoring and retuning of low-level PID control loops. *Chemical Engineering Science*, **2012**, 69, 287-295	4.4	11
207	Simulation and control of aggregate surface morphology in a two-stage thin film deposition process for improved light trapping. *Chemical Engineering Science*, **2012**, 71, 520-530	4.4	5
206	Modeling and control of Transparent Conducting Oxide layer surface morphology for improved light trapping. *Chemical Engineering Science*, **2012**, 74, 135-147	4.4	7

205	Distributed model predictive control of switched nonlinear systems **2012**,		4
204	Feedback Control of Particle Size Distribution in Nanoparticle Synthesis and Processing **2012**, 7-44		1
203	Supervisory Predictive Control of Standalone Wind/Solar Energy Generation Systems. *IEEE Transactions on Control Systems Technology*, **2011**, 19, 199-207	4.8	121
202	Economic model predictive control using Lyapunov techniques: Handling asynchronous, delayed measurements and distributed implementation **2011**,		2
201	A distributed control framework for smart grid development: Energy/water system optimal operation and electric grid integration. *Journal of Process Control*, **2011**, 21, 1504-1516	3.9	61
200	Model predictive control of nonlinear singularly perturbed systems: Application to a large-scale process network. *Journal of Process Control*, **2011**, 21, 1296-1305	3.9	32
199	Multirate Lyapunov-based distributed model predictive control of nonlinear uncertain systems. *Journal of Process Control*, **2011**, 21, 1231-1242	3.9	30
198	Dynamics and control of aggregate thin film surface morphology for improved light trapping: Implementation on a large-lattice kinetic Monte Carlo model. *Chemical Engineering Science*, **2011**, 66, 5955-5967	4.4	8
197	Author response to Letter to the Editor by Professor Bing Guo on the paper Bacterial aerosol neutralization by aerodynamic shocks using a novel impactor system: Design and computation, Chem. Eng. Sci., 64, 1953–1967, 2009. *Chemical Engineering Science*, **2011**, 66, 229-230	4.4	
196	Dynamics and Lattice-Size Dependence of Surface Mean Slope in Thin-Film Deposition. *Industrial & Engineering Chemistry Research*, **2011**, 50, 1219-1230	3.9	9
195	Mineral scale monitoring for reverse osmosis desalination via real-time membrane surface image analysis. *Desalination*, **2011**, 273, 64-71	10.3	48
194	Handling communication disruptions in distributed model predictive control. *Journal of Process Control*, **2011**, 21, 173-181	3.9	24
193	Multirate distributed model predictive control of nonlinear systems **2011**,		1
192	**2011**,		4
191	Networked and Distributed Predictive Control. *Advances in Industrial Control*, **2011**,	0.3	42
190	Multirate Distributed Model Predictive Control. *Advances in Industrial Control*, **2011**, 193-218	0.3	
189	Distributed Model Predictive Control: Two-Controller Cooperation. *Advances in Industrial Control*, **2011**, 99-133	0.3	
188	Lyapunov-Based Model Predictive Control. *Advances in Industrial Control*, **2011**, 13-45	0.3	3

187	Networked Predictive Process Control. *Advances in Industrial Control*, **2011**, 47-98	0.3	4
186	Minimizing energy consumption in reverse osmosis membrane desalination using optimization-based control **2010**,		1
185	A two-tier control architecture for nonlinear process systems with continuous/asynchronous feedback. *International Journal of Control*, **2010**, 83, 257-272	1.5	11
184	Reverse osmosis desalination with high permeability membranes Cost optimization and research needs. *Desalination and Water Treatment*, **2010**, 15, 256-266		75
183	Controller and Estimator Design for Regulation of Film Thickness, Surface Roughness, and Porosity in a Multiscale Thin Film Growth Process. *Industrial & Engineering Chemistry Research*, **2010**, 49, 7795-7806	3.9	6
182	Iterative distributed model predictive control of nonlinear systems: Handling delayed measurements **2010**,		1
181	Multivariable Model Predictive Control of Thin Film Surface Roughness and Slope for Light Trapping Optimization. *Industrial & Engineering Chemistry Research*, **2010**, 49, 10510-10516	3.9	2
180	Handling Communication Disruptions in Distributed Model Predictive Control. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2010**, 43, 296-301		
179	Lattice-size Dependence and Dynamics of Surface Mean Slope in a Thin Film Deposition Process. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2010**, 43, 811-816		
178	Sequential and Iterative Distributed Model Predictive Control of Nonlinear Process Systems Subject to Asynchronous Measurements. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2010**, 43, 625-630		
177	Bacterial aerosol neutralization by aerodynamic shocks using an impactor system: Experimental results for E. coli and analysis. *Chemical Engineering Science*, **2010**, 65, 1490-1502	4.4	3
176	Bacterial aerosol neutralization by aerodynamic shocks using an impactor system: Experimental results for B. atropheus spores. *Chemical Engineering Science*, **2010**, 65, 4803-4815	4.4	4
175	Sequential and iterative architectures for distributed model predictive control of nonlinear process systems. *AICHE Journal*, **2010**, 56, NA-NA	3.6	34
174	Detection, isolation and handling of actuator faults in distributed model predictive control systems. *Journal of Process Control*, **2010**, 20, 1059-1075	3.9	38
173	Minimizing energy consumption in reverse osmosis membrane desalination using optimization-based control. *Journal of Process Control*, **2010**, 20, 1261-1269	3.9	62
172	Distributed model predictive control of nonlinear systems subject to asynchronous and delayed measurements. *Automatica*, **2010**, 46, 52-61	5.7	95
171	Monitoring and handling of actuator faults in two-tier control systems for nonlinear processes. *Chemical Engineering Science*, **2010**, 65, 3179-3190	4.4	5
170	Predictive control of surface mean slope and roughness in a thin film deposition process. *Chemical Engineering Science*, **2010**, 65, 4720-4731	4.4	8

169	Dependence of film surface roughness and slope on surface migration and lattice size in thin film deposition processes. *Chemical Engineering Science*, **2010**, 65, 6101-6111	4.4	18
168	Effect of Stream Mixing on RO Energy Cost Minimization. *Desalination*, **2010**, 261, 232-239	10.3	15
167	Multiscale Modeling and Control of Porous Thin Film Growth. *The Electrical Engineering Handbook*, **2010**, 13-1-13-17		
166	Control of Particulate Processes. *The Electrical Engineering Handbook*, **2010**, 14-1-14-21		
165	Investigation of film surface roughness and porosity dependence on lattice size in a porous thin film deposition process. *Physical Review E*, **2009**, 80, 041122	2.4	25
164	Model predictive control of feed flow reversal in a reverse osmosis desalination process **2009**,		6
163	Networked monitoring and fault-tolerant control of nonlinear process systems **2009**,		1
162	Model predictive control of nonlinear stochastic PDEs: Application to a sputtering process **2009**,		3
161	A two-tier control architecture for nonlinear process systems with continuous/asynchronous feedback **2009**,		3
160	Control and Optimization of Multiscale Process Systems **2009**,		13
159	Lyapunov-based model predictive control of nonlinear systems subject to time-varying measurement delays. *International Journal of Adaptive Control and Signal Processing*, **2009**, 23, 788-807	2.8	36
158	Distributed model predictive control of nonlinear process systems. *AICHE Journal*, **2009**, 55, 1171-1184	3.6	171
157	Modeling and Control of High-Velocity Oxygen-Fuel (HVOF) Thermal Spray: A Tutorial Review. *Journal of Thermal Spray Technology*, **2009**, 18, 753-768	2.5	67
156	Minimization of energy consumption for a two-pass membrane desalination: Effect of energy recovery, membrane rejection and retentate recycling. *Journal of Membrane Science*, **2009**, 339, 126-137	9.6	85
155	On RO membrane and energy costs and associated incentives for future enhancements of membrane permeability. *Journal of Membrane Science*, **2009**, 344, 1-5	9.6	89
154	Model-predictive control of feed flow reversal in a reverse osmosis desalination process. *Journal of Process Control*, **2009**, 19, 433-442	3.9	40
153	Data-based fault detection and isolation using feedback control: Output feedback and optimality. *Chemical Engineering Science*, **2009**, 64, 2370-2383	4.4	12
152	Modeling and control of film porosity in thin film deposition. *Chemical Engineering Science*, **2009**, 64, 3668-3682	4.4	28

151	Regulation of film thickness, surface roughness and porosity in thin film growth using deposition rate. *Chemical Engineering Science*, **2009**, 64, 3903-3913	4.4	35
150	Stochastic Modeling and Simultaneous Regulation of Surface Roughness and Porosity in Thin Film Deposition. *Industrial & Engineering Chemistry Research*, **2009**, 48, 6690-6700	3.9	20
149	Effect of Thermodynamic Restriction on Energy Cost Optimization of RO Membrane Water Desalination. *Industrial & Engineering Chemistry Research*, **2009**, 48, 6010-6021	3.9	162
148	Energy Consumption Optimization of Reverse Osmosis Membrane Water Desalination Subject to Feed Salinity Fluctuation. *Industrial & Engineering Chemistry Research*, **2009**, 48, 9581-9589	3.9	95
147	Nonlinear Model-Based Control of an Experimental Reverse-Osmosis Water Desalination System. *Industrial & Engineering Chemistry Research*, **2009**, 48, 6126-6136	3.9	57
146	Distributed model predictive control of nonlinear systems subject to delayed measurements **2009**,		1
145	Simultaneous Regulation of Surface Roughness and Porosity in Thin Film Growth. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2009**, 42, 922-927		
144	Distributed Model Predictive Control of Nonlinear Process Systems Subject to Asynchronous Measurements. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2009**, 42, 147-152		2
143	Nonlinear Model-Based Control of an Experimental Reverse Osmosis Water Desalination System* *Financial support from NSF and the California Department of Water Resources is gratefully acknowledged.. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2009**,		1
142	Energy Consumption Optimization of RO Membrane Desalination Subject to Feed Salinity Fluctuation* *The present work was supported in part by the International Desalination Association (Channabasappa Memorial Scholarship to Aihua Zhu), California Department of Water Resources,		5
141	Data-based Fault Detection and Isolation Using Output Feedback Control. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2009**, 42, 321-326		
140	Distributed Model Predictive Control System Design Using Lyapunov Techniques. *Lecture Notes in Control and Information Sciences*, **2009**, 181-194	0.5	
139	Control and Monitoring of a High Recovery Reverse Osmosis Desalination Process. *Industrial & Engineering Chemistry Research*, **2008**, 47, 6698-6710	3.9	30
138	Control of a reverse osmosis desalination process at high recovery **2008**,		4
137	Lyapunov-Based Model Predictive Control of Nonlinear Systems Subject to Data Losses. *IEEE Transactions on Automatic Control*, **2008**, 53, 2076-2089	5.9	187
136	Lyapunov-based model predictive control of nonlinear systems subject to time-varying measurement delays **2008**,		2
135	Fault Detection and Isolation for Nonlinear Process Systems Using Asynchronous Measurements. *Industrial & Engineering Chemistry Research*, **2008**, 47, 10009-10019	3.9	10
134	Plantwide Fault Isolation Using Nonlinear Feedback Control. *Industrial & Engineering Chemistry Research*, **2008**, 47, 4220-4229	3.9	7

133	Model parameter estimation and feedback control of surface roughness in a sputtering process. *Chemical Engineering Science*, **2008**, 63, 1800-1816	4.4	11
132	Lyapunov-based Model Predictive Control of Particulate Processes Subject to Asynchronous Measurements. *Particle and Particle Systems Characterization*, **2008**, 25, 360-375	3.1	2
131	Enhancing data-based fault isolation through nonlinear control. *AICHE Journal*, **2008**, 54, 223-241	3.6	25
130	Model predictive control of nonlinear stochastic partial differential equations with application to a sputtering process. *AICHE Journal*, **2008**, 54, 2065-2081	3.6	26
129	Robust predictive control of switched systems: Satisfying uncertain schedules subject to state and control constraints. *International Journal of Adaptive Control and Signal Processing*, **2008**, 22, 161-179	2.8	54
128	Isolation and handling of actuator faults in nonlinear systems. *Automatica*, **2008**, 44, 53-62	5.7	134
127	Optimal control of diffusion-convection-reaction processes using reduced-order models. *Computers and Chemical Engineering*, **2008**, 32, 2123-2135	4	44
126	Studies on Feedback Control of Cardiac Alternans. *Computers and Chemical Engineering*, **2008**, 32, 2086-2098	4	18
125	Model-based control of particulate processes. *Chemical Engineering Science*, **2008**, 63, 1156-1172	4.4	48
124	Handling sensor malfunctions in control of particulate processes. *Chemical Engineering Science*, **2008**, 63, 1217-1229	4.4	14
123	Actuator and controller scheduling in nonlinear transport-reaction processes. *Chemical Engineering Science*, **2008**, 63, 3537-3550	4.4	17
122	Dynamic output feedback covariance control of stochastic dissipative partial differential equations. *Chemical Engineering Science*, **2008**, 63, 4531-4542	4.4	32
121	A two-tier architecture for networked process control. *Chemical Engineering Science*, **2008**, 63, 5394-5409	4.4	45
120	Optimal mechano-electric stabilization of cardiac alternans. *Chemical Engineering Science*, **2008**, 63, 5425-5433	4.4	6
119	Stability of nonlinear asynchronous systems. *Systems and Control Letters*, **2008**, 57, 465-473	2.4	22
118	Output feedback control of nonlinear systems subject to sensor data losses. *Systems and Control Letters*, **2008**, 57, 631-642	2.4	22
117	Fault-tolerant control of nonlinear process systems subject to sensor faults. *AICHE Journal*, **2007**, 53, 654-668	3.6	65
116	Smart plant operations: Vision, progress and challenges. *AICHE Journal*, **2007**, 53, 2734-2741	3.6	115

115	Fault-tolerant control of a polyethylene reactor. *Journal of Process Control*, **2007**, 17, 439-451	3.9	26
114	Control of particulate processes: Recent results and future challenges. *Powder Technology*, **2007**, 175, 1-7	5.2	31
113	An input/output approach to the optimal transition control of a class of distributed chemical reactors. *Chemical Engineering Science*, **2007**, 62, 2979-2988	4.4	17
112	Model-based control of nonlinear systems subject to sensor data losses: A chemical process case study **2007**,		2
111	Output Feedback Control of Nonlinear Systems Subject to Sensor Data Losses **2007**,		1
110	Stability of nonlinear asynchronous systems **2007**,		4
109	An Input/Output Approach to the Optimal Transition Control of a Class of Distributed Chemical Reactors. *Proceedings of the American Control Conference*, **2007**,	1.2	2
108	Lyapunov-based Model Predictive Control of Nonlinear Systems Subject to Data Losses. *Proceedings of the American Control Conference*, **2007**,	1.2	11
107	PARAMETER IDENTIFICATION FOR NONLINEAR STOCHASTIC PDE MODEL OF A SPUTTERING PROCESS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2007**, 40, 215-220		
106	FAULT-TOLERANT CONTROL OF A REVERSE OSMOSIS DESALINATION PROCESS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2007**, 40, 161-166		4
105	OPTIMAL TRANSITION CONTROL OF DIFFUSION-CONVECTION-REACTION PROCESSES. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2007**, 40, 135-140		
104	Techniques for Uniting Lyapunov-Based and Model Predictive Control **2007**, 77-91		1
103	Predictive control of parabolic PDEs with boundary control actuation. *Chemical Engineering Science*, **2006**, 61, 6239-6248	4.4	71
102	Computational study of particle in-flight behavior in the HVOF thermal spray process. *Chemical Engineering Science*, **2006**, 61, 6540-6552	4.4	83
101	Integrated fault-detection and fault-tolerant control of process systems. *AICHE Journal*, **2006**, 52, 2129-2148	3.6	100
100	Nonlinear Feedback Control of Surface Roughness Using a Stochastic PDE **2006**,		5
99	Fault-Tolerant Control of Nonlinear Systems Subject to Sensor Data Losses **2006**,		2
98	Predictive Control of Infinite Dimensional Systems **2006**,		1

97	Nonlinear Feedback Control of Surface Roughness Using a Stochastic PDE: Design and Application to a Sputtering Process. *Industrial & Engineering Chemistry Research*, **2006**, 45, 7177-7189	3.9	24
96	Predictive Output Feedback Control of Parabolic Partial Differential Equations (PDEs). *Industrial & Engineering Chemistry Research*, **2006**, 45, 8421-8429	3.9	24
95	Fault-tolerant control of nonlinear processes: performance-based reconfiguration and robustness. *International Journal of Robust and Nonlinear Control*, **2006**, 16, 91-111	3.6	62
94	Predictive control of parabolic PDEs with state and control constraints. *International Journal of Robust and Nonlinear Control*, **2006**, 16, 749-772	3.6	78
93	Predictive control of particle size distribution in particulate processes. *Chemical Engineering Science* , **2006**, 61, 268-281	4.4	158
92	Control and optimization of multiscale process systems. *Computers and Chemical Engineering*, **2006**, 30, 1670-1686	4	36
91	Stabilization of nonlinear systems with state and control constraints using Lyapunov-based predictive control. *Systems and Control Letters*, **2006**, 55, 650-659	2.4	220
90	Multivariable Predictive Control of Thin Film Deposition Using a Stochastic PDE Model. *Industrial & Engineering Chemistry Research*, **2005**, 44, 2416-2427	3.9	52
89	INTEGRATED FAULT-DETECTION AND FAULT-TOLERANT CONTROL OF PROCESS SYSTEMS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2005**, 38, 105-110		2
88	ROBUST STABILIZATION OF NONLINEAR PROCESSES USING HYBRID PREDICTIVE CONTROL. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2005**, 38, 1013-1018		
87	Modeling and control of HVOF thermal spray processing of WC□Co coatings. *Powder Technology*, **2005**, 156, 177-194	5.2	50
86	Output feedback control of switched nonlinear systems using multiple Lyapunov functions. *Systems and Control Letters*, **2005**, 54, 1163-1182	2.4	220
85	Multi-scale modeling and analysis of an industrial HVOF thermal spray process. *Chemical Engineering Science*, **2005**, 60, 3649-3669	4.4	106
84	Feedback control of surface roughness in sputtering processes using the stochastic Kuramoto□Sivashinsky equation. *Computers and Chemical Engineering*, **2005**, 29, 741-759	4	23
83	Control of flow over a cylinder using rotational oscillations. *Computers and Chemical Engineering*, **2005**, 29, 877-885	4	11
82	Predictive control of transport-reaction processes. *Computers and Chemical Engineering*, **2005**, 29, 2335-2345	4	86
81	Robust hybrid predictive control of nonlinear systems. *Automatica*, **2005**, 41, 209-217	5.7	78
80	Feedback control of surface roughness using stochastic PDEs. *AICHE Journal*, **2005**, 51, 345-352	3.6	29

79	Fault-tolerant control of process systems using communication networks. *AICHE Journal*, **2005**, 51, 1665-1682	3.6	50
78	Analysis of mode transitions in biological networks. *AICHE Journal*, **2005**, 51, 2220-2234	3.6	17
77	A method for PID controller tuning using nonlinear control techniques. *AICHE Journal*, **2005**, 51, 3292-3299	3.6	6
76	Dynamics and control of thin film surface microstructure in a complex deposition process. *Chemical Engineering Science*, **2005**, 60, 1603-1617	4.4	19
75	Predictive control of crystal size distribution in protein crystallization. *Nanotechnology*, **2005**, 16, S562-74	3.4	92
74	Uniting bounded control and MPC for stabilization of constrained linear systems. *Automatica*, **2004**, 40, 101-110	5.7	42
73	Model-based estimation and control of particle velocity and melting in HVOF thermal spray. *Chemical Engineering Science*, **2004**, 59, 5647-5656	4.4	19
72	Feedback control of HVOF thermal spray process accounting for powder size distribution. *Journal of Thermal Spray Technology*, **2004**, 13, 108-120	2.5	24
71	Coordinating feedback and switching for control of spatially distributed processes. *Computers and Chemical Engineering*, **2004**, 28, 111-128	4	59
70	Distributed nonlinear control of diffusion–reaction processes. *International Journal of Robust and Nonlinear Control*, **2004**, 14, 133-156	3.6	31
69	Hybrid predictive control of nonlinear systems: method and applications to chemical processes. *International Journal of Robust and Nonlinear Control*, **2004**, 14, 199-225	3.6	45
68	Hybrid predictive control of process systems. *AICHE Journal*, **2004**, 50, 1242-1259	3.6	41
67	Feedback control of surface roughness of GaAs (0 0 1) thin films using kinetic Monte Carlo models. *Computers and Chemical Engineering*, **2004**, 29, 225-241	4	29
66	Robust stabilization of infinite-dimensional systems using sliding-mode output feedback control. *International Journal of Control*, **2004**, 77, 1115-1136	1.5	45
65	Diamond Jet Hybrid HVOF Thermal Spray: Rule-Based Modeling of Coating Microstructure. *Industrial & Engineering Chemistry Research*, **2004**, 43, 3653-3665	3.9	37
64	Diamond Jet Hybrid HVOF Thermal Spray: Gas-Phase and Particle Behavior Modeling and Feedback Control Design. *Industrial & Engineering Chemistry Research*, **2004**, 43, 3632-3652	3.9	51
63	Predictive Control of Thin Film Surface Microstructure in a Complex Deposition Process. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2004**, 37, 41-46		
62	Predictive Control of Switched Nonlinear Processes With Scheduled Mode Transitions 1. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2004**, 37, 257-262		0

61	Feedback Control of Surface Roughness in a Deposition Process Using a Stochastic PDE *. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2004**, 37, 263-268		1
60	Fault-Tolerant Control of Multi-Unit Process Systems Using Communication Networks 1. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2004**, 37, 619-624		1
59	Coordinating feedback and switching for control of hybrid nonlinear processes. *AICHE Journal*, **2003**, 49, 2079-2098	3.6	76
58	Feedback control of growth rate and surface roughness in thin film growth. *AICHE Journal*, **2003**, 49, 2099-2113	3.6	51
57	Analysis and control of parabolic PDE systems with input constraints. *Automatica*, **2003**, 39, 715-725	5.7	120
56	Modeling and analysis of HVOF thermal spray process accounting for powder size distribution. *Chemical Engineering Science*, **2003**, 58, 849-857	4.4	39
55	Bounded robust control of constrained multivariable nonlinear processes. *Chemical Engineering Science*, **2003**, 58, 3025-3047	4.4	134
54	Estimation and control of surface roughness in thin film growth using kinetic Monte-Carlo models. *Chemical Engineering Science*, **2003**, 58, 3115-3129	4.4	75
53	Fault-tolerant control of fluid dynamic systems via coordinated feedback and switching. *Computers and Chemical Engineering*, **2003**, 27, 1913-1924	4	10
52	Robust inverse optimal control laws for nonlinear systems. *International Journal of Robust and Nonlinear Control*, **2003**, 13, 1371-1388	3.6	16
51	Feedback control of HVOF thermal spray process: A study of the effect of process disturbances on closed-loop performance. *Computer Aided Chemical Engineering*, **2003**, 15, 1193-1198	0.6	1
50	Integrated optimal actuator/sensor placement and robust control of uncertain transport-reaction processes. *Computers and Chemical Engineering*, **2002**, 26, 187-203	4	35
49	Drag reduction in flow over a flat plate using active feedback control. *Computers and Chemical Engineering*, **2002**, 26, 1095-1102	4	6
48	Simulation, estimation and control of size distribution in aerosol processes with simultaneous reaction, nucleation, condensation and coagulation. *Computers and Chemical Engineering*, **2002**, 26, 1153-1169	4	37
47	Dynamic optimization of dissipative PDE systems using nonlinear order reduction. *Chemical Engineering Science*, **2002**, 57, 5083-5114	4.4	152
46	Switching and Feedback Laws for Control of Constrained Switched Nonlinear Systems. *Lecture Notes in Computer Science*, **2002**, 164-178	0.9	11
45	COORDINATED FEEDBACK AND SWITCHING FOR WAVE SUPPRESSION. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2002**, 35, 157-162		1
44	Drag reduction in transitional linearized channel flow using distributed control. *International Journal of Control*, **2002**, 75, 1213-1218	1.5	16

43	Model-Based Control of Particulate Processes. *Particle Technology Series*, **2002**,	0	23
42	Control of nonlinear distributed parameter systems: An overview and new research directions. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2001**, 34, 287-292		
41	Studies on nonlinear dynamics and control of a tubular reactor with recycle. *Nonlinear Analysis: Theory, Methods & Applications*, **2001**, 47, 5933-5944	1.3	22
40	Crystal temperature control in the Czochralski crystal growth process. *AICHE Journal*, **2001**, 47, 79-106	3.6	27
39	Control of nonlinear distributed process systems: Recent developments and challenges. *AICHE Journal*, **2001**, 47, 514-518	3.6	103
38	Analysis and control of particulate processes with input constraints. *AICHE Journal*, **2001**, 47, 1849-1865	3.6	40
37	Robust control of parabolic PDE systems with time-dependent spatial domains. *Automatica*, **2001**, 37, 61-69	5.7	57
36	Integrating nonlinear output feedback control and optimal actuator/sensor placement for transport-reaction processes. *Chemical Engineering Science*, **2001**, 56, 4517-4535	4.4	63
35	Integrating robustness, optimality and constraints in control of nonlinear processes. *Chemical Engineering Science*, **2001**, 56, 1841-1868	4.4	113
34	Robust near-optimal output feedback control of non-linear systems. *International Journal of Control* , **2001**, 74, 133-157	1.5	23
33	Nonlinear and Robust Control of PDE Systems. *Systems and Control: Foundations and Applications*, **2001**,	0.3	273
32	Nonlinear Control of Incompressible Fluid Flow: Application to Burgers' Equation and 2D Channel Flow. *Journal of Mathematical Analysis and Applications*, **2000**, 252, 230-255	1.1	55
31	Robust control of particulate processes using uncertain population balances. *AICHE Journal*, **2000**, 46, 266-280	3.6	57
30	Robust output feedback control of nonlinear singularly perturbed systems. *Automatica*, **2000**, 36, 45-52	5.7	50
29	Optimization of transport-reaction processes using nonlinear model reduction. *Chemical Engineering Science*, **2000**, 55, 4349-4366	4.4	57
28	Wave suppression by nonlinear finite-dimensional control. *Chemical Engineering Science*, **2000**, 55, 2627-2640	4.4	90
27	Robust optimal control and estimation of constrained nonlinear processes. *Computers and Chemical Engineering*, **2000**, 24, 801-807	4	0
26	Computation of optimal actuator locations for nonlinear controllers in transport-reaction processes. *Computers and Chemical Engineering*, **2000**, 24, 577-583	4	20

25	Global stabilization of the Kuramoto–Sivashinsky equation via distributed output feedback control. *Systems and Control Letters*, **2000**, 39, 283-294	2.4	96
24	Feedback control of the Kuramoto–Sivashinsky equation. *Physica D: Nonlinear Phenomena*, **2000**, 137, 49-61	3.3	89
23	Non-linear feedback control of parabolic partial differential difference equation systems. *International Journal of Control*, **2000**, 73, 1572-1591	1.5	13
22	Modeling and Control of a Titania Aerosol Reactor. *Aerosol Science and Technology*, **2000**, 32, 369-391	3.4	17
21	Finite-dimensional approximation and control of non-linear parabolic PDE systems. *International Journal of Control*, **2000**, 73, 439-456	1.5	166
20	Dynamics of a reaction-diffusion system with Brusselator kinetics under feedback control. *Physical Review E*, **1999**, 59, 372-380	2.4	10
19	Robust output feedback control of quasi-linear parabolic PDE systems. *Systems and Control Letters*, **1999**, 36, 307-316	2.4	45
18	Nonlinear control of spatially inhomogenous aerosol processes. *Chemical Engineering Science*, **1999**, 54, 2669-2678	4.4	27
17	Plasma enhanced chemical vapor deposition: Modeling and control. *Chemical Engineering Science*, **1999**, 54, 3305-3314	4.4	59
16	Feedback control of nonlinear differential difference equation systems. *Chemical Engineering Science*, **1999**, 54, 5677-5709	4.4	33
15	Nonlinear Feedback Control of Parabolic Partial Differential Equation Systems with Time-dependent Spatial Domains. *Journal of Mathematical Analysis and Applications*, **1999**, 239, 124-157	1.1	34
14	Nonlinear control of particulate processes. *AICHE Journal*, **1999**, 45, 1279-1297	3.6	102
13	Output Feedback Control of Parabolic PDE Systems with Nonlinear Spatial Differential Operators. *Industrial & Engineering Chemistry Research*, **1999**, 38, 4372-4380	3.9	44
12	Robust control of hyperbolic PDE systems. *Chemical Engineering Science*, **1998**, 53, 85-105	4.4	88
11	Singular perturbation modeling of nonlinear processes with nonexplicit time-scale multiplicity. *Chemical Engineering Science*, **1998**, 53, 1491-1504	4.4	68
10	Robust control of parabolic PDE systems. *Chemical Engineering Science*, **1998**, 53, 2949-2965	4.4	114
9	Output Feedback Control of Nonlinear Two-Time-Scale Processes. *Industrial & Engineering Chemistry Research*, **1998**, 37, 1893-1909	3.9	6
8	Robust control of multivariable two-time-scale nonlinear systems. *Journal of Process Control*, **1997**, 7, 313-328	3.9	19

7	Finite-Dimensional Control of Parabolic PDE Systems Using Approximate Inertial Manifolds. *Journal of Mathematical Analysis and Applications*, **1997**, 216, 398-420	1.1	222
6	Feedback control of hyperbolic PDE systems. *AICHE Journal*, **1996**, 42, 3063-3086	3.6	136
5	Feedback control of two-time-scale nonlinear systems. *International Journal of Control*, **1996**, 63, 965-994	1.5	43
4	Robust semi-global output tracking for nonlinear singularly perturbed systems. *International Journal of Control*, **1996**, 65, 639-666	1.5	27
3	Dynamic feedforward/output feedback control of nonlinear processes. *Chemical Engineering Science*, **1995**, 50, 1889-1907	4.4	13
2	Statistical Machine-Learning -based Predictive Control of Uncertain Nonlinear Processes. *AICHE Journal*,	3.6	5
1	Machine-learning-based construction of barrier functions and models for safe model predictive control. *AICHE Journal*,e17456	3.6	1