

# Costas Kravaris

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7637046/publications.pdf>

Version: 2024-02-01

59  
papers

1,649  
citations

393982

19  
h-index

288905

40  
g-index

59  
all docs

59  
docs citations

59  
times ranked

939  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design of linear residual generators for fault detection and isolation in nonlinear systems. International Journal of Control, 2022, 95, 804-820.	1.2	9
2	Hidden Markov model based fault diagnoser using binary alarm signals with an analysis on distinguishability. Computers and Chemical Engineering, 2022, 160, 107689.	2.0	1
3	Deep neural network-based hybrid modeling and experimental validation for an industry-scale fermentation process: Identification of time-varying dependencies among parameters. Chemical Engineering Journal, 2022, 441, 135643.	6.6	48
4	Functional observers with linear error dynamics for discrete-time nonlinear systems. Automatica, 2022, 143, 110420.	3.0	2
5	<scp>Hidden Markov</scp> model based approach for diagnosing cause of alarm signals. AIChE Journal, 2021, 67, e17297.	1.8	7
6	Functional observers with linear error dynamics for nonlinear systems. Systems and Control Letters, 2021, 157, 105021.	1.3	11
7	Design of functional observers for fault detection and isolation in nonlinear systems in the presence of noises. Journal of Process Control, 2021, 108, 68-85.	1.7	3
8	Functional observers with linear error dynamics for discrete-time nonlinear systems. , 2021, , .		0
9	Safety-centered process control design based on dynamic safe set. Journal of Loss Prevention in the Process Industries, 2020, 65, 104126.	1.7	2
10	Identification of Optimal Catalyst Distributions in Heat-Exchanger Reactors. Industrial & Engineering Chemistry Research, 2020, 59, 5699-5711.	1.8	1
11	Multiclass data classification using fault detection-based techniques. Computers and Chemical Engineering, 2020, 136, 106786.	2.0	21
12	Nonlinear observer design for two-time-scale systems. AIChE Journal, 2020, 66, e16956.	1.8	7
13	Model reduction of aerobic bioprocess models for efficient simulation. Chemical Engineering Science, 2020, 217, 115512.	1.9	8
14	Reduced-order Nonlinear Observer Design for Two-time-scale Systems. IFAC-PapersOnLine, 2020, 53, 5922-5927.	0.5	1
15	Optimal heating profiles in tubular reactors with solid-phase axial wall conduction for isothermal operation. AIChE Journal, 2019, 65, e16742.	1.8	1
16	Modeling and Observer-Based Monitoring of RAFT Homopolymerization Reactions. Processes, 2019, 7, 768.	1.3	6
17	Multirate Sampled-Data Observer Design Based on a Continuous-Time Design. IEEE Transactions on Automatic Control, 2019, 64, 5265-5272.	3.6	23
18	Analysis of solid-phase axial heat conduction upon hot-spot formation in a one-dimensional microreactor. Chemical Engineering Journal, 2019, 377, 120501.	6.6	2

#	ARTICLE	IF	CITATIONS
19	A dead time compensation approach for multirate observer design with large measurement delays. AICHE Journal, 2019, 65, 562-570.	1.8	6
20	Robust stabilization of a two-stage continuous anaerobic bioreactor system. AICHE Journal, 2018, 64, 1295-1304.	1.8	9
21	A quantitative approach for optimal alarm identification. Journal of Loss Prevention in the Process Industries, 2018, 55, 213-222.	1.7	7
22	Multi-rate observer design for process monitoring using asynchronous inter-sample output predictions. AICHE Journal, 2017, 63, 3384-3394.	1.8	14
23	Multi-rate observer design using asynchronous inter-sample output predictions. , 2017, , .		3
24	Dynamic model reduction for two-stage anaerobic digestion processes. Chemical Engineering Journal, 2017, 327, 1102-1116.	6.6	19
25	Multi-rate sampled-data observers based on a continuous-time design. , 2017, , .		9
26	Robust stabilization of a two-stage anaerobic bioreactor system. , 2017, , .		1
27	State Observer Design for Monitoring the Degree of Polymerization in a Series of Melt Polycondensation Reactors. Processes, 2016, 4, 4.	1.3	5
28	Functional Observers for Nonlinear Systems. IFAC-PapersOnLine, 2016, 49, 505-510.	0.5	11
29	An approach to mechanistic event recognition applied on monitoring organic matter depletion in SBRs. AICHE Journal, 2014, 60, 3460-3472.	1.8	5
30	Plantwide control structure selection methodology for the benchmark vinyl acetate monomer plant. Computers and Chemical Engineering, 2014, 62, 108-116.	2.0	8
31	Constant-yield control of continuous bioreactors. Chemical Engineering Journal, 2013, 228, 1234-1247.	6.6	8
32	Advances and selected recent developments in state and parameter estimation. Computers and Chemical Engineering, 2013, 51, 111-123.	2.0	135
33	Plant-wide control structure selection methodology based on economics. Computers and Chemical Engineering, 2013, 52, 240-248.	2.0	23
34	Functional observers for nonlinear systems. , 2011, , .		9
35	A new model reduction method for nonlinear dynamical systems. Nonlinear Dynamics, 2010, 59, 183-194.	2.7	23
36	Tracking the singular arc of a continuous bioreactor using sliding mode control. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
37	Relaxed Lyapunov criteria for robust global stabilization of nonlinear systems. , 2009, , .		0
38	Robust global stabilisability by means of sampled-data control with positive sampling rate. International Journal of Control, 2009, 82, 755-772.	1.2	28
39	Relaxed Lyapunov criteria for robust global stabilisation of non-linear systems. International Journal of Control, 2009, 82, 2077-2094.	1.2	22
40	Global stability results for systems under sampled-data control. International Journal of Robust and Nonlinear Control, 2009, 19, 1105-1128.	2.1	95
41	From Continuous-Time Design to Sampled-Data Design of Observers. IEEE Transactions on Automatic Control, 2009, 54, 2169-2174.	3.6	183
42	Higher-order corrections to the pi criterion for the periodic operation of chemical reactors. , 2009, , .		0
43	A Vector Lyapunov Function Characterization of Input-to-State Stability with Application to Robust Global Stabilization of the Chemostat. European Journal of Control, 2008, 14, 47-61.	1.6	40
44	From continuous-time design to sampled-data design of nonlinear observers. , 2008, , .		2
45	On the Observer Problem for Discrete-Time Control Systems. IEEE Transactions on Automatic Control, 2007, 52, 12-25.	3.6	34
46	Global stability results for systems under sampled-data control. , 2007, , .		3
47	Modular Design of Nonlinear Observers for State and Disturbance Estimation. , 2006, , .		3
48	Nonlinear Multirate Model-Algorithmic Control. 1. Theory. Industrial & Engineering Chemistry Research, 2002, 41, 4054-4063.	1.8	3
49	Model-based synthesis of nonlinear PI and PID controllers. AIChE Journal, 2001, 47, 1805-1818.	1.8	14
50	Nonlinear Observer Design for Process Monitoring. Industrial & Engineering Chemistry Research, 2000, 39, 408-419.	1.8	46
51	Nonlinear observer design using Lyapunov's auxiliary theorem. Systems and Control Letters, 1998, 34, 241-247.	1.3	353
52	A Partially Decentralized State Observer and Its Parallel Computer Implementation. Industrial & Engineering Chemistry Research, 1998, 37, 2741-2760.	1.8	16
53	On-Line Identification and Nonlinear Control of pH Processes. Industrial & Engineering Chemistry Research, 1998, 37, 2446-2461.	1.8	25
54	Discrete-time nonlinear feedback control of multivariable processes. AIChE Journal, 1996, 42, 187-203.	1.8	23

#	ARTICLE	IF	CITATIONS
55	MPC formulation of GLC. AICHE Journal, 1996, 42, 2377-2381.	1.8	14
56	Multivariable nonlinear control of a continuous polymerization reactor: An experimental study. AICHE Journal, 1993, 39, 1920-1937.	1.8	56
57	Dynamic compensation of measurable disturbances in non-linear multivariable systems. International Journal of Control, 1993, 58, 1279-1301.	1.2	17
58	Nonlinear control of a batch polymerization reactor: An experimental study. AICHE Journal, 1992, 38, 1429-1448.	1.8	151
59	Discrete-time nonlinear controller synthesis by input/output linearization. AICHE Journal, 1992, 38, 1923-1945.	1.8	73