Darci Odloak

List of Publications by Year in descending order

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85 papers	1,561 citations	24 h-index	329751 37 g-index
85 all docs	85 docs citations	85 times ranked	857 citing authors

#	Article	IF	CITATIONS
1	A One-Layer Stabilizing Model Predictive Control Strategy of Integrating Systems with Repeated Poles. Journal of Control, Automation and Electrical Systems, 2022, 33, 369-381.	1.2	O
2	A stabilizing cooperative-distributed gradient-based economic model predictive control strategy for constrained linear systems. Journal of Process Control, 2022, 112, 36-48.	1.7	1
3	Steady-state simulation and optimization of an air cooled chiller. Case Studies in Thermal Engineering, 2022, 36, 102142.	2.8	4
4	State Estimation of Gas-Lifted Oil Well Using Nonlinear Filters. Sensors, 2022, 22, 4875.	2.1	3
5	Stochastic Multilayer Optimization for an Acrylic Acid Reactor. ACS Omega, 2021, 6, 26150-26169.	1.6	1
6	Stable distributed MPC with zone control and input targets. Computers and Chemical Engineering, 2021, 155, 107507.	2.0	4
7	Hybrid RTO with zone control MPC applied to a Gas-lift system. , 2020, , .		1
8	An efficient cooperative-distributed model predictive controller with stability and feasibility guarantees for constrained linear systems. Systems and Control Letters, 2020, 141, 104701.	1.3	13
9	One-layer gradient-based MPC + RTO strategy for unstable processes: a case study of a CSTR system. Brazilian Journal of Chemical Engineering, 2020, 37, 173-188.	0.7	6
10	A terminal state contractive nonlinear MPC with output zones and input targets. IFAC-PapersOnLine, 2020, 53, 6025-6030.	0.5	1
11	Stabilization of Artificial Gas Lift System Using Nonlinear Model Predictive Control with input Target and Control Zones. , 2020, , .		2
12	An Automatic Tuning Method for Model Predictive Control Strategies. Industrial & Engineering Chemistry Research, 2019, 58, 21602-21613.	1.8	8
13	INTEGRATING REAL TIME OPTIMIZATION AND MODEL PREDICTIVE CONTROL OF A CRUDE DISTILLATION UNIT. Brazilian Journal of Chemical Engineering, 2019, 36, 1205-1222.	0.7	10
14	A robust LQR-MPC control strategy with input constraints and control zones. Journal of Process Control, 2018, 64, 89-99.	1.7	13
15	Application of Model Predictive Control to a Continuous Multipleâ€Effect Crystallizer. Chemical Engineering and Technology, 2018, 41, 1406-1416.	0.9	3
16	One-layer gradient-based MPC + RTO of a propylene/propane splitter. Computers and Chemical Engineering, 2017, 106, 160-170.	2.0	11
17	A zone control strategy for stochastic model predictive control. , 2016, , .		1
18	A robustly stabilizing model predictive control strategy of stable and unstable processes. Automatica, 2016, 67, 132-143.	3.0	31

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19	Reference trajectory tuning of model predictive control. Control Engineering Practice, 2016, 50, 1-11.	3.2	28
20	Tuning the Model Predictive Control of a Crude Distillation Unit. ISA Transactions, 2016, 60, 178-190.	3.1	27
21	Human immunomodulation and initial HIV spread. Computers and Chemical Engineering, 2016, 84, 255-280.	2.0	4
22	Combine operations research with molecular biology to stretch pharmacogenomics and personalized medicine—A case study on HIV/AIDS. Computers and Chemical Engineering, 2015, 80, 114-129.	2.0	5
23	An extended Linear Quadratic Regulator with zone control and input targets. Journal of Process Control, 2015, 29, 33-44.	1.7	2
24	Study of the implementation of a robust MPC in a propylene/propane splitter using rigorous dynamic simulation. Canadian Journal of Chemical Engineering, 2014, 92, 1213-1224.	0.9	3
25	Robust model predictive control of an industrial partial combustion fluidized-bed catalytic cracking converter. Chemical Engineering Research and Design, 2014, 92, 917-930.	2.7	23
26	A gradient-based strategy for the one-layer RTO+MPC controller. Journal of Process Control, 2014, 24, 435-447.	1.7	29
27	Model predictive control suitable for closed-loop re-identification. Systems and Control Letters, 2014, 69, 23-33.	1.3	29
28	Reduction of the QP-MPC cascade structure to a single layer MPC. Journal of Process Control, 2014, 24, 1627-1638.	1.7	4
29	Multi-model MPC with output feedback. Brazilian Journal of Chemical Engineering, 2014, 31, 131-144.	0.7	2
30	Robust model predictive control of integrating time delay processes. Journal of Process Control, 2013, 23, 917-932.	1.7	29
31	LMI-Based Multi-model Predictive Control of an Industrial C3/C4 Splitter. Journal of Control, Automation and Electrical Systems, 2013, 24, 420-429.	1.2	4
32	Robust model predictive control of a pilot plant distillation column. Control Engineering Practice, 2013, 21, 231-241.	3.2	30
33	Infinite horizon MPC applied to an industrial FCC converter. , 2013, , .		0
34	Rescue therapy planning based on HIV genotyping testing. Chemical Engineering Science, 2013, 93, 445-466.	1.9	8
35	Modeling interleukin-2-based immunotherapy in AIDS pathogenesis. Journal of Theoretical Biology, 2013, 335, 57-78.	0.8	9
36	Model Reduction Using Proper Orthogonal Decomposition and Predictive Control of Distributed Reactor System. Journal of Control Science and Engineering, 2013, 2013, 1-19.	0.8	10

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37	Using Dynsimr to study the implementation of advanced control in a Propylene/Propane Splitter*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 33-38.	0.4	O
38	Robust MPC with Output Feedback of Integrating Systems. Journal of Control Science and Engineering, 2012, 2012, 1-10.	0.8	1
39	Integration of RTO with MPC through the gradient of a convex function. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 268-273.	0.4	3
40	Closed-loop re-identification of an industrial debutanizer column. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 862-867.	0.4	0
41	A gradient-based strategy for integrating Real Time Optimizer (RTO) with Model Predictive Control (MPC). IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 33-38.	0.4	6
42	Model Predictive Control for changing economic targets. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 384-391.	0.4	9
43	Closed-loop stable model predictive control of integrating systems with dead time. Journal of Process Control, 2012, 22, 1209-1218.	1.7	16
44	Optimization and control of a continuous polymerization reactor. Brazilian Journal of Chemical Engineering, 2012, 29, 807-820.	0.7	19
45	Linear matrix inequality-based robust model predictive control for time-delayed systems. IET Control Theory and Applications, 2012, 6, 37.	1.2	18
46	Application of an extended IHMPC to an unstable reactor system: Study of feasibility and performance. Journal of Process Control, 2011, 21, 1493-1503.	1.7	21
47	Optimizing model predictive control of an industrial distillation column. Control Engineering Practice, 2011, 19, 1137-1146.	3.2	21
48	Stable MPC for tracking with maximal domain of attraction. Journal of Process Control, 2011, 21, 573-584.	1.7	12
49	Predictive Control of an Industrial Toluene Distillation Column with Economic Objective. , 2011, , .		0
50	Application of IHMPC to an unstable reactor system: study of feasibility and performance. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 284-289.	0.4	0
51	Robust model predictive controller with output feedback and target tracking. IET Control Theory and Applications, 2010, 4, 1377-1390.	1.2	15
52	MPC for tracking zone regions. Journal of Process Control, 2010, 20, 506-516.	1.7	71
53	Robust integration of real time optimization with linear model predictive control. Computers and Chemical Engineering, 2010, 34, 1937-1944.	2.0	34
54	Real time optimization (RTO) with model predictive control (MPC). Computers and Chemical Engineering, 2010, 34, 1999-2006.	2.0	81

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55	Robust Integration of RTO and MPC. Computer Aided Chemical Engineering, 2009, , 119-126.	0.3	1
56	Real Time Optimization (RTO) with Model Predictive Control (MPC). Computer Aided Chemical Engineering, 2009, 27, 1365-1370.	0.3	1
57	Closed-loop model re-identification of processes under MPC with zone control. Control Engineering Practice, 2009, 17, 551-563.	3.2	33
58	A stable MPC with zone control. Journal of Process Control, 2009, 19, 110-122.	1.7	95
59	Infinite horizon MPC with non-minimal state space feedback. Journal of Process Control, 2009, 19, 473-481.	1.7	44
60	Enlarging the domain of attraction of stable MPC controllers, maintaining the output performance. Automatica, 2009, 45, 1080-1085.	3.0	26
61	Stable Model Predictive Control for Integrating Systems with Optimizing Targets. Industrial & Samp; Engineering Chemistry Research, 2009, 48, 9141-9150.	1.8	5
62	Internal Excitation Approaches for Closed-loop Identification of Processes Controlled by MPC. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 458-463.	0.4	1
63	Using kriging models for real-time process optimisation. Computer Aided Chemical Engineering, 2008, 25, 361-366.	0.3	11
64	Stable IHMPC for Unstable Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 6950-6955.	0.4	3
65	Extended robust model predictive control of integrating systems. AICHE Journal, 2007, 53, 1758-1769.	1.8	22
66	Diagnosis of Abnormal Situations in a Continuous Solution Polymerization Reactor. Macromolecular Theory and Simulations, 2007, 16, 247-261.	0.6	3
67	An application of metamodels for process optimization. Computer Aided Chemical Engineering, 2006, , 1449-1454.	0.3	3
68	Predictive control applied to heat-exchanger networks. Chemical Engineering and Processing: Process Intensification, 2006, 45, 661-671.	1.8	32
69	Infinite Horizon MPC of a Heat-exchanger Network. Chemical Engineering Research and Design, 2006, 84, 1041-1050.	2.7	8
70	Robust MPC for systems with output feedback and input saturation. Journal of Process Control, 2005, 15, 837-846.	1.7	14
71	Observer-based fault diagnosis in chemical plants. Chemical Engineering Journal, 2005, 112, 93-108.	6.6	87
72	A stable model predictive control for integrating processes. Computers and Chemical Engineering, 2005, 29, 1089-1099.	2.0	28

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73	Extended robust model predictive control. AICHE Journal, 2004, 50, 1824-1836.	1.8	61
74	An infinite horizon model predictive control for stable and integrating processes. Computers and Chemical Engineering, 2003, 27, 1113-1128.	2.0	38
75	Multi-model predictive control of an industrial C3/C4 splitter. Control Engineering Practice, 2003, 11, 765-779.	3.2	55
76	MPC for stable linear systems with model uncertainty. Automatica, 2003, 39, 569-583.	3.0	58
77	Robust model predictive control of integrating processes. Journal of Process Control, 2003, 13, 101-114.	1.7	18
78	Industrial implementation of a real-time optimization strategy for maximizing production of LPG in a FCC unit. Computers and Chemical Engineering, 2000, 24, 525-531.	2.0	59
79	Output feedback MPC with guaranteed robust stability. Journal of Process Control, 2000, 10, 557-572.	1.7	22
80	Control of the Neutralization Process with the Generic Model Algorithm. Chemical Engineering and Technology, 1998, 21, 369.	0.9	3
81	One-layer real time optimization of LPG production in the FCC unit: procedure, advantages and disadvantages. Computers and Chemical Engineering, 1998, 22, S191-S198.	2.0	60
82	A new treatment of inconsistent quadratic programs in a SQP-based algorithm. Computers and Chemical Engineering, 1998, 22, 1623-1651.	2.0	13
83	Constrained multivariable control of fluid catalytic cracking converters. Journal of Process Control, 1995, 5, 29-39.	1.7	68
84	Robust Model Predictive Control for Time Delayed Systems with Optimizing Targets and Zone Control. , 0 , , .		3
85	An infinite horizon model predictive control for stable, integrating and unstable systems. , 0, , .		O