

# Alexandra Grancharova

## List of Publications by Year in descending order

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Version: 2024-02-01

45  
papers

562  
citations

1039880

9  
h-index

677027

22  
g-index

49  
all docs

49  
docs citations

49  
times ranked

481  
citing authors

#	ARTICLE	IF	CITATIONS
1	Explicit Nonlinear Model Predictive Control. Lecture Notes in Control and Information Sciences, 2012, , .	0.6	75
2	Explicit stochastic predictive control of combustion plants based on Gaussian process models. Automatica, 2008, 44, 1621-1631.	3.0	72
3	Evolving Gaussian process models for prediction of ozone concentration in the air. Simulation Modelling Practice and Theory, 2013, 33, 68-80.	2.2	47
4	UAVs Trajectory Planning by Distributed MPC under Radio Communication Path Loss Constraints. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 79, 115-134.	2.0	46
5	Computation, approximation and stability of explicit feedback min-max nonlinear model predictive control. Automatica, 2009, 45, 1134-1143.	3.0	44
6	Design and Comparison of Explicit Model Predictive Controllers for an Electropneumatic Clutch Actuator Using On/Off Valves. IEEE/ASME Transactions on Mechatronics, 2011, 16, 665-673.	3.7	39
7	Computational Aspects of Approximate Explicit Nonlinear Model Predictive Control. , 2007, , 181-192.		37
8	Explicit model predictive control of gas-liquid separation plant via orthogonal search tree partitioning. Computers and Chemical Engineering, 2004, 28, 2481-2491.	2.0	23
9	Explicit output-feedback nonlinear predictive control based on black-box models. Engineering Applications of Artificial Intelligence, 2011, 24, 388-397.	4.3	22
10	Explicit stochastic Nonlinear Predictive Control based on Gaussian process models. , 2007, , .		15
11	Explicit Approximate Model Predictive Control of Constrained Nonlinear Systems with Quantized Input. Lecture Notes in Control and Information Sciences, 2009, , 371-380.	0.6	15
12	Explicit Model Predictive Control of an electropneumatic clutch actuator using on/off valves and pulse-width modulation. , 2009, , .		11
13	Explicit Approximate Approach to Feedback Min-Max Model Predictive Control of Constrained Nonlinear Systems. , 2006, , .		9
14	Distributed MPC-Based Path Planning for UAVs under Radio Communication Path Loss Constraints. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 254-259.	0.4	9
15	The concept for Gaussian process model based system identification toolbox. , 2007, , .		8
16	Distributed Quasi-Nonlinear Model Predictive Control by Dual Decomposition. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1429-1434.	0.4	8
17	Multi-parametric Programming. Lecture Notes in Control and Information Sciences, 2012, , 1-37.	0.6	7
18	Approaches to explicit Nonlinear Model Predictive Control with reduced partition complexity. , 2009, , .		7

#	ARTICLE	IF	CITATIONS
19	EXPLICIT MIN-MAX MODEL PREDICTIVE CONTROL OF CONSTRAINED NONLINEAR SYSTEMS WITH MODEL UNCERTAINTY. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 1019-1024.	0.4	6
20	Rotary-Wing UAVs Trajectory Planning by Distributed Linear MPC with Reconfigurable Communication Network Topologies. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 198-205.	0.4	6
21	A computational approach to explicit feedback stochastic Nonlinear Model Predictive Control. , 2010, , .		5
22	Distributed Path Planning for a UAV Communication Chain by Dual Decomposition. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 43-48.	0.4	5
23	Nonlinear Model Predictive Control. Lecture Notes in Control and Information Sciences, 2012, , 39-69.	0.6	5
24	Application of Gaussian Processes to the Modelling and Control in Process Engineering. Studies in Computational Intelligence, 2014, , 155-190.	0.7	4
25	Design of Explicit Model Predictive Controllers Based on Orthogonal Partition of the Parameter Space: Methods and A Software Tool. IFAC-PapersOnLine, 2015, 48, 105-110.	0.5	4
26	Distributed Nonlinear Model Predictive Control by Sequential Linearization and Accelerated Gradient Method. IFAC-PapersOnLine, 2016, 49, 597-602.	0.5	4
27	Distributed Robust Model Predictive Control of Interconnected Polytopic Systems. Lecture Notes in Control and Information Sciences, 2015, , 73-91.	0.6	4
28	An Approach to Distributed Robust Model Predictive Control of Discrete-Time Polytopic Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 2576-2581.	0.4	3
29	Distributed Quasi-Nonlinear Model Predictive Control with Contractive Constraint. IFAC-PapersOnLine, 2018, 51, 41-47.	0.5	3
30	Reduced Dimension Approach to Approximate Explicit Model Predictive Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 531-536.	0.4	2
31	Dual-mode Explicit Output-feedback Predictive Control Based on Neural Network Models *. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 545-550.	0.4	2
32	Explicit MPC of Constrained Nonlinear Systems with Quantized Inputs. Lecture Notes in Control and Information Sciences, 2012, , 111-125.	0.6	2
33	An intelligent model predictive control-based strategy for plantwide optimization of degrading plants. , 2016, , .		2
34	Low Complexity Distributed Model Predictive Control by Using Contractive Sets. IFAC-PapersOnLine, 2017, 50, 13164-13169.	0.5	2
35	Contractive Model Predictive Control for Insulin Delivery for Type 1 Diabetics. , 2019, , .		2
36	Suboptimality Analysis of Distributed Quasi-Nonlinear Model Predictive Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 522-528.	0.4	1

#	ARTICLE	IF	CITATIONS
37	Explicit NMPC Based on Neural Network Models. Lecture Notes in Control and Information Sciences, 2012, , 187-207.	0.6	1
38	Explicit interpolation-based nonlinear model predictive control with a convex approximation of the feasible set. , 2014, , .		1
39	Formation Reconfiguration Using Model Predictive Control Techniques for Multi-agent Dynamical Systems. Lecture Notes in Control and Information Sciences, 2015, , 183-205.	0.6	1
40	Explicit Nonlinear Model Predictive Control of a Two-Chamber Microbial Fuel Cell. , 2020, , .		1
41	General strategy for decision support in integrated process synthesis, design and control. Computer Aided Chemical Engineering, 2001, 9, 1003-1008.	0.3	0
42	Explicit Stochastic NMPC. Lecture Notes in Control and Information Sciences, 2012, , 157-186.	0.6	0
43	Explicit NMPC Using mp-QP Approximations of mp-NLP. Lecture Notes in Control and Information Sciences, 2012, , 71-85.	0.6	0
44	Semi-explicit Distributed NMPC. Lecture Notes in Control and Information Sciences, 2012, , 209-231.	0.6	0
45	Intelligent Two-Level Optimization and Model Predictive Control of Degrading Plants. Studies in Computational Intelligence, 2018, , 117-134.	0.7	0