Johannes Jschke

List of Publications by Year in Descending Order

56 papers	391 citations	10 h-index	18 g-index
60 ext. papers	518 ext. citations	2.4 avg, IF	4.54 L-index

#	Paper	IF	Citations
56	Multiple Shooting for Training Neural Differential Equations on Time Series **2022**, 6, 1897-1902		0
55	Steady-state real-time optimization using transient measurements on an experimental rig. *Journal of Process Control*, **2022**, 115, 181-196	3.9	0
54	Sensitivity-Assisted multistage nonlinear model predictive control: Robustness, stability and computational efficiency. *Computers and Chemical Engineering*, **2021**, 148, 107269	4	2
53	Optimal scheduling of flexible thermal power plants with lifetime enhancement under uncertainty. *Applied Thermal Engineering*, **2021**, 191, 116794	5.8	4
52	Online model maintenance in real-time optimization methods. *Computers and Chemical Engineering*, **2021**, 145, 107141	4	1
51	Multi-scenario Design Optimization using ADMM of a Thermal Energy Storage System. *Computer Aided Chemical Engineering*, **2021**, 739-745	0.6	
50	Early field planning using optimisation and considering uncertainties. *Journal of Petroleum Science and Engineering*, **2021**, 207, 109058	4.4	1
49	Real-time optimization with persistent parameter adaptation applied to experimental rig. *IFAC-PapersOnLine*, **2021**, 54, 475-480	0.7	1
48	Adaptive horizon economic nonlinear model predictive control. *Journal of Process Control*, **2020**, 92, 108-118	3.9	4
47	Fast sensitivity-based economic model predictive control for degenerate systems. *Journal of Process Control*, **2020**, 88, 54-62	3.9	2
46	Data-Driven Robust Optimal Operation of Thermal Energy Storage in Industrial Clusters. *Processes*, **2020**, 8, 194	2.9	8
45	Health-aware advanced control applied to a gas-lifted oil well network. *IFAC-PapersOnLine*, **2020**, 53, 301-306	0.7	3
44	Self-Optimizing Control of a Continuous-Flow Pharmaceutical Manufacturing Plant. *IFAC-PapersOnLine*, **2020**, 53, 11601-11606	0.7	1
43	Optimizing the Capacity of Thermal Energy Storage in Industrial Clusters. *Computer Aided Chemical Engineering*, **2020**, 48, 1459-1464	0.6	1
42	First Principles and Machine Learning Virtual Flow Metering: A Literature Review. *Journal of Petroleum Science and Engineering*, **2020**, 184, 106487	4.4	27
41	Data-driven Online Adaptation of the Scenario-tree in Multistage Model Predictive Control. *IFAC-PapersOnLine*, **2019**, 52, 461-467	0.7	5
40	Oil Production Monitoring using Gradient Boosting Machine Learning Algorithm. *IFAC-PapersOnLine* , **2019**, 52, 514-519	0.7	14

39	Using a neural network for estimating plant gradients in real-time optimization with modifier adaptation. *IFAC-PapersOnLine*, **2019**, 52, 808-813	0.7	7
38	Online Model Maintenance via Output Modifier Adaptation. *Industrial & Engineering Chemistry Research*, **2019**, 58, 13750-13766	3.9	5
37	Extracting Valuable Information from Big Data for Machine Learning Control: An Application for a Gas Lift Process. *Processes*, **2019**, 7, 252	2.9	3
36	Optimal Operation of a Subsea Separation System Including a Coalescence Based Gravity Separator Model and a Produced Water Treatment Section. *Industrial & Engineering Chemistry Research*, **2019**, 58, 4168-4185	3.9	5
35	Generalized sensitivity analysis of nonlinear programs using a sequence of quadratic programs. *Optimization*, **2019**, 68, 485-508	1.2	0
34	Simplified First-Principles Model of a Compact Flotation Unit for Use in Optimization and Control. *Industrial & Engineering Chemistry Research*, **2019**, 58, 1273-1285	3.9	5
33	Self-optimizing control of an LNG liquefaction plant. *Journal of Process Control*, **2019**, 74, 63-75	3.9	1
32	Improving Scenario Decomposition for Multistage MPC Using a Sensitivity-Based Path-Following Algorithm **2018**, 2, 581-586		10
31	Fast Economic Model Predictive Control for a Gas Lifted Well Network. *IFAC-PapersOnLine*, **2018**, 51, 25-30	0.7	1
30	Modifier adaptation for real-time optimization of a gas lifted well network. *IFAC-PapersOnLine*, **2018**, 51, 31-36	0.7	3
29	Modeling and control of an inline deoiling hydrocyclone. *IFAC-PapersOnLine*, **2018**, 51, 138-143	0.7	7
28	Fast Sensitivity-Based Nonlinear Economic Model Predictive Control with Degenerate NLP. *IFAC-PapersOnLine*, **2018**, 51, 399-404	0.7	
27	Data-driven Scenario Selection for Multistage Robust Model Predictive Control. *IFAC-PapersOnLine*, **2018**, 51, 462-468	0.7	5
26	Oil production optimization of several wells subject to choke degradation. *IFAC-PapersOnLine*, **2018** , 51, 1-6	0.7	4
25	A Predictor-Corrector Path-Following Algorithm for Dual-Degenerate Parametric Optimization Problems. *SIAM Journal on Optimization*, **2017**, 27, 538-564	2	13
24	Self-optimizing control A survey. *Annual Reviews in Control*, **2017**, 43, 199-223	10.3	38
23	A model for subsea oil-water gravity separator to estimate unmeasured disturbances. *Computer Aided Chemical Engineering*, **2017**, 1489-1494	0.6	2
22	Framework for Combined Diagnostics, Prognostics and Optimal Operation of a Subsea Gas Compression System * *This work is funded by the SUBPRO center for research based innovation, www.ntnu.edu/subpro. *IFAC-PapersOnLine*, **2017**, 50, 15916-15921	0.7	10

21	Sensitivity-Based Economic NMPC with a Path-Following Approach. *Processes*, **2017**, 5, 8	2.9	12
20	Self-Optimizing Control of a Two-Stage Refrigeration Cycle. *IFAC-PapersOnLine*, **2016**, 49, 845-850	0.7	3
19	Optimal operation of energy storage in buildings: Use of the hot water system. *Journal of Energy Storage*, **2016**, 5, 102-112	7.8	5
18	Modelling and optimization of compact subsea liquid-liquid separation system. *Computer Aided Chemical Engineering*, **2016**, 38, 1255-1260	0.6	2
17	Null-space method for optimal operation of transient processes. *IFAC-PapersOnLine*, **2016**, 49, 418-423	0.7	3
16	Integrating self-optimizing control and real-time optimization using zone control MPC. *Journal of Process Control*, **2015**, 34, 35-48	3.9	10
15	An autonomous approach for driving systems towards their limit: an intelligent adaptive anti-slug control system for production maximization. *IFAC-PapersOnLine*, **2015**, 48, 104-111	0.7	3
14	Neighbouring-Extremal Control for Steady-State Optimization Using Noisy Measurements. *IFAC-PapersOnLine*, **2015**, 48, 698-703	0.7	1
13	Fast economic model predictive control based on NLP-sensitivities. *Journal of Process Control*, **2014**, 24, 1260-1272	3.9	60
12	A Self-Optimizing Strategy for Optimal Operation of a Preheating Train for a Crude Oil Unit. *Computer Aided Chemical Engineering*, **2014**, 33, 607-612	0.6	4
11	Optimal operation of heat exchanger networks with stream split: Only temperature measurements are required. *Computers and Chemical Engineering*, **2014**, 70, 35-49	4	21
10	Using Process Data for Finding Self-optimizing Controlled Variables*. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2013**, 46, 451-456		2
9	Dynamic online optimization of a house heating system in a fluctuating energy price scenario. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2013**, 46, 463-468		2
8	Economic plantwide control: Automated controlled variable selection for a reactor-separator-recycle process. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2013**, 46, 87-92		1
7	Optimal controlled variables for polynomial systems. *Journal of Process Control*, **2012**, 22, 167-179	3.9	14
6	Control structure selection for optimal operation of a heat exchanger network **2012**,		1
5	Economically Optimal Controlled Variables for Parallel Units Application to Chemical Reactors1. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2012**, 45, 768-773		1
4	Optimal Operation by Controlling the Gradient to Zero. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2011**, 44, 6073-6078		1

3	NCO tracking and self-optimizing control in the context of real-time optimization. *Journal of Process Control*, **2011**, 21, 1407-1416	3.9	48
2	Self-optimizing invariants in dynamic optimization **2011**,		3
1	Controlled Variables from Optimal Operation Data. *Computer Aided Chemical Engineering*, **2011**, 29, 753-757	0.7	0