Ralf Hannemann-Tamas

List of Publications by Year
in descending order

19	405	933447 10	888059 17
papers	citations	h-index	g-index

19	19	19	349
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A two-layer architecture for economically optimal process control and operation. Journal of Process Control, 2011, 21, 311-321.	3.3	111
2	Neighboring-extremal updates for nonlinear model-predictive control and dynamic real-time optimization. Journal of Process Control, 2009, 19, 1277-1288.	3.3	68
3	Discrete first- and second-order adjoints and automatic differentiation for the sensitivity analysis of dynamic models. Procedia Computer Science, 2010, 1, 297-305.	2.0	33
4	Continuous and Discrete Composite Adjoints for the Hessian of the Lagrangian in Shooting Algorithms for Dynamic Optimization. SIAM Journal of Scientific Computing, 2010, 31, 4675-4695.	2.8	33
5	An iterative partition-based moving horizon estimator with coupled inequality constraints. Automatica, 2015, 61, 302-307.	5.0	29
6	How to verify optimal controls computed by direct shooting methods? â€“ A tutorial. Journal of Process Control, 2012, 22, 494-507.	3.3	26
7	Optimized Hollow Fiber Sorbents and Pressure Swing Adsorption Process for H₂ Recovery. Industrial & Engineering Chemistry Research, 2018, 57, 5093-5105.	3.7	19
8	Incremental single shootingâ€”A robust method for the estimation of parameters in dynamical systems. Computers and Chemical Engineering, 2009, 33, 1298-1305.	3.8	18
9	Model complexity reduction of chemical reaction networks using mixed-integer quadratic programming. Computers and Mathematics With Applications, 2013, 65, 1575-1595.	2.7	16
10	Robust dynamic optimization of batch processes under parametric uncertainty: Utilizing approaches from semi-infinite programs. Computers and Chemical Engineering, 2018, 116, 253-267.	3.8	15
11	Multiscale dynamic modeling and simulation of a biorefinery. Biotechnology and Bioengineering, 2019, 116, 2561-2574.	3.3	9
12	Polynomial approximation of inequality path constraints in dynamic optimization. Computers and Chemical Engineering, 2020, 135, 106732.	3.8	6
13	Higher-order Discrete Adjoint ODE Solver in C++ for Dynamic Optimization. Procedia Computer Science, 2015, 51, 256-265.	2.0	5
14	Modeling of dynamic systems with a variable number of phases in liquidâ€“liquid equilibria. AICHE Journal, 2019, 65, 571-581.	3.6	5
15	Simulation of differential-algebraic equation systems with optimization criteria embedded in Modelica. Computers and Chemical Engineering, 2020, 140, 106920.	3.8	5
16	Adjoint Sensitivity Analysis for Nonsmooth Differential-Algebraic Equation Systems. SIAM Journal of Scientific Computing, 2015, 37, A2380-A2402.	2.8	4
17	Guaranteed satisfaction of inequality state constraints in PDE-constrained optimization. Automatica, 2020, 111, 108653.	5.0	3
18	Full algorithmic differentiation of a Rosenbrock-type method for direct single shooting. , 2014, , .		0

#	Article	IF	Citations
19	Direct single shooting for dynamic optimization of differential-algebraic equation systems with optimization criteria embedded. Computers and Chemical Engineering, 2022, 159, 107643.	3.8	0