Julien L Billeter

List of Publications by Year
in descending order

26 papers	260 citations	1040056 9 h-index	996975 15 g-index
26 all docs	26 docs citations	26 times ranked	184 citing authors

#	Article	IF	Citations
1	Maximum-likelihood estimation of kinetic parameters via the extent-based incremental approach. Computers and Chemical Engineering, 2019, 122, 152-171.	3.8	6
2	Incremental Parameter Estimation under Rank-Deficient Measurement Conditions. Processes, 2019, 7, 75.	2.8	4
3	Sequential model identification of reaction systemsâ€"The missing path between the incremental and simultaneous approaches. AICHE Journal, 2019, 65, 1211.	3.6	5
4	Fast Estimation of Plant Steady State for Imperfectly Known Dynamic Systems, with Application to Real-Time Optimization. Industrial & Engineering Chemistry Research, 2018, 57, 3699-3716.	3.7	7
5	On decoupling rate processes in chemical reaction systems â€“ Methods and applications. Computers and Chemical Engineering, 2018, 114, 296-305.	3.8	7
6	Shape constrained splines as transparent black-box models for bioprocess modeling. Computers and Chemical Engineering, 2017, 99, 96-105.	3.8	14
7	Data reconciliation for chemical reaction systems using vessel extents and shape constraints. Computers and Chemical Engineering, 2017, 101, 44-58.	3.8	22
8	Identification of Biokinetic Models Using the Concept of Extents. Environmental Science & Technology, 2017, 51, 7520-7531.	10.0	2
9	Semi-analytical solutions for tubular chemical reactors. Chemical Engineering Science, 2017, 172, 239-249.	3.8	4
10	Generalization of the concept of extents to distributed reaction systems. Chemical Engineering Science, 2017, 171, 558-575.	3.8	10
11	Extent computation under rank-deficient conditions. IFAC-PapersOnLine, 2017, 50, 3929-3934.	0.9	2
12	Global Identification of Kinetic Parameters via the Extent-based Incremental Approach. Computer Aided Chemical Engineering, 2017, 40, 2119-2124.	0.5	4
13	Identification of Multiphase Reaction Systems with Instantaneous Equilibria. Industrial & Engineering Chemistry Research, 2016, 55, 8034-8045.	3.7	8
14	On the Use of Shape-Constrained Splines for Biokinetic Process Modeling**This study is financed by Eawag Discretionary Funds (PSP: 5221.00492.009.03).. IFAC-PapersOnLine, 2016, 49, 1145-1150.	0.9	2
15	On the use of shape constraints for state estimation in reaction systems. IFAC-PapersOnLine, 2016, 49, 73-78.	0.9	2
16	Incremental Model Identification of Distributed Two-phase Reaction Systems. IFAC-PapersOnLine, 2015, 48, 266-271.	0.9	2
17	Data Reconciliation in Reaction Systems using the Concept of Extents. Computer Aided Chemical Engineering, 2015, , 419-424.	0.5	10
18	Control of Reaction Systems via Rate Estimation and Feedback Linearization. Computer Aided Chemical Engineering, 2015, , 137-142.	0.5	9

#	Article	IF	Citations
19	Variant and invariant states for chemical reaction systems. Computers and Chemical Engineering, 2015, 73, 23-33.	3.8	58
20	Comprehensive kinetic model for the dissolution, reaction, and crystallization processes involved in the synthesis of aspirin. Journal of Chemometrics, 2014, 28, 420-428.	1.3	9
21	Extent-based kinetic identification using spectroscopic measurements and multivariate calibration. Analytica Chimica Acta, 2013, 767, 21-34.	5.4	16
22	Kinetic Modeling of Dissolution and Crystallization of Slurries with Attenuated Total Reflectance UVâ€“Visible Absorbance and Near-Infrared Reflectance Measurements. Analytical Chemistry, 2013, 85, 5367-5375.	6.5	12
23	Extent-based incremental identification of reaction systems using concentration and calorimetric measurements. Chemical Engineering Journal, 2012, 207-208, 785-793.	12.7	14
24	Systematic prediction of linear dependencies in the concentration profiles and implications on the kinetic hard-modelling of spectroscopic data. Chemometrics and Intelligent Laboratory Systems, 2009, 95, 170-187.	3.5	6
25	Kinetic hard-modelling and spectral validation of rank-deficient spectroscopic data: A case study. Chemometrics and Intelligent Laboratory Systems, 2009, 98, 213-226.	3.5	4
26	Uncertainties and error propagation in kinetic hard-modelling of spectroscopic data. Chemometrics and Intelligent Laboratory Systems, 2008, 93, 120-131.	3.5	21