

Jakob Kj bsted Huusom

List of Publications by Year in descending order

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72
papers

795
citations

516710

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74
all docs

74
docs citations

74
times ranked

710
citing authors

#	ARTICLE	IF	CITATIONS
1	Improving convergence of Iterative Feedback Tuning. Journal of Process Control, 2009, 19, 570-578.	3.3	60
2	A control scheme for filament stretching rheometers with application to polymer melts. Journal of Non-Newtonian Fluid Mechanics, 2013, 194, 14-22.	2.4	49
3	Tuning SISO offset-free Model Predictive Control based on ARX models. Journal of Process Control, 2012, 22, 1997-2007.	3.3	48
4	Systematic integrated process design and control of binary element reactive distillation processes. AIChE Journal, 2016, 62, 3137-3154.	3.6	46
5	Systematic integrated process design and control of reactive distillation processes involving multi-elements. Chemical Engineering Research and Design, 2016, 115, 348-364.	5.6	37
6	Mechanistic modeling of biodiesel production using a liquid lipase formulation. Biotechnology Progress, 2014, 30, 1277-1290.	2.6	28
7	Finite horizon MPC for systems in innovation form. , 2011, , .		27
8	Benchmarking real-time monitoring strategies for ethanol production from lignocellulosic biomass. Biomass and Bioenergy, 2019, 127, 105296.	5.7	25
9	Systematic Sustainable Process Design and Analysis of Biodiesel Processes. Processes, 2013, 1, 167-202.	2.8	23
10	Challenges and opportunities in integration of design and control. Computers and Chemical Engineering, 2015, 81, 138-146.	3.8	23
11	Parameter estimation and analysis of an automotive heavy-duty SCR catalyst model. Chemical Engineering Science, 2017, 161, 167-177.	3.8	21
12	Optimal operation and stabilising control of the concentric heat-integrated distillation column (HIDiC). Computers and Chemical Engineering, 2017, 96, 196-211.	3.8	21
13	A design algorithm using external perturbation to improve Iterative Feedback Tuning convergence. Automatica, 2011, 47, 2665-2670.	5.0	20
14	Flow-following sensor devices: A tool for bridging data and model predictions in large-scale fermentations. Computational and Structural Biotechnology Journal, 2020, 18, 2908-2919.	4.1	19
15	Tuning of methods for offset free MPC based on ARX model representations. , 2010, , .		18
16	Modeling and analysis of conventional and heat-integrated distillation columns. AIChE Journal, 2015, 61, 4251-4263.	3.6	18
17	Control structure design for resource recovery using the enhanced biological phosphorus removal and recovery (EBP2R) activated sludge process. Chemical Engineering Journal, 2016, 296, 447-457.	12.7	16
18	Analysis and model-based optimization of a pectin extraction process. Journal of Food Engineering, 2019, 244, 159-169.	5.2	16

#	ARTICLE	IF	CITATIONS
19	Driving Force Based Design of Cyclic Distillation. Industrial & Engineering Chemistry Research, 2017, 56, 10833-10844.	3.7	14
20	High-order approximation of chromatographic models using a nodal discontinuous Galerkin approach. Computers and Chemical Engineering, 2018, 109, 68-76.	3.8	14
21	Integrated Process Design and Control of Cyclic Distillation Columns. IFAC-PapersOnLine, 2018, 51, 542-547.	0.9	13
22	ChromaTech: A discontinuous Galerkin spectral element simulator for preparative liquid chromatography. Computers and Chemical Engineering, 2020, 141, 107012.	3.8	13
23	A novel operation cost optimization system for mix-burning coal slime circulating fluidized bed boiler unit. Applied Thermal Engineering, 2019, 148, 620-631.	6.0	11
24	State Estimation in the Automotive SCR DeNOx Process. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 501-506.	0.4	10
25	Robust Batch-to-Batch Optimization with Scenario Adaptation. Industrial & Engineering Chemistry Research, 2019, 58, 13664-13674.	3.7	10
26	ARX-Model based Model Predictive Control with Offset-Free Tracking. Computer Aided Chemical Engineering, 2010, 28, 601-606.	0.5	9
27	A mass and energy balance stage model for cyclic distillation. AIChE Journal, 2020, 66, e16259.	3.6	9
28	Characterization of mixing performance in bioreactors using flow-following sensor devices. Chemical Engineering Research and Design, 2021, 174, 471-485.	5.6	9
29	Integrated Process Design and Control of Multi-element Reactive Distillation Processes. IFAC-PapersOnLine, 2016, 49, 735-740.	0.9	8
30	Data Driven Tuning of State Space Control loops with unknown state information and model uncertainty.. Computer Aided Chemical Engineering, 2009, 26, 441-446.	0.5	7
31	Pressure Control in Distillation Columns: A Model-Based Analysis. Industrial & Engineering Chemistry Research, 2014, 53, 14776-14787.	3.7	7
32	Adding Value to Bioethanol through a Purification Process Revamp. Industrial & Engineering Chemistry Research, 2017, 56, 5692-5704.	3.7	7
33	A Bottlenecking Study of an Industrial Pharmaceutical Batch Plant. Industrial & Engineering Chemistry Research, 2019, 58, 20003-20013.	3.7	7
34	Automated Compartment Model Development Based on Data from Flow-Following Sensor Devices. Processes, 2021, 9, 1651.	2.8	7
35	Noise Modelling and MPC Tuning for Systems with Infrequent Step Disturbances. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 11226-11232.	0.4	6
36	Adaptive disturbance estimation for offset-free SISO Model Predictive Control. , 2011, , .		6

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37	Control assessment for heat integrated systems. An industrial case study for ethanol recovery. Chemical Engineering and Processing: Process Intensification, 2013, 67, 60-70.	3.6	6
38	Analysing separation and reaction stage performance in a reactive cyclic distillation process. Chemical Engineering and Processing: Process Intensification, 2021, 167, 108515.	3.6	6
39	Challenges in Optimization and Control of Biobased Process Systems: An Industrial-Academic Perspective. Industrial & Engineering Chemistry Research, 2021, 60, 14985-15003.	3.7	6
40	A Framework for Modular Modeling of the Diesel Engine Exhaust Gas Cleaning System. Computer Aided Chemical Engineering, 2015, 37, 455-460.	0.5	5
41	State Estimation in Fermentation of Lignocellulosic Ethanol. Focus on the Use of pH Measurements. Computer Aided Chemical Engineering, 2015, , 1769-1774.	0.5	5
42	Real-time model based process monitoring of enzymatic biodiesel production. Biotechnology Progress, 2015, 31, 585-595.	2.6	5
43	Mathematical Modelling and Simulation of a Trickle-Bed Reactor for Hydrotreating of Petroleum Feedstock. International Journal of Chemical Reactor Engineering, 2019, 17, .	1.1	5
44	Raw material quality assessment approaches comparison in pectin production. Biotechnology Progress, 2019, 35, e2762.	2.6	5
45	Energy-efficient operation of a direct air-cooled condenser based on divisional regulation. International Journal of Refrigeration, 2021, 132, 233-242.	3.4	5
46	A tuning procedure for ARX-based MPC. , 2013, , .		4
47	Dynamic effects of diabatisation in distillation columns. Computer Aided Chemical Engineering, 2013, , 1015-1020.	0.5	4
48	Cost competitive "soft sensor" for determining product recovery in industrial methanol. , 2017, , .		4
49	Data driven tuning of state space controllers with observers. , 2009, , .		3
50	Application of Uncertainty and Sensitivity Analysis to a Kinetic Model for Enzymatic Biodiesel Production. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 149-156.	0.4	3
51	Fed-Batch Feeding Strategies for Enzymatic Biodiesel Production. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 6204-6209.	0.4	3
52	From Fed-batch to Continuous Enzymatic Biodiesel Production. Computer Aided Chemical Engineering, 2015, , 1337-1342.	0.5	3
53	Active disturbance rejection control of a heat integrated distillation column. , 2016, , .		3
54	Estimation of Kinetic Parameters in an Automotive SCR Catalyst Model. Topics in Catalysis, 2016, 59, 945-951.	2.8	3

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55	State and Input Estimation of Nonlinear Chromatographic Processes. , 2019, , .		3
56	Economic Optimal Control of a U-loop Bioreactor using Simultaneous Collocation-based Approaches. , 2019, , .		3
57	Spatial Discretization and Kalman Filtering for Ideal Packed-Bed Chromatography. , 2019, , .		3
58	Discrete-continuous dynamic simulation of plantwide batch process systems in MATLAB. Chemical Engineering Research and Design, 2020, 159, 66-77.	5.6	3
59	Iterative Feedback Tuning of State Space Control Loops with Observers Given Model Uncertainty.. Computer Aided Chemical Engineering, 2009, 27, 1359-1364.	0.5	2
60	A Modeling Framework for Conventional and Heat Integrated Distillation Columns. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 373-378.	0.4	2
61	Control Structure Design of an Innovative Enhanced Biological Nutrient Recovery Activated Sludge System Coupled with a Photobioreactor. Computer Aided Chemical Engineering, 2015, 37, 2555-2560.	0.5	2
62	A novel tuning approach for offset-free MPC. , 2015, , .		2
63	Dynamic Modeling and Analysis of an Industrial Gas Suspension Absorber for Flue Gas Desulfurization. Emission Control Science and Technology, 2016, 2, 20-32.	1.5	2
64	The Extended Kalman Filter for Nonlinear State Estimation in a U-loop Bioreactor. , 2019, , .		2
65	Simulation of NMPC for a Laboratory Adiabatic CSTR with an Exothermic Reaction. , 2020, , .		2
66	Economic Nonlinear Model Predictive Control of a U-loop Bioreactor. , 2020, , .		2
67	Quantitative metrics for evaluating reactive cyclic distillation performance. Chemical Engineering and Processing: Process Intensification, 2022, 174, 108843.	3.6	2
68	Iterative controller tuning for processes with fold bifurcations. Computer Aided Chemical Engineering, 2007, 24, 835-840.	0.5	1
69	Analysis and evaluation of a heat integrated horizontal distillation system. Computer Aided Chemical Engineering, 2018, , 217-222.	0.5	1
70	Economic analysis of a horizontal diabatic separation system. Chemical Engineering Research and Design, 2019, 147, 709-720.	5.6	1
71	Application of the IFSH Methodology for Plantwide Control for an Evaporator Benchmark Process. IFAC-PapersOnLine, 2021, 54, 146-151.	0.9	0
72	Systematic identification and robust control design for uncertain time delay processes. Computer Aided Chemical Engineering, 2011, , 442-446.	0.5	0