Harvey Arellano-Garcia

List of Publications by Year
in descending order

193 papers	2,432 citations	270111 25 h-index	274796 44 g-index
208 all docs	208 docs citations	208 times ranked	2458 citing authors

#	Article	IF	Citations
1	Are Ni/ and Ni5Fe1/biochar catalysts suitable for synthetic natural gas production? A comparison with Î³-Al2O3 supported catalysts. Green Energy and Environment, 2023, 8, 744-756.	4.7	10
2	Valorization of biomass-derived CO_2 residues with Cu-MnOx catalysts for RWGS reaction. Renewable Energy, 2022, 182, 443-451.	4.3	22
3	Economic approach for CO_2 valorization from hydrothermal carbonization gaseous streams via reverse water-gas shift reaction. Fuel, 2022, 313, 123055.	3.4	6
4	Deep Learning-Based Fault Prediction in Wireless Sensor Network Embedded Cyber-Physical Systems for Industrial Processes. IEEE Access, 2022, 10, 10867-10879.	2.6	8
5	A Model Predictive Control-Based Decision-Making Strategy for Residential Microgrids. Eng, 2022, 3, 100-115.	1.2	2
6	3D-printed structured catalysts for CO_2 methanation reaction: Advancing of gyroid-based geometries. Energy Conversion and Management, 2022, 258, 115464.	4.4	12
7	Development of one-pot Cu/cellulose derived carbon catalysts for RWGS reaction. Fuel, 2022, 319, 123707.	3.4	8
8	Catalytic Upgrading of Biomass-Gasification Mixtures Using Ni-Fe/MgAl$_2$O$_4$ as a Bifunctional Catalyst. Energy & Fuels, 2022, 36, 8267-8273.	2.5	5
9	Optimal Operation of an Industrial Natural Gas Fired Natural Draft Heater. Chemical Engineering Journal Advances, 2022, 11, 100354.	2.4	1
10	CO_2 methanation on Ni/YMn1-xAlxO3 perovskite catalysts. Applied Materials Today, 2022, 29, 101577.	2.3	5
11	An identification approach to a reaction network for an ABE catalytic upgrade. Computer Aided Chemical Engineering, 2021, 50, 643-648.	0.3	0
12	Unprofitability of small biogas plants without subsidies in the Brandenburg region. Environmental Chemistry Letters, 2021, 19, 1823-1829.	8.3	20
13	Zr and Fe on Pt/ CeO $_2$ â€MO $_x$ / Al $_2$ O $_3$ catalysts for WGS reaction. International Journal of Energy Research, 2021, 45, 13978-13989.	2.2	4
14	Nickel Phosphide Catalysts as Efficient Systems for CO_2 Upgrading via Dry Reforming of Methane. Catalysts, 2021, 11, 446.	1.6	26
15	Cu supported Fe-SiO2 nanocomposites for reverse water gas shift reaction. Journal of CO_2 Utilization, 2021, 46, 101493.	3.3	21
16	Stepping toward Efficient Microreactors for CO$_2$ Methanation: 3D-Printed Gyroid Geometry. ACS Sustainable Chemistry and Engineering, 2021, 9, 8198-8206.	3.2	22
17	Exploring profitability of bioeconomy paths: Dimethyl ether from biogas as case study. Energy, 2021, 225, 120230.	4.5	16
18	Ni/YMnO3 perovskite catalyst for CO_2 methanation. Applied Materials Today, 2021, 23, 101055.	2.3	13

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19	Effects of Dynamic Pricing on the Design and Operation of Distributed Energy Resource Networks. Processes, 2021, 9, 1306.	1.3	3
20	Towards emission free steel manufacturing â€" Exploring the advantages of a CO_2 methanation unit to minimize CO_2 emissions. Science of the Total Environment, 2021, 781, 146776.	3.9	9
21	Syngas production using CO_2-rich residues: From ideal to real operating conditions. Journal of CO_2 Utilization, 2021, 52, 101661.	3.3	10
22	Assessing the impact of textural properties in Niâ€"Fe catalysts for CO_2 methanation performance. Microporous and Mesoporous Materials, 2021, 327, 111405.	2.2	4
23	Optimal design of heating and cooling pipeline networks for residential distributed energy resource systems. Energy, 2021, 235, 121430.	4.5	9
24	Optimal design and operation of distributed energy resources systems for residential neighbourhoods. Smart Energy, 2021, 4, 100049.	2.6	12
25	Promoting bioeconomy routes: From food waste to green biomethane. A profitability analysis based on a real case study in eastern Germany. Journal of Environmental Management, 2021, 300, 113788.	3.8	21
26	The reverse water gas shift reaction: a process systems engineering perspective. Reaction Chemistry and Engineering, 2021, 6, 954-976.	1.9	129
27	Optimization of lactic acid production by Lactobacillus plantarum strain Hui1 in a medium containing sugar cane molasses. Agronomia Colombiana, 2021, 39, 98-107.	0.1	0
28	Synthesis and characterisation of nâ€ctacosane@silica nanocapsules for thermal storage applications. International Journal of Energy Research, 2020, 44, 2306-2315.	2.2	6
29	Real-time feasibility of nonlinear model predictive control for semi-batch reactors subject to uncertainty and disturbances. Computers and Chemical Engineering, 2020, 133, 106529.	2.0	6
30	CFD Analysis of the Use of Desert Sand as Thermal Energy Storage Medium in a Solar Powered Fluidised Bed Harvesting Unit. Computer Aided Chemical Engineering, 2020, 48, 349-354.	0.3	0
31	Global Sensitivity Analysis for Design and Operation of Distributed Energy Systems. Computer Aided Chemical Engineering, 2020, 48, 1519-1524.	0.3	2
32	Circular Economy in Banana Cultivation. Computer Aided Chemical Engineering, 2020, 48, 1567-1572.	0.3	1
33	;Valorisation of banana peels by hydrothermal carbonisation: Potential use of the hydrochar and liquid by-product for water purification and energy conversion. Bioresource Technology Reports, 2020, 12, 100582.	1.5	13
34	Numerical modelling of the interaction between eccrine sweat and textile fabric for the development of smart clothing. International Journal of Clothing Science and Technology, 2020, 32, 761-774.	0.5	1
35	An Inter-Disciplinary Modelling Approach in Industrial 5G/6G and Machine Learning Era. , 2020, , .		6
36	Finite element modelling of the thermal performance of salinity gradient solar ponds. Energy, 2020, 203, 117861.	4.5	18

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37	Process design and evaluation of syngas-to-ethanol conversion plants. Journal of Cleaner Production, 2020, 269, 122078.	4.6	13
38	Catalytic upgrading of acetone, butanol and ethanol (ABE): A step ahead for the production of added value chemicals in bio-refineries. Renewable Energy, 2020, 156, 1065-1075.	4.3	12
39	Comparative CFD analysis of thermal energy storage materials in photovoltaic/thermal panels. Computer Aided Chemical Engineering, 2019, , 793-798.	0.3	1
40	Hydrogen Production via Load–Matched Coupled Solar–Proton Exchange Membrane Electrolysis Using Aqueous Methanol. Chemical Engineering and Technology, 2019, 42, 2340-2347.	0.9	6
41	Increasing operational efficiency through the integration of an oil refinery and an ethylene production plant. Chemical Engineering Research and Design, 2019, 152, 85-94.	2.7	13
42	Modelling and optimal operation of a natural gas fired natural draft heater. Computer Aided Chemical Engineering, 2019, 46, 985-990.	0.3	1
43	Fractal branch-like fractal shell-and-tube heat exchangers: A CFD study of the shell side performance. IFAC-PapersOnLine, 2019, 52, 100-105.	0.5	3
44	Integration of Fossil Fuel-based with Bio-based Industries: The Use of Waste Streams and Biomass to Produce Syngas and Added Value Products. IFAC-PapersOnLine, 2019, 52, 616-621.	0.5	5
45	A Mixed-Integer Linear Programming Model for the Optimal Operation and Design of Residential Neighbourhoods. IFAC-PapersOnLine, 2019, 52, 934-939.	0.5	5
46	Centralised versus localised supply chain management using a flow configuration model. Computer Aided Chemical Engineering, 2019, 46, 1381-1386.	0.3	3
47	Numerical and experimental characterization of the hydrodynamics and drying kinetics of a barbotine slurry spray. Chemical Engineering Science, 2019, 195, 83-94.	1.9	3
48	Influence of Reaction Parameters on the Catalytic Upgrading of an Acetone, Butanol, and Ethanol (ABE) Mixture: Exploring New Routes for Modern Biorefineries. Frontiers in Chemistry, 2019, 7, 906.	1.8	5
49	Optimisation and control of a distributed energy resource network using Internet-of-Things technologies. Computer Aided Chemical Engineering, 2019, 46, 79-84.	0.3	1
50	Devicification of Food Process Engineering. , 2019, , .		0
51	Integrating Oil Refineries and Bio-refineries: Upgrading Acetone, Butanol and Ethanol to High-Value Products. Computer Aided Chemical Engineering, 2019, 46, 349-354.	0.3	0
52	Improved Prediction of Phosphorus Dynamics in Biotechnological Processes by Considering Precipitation and Polyphosphate Formation: A Case Study on Antibiotic Production with Streptomyces coelicolor. Industrial & Engineering Chemistry Research, 2018, 57, 9740-9749.	1.8	1
53	Multicomponent Ni-CeO2 nanocatalysts for syngas production from CO2/CH4 mixtures. Journal of CO2 Utilization, 2018, 25, 68-78.	3.3	61
54	Chemical CO2 recycling via dry and bi reforming of methane using Ni-Sn/Al2O3 and Ni-Sn/CeO2-Al2O3 catalysts. Applied Catalysis B: Environmental, 2018, 224, 125-135.	10.8	178

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55	On the effect of the Froude number on the interface area of gravity-driven liquid rivulets. Chemical Engineering Research and Design, 2018, 130, 208-218.	2.7	4
56	Modelling and Optimisation Approach of an Integrated Oil Refinery and a Petrochemical Plant. Computer Aided Chemical Engineering, 2018, 44, 1081-1086.	0.3	1
57	A model-based approach to design miniaturised structured packings for highly efficient mass transfer in gas/liquid multiphase flows. Computer Aided Chemical Engineering, 2018, 43, 821-826.	0.3	0
58	A Mathematical Programming Approach to Optimal Design of Smart Distributed Energy Systems. Computer Aided Chemical Engineering, 2018, , 2521-2526.	0.3	2
59	Dull or bright you still get electric delight: A new approach to the design of all-weather panels. Computer Aided Chemical Engineering, 2018, , 211-216.	0.3	1
60	Synthetic natural gas production from CO_2 over Ni-x/CeO2-ZrO2 (x = Fe, Co) catalysts: Influence of promoters and space velocity. Catalysis Today, 2018, 317, 108-113.	2.2	64
61	Towards the cooperative-based control of chemical plants. Computer Aided Chemical Engineering, 2018, 43, 1087-1092.	0.3	1
62	CO_2 valorisation via Reverse Water-Gas Shift reaction using advanced Cs doped Fe-Cu/Al2O3 catalysts. Journal of CO2 Utilization, 2017, 21, 423-428.	3.3	156
63	Adaptation of Control Structure Design Methods to an Industrial Plant Engineering Workflow. Industrial & Engineering Chemistry Research, 2017, 56, 14270-14281.	1.8	0
64	Numerical Modelling of Braiding and Meandering Instabilities in Gravity‐Driven Liquid Rivulets. Chemie-Ingenieur-Technik, 2017, 89, 1515-1522.	0.4	2
65	Model Based Analysis of a Petroleum Refinery Plant with Hydrotreating as a Pre-treatment Unit. Computer Aided Chemical Engineering, 2017, 40, 835-840.	0.3	0
66	Integration of Bio-refinery Concepts in Oil Refineries. Computer Aided Chemical Engineering, 2017, , 829-834.	0.3	4
67	Modelling of the Thermal Performance of SGSP using COMSOL Multiphysics. Computer Aided Chemical Engineering, 2017, 40, 2575-2580.	0.3	2
68	Improving the Prediction of Phosphate Dynamics in Biotechnological Processes: A Case Study Based on Antibiotic Production Using Streptomyces coelicolor. Computer Aided Chemical Engineering, 2017, 40, 2869-2874.	0.3	1
69	Model-Based Analysis and Integration of Synthetic Methane Production and Methane Oxidative Coupling. Computer Aided Chemical Engineering, 2017, 40, 1147-1152.	0.3	0
70	Solar Hydrogen Production via Aqueous Methanol Electrolysis. Computer Aided Chemical Engineering, 2017, , 2533-2538.	0.3	2
71	Experimental Work Towards the Improvement of a Kinetic Model for Acetone-Butanol-Ethanol Pathway. Computer Aided Chemical Engineering, 2017, , 2875-2880.	0.3	0
72	Systematic approach in testing the viability of mechanical partial-cut singulation process towards tin-plateable sidewalls for wettable flank on automotive QFN technology. , 2016, , .		2

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73	Electric Field Driven Separation of Oil–Water Mixtures: Model Development and Experimental Verification. Industrial & Engineering Chemistry Research, 2016, 55, 4585-4598.	1.8	18
74	Construction of global optimization constrained NLP test cases from unconstrained problems. Chemical Engineering Research and Design, 2016, 109, 753-769.	2.7	0
75	ICRS-Filter: A randomized direct search algorithm for constrained nonconvex optimization problems. Chemical Engineering Research and Design, 2016, 106, 178-190.	2.7	3
76	Optimal Operation Strategy for Biohydrogen Production. Industrial & Engineering Chemistry Research, 2015, 54, 6334-6343.	1.8	32
77	A Novel Quantisation-based Integration Method for ODEs. Computer Aided Chemical Engineering, 2015, 37, 473-478.	0.3	0
78	A Novel Rigorous Mathematical Programming Approach to Construct Phenomenological Models. Computer Aided Chemical Engineering, 2015, , 707-712.	0.3	1
79	Energy and Yield Evaluation of an Alcohols and Hydrocarbons Production Plant using Rh-based Catalysts with Different Promoters. Computer Aided Chemical Engineering, 2015, 37, 1271-1276.	0.3	0
80	Process for Synthesis of Biodiesel from Used Cooking Oil: Feasibility and Experimental Studies. Computer Aided Chemical Engineering, 2014, , 1111-1116.	0.3	0
81	Electric Field Driven Separation of Oil-water Mixtures: Model Development. Computer Aided Chemical Engineering, 2014, 33, 1615-1620.	0.3	0
82	Optimal operation of a membrane reactor network. AICHE Journal, 2014, 60, 170-180.	1.8	8
83	An approach to mechanistic event recognition applied on monitoring organic matter depletion in SBRs. AICHE Journal, 2014, 60, 3460-3472.	1.8	5
84	Kinetics of 1-dodecene hydroformylation in a thermomorphic solvent system using a rhodium-biphephos catalyst. Chemical Engineering Science, 2014, 115, 31-48.	1.9	85
85	Towards a novel process concept for the hydroformylation of higher alkenes: Mini-plant operation strategies via model development and optimal experimental design. Chemical Engineering Science, 2014, 115, 127-138.	1.9	9
86	Optimization Model of Crude Oil Distillation Units for Optimal Crude Oil Blending and Operating Conditions. Industrial & Engineering Chemistry Research, 2013, 52, 12993-13005.	1.8	30
87	Model based optimization of the intermittent aeration profile for SBRs under partial nitrification. Water Research, 2013, 47, 3399-3410.	5.3	75
88	Experimental evaluation of an approach to online redesign of experiments for parameter determination. AICHE Journal, 2013, 59, 1981-1995.	1.8	33
89	Simultaneous solution approach to model‐based experimental design. AICHE Journal, 2013, 59, 4169-4183.	1.8	19
90	Improving the Operating Conditions of Gradient Ion-Exchange Simulated Moving Bed for Protein Separation. Industrial & Engineering Chemistry Research, 2013, 52, 5407-5417.	1.8	9

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91	Techno-Economic Analysis for the Synthesis of Downstream Processes from the Oxidative Coupling of Methane Reaction. Computer Aided Chemical Engineering, 2012, 31, 410-414.	0.3	1
92	Model-based design of experiments for model identification using closed-loop set-point response. Computer Aided Chemical Engineering, 2012, 30, 1337-1341.	0.3	1
93	Improvement of Crude Oil Refinery Gross Margin using a NLP Model of a Crude Distillation Unit System. Computer Aided Chemical Engineering, 2012, 30, 987-991.	0.3	2
94	Design and modeling of a new periodical-steady state process for the oxidation of sulfur dioxide in the context of an emission free sulfuric acid plant. Computer Aided Chemical Engineering, 2012, , 1677-1681.	0.3	4
95	Model-based system identification and PI controller tuning using closed-loop set-point response. Computer Aided Chemical Engineering, 2012, , 755-759.	0.3	1
96	Durchgängige Nutzung von Prozessmodellen während des Prozesslebenszyklus: ein industrielles Fallbeispiel. Chemie-Ingenieur-Technik, 2012, 84, 1971-1979.	0.4	4
97	Oxidative Coupling of Methane: Optimal Operating Policies for a Membrane Reactor Network. Chemie-Ingenieur-Technik, 2012, 84, 1980-1988.	0.4	3
98	Experimental investigation of fluidized-bed reactor performance for oxidative coupling of methane. Journal of Natural Gas Chemistry, 2012, 21, 534-543.	1.8	28
99	Methane Oxidative Coupling: Synthesis of Membrane Reactor Networks. Industrial & Engineering Chemistry Research, 2012, 51, 7747-7761.	1.8	15
100	Process development in a miniplant scale - A multilevel - multiscale PSE approach for developing an improved Oxidative Coupling of Methane process. Computer Aided Chemical Engineering, 2012, , 1692-1696.	0.3	4
101	Hierarchical simulation of integrated chemical processes with a web based modeling tool. Computer Aided Chemical Engineering, 2012, 31, 155-159.	0.3	3
102	Input reconstruction for statistical‐based fault detection and isolation. AICHE Journal, 2012, 58, 1513-1523.	1.8	10
103	Generation of discrete first‐and second‐order sensitivities for single shooting. AICHE Journal, 2012, 58, 3110-3122.	1.8	10
104	Beschleunigte Prozesssynthese im Rahmen der Realisierung der emissionsfreien Schwefelsäureanlage. Chemie-Ingenieur-Technik, 2012, 84, 1231-1231.	0.4	0
105	Two‐Dimensional Model for Oxidative Coupling of Methane in a Packed‐Bed Membrane Reactor. Chemical Engineering and Technology, 2012, 35, 294-301.	0.9	25
106	ASM3 extended for two‐step nitrification–denitrification: a model reduction for sequencing batch reactors. Journal of Chemical Technology and Biotechnology, 2012, 87, 887-896.	1.6	17
107	Optimal Operation of a Membrane Reactor Network. Computer Aided Chemical Engineering, 2012, 31, 1321-1325.	0.3	5
108	Performance Analysis of Shooting Algorithms in Chance-Constrained Optimization. Computer Aided Chemical Engineering, 2012, , 1512-1516.	0.3	4

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109	Generation of first and higher order derivative information out of the documentation level. Computer Aided Chemical Engineering, 2012, , 950-954.	0.3	0
110	Model-Based Optimal Design of Experiments for Determining Reaction Network Structures. Computer Aided Chemical Engineering, 2012, 31, 705-709.	0.3	0
111	An Approach to Process Monitoring under Probabilistic Constraints. Computer Aided Chemical Engineering, 2012, , 1252-1256.	0.3	1
112	Performances Evaluation of Biomass Gasification and Synthetic Gas Co-Firing in Coal-Fired Boiler. , 2011, , .		0
113	An Efficient High Resolution FEM for PDE Systems. Computer Aided Chemical Engineering, 2011, , 56-60.	0.3	0
114	A Novel Process Design for the Hydroformylation of Higher Alkenes.. Computer Aided Chemical Engineering, 2011, 29, 226-230.	0.3	2
115	Performance evaluation of biomass co-gasification with coal in entrained-flow gasifirer. , 2011, , .		1
116	MOSAIC a web-based modeling environment for code generation. Computers and Chemical Engineering, 2011, 35, 2257-2273.	2.0	36
117	Utility systems operation: Optimisation-based decision making. Applied Thermal Engineering, 2011, 31, 3196-3205.	3.0	34
118	Robust Implementation of Optimal Decisions Using a Two-Layer Chance-Constrained Approach. Industrial & Engineering Chemistry Research, 2011, 50, 5050-5063.	1.8	4
119	Ethylene separation by feed-splitting from light gases. Energy, 2011, 36, 4518-4523.	4.5	23
120	Inverse exergo-ökologisch-ökonomische Prozessanalyse von Abgasbehandlungsprozessen. Chemie-Ingenieur-Technik, 2011, 83, 427-442.	0.4	2
121	Design and Development of an Optimal CO_2 Separation Process for the Oxidative Coupling of Methane in Mini Plant Scale. Chemie-Ingenieur-Technik, 2011, 83, 488-495.	0.4	2
122	Oxidative coupling of methane in a fluidized bed reactor: Influence of feeding policy, hydrodynamics, and reactor geometry. Chemical Engineering Journal, 2011, 171, 255-271.	6.6	46
123	An efficient sparse approach to sensitivity generation for large-scale dynamic optimization. Computers and Chemical Engineering, 2011, 35, 2053-2065.	2.0	27
124	Unified model-based fault diagnosis for three industrial application studies. Control Engineering Practice, 2011, 19, 479-490.	3.2	31
125	Techno-Economic Analysis for Ethylene and Methanol Production from the Oxidative Coupling of Methane Process. Computer Aided Chemical Engineering, 2011, , 1874-1878.	0.3	3
126	Optimization of a Sequencing Batch Reactor process for waste water treatment using a two step nitrification model. Computer Aided Chemical Engineering, 2011, , 1291-1295.	0.3	0

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127	A Novel Design Concept for the Oxidative Coupling of Methane Using Hybrid Reactors. Computer Aided Chemical Engineering, 2011, 29, 377-381.	0.3	1
128	MOSAIC, an environment for web-based modeling in the documentation level. Computer Aided Chemical Engineering, 2011, 29, 1140-1144.	0.3	2
129	Experimental Evaluation of a Robust NMPC Strategy for an Unstable Nonlinear Process. Computer Aided Chemical Engineering, 2011, 29, 482-486.	0.3	0
130	Efficient Computation of First- and Second-Order Sensitivities Using an Internal Forward Differentiation Scheme. Computer Aided Chemical Engineering, 2011, 29, 733-737.	0.3	0
131	Benchmark for Hierarchical Plantwide Control of Hybrid Chemical Processes: Control of Coupled Batch and Continuous Reactors. Computer Aided Chemical Engineering, 2010, , 541-546.	0.3	1
132	Input Reconstruction for Statistically Enhanced Fault Detection and Isolation. Computer Aided Chemical Engineering, 2010, 28, 193-198.	0.3	0
133	A New Modeling Environment Based on Internet-Standards XML and MathML. Computer Aided Chemical Engineering, 2010, 28, 673-678.	0.3	3
134	Model reduction of the ASM3 extended for two-step nitrification. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 60-65.	0.4	2
135	Handling Uncertainty in Model-Based Optimal Experimental Design. Industrial & Engineering Chemistry Research, 2010, 49, 5702-5713.	1.8	24
136	Inverse exergoÃ¶kologischÃ¶konomische Analyse von Abgasbehandlungsprozessen. Chemie-Ingenieur-Technik, 2010, 82, 1412-1412.	0.4	0
137	MOSAIC: Webbasierte Modellierungsumgebung fÃ¼r Code-Generierung aus XML/MathML. Chemie-Ingenieur-Technik, 2010, 82, 1392-1392.	0.4	0
138	Neuer Ansatz zur Mechanismenerkennung in E. coli Fed-Batch-Kultivierungen. Chemie-Ingenieur-Technik, 2010, 82, 1503-1503.	0.4	0
139	Modellreduktion des erweiterten ASM3-Modells fÃ¼r die zweistufige Nitrifikation. Chemie-Ingenieur-Technik, 2010, 82, 1540-1540.	0.4	0
140	Design und Modellierung eines zyklischen Prozesskonzepts fÃ¼r die SO2-Oxidation. Chemie-Ingenieur-Technik, 2010, 82, 1351-1351.	0.4	1
141	Neues Prozesskonzept zur Produktion von MilchsÃ¤ureethylester. Chemie-Ingenieur-Technik, 2010, 82, 1429-1429.	0.4	0
142	Oxidative Kopplung von Methan: Reaktorkonzepte und Betriebsbedingungen. Chemie-Ingenieur-Technik, 2010, 82, 1310-1310.	0.4	0
143	Optimal determination of steric mass action model parameters for Î²-lactoglobulin using static batch experiments. Journal of Chromatography A, 2010, 1217, 4267-4277.	1.8	5
144	Analysis of attainable reactor performance for the oxidative methane coupling process. Chemical Engineering Science, 2010, 65, 6341-6352.	1.9	43

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145	Oxidative Coupling of Methane: Reactor Performance and Operating Conditions. Computer Aided Chemical Engineering, 2010, 28, 781-786.	0.3	10
146	Model-Based Analysis of Reactor Feeding Policies for Methane Oxidative Coupling. Industrial & Engineering Chemistry Research, 2010, 49, 3544-3552.	1.8	15
147	Local Optima in Model-Based Optimal Experimental Design. Industrial & Engineering Chemistry Research, 2010, 49, 10059-10073.	1.8	8
148	Ultrafiltration of Surfactant Micelles: Cross-flow Experiments and Flux Modelling. Computer Aided Chemical Engineering, 2010, 28, 787-792.	0.3	1
149	Optimal Experimental Design for the Determination of Protein Ion-Exchange Equilibrium Parameters. Computer Aided Chemical Engineering, 2009, 27, 309-314.	0.3	0
150	An Efficient Discretization Approach for Partial Differential Equations describing Chemical Reaction Systems. Computer Aided Chemical Engineering, 2009, , 901-905.	0.3	1
151	Analysis of oxidative coupling of methane in membrane reactors. Computer Aided Chemical Engineering, 2009, 26, 123-128.	0.3	2
152	A Novel Approach to Mechanism Recognition in Escherichia Coli Fed-Batch Fermentations. Computer Aided Chemical Engineering, 2009, 27, 651-656.	0.3	0
153	Modellbasierte experimentelle Analyse zur Bestimmung von Protein€Gleichgewichtsparametern für die Ionenaustauschchromatographie. Chemie-Ingenieur-Technik, 2009, 81, 1074-1075.	0.4	0
154	Chance constrained optimization of process systems under uncertainty: I. Strict monotonicity. Computers and Chemical Engineering, 2009, 33, 1568-1583.	2.0	60
155	Model-based recognition of fouling mechanisms in membrane bioreactors. Desalination, 2009, 236, 224-233.	4.0	32
156	Model-Based Experimental Analysis of a Fixed-Bed Reactor for Catalytic SO_2 Oxidation. Industrial & Engineering Chemistry Research, 2009, 48, 5165-5176.	1.8	20
157	Ethylene Separation by Feed-Splitting from Light Gases. Computer Aided Chemical Engineering, 2009, 27, 855-860.	0.3	2
158	Identification of Reaction Mechanisms with a Dynamic PFR Model* *This work is supported by the Max-Buchner-Forschungsstiftung.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 399-404.	0.4	0
159	Development and Experimental Verification of Model-Based Process Control using Mixed-Reality Environments. Computer Aided Chemical Engineering, 2009, 26, 333-337.	0.3	1
160	The Significance of Experiments on PSE. Computer Aided Chemical Engineering, 2009, 27, 163-168.	0.3	3
161	Optimale Versuchsplanung für Key Performance Indicators. Chemie-Ingenieur-Technik, 2008, 80, 1342-1343.	0.4	0
162	Modellgestütztes Monitoring zur optimierten Bioprozessführung. Chemie-Ingenieur-Technik, 2008, 80, 1342-1342.	0.4	1

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163	EinsatzmÃ¶glichkeiten der reaktiven Batchrektifikation mit MittelbehÃ¤lter. Chemie-Ingenieur-Technik, 2008, 80, 1243-1244.	0.4	0
164	Experimentelle ÃœberprÃ¼fung robuster AnsÃ¤tze zur optimalen ProzessfÃ¼hrung mit unsicheren Modellen. Chemie-Ingenieur-Technik, 2008, 80, 1360-1360.	0.4	0
165	Einsatz moderner Methoden der Versuchsplanung zur systematischen Modellbildung fÃ¼r die Reaktorauslegung. Chemie-Ingenieur-Technik, 2008, 80, 1357-1357.	0.4	0
166	Chance constrained programming approach to process optimization under uncertainty. Computers and Chemical Engineering, 2008, 32, 25-45.	2.0	263
167	A new operation mode for reactive batch distillation in middle-vessel columns: Start-up and operation. Computers and Chemical Engineering, 2008, 32, 161-169.	2.0	10
168	Model-based determination of changing kinetics in high cell density cultures using respiration data. Chemical Engineering Science, 2008, 63, 4789-4799.	1.9	5
169	Optimum experimental design for key performance indicators. Computer Aided Chemical Engineering, 2008, , 575-580.	0.3	5
170	Implementation of Optimal Decisions in the Presence of Uncertainty. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 11931-11936.	0.4	0
171	An efficient approach to robust simulation of claus processes in coking plants. Computer Aided Chemical Engineering, 2007, , 521-526.	0.3	6
172	Increasing the predictivity of kinetic models for high-cell-density cultivations. Computer Aided Chemical Engineering, 2007, , 953-958.	0.3	0
173	A hybrid optimization approach to parameter estimation. Computer Aided Chemical Engineering, 2007, 24, 75-80.	0.3	4
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