

Laurent Falk

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11050127/publications.pdf>

Version: 2024-02-01

38
papers

1,670
citations

394421

19
h-index

330143

37
g-index

41
all docs

41
docs citations

41
times ranked

1356
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterisation of micromixing efficiency by the iodide-iodate reaction system. Part I: experimental procedure. <i>Chemical Engineering Science</i> , 2000, 55, 4233-4243.	3.8	263
2	Characterisation of micromixing efficiency by the iodide-iodate reaction system. Part II: kinetic study. <i>Chemical Engineering Science</i> , 2000, 55, 4245-4253.	3.8	162
3	Villiermaux-Dushman protocol for experimental characterization of micromixers. <i>Chemical Engineering and Processing: Process Intensification</i> , 2011, 50, 979-990.	3.6	143
4	A generalized mixing model for initial contacting of reactive fluids. <i>Chemical Engineering Science</i> , 1994, 49, 5127-5140.	3.8	123
5	Trends in design of distributed energy systems using hydrogen as energy vector: A systematic literature review. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 9486-9504.	7.1	119
6	A review of thermochemical processes and technologies to use steelworks off-gases. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 74, 809-823.	16.4	102
7	Kinetics of Methanol Synthesis from Carbon Dioxide Hydrogenation over Copper-Zinc Oxide Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 13133-13145.	3.7	84
8	Determination of kinetic constants of a photocatalytic reaction in micro-channel reactors in the presence of mass-transfer limitation and axial dispersion. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011, 223, 202-211.	3.9	64
9	Rapid design of channel multi-scale networks with minimum flow maldistribution. <i>Chemical Engineering and Processing: Process Intensification</i> , 2009, 48, 723-733.	3.6	55
10	Local and global process intensification. <i>Chemical Engineering and Processing: Process Intensification</i> , 2014, 84, 1-13.	3.6	50
11	Methanol synthesis from CO ₂ and H ₂ in multi-tubular fixed-bed reactor and multi-tubular reactor filled with monoliths. <i>Chemical Engineering Research and Design</i> , 2014, 92, 2598-2608.	5.6	45
12	Multi-criteria optimization for the design and operation of distributed energy systems considering sustainability dimensions. <i>Energy</i> , 2021, 214, 118989.	8.8	45
13	Micromixing efficiency of a novel sliding-surface mixing device. <i>AIChE Journal</i> , 1999, 45, 2203-2213.	3.6	42
14	Extension of a chemical method for the study of micromixing process in viscous media. <i>Chemical Engineering Science</i> , 1997, 52, 4649-4658.	3.8	37
15	Sustainability analysis for the design of distributed energy systems: A multi-objective optimization approach. <i>Applied Energy</i> , 2021, 290, 116746.	10.1	35
16	Determination of local energy dissipation rates in impinging jets by a chemical reaction method. <i>Chemical Engineering Journal</i> , 1999, 72, 125-138.	12.7	33
17	Influence of reagents choice (buffer, acid and inert salt) on triiodide production in the Villiermaux-Dushman method applied to a stirred vessel. <i>Chemical Engineering Research and Design</i> , 2018, 136, 25-31.	5.6	23
18	Falling liquid film stability in microgas/liquid absorption. <i>Chemical Engineering and Processing: Process Intensification</i> , 2010, 49, 953-957.	3.6	21

#	ARTICLE	IF	CITATIONS
19	Modular, Flexible, and Continuous Plant for Radical Polymerization in Aqueous Solution. <i>Macromolecular Reaction Engineering</i> , 2016, 10, 339-353.	1.5	21
20	Rheo-Raman: A Promising Technique for In Situ Monitoring of Polymerization Reactions in Solution. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 16151-16156.	3.7	19
21	Influence of the plate-type continuous micro-separator dimensions on the efficiency of demulsification of oil-in-water emulsion. <i>Chemical Engineering Research and Design</i> , 2014, 92, 2758-2769.	5.6	17
22	Preliminary design and simulation of a microstructured reactor for production of synthesis gas by steam methane reforming. <i>Chemical Engineering Research and Design</i> , 2014, 92, 1728-1739.	5.6	16
23	In situ monitoring of acrylic acid polymerization in aqueous solution using rheo-Raman technique. Experimental investigation and theoretical modelling. <i>Chemical Engineering Science</i> , 2014, 106, 242-252.	3.8	15
24	Numerical simulation of the mixing of passive and reactive scalars in two-dimensional flows dominated by coherent vortices. <i>Chemical Engineering Science</i> , 2000, 55, 4255-4269.	3.8	13
25	Intensification of G/L absorption in microstructured falling film. Application to the treatment of chlorinated VOC's - part II: Modeling and geometric optimization. <i>Chemical Engineering Science</i> , 2011, 66, 2475-2490.	3.8	13
26	Impact of reducing the channel diameter on heterogeneous gas reactions in an isothermal monolith. <i>Chemical Engineering and Processing: Process Intensification</i> , 2015, 95, 317-326.	3.6	12
27	Application of Raman Spectroscopy to Characterization of Residence Time Distribution and Online Monitoring of a Pilot-Scale Tubular Reactor for Acrylic Acid Solution Polymerization. <i>Macromolecular Reaction Engineering</i> , 2016, 10, 406-414.	1.5	12
28	Diffusion of liquids in molten polymers: Mutual diffusion coefficient dependence on liquid miscibility and polymer molar mass. <i>Polymer</i> , 2006, 47, 5080-5089.	3.8	11
29	Capability of a falling film microstructured contactor for the separation of binary mixtures. <i>Chemical Engineering Journal</i> , 2011, 167, 455-467.	12.7	11
30	Intensification of heat transfer during evaporation of a falling liquid film in vertical microchannels—Experimental investigations. <i>Chemical Engineering Science</i> , 2012, 75, 152-166.	3.8	11
31	Contribution of Raman Spectroscopy to In Situ Monitoring of a High-Impact Polystyrene Process. <i>Chemical Engineering and Technology</i> , 2014, 37, 275-282.	1.5	11
32	Intensification of the G/L absorption in microstructured falling film application to the treatment of chlorinated VOC's. Part III: Influence of gas thickness channel on mass transfer. <i>Chemical Engineering Science</i> , 2011, 66, 5989-6001.	3.8	8
33	Continuous Pilot-Scale Tubular Reactor for Acrylic Acid Polymerization in Solution Designed Using Lab-Scale Rheo-Raman data. <i>Macromolecular Reaction Engineering</i> , 2016, 10, 354-363.	1.5	6
34	Techno-Economic and Carbon Footprint Analyses of a Coke Oven Gas Reuse Process for Methanol Production. <i>Processes</i> , 2021, 9, 1042.	2.8	5
35	Characterization and modelling of diffusion and reaction of low molecular weight reactants in molten polymer. <i>Polymer</i> , 2007, 48, 6902-6912.	3.8	4
36	Structured Multi-Scale Process Systems Design and Engineering - The Role of Microreactor Technology in Chemical Process Design. , 2013, , 1-21.		3

#	ARTICLE	IF	CITATIONS
37	Continuous Pilot-Scale Tubular Reactor for Acrylic Acid Polymerization in Solution Designed Using Lab-Scale Rheo-Raman data. <i>Macromolecular Reaction Engineering</i> , 2016, 10, 354-363.	1.5	1
38	Optimal Design of Energy Systems in Isolated Zones Using Sustainability Indicators. A Case Study in the Colombian Amazon. , 2021, , .		0