Petr Zmostn

List of Publications by Citations

51 papers	641 citations	14 h-index	24 g-index
53 ext. papers	743 ext. citations	4.3 avg, IF	4 L-index

#	Paper	IF	Citations
51	Hydrodeoxygenation of aldehydes catalyzed by supported palladium catalysts. *Applied Catalysis A: General*, **2007**, 332, 56-64	5.1	72
50	Experimental study of hydrocarbon structure effects on the composition of its pyrolysis products. *Journal of Analytical and Applied Pyrolysis*, **2010**, 87, 207-216	6	63
49	The kinetic model of thermal cracking for olefins production. *Chemical Engineering and Processing: Process Intensification*, **2003**, 42, 461-473	3.7	59
48	Hydrodeoxygenation of benzophenone on Pd catalysts. *Applied Catalysis A: General*, **2005**, 296, 169-175	5.1	54
47	Application of random-search algorithm for regression analysis of catalytic hydrogenations. *Canadian Journal of Chemical Engineering*, **1997**, 75, 735-742	2.3	31
46	A software for regression analysis of kinetic data. *Computers & Chemistry*, **1999**, 23, 479-485		29
45	On the mechanism of colloidal silica action to improve flow properties of pharmaceutical excipients. *International Journal of Pharmaceutics*, **2019**, 556, 383-394	6.5	25
44	Identification of kinetic models of heterogeneously catalyzed reactions. *Applied Catalysis A: General* , **2002**, 225, 291-299	5.1	24
43	Effect of colloidal silica on rheological properties of common pharmaceutical excipients. *European Journal of Pharmaceutics and Biopharmaceutics*, **2016**, 106, 2-8	5.7	20
42	Hydrogenation and Hydrogenolysis of Acetophenone. *Collection of Czechoslovak Chemical Communications*, **2003**, 68, 1969-1984		19
41	Improving the steam-cracking efficiency of naphtha feedstocks by mixed/separate processing. *Journal of Analytical and Applied Pyrolysis*, **2020**, 146, 104768	6	18
40	Generalized model of n-heptane pyrolysis and steam cracking kinetics based on automated reaction network generation. *Journal of Analytical and Applied Pyrolysis*, **2014**, 109, 159-167	6	18
39	Production of olefins via steam cracking of vegetable oils. *Resources, Conservation and Recycling*, **2012**, 59, 47-51	11.9	15
38	A Novel Approach for the Prediction of Hydrocarbon Thermal Cracking Product Yields from the Substitute Feedstock Composition. *Chemical Engineering and Technology*, **2005**, 28, 1166-1176	2	15
37	Increasing dissolution of trospium chloride by co-crystallization with urea. *Journal of Crystal Growth* , **2014**, 399, 19-26	1.6	13
36	Generalized Model of Hydrocarbons Pyrolysis Using Automated Reactions Network Generation. *Industrial & Engineering Chemistry Research*, **2013**, 52, 15407-15416	3.9	13
35	Investigation of Dissolution Mechanism and Release Kinetics of Poorly Water-Soluble Tadalafil from Amorphous Solid Dispersions Prepared by Various Methods. *Pharmaceutics*, **2019**, 11,	6.4	12

34	Application of hydrocarbon cracking experiments to ethylene unit control and optimization. *Petroleum Chemistry*, **2006**, 46, 237-245	1.1	12
33	A rate□ontrolling step in langmuir□inshelwood kinetic models. *Canadian Journal of Chemical Engineering*, **2000**, 78, 513-521	2.3	12
32	Mathematical model of Fischer-Tropsch synthesis using variable alpha-parameter to predict product distribution. *Fuel*, **2019**, 243, 603-609	7.1	10
31	ANN modelling of pyrolysis utilising the characterisation of atmospheric gas oil based on incomplete data. *Chemical Engineering Science*, **2007**, 62, 5021-5025	4.4	10
30	Prediction of drug-polymer interactions in binary mixtures using energy balance supported by inverse gas chromatography. *European Journal of Pharmaceutical Sciences*, **2019**, 130, 247-259	5.1	9
29	Effective characterization of petroleum C7+ fractions. *Fuel*, **2012**, 102, 545-553	7.1	8
28	Application of a Semi-Mechanistic Model for Cracking Unit Balance. *Chemical Engineering and Technology*, **2015**, 38, 609-618	2	7
27	Effect of Maize Starch Excipient Properties on Drug Release Rate. *Procedia Engineering*, **2012**, 42, 482-488		7
26	Olefin production through pyrolysis of triacylglycerols. *Lipid Technology*, **2009**, 21, 220-223		7
25	Preparation of solid dispersions with respect to the dissolution rate of active substance. *Journal of Drug Delivery Science and Technology*, **2020**, 56, 101518	4.5	7
24	Evaluation of Functional Characteristics of Lactose by Inverse Gas Chromatography. *Procedia Engineering*, **2012**, 42, 644-650		4
23	Hydrogen production by catalysed pyrolysis of polymer blends. *Fuel*, **2011**, 90, 2334-2339	7.1	4
22	Compression of anisometric granular materials. *Powder Technology*, **2019**, 342, 887-898	5.2	4
21	Effect of polymer type on the surface energy of acetaminophen solid dispersions prepared by melt method. *International Journal of Pharmaceutics*, **2017**, 530, 107-112	6.5	3
20	Using the Semi-mechanistic Steam-cracking Model to Improve Steam-Cracker Operation. *Procedia Engineering*, **2012**, 42, 1946-1954		3
19	Meloxicam Carrier Systems Having Enhanced Release and Aqueous Wettability Prepared Using Micro-suspensions in Different Liquid Media. *AAPS PharmSciTech*, **2020**, 21, 155	3.9	3
18	Analysis of Drug Release from Different Agglomerates Using a Mathmatical Model. *Dissolution Technologies*, **2014**, 21, 40-47	1.7	3
17	Effect of co-milling on dissolution rate of poorly soluble drugs. *International Journal of Pharmaceutics*, **2021**, 597, 120312	6.5	3

16	Fischer-Tropsch Wax from Renewable Resources as an Excellent Feedstock for the Steam-Cracking Process. *Chemical Engineering and Technology*, **2021**, 44, 329-338	2	3
15	Adhesion force measurement by centrifuge technique as tool for predicting interactive mixture stability. *Chemical Engineering Research and Design*, **2021**, 165, 467-476	5.5	3
14	Substitute Composition of Naphtha Based on Density, SIMDIST, and PIONA for Modeling of Steam Cracking. *Chemical Engineering and Technology*, **2017**, 40, 1008-1015	2	2
13	Breakage of anisometric rod-shaped particles. *Particulate Science and Technology*, **2018**, 36, 432-437	2	2
12	Prediction of Dissolution Behavior of Final Dosage forms Prepared by Different Granulation Methods. *Procedia Engineering*, **2012**, 42, 1463-1473		2
11	MECHANISTIC STUDY OF DISSOLUTION ENHANCEMENT BY INTERACTIVE MIXTURES OF CHITOSAN WITH MELOXICAM AS MODEL. *European Journal of Pharmaceutical Sciences*, **2021**, 169, 106087	5.1	2
10	Semi-mechanistic Model Applied to the Search for Economically Optimal Conditions and Blending of Gasoline Feedstock for Steam-cracking Process. *MATEC Web of Conferences*, **2016**, 62, 04004	0.3	2
9	Stress-Dependent Particle Interactions of Magnesium Aluminometasilicates as Their Performance Factor in Powder Flow and Compaction Applications. *Materials*, **2021**, 14,	3.5	2
8	Experimental Evaluation of Hydrotreated Vegetable Oils as Novel Feedstocks for Steam-Cracking Process. *Processes*, **2021**, 9, 1504	2.9	2
7	Dry-Swabbing/Image Analysis Technique for the Pharmaceutical Equipment Cleaning Validation. *Procedia Engineering*, **2012**, 42, 447-453		1
6	Simplifying Complex Computer-Generated Reactions Network to Suppress Its Stiffness. *Procedia Engineering*, **2012**, 42, 1624-1633		1
5	Application of pyrolysis-capillary gas chromatography with NPD detection in thermal degradation of polyphosphazenes study. *Open Chemistry*, **2007**, 5, 271-290	1.6	1
4	Propylene column pressure relief valves chattering resulting in explosion and fire of the Steam Cracker unit. *Journal of Loss Prevention in the Process Industries*, **2022**, 74, 104658	3.5	1
3	Dirty-Hold Time Effect on the Cleaning Process Efficiency. *Procedia Engineering*, **2012**, 42, 431-436		0
2	Streamlining of the Powder Mixing Process based on a Segregation Test. *AAPS PharmSciTech*, **2021**, 22, 190	3.9	0
1	Effect of dirty-hold time on cleaning process of pharmaceutical equipment. *Pharmaceutical Development and Technology*, **2013**, 18, 274-9	3.4	