Ireneusz ZbiciÅ„ski

List of Publications by Year
in descending order

80	1,316	304368	433756
papers	citations	22 h-index	31 g-index

87	87	87	990
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Liquid Flow on Structured Packing: CFD Simulation and Experimental Study. Chemical Engineering and Technology, 2003, 26, 580-584.	0.9	75
2	Advanced experimental analysis of drying kinetics in spray drying. Chemical Engineering Journal, 2002, 86, 207-216.	6.6	71
3	DRYING KINETICS AND PARTICLE RESIDENCE TIME IN SPRAY DRYING. Drying Technology, 2002, 20, 1751-1768.	1.7	58
4	A 3D model of thrombus formation in a stent-graft after implantation in the abdominal aorta. Journal of Biomechanics, 2015, 48, 425-431.	0.9	50
5	Prediction of Final Product Properties After Cocurrent Spray Drying. Drying Technology, 2005, 23, 1653-1665.	1.7	41
6	Conditions for Accurate CFD Modeling of Spray-Drying Process. Drying Technology, 2006, 24, 1109-1114.	1.7	41
7	CFD Model of Particle Agglomeration in Spray Drying. Drying Technology, 2015, 33, 1971-1980.	1.7	37
8	Equipment, technology, perspectives and modeling of pulse combustion drying. Chemical Engineering Journal, 2002, 86, 33-46.	6.6	35
9	Developing spray-dried powders containing anthocyanins of black raspberry juice encapsulated based on fenugreek gum. Advanced Powder Technology, 2015, 26, 462-469.	2.0	35
10	A Sensitivity Study on CFD Modeling of Cocurrent Spray-Drying Process. Drying Technology, 2005, 23, 1681-1691.	1.7	34
11	CFD Model of Apple Atmospheric Freeze Drying at Low Temperature. Drying Technology, 2007, 25, 1331-1339.	1.7	32
12	Advances in spray drying of sugar-rich products. Drying Technology, 2021, 39, 1774-1799.	1.7	31
13	A Novel Attempt to Standardize Results of CFD Simulations Basing on Spatial Configuration of Aortic Stent-Grafts. PLoS ONE, 2016, 11, e0153332.	1.1	29
14	Modeling of Air Flow in an Industrial Countercurrent Spray-Drying Tower. Drying Technology, 2012, 30, 217-224.	1.7	28
15	Hybrid neural model of thermal drying in a fluidized bed. Computers and Chemical Engineering, 1996, 20, S695-S700.	2.0	27
16	Spray Drying of Probiotics: Process Development and Scale-Up. Drying Technology, 2010, 28, 1170-1177.	1.7	27
17	Effects of stent-graft geometry and blood hematocrit on hemodynamic in Abdominal Aortic Aneurysm. Chemical and Process Engineering - Inzynieria Chemiczna I Procesowa, 2012, 33, 53-61.	0.7	25
18	Spray Drying Tower Experiments. Drying Technology, 2004, 22, 1325-1349.	1.7	24

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19	CFD simulations of droplet and particle agglomeration in an industrial counter-current spray dryer. Advanced Powder Technology, 2018, 29, 1724-1733.	2.0	24
20	Model of Heat and Mass Transfer in an Industrial Counter-Current Spray-Drying Tower. Drying Technology, 2012, 30, 1274-1282.	1.7	23
21	CFD modelling of moisture evaporation in an industrial dispersed system. Advanced Powder Technology, 2017, 28, 167-176.	2.0	23
22	Evaporation Kinetics of Single Droplets Containing Dissolved Bioaiass. Drying Technology, 1996, 14, 2041-2060.	1.7	22
23	Pulse Combustion Drying: Aerodynamics, Heat Transfer, and Drying Kinetics. Drying Technology, 2003, 21, 629-655.	1.7	22
24	CFD Analysis of Dust Explosion Relief System in the Counter-Current Industrial Spray Drying Tower. Drying Technology, 2013, 31, 881-890.	1.7	21
25	Application of LCA to Determine Environmental Impact of Concentrated Photovoltaic Solar Panelsâ€"State-of-the-Art. Energies, 2021, 14, 3143.	1.6	21
26	Modelling of glucoamylase thermal inactivation in the presence of starch by artificial neural network. Journal of Biotechnology, 2004, 114, 177-185.	1.9	20
27	Analysis of the Mechanism of Counter-current Spray Drying. Transport in Porous Media, 2007, 66, 89-101.	1.2	20
28	Continuous and Discrete Phase Behavior in Countercurrent Spray Drying Process. Drying Technology, 2009, 27, 1353-1362.	1.7	20
29	MULTIOBJECTIVE OPTIMIZATION OF DRYING PROCESS. Drying Technology, 1989, 7, 1-16.	1.7	18
30	Modeling and Scaling Up of Industrial Spray Dryers: A Review. Journal of Chemical Engineering of Japan, 2017, 50, 757-767.	0.3	17
31	A novel method for describing biomechanical properties of the aortic wall based on the three-dimensional fluid-structure interaction model. Interactive Cardiovascular and Thoracic Surgery, 2019, 28, 306-315.	0.5	16
32	Application of artificial neural networks to modelling of starch hydrolysis by glucoamylase. Bioprocess and Biosystems Engineering, 2000, 23, 351-357.	1.7	15
33	Mathematical modelling of spray drying. Computers and Chemical Engineering, 1988, 12, 209-214.	2.0	14
34	Analysis of Gas Admixing Foam Sprayâ€"Drying Process. Drying Technology, 2009, 28, 103-110.	1.7	14
35	Effect of Turbulence on Heat and Mass Transfer in the Atomization Zone. Drying Technology, 1996, 14, 231-244.	1.7	12
36	An analysis of a pulse combustion drying system. Chemical Engineering and Processing: Process Intensification, 1999, 38, 593-600.	1.8	12

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37	Modeling of gas dynamics in a pulse combustion chamber to predict initial drying process parameters. Chemical Engineering Journal, 2002, 86, 25-31.	6.6	12
38	Development and experimental verification of momentum, heat and mass transfer model in spray drying. The Chemical Engineering Journal and the Biochemical Engineering Journal, 1995, 58, 123-133.	0.1	11
39	OPTIMIZATION AND NEURAL MODELLING OF PULSE COMBUSTORS FOR DRYING APPLICATIONS. Drying Technology, 1999, 17, 610-631.	1.7	11
40	Evaluation of Environmental Impact of the Spray-Drying Process. Drying Technology, 2010, 28, 1091-1096.	1.7	11
41	Modeling of Dust Explosion in the Industrial Spray Dryer. Drying Technology, 2012, 30, 1720-1729.	1.7	11
42	Energy Consumption and Product Quality Interactions in Flame Spray Drying. Drying Technology, 2015, 33, 1022-1028.	1.7	11
43	Calculations of the pulse combustion drying system. Energy Conversion and Management, 2001, 42, 1909-1918.	4.4	10
44	Morphology and microencapsulation efficiency of foamed spray-dried sunflower oil. Chemical and Process Engineering - Inzynieria Chemiczna I Procesowa, 2012, 33, .	0.7	10
45	Waterpraxis as a tool supporting protection of water in the Sulejow Reservoir. Desalination and Water Treatment, 2013, 51, 4194-4206.	1.0	10
46	DYNAMIC AND HYBRID NEURAL MODEL OF THERMAL DRYING IN A FLUTDIZED BED. Drying Technology, 1997, 15, 1743-1752.	1.7	9
47	HYBRID NEURAL MODELLING OF FLUIDISED BED DRYING PROCESS. Drying Technology, 2001, 19, 1725-1738.	1.7	9
48	Determination of Spray-Drying Kinetics in a Small Scale. Drying Technology, 2005, 23, 1751-1759.	1.7	9
49	Retention Rate Enhancement of Antioxidant and Cyaniding 3-O-Glucoside Components of the Reconstituted Product from Spray-Dried Black Raspberry Juice by Optimizing Process Parameters. Drying Technology, 2014, 32, 1683-1691.	1.7	9
50	Mechanism of Particle Agglomeration for Single and Multi-Nozzle Atomization in Spray Drying: A Review. Processes, 2022, 10, 727.	1.3	9
51	3-D CFD simulations of hydrodynamics in the Sulejow dam reservoir. Journal of Hydrology and Hydromechanics, 2015, 63, 334-341.	0.7	8
52	Effect of foam spray drying process parameters on powder morphology. Drying Technology, 2019, 37, 535-545.	1.7	8
53	Microencapsulation in foam spray drying. Drying Technology, 2020, 38, 55-70.	1.7	8
54	Application of pulse combustion technology in spray drying process. Brazilian Journal of Chemical Engineering, 2000, 17, 441-450.	0.7	8

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55	Effect of Particle Structure on Quality Retention of Bio-Products During Thermal Drying. Drying Technology, 1996, 14, 1921-1946.	1.7	7
56	EXTENSION OF THE NEURAL NETWORKS OPERATING RANGE BY THE APPLICATION OF DIMENSIONLESS NUMBERS IN PREDICTION OF HEAT TRANSFER COEFFICIENTS. Drying Technology, 2000, 18, 649-660.	1.7	6
57	Experimental detergent drying analysis in a counter-current spray dryer with swirling air flow. Drying Technology, 2020, 38, 108-116.	1.7	6
58	Some aspects of the drying of protein products. The Chemical Engineering Journal and the Biochemical Engineering Journal, 1995, 58, 197-204.	0.1	5
59	2D FSI determination of mechanical stresses on aneurismal walls. Bio-Medical Materials and Engineering, 2014, 24, 2519-2526.	0.4	5
60	Flame Spray Drying. Drying Technology, 2014, 32, 1343-1351.	1.7	5
61	Quality Enhancement for Thermosensitive Materials Dried with Solid Carriers. Drying Technology, 2003, 21, 1065-1075.	1.7	4
62	Environmental, energy and economic aspects in a zero-emission faÃ§ade system design. Management of Environmental Quality, 2016, 27, 708-721.	2.2	4
63	Flame spray drying: Droplet and particle flow dynamics. Drying Technology, 2017, 35, 948-956.	1.7	4
64	Continuous and Periodic Monitoring System of Surface Water Quality of an Impounding Reservoir: Sulejow Reservoir, Poland. International Journal of Environmental Research and Public Health, 2019, 16, 301.	1.2	4
65	Diffusion Model for Apple Cubes Atmospheric Freeze-Drying with the Effect of Shrinkage. International Journal of Food Engineering, 2008, 4, .	0.7	3
66	Effect of replacement of tin doped indium oxide (ITO) by ZnO: analysis of environmental impact categories. E3S Web of Conferences, 2017, 19, 02026.	0.2	2
67	Industrial Spray Tower Hot Air Inlets Area Temperature Control. Journal of Chemical Engineering of Japan, 2017, 50, 768-774.	0.3	2
68	Mechanism of flame spray drying process: experimental and CFD analysis. Drying Technology, 2020, 38, 80-92.	1.7	2
69	Online Measurement Method of Water Quality in the Sulejow Reservoir. Ecological Chemistry and Engineering S, 2018, 25, 89-100.	0.3	2
70	Analysis of the mechanism of counter-current spray drying. , 2006, , 89-101.		1
71	A Scaling-up Approach from Experimental Tunnel to Spray Dryer. International Journal of Food Engineering, 2010, 6, .	0.7	1
72	Mathematical Modeling of Heat and Mass Transfer in Energy Science and Engineering. Mathematical Problems in Engineering, 2013, 2013, 1-3.	0.6	1

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73	4D model of hemodynamics in the abdominal aorta. Bio-Medical Materials and Engineering, 2015, 26, S257-S264.	0.4	1
74	Mathematical Modeling of Heat and Mass Transfer in Energy Science and Engineering 2014. Mathematical Problems in Engineering, 2015, 2015, 1-3.	0.6	1
75	Analysis of factors affecting the ecological status of the large water bodies on the basis of monitoring and integrated 3D models. E3S Web of Conferences, 2017, 19, 02009.	0.2	1
76	Numerical analysis of blood flow in human abdominal aorta. WIT Transactions on Engineering Sciences, 2006, , .	0.0	1
77	Surface water quality monitoring in a large dame reservoir, Poland. , 0, 101, 130-142.		1
78	Classical and Hybrid Neural Models of Fluidised Bed Brying Process. Chemie-Ingenieur-Technik, 2001, 73, 650-650.	0.4	0
79	Drying Modeling and Simulation. Mathematical Problems in Engineering, 2012, 2012, 1-3.	0.6	0
80	Guest Editorial: Selected Papers from the XIII Polish Drying Symposium. Drying Technology, 2014, 32, 1265-1265.	1.7	0