

Marjatta Louhi-Kultanen

List of Publications by Year in descending order

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78
papers

1,827
citations

304743

22
h-index

289244

40
g-index

80
all docs

80
docs citations

80
times ranked

1957
citing authors

#	ARTICLE	IF	CITATIONS
1	Assessment of Recent Process Analytical Technology (PAT) Trends: A Multiauthor Review. <i>Organic Process Research and Development</i> , 2015, 19, 3-62.	2.7	329
2	Solvent-Mediated Phase Transformation Kinetics of an Anhydrate/Hydrate System. <i>Crystal Growth and Design</i> , 2006, 6, 2053-2060.	3.0	106
3	Crystallization of glycine with ultrasound. <i>International Journal of Pharmaceutics</i> , 2006, 320, 23-29.	5.2	102
4	Crystal Shape Control by Manipulating Supersaturation in Batch Cooling Crystallization. <i>Crystal Growth and Design</i> , 2006, 6, 2799-2803.	3.0	69
5	Hospital wastewater treatment with pilot-scale pulsed corona discharge for removal of pharmaceutical residues. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 1569-1577.	6.7	68
6	Solubility and stability of anhydrate/hydrate in solvent mixtures. <i>International Journal of Pharmaceutics</i> , 2006, 321, 101-107.	5.2	61
7	Polymorph Screening Using Near-Infrared Spectroscopy. <i>Analytical Chemistry</i> , 2003, 75, 5267-5273.	6.5	58
8	IR spectroscopy together with multivariate data analysis as a process analytical tool for in-line monitoring of crystallization process and solid-state analysis of crystalline product. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2005, 38, 275-284.	2.8	55
9	In-line image analysis on the effects of additives in batch cooling crystallization. <i>Journal of Crystal Growth</i> , 2006, 289, 286-294.	1.5	53
10	Raman and ATR FTIR spectroscopy in reactive crystallization: Simultaneous monitoring of solute concentration and polymorphic state of the crystals. <i>Journal of Crystal Growth</i> , 2009, 311, 3466-3475.	1.5	51
11	Physicochemical stability of high indomethacin payload ordered mesoporous silica MCM-41 and SBA-15 microparticles. <i>International Journal of Pharmaceutics</i> , 2011, 416, 242-51.	5.2	50
12	Oxidation of aqueous pharmaceuticals by pulsed corona discharge. <i>Environmental Technology (United Kingdom)</i> , 2013, 34, 923-930.	2.2	50
13	Additive Effects on the Solvent-Mediated Anhydrate/Hydrate Phase Transformation in a Mixed Solvent. <i>Crystal Growth and Design</i> , 2007, 7, 724-729.	3.0	48
14	Effect of Cu doping on TiO ₂ nanoparticles and its photocatalytic activity under visible light. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 7438-7447.	2.2	47
15	DRIFT-IR for quantitative characterization of polymorphic composition of sulfathiazole. <i>Analytica Chimica Acta</i> , 2005, 544, 108-117.	5.4	34
16	In-line monitoring of reactive crystallization process based on ATR-FTIR and Raman spectroscopy. <i>Journal of Chemometrics</i> , 2008, 22, 644-652.	1.3	30
17	Fluorescence Properties Reinforced by Proton Transfer in the Salt 2,6-Diaminopyridinium Dihydrogen Phosphate. <i>Journal of Physical Chemistry A</i> , 2014, 118, 6883-6892.	2.5	28
18	Ice growth on the cooling surface in a jacketed and stirred eutectic freeze crystallizer of aqueous Na ₂ SO ₄ solutions. <i>Separation and Purification Technology</i> , 2017, 175, 512-526.	7.9	27

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19	Lithium carbonate precipitation by homogeneous and heterogeneous reactive crystallization. <i>Hydrometallurgy</i> , 2020, 195, 105386.	4.3	27
20	Spectroscopic Monitoring of Carbamazepine Crystallization and Phase Transformation in Ethanol-Water Solution. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 6991-6998.	3.7	25
21	Oxidation of Aqueous Paracetamol by Pulsed Corona Discharge. <i>Ozone: Science and Engineering</i> , 2013, 35, 116-124.	2.5	25
22	Effect of mixing on enzymatic hydrolysis of cardboard waste: Saccharification yield and subsequent separation of the solid residue using a pressure filter. <i>Bioresource Technology</i> , 2012, 110, 405-411.	9.6	22
23	ATR-FTIR in monitoring of crystallization processes: comparison of indirect and direct OSC methods. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2005, 76, 25-35.	3.5	19
24	Process control and monitoring of reactive crystallization of L-glutamic acid. <i>AIChE Journal</i> , 2010, 56, 2063-2076.	3.6	18
25	Application of the compartmental model to the gas-liquid precipitation of CO_2 - Ca(OH)_2 aqueous system in a stirred tank. <i>AIChE Journal</i> , 2017, 63, 378-386.	3.6	18
26	Pulsed corona discharge oxidation of aqueous lignin: decomposition and aldehydes formation. <i>Environmental Technology (United Kingdom)</i> , 2014, 35, 171-176.	2.2	16
27	Lithium Recovery by Precipitation from Impure Solutions – Lithium Ion Battery Waste. <i>Chemical Engineering and Technology</i> , 2018, 41, 1205-1210.	1.5	16
28	Abatement of amoxicillin and doxycycline in binary and ternary aqueous solutions by gas-phase pulsed corona discharge oxidation. <i>Chemical Engineering Journal</i> , 2018, 334, 673-681.	12.7	16
29	Mechanistic Study of Magnesium Carbonate Semibatch Reactive Crystallization with Magnesium Hydroxide and CO_2 . <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 12077-12082.	3.7	15
30	Dynamic and perturbative system analysis of granular material in a vibrating screen. <i>Advanced Powder Technology</i> , 2017, 28, 3257-3264.	4.1	15
31	Real-Time Raman Monitoring of Calcium Phosphate Precipitation in a Semi-Batch Stirred Crystallizer. <i>Crystal Growth and Design</i> , 2018, 18, 1622-1628.	3.0	14
32	Freeze Concentration of Aqueous [DBNH][OAc] Ionic Liquid Solution. <i>Crystals</i> , 2020, 10, 147.	2.2	14
33	Batch cooling crystallization study based on in-line measurement of supersaturation and crystal size distribution. <i>Journal of Crystal Growth</i> , 2005, 275, e1857-e1862.	1.5	13
34	Determination of the Pitzer Interaction Parameters at 273.15 K from the Freezing-Point Data Available for NaCl and KCl Solutions. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 5608-5616.	3.7	13
35	Batch cooling crystallization and pressure filtration of sulphathiazole: the influence of solvent composition. <i>Biotechnology and Applied Biochemistry</i> , 2005, 41, 17.	3.1	12
36	Raman spectroscopic imaging of indomethacin loaded in porous silica. <i>CrystEngComm</i> , 2012, 14, 1582-1587.	2.6	12

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37	Mass Transfer and Kinetics Study of Heterogeneous Semi-Batch Precipitation of Magnesium Carbonate. <i>Chemical Engineering and Technology</i> , 2014, 37, 1363-1368.	1.5	12
38	Fluorescence and physical properties of the organic salt 2-chloro-4-nitrobenzoate-3-ammonium-phenol. <i>Chemical Physics</i> , 2015, 458, 52-61.	1.9	11
39	Mathematical model of precipitation of magnesium carbonate with carbon dioxide from the magnesium hydroxide slurry. <i>Computers and Chemical Engineering</i> , 2016, 87, 180-189.	3.8	11
40	Insights into Design Criteria for a Continuous, Sonicated Modular Tubular Cooling Crystallizer. <i>Crystal Growth and Design</i> , 2018, 18, 7286-7295.	3.0	11
41	Purification efficiency of natural freeze crystallization for urban wastewaters. <i>Cold Regions Science and Technology</i> , 2020, 170, 102953.	3.5	11
42	Activity Coefficients of Potassium Dihydrogen Phosphate in Aqueous Solutions at 25°C and in Aqueous Mixtures of Urea and this Electrolyte in the Temperature Range 20-35°C. <i>Zeitschrift Fur Physikalische Chemie</i> , 2003, 217, 723-738.	2.8	10
43	Simulation and Empirical Studies of Solvent Evaporation Rates in Vacuum Evaporation Crystallization. <i>Chemical Engineering and Technology</i> , 2019, 42, 1452-1457.	1.5	10
44	Separation efficiency and ice strength properties in simulated natural freezing of aqueous solutions. <i>Cold Regions Science and Technology</i> , 2019, 158, 18-29.	3.5	10
45	Solid-liquid separation of hydrolysates obtained from enzymatic hydrolysis of cardboard waste. <i>Industrial Crops and Products</i> , 2012, 38, 72-80.	5.2	9
46	Purity and mechanical strength of naturally frozen ice in wastewater basins. <i>Water Research</i> , 2018, 145, 418-428.	11.3	9
47	Impurity separation efficiency of multi-component wastewater in a pilot-scale freeze crystallizer. <i>Separation and Purification Technology</i> , 2020, 236, 116271.	7.9	9
48	A Model for the Prediction of Supersaturation Level in Batch Cooling Crystallization. <i>Journal of Chemical Engineering of Japan</i> , 2006, 39, 426-436.	0.6	8
49	Pulsed corona discharge oxidation of aqueous carbamazepine micropollutant. <i>Environmental Technology (United Kingdom)</i> , 2016, 37, 2072-2081.	2.2	8
50	Neural network simulation for non-MSMPR crystallization. <i>Chemical Engineering Journal</i> , 2001, 81, 101-107.	12.7	7
51	CFD Study of Local Crystal Growth Rate in a Continuous Suspension Crystallizer.. <i>Journal of Chemical Engineering of Japan</i> , 2002, 35, 1178-1187.	0.6	7
52	Modeling and simulation of gravitational solid-solid separation for optimum performance. <i>Powder Technology</i> , 2013, 239, 337-347.	4.2	7
53	The Effect of Mixedness on Crystal Size Distribution in a Continuous Crystallizer.. <i>Journal of Chemical Engineering of Japan</i> , 1998, 31, 55-60.	0.6	7
54	Application of on-line Raman spectroscopy on monitoring semi-batch anti-solvent crystallization. <i>CrystEngComm</i> , 2009, 11, 827.	2.6	6

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55	Solubility of potassium dihydrogen phosphate in aqueous solutions of acetone, ethyl acetate, and thiourea from T=(298.15–313.15)K. <i>Fluid Phase Equilibria</i> , 2012, 336, 16-21.	2.5	6
56	Growth and characterization of 6-chloro-2,4-dinitroaniline crystals in anti-solvent precipitation and reprecipitation methods. <i>CrystEngComm</i> , 2014, 16, 4183-4193.	2.6	6
57	Effect of a pulsed electric field on the synthesis of TiO ₂ and its photocatalytic performance under visible light irradiation. <i>Powder Technology</i> , 2017, 307, 137-144.	4.2	6
58	Behaviour of aqueous sulfamethizole solution and temperature effects in cold plasma oxidation treatment. <i>Scientific Reports</i> , 2018, 8, 8734.	3.3	6
59	Purification of Nickel Sulfate by Batch Cooling Crystallization. <i>Chemical Engineering and Technology</i> , 2019, 42, 1475-1480.	1.5	6
60	Determination of Pitzer Parameters for 1 M Nitrate and 1 M Sulfate Solutions from Freezing Point Data. <i>Chemical Engineering and Technology</i> , 2014, 37, 1340-1346.	1.5	5
61	Dynamic population balance and flow models for granular solids in a linear vibrating screen. <i>AIChE Journal</i> , 2016, 62, 3889-3898.	3.6	5
62	Hydrodynamics and kinetics in semi-batch stirred tank precipitation of L-glutamic acid based on pH shift with mineral acids. <i>Chemical Engineering Science</i> , 2018, 178, 167-182.	3.8	5
63	Non-thermal gas-phase pulsed corona discharge for lignin modification. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018, 126, 141-149.	3.6	5
64	The CFD simulation of temperature control in a batch mixing tank. <i>Computer Aided Chemical Engineering</i> , 2003, 14, 983-988.	0.5	4
65	Filter cake washing: Partial dissolution of organic particles and real-time monitoring based on Raman spectroscopy. <i>Separation and Purification Technology</i> , 2008, 59, 270-276.	7.9	4
66	Structural, theoretical and third order nonlinear optical properties of (E)-N-(4-chlorobenzylidene)-4-fluorobenzohydrazide monohydrate. <i>Molecular Crystals and Liquid Crystals</i> , 2021, 725, 66-80.	0.9	4
67	Determination of the Pitzer Interaction Parameters at 273.15 K from the Freezing-Point Data Available for Solutions of Uni-Univalent Electrolytes. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 19351-19358.	3.7	3
68	Influence and CFD analysis of cooling air velocity on the purification of aqueous nickel sulfate solutions by freezing. <i>AIChE Journal</i> , 2018, 64, 200-208.	3.6	3
69	Experimental and CFD study on influence of viscosity on layer melt crystallization. <i>Separation and Purification Technology</i> , 2022, 284, 120170.	7.9	3
70	Semi-batch evaporative crystallization and drying of cobalt sulphate hydrates. <i>Hydrometallurgy</i> , 2022, 208, 105821.	4.3	3
71	Pulsed electric field assisted sol-gel preparation of TiO ₂ nanoparticles. <i>Journal of Crystal Growth</i> , 2016, 451, 200-206.	1.5	2
72	Nonlinear optimization of gravity solids classification based on the feed and deck angles: a law of mass action approach. <i>Powder Technology</i> , 2016, 291, 140-146.	4.2	2

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73	High Purity Nickel Recovery from an Industrial Sidestream Using Concentration and Liquid-Liquid Extraction Techniques. <i>Jom</i> , 2020, 72, 831-838.	1.9	2
74	The Effect of Immiscible Additives on the Batch Reactive Crystallization of a Benzoic Acid Derivative.. <i>Journal of Chemical Engineering of Japan</i> , 2002, 35, 1140-1145.	0.6	2
75	Synthesis, structural, vibrational, molecular docking and nonlinear optical studies of (E)-N ² -(2,3-dimethoxybenzylidene)-4-fluorobenzohydrazide. <i>Journal of Molecular Structure</i> , 2022, 1254, 132375.	3.6	2
76	Recovery of Lanthanum from Aqueous Solutions by Crystallization as Lanthanum Sodium Sulfate Double Salt. <i>Jom</i> , 0, , 1.	1.9	2
77	Assessment of water quality in the vicinity of peat extraction sites: The case of Pieni-Saimaa, Finland. <i>Water and Environment Journal</i> , 2016, 30, 157-166.	2.2	1
78	Modelling of crystal growth in multicomponent solutions. <i>Computer Aided Chemical Engineering</i> , 2003, 14, 785-790.	0.5	0