

Urs A Peuker

List of Publications by Year in descending order

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94
papers

1,391
citations

331670

21
h-index

395702

33
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99
all docs

99
docs citations

99
times ranked

1140
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of rare earth minerals flotation: Monazite and xenotime. <i>International Journal of Mining Science and Technology</i> , 2015, 25, 877-883.	10.3	72
2	Recycling Chain for Spent Lithium-Ion Batteries. <i>Metals</i> , 2020, 10, 316.	2.3	69
3	Numerical investigation of sonochemical reactors considering the effect of inhomogeneous bubble clouds on ultrasonic wave propagation. <i>Chemical Engineering Journal</i> , 2012, 189-190, 364-375.	12.7	67
4	Crushing of large Li-ion battery cells. <i>Waste Management</i> , 2019, 85, 317-326.	7.4	61
5	A TGA-FTIR perspective of fatty acid adsorbed on magnetite nanoparticles- Decomposition steps and magnetite reduction. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012, 397, 16-23.	4.7	59
6	How gangue particle size can affect the recovery of ultrafine and fine particles during froth flotation. <i>Minerals Engineering</i> , 2017, 109, 1-9.	4.3	56
7	Flotation study of fine grained carbonaceous sedimentary apatite ore - Challenges in process mineralogy and impact of hydrodynamics. <i>Minerals Engineering</i> , 2018, 121, 196-204.	4.3	52
8	Nanobubble enhanced agglomeration of hydrophobic powders. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2017, 530, 117-123.	4.7	50
9	Liquid-liquid phase transfer of magnetite nanoparticles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2009, 348, 186-190.	4.7	39
10	Impact of flotation hydrodynamics on the optimization of fine-grained carbonaceous sedimentary apatite ore beneficiation. <i>Powder Technology</i> , 2019, 345, 223-233.	4.2	36
11	Study of nanobubbles on hydrophilic and hydrophobic alumina surfaces. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 497, 242-250.	4.7	33
12	Description of Ore Particles from X-Ray Microtomography (XMT) Images, Supported by Scanning Electron Microscope (SEM)-Based Image Analysis. <i>Microscopy and Microanalysis</i> , 2018, 24, 461-470.	0.4	32
13	Characterization of magnetic ion-exchange composites for protein separation from biosuspensions. <i>Journal of Bioscience and Bioengineering</i> , 2008, 105, 579-585.	2.2	31
14	Multidimensional characterization of separation processes - Part 1: Introducing kernel methods and entropy in the context of mineral processing using SEM-based image analysis. <i>Minerals Engineering</i> , 2019, 137, 78-86.	4.3	29
15	Wettability of AlSi7Mg alloy on alumina, spinel, mullite and rutile and its influence on the aluminum melt filtration efficiency. <i>Materials and Design</i> , 2018, 150, 75-85.	7.0	27
16	Efficient separation of fine coal assisted by surface nanobubbles. <i>Separation and Purification Technology</i> , 2020, 249, 117163.	7.9	27
17	Froth properties and entrainment in lab-scale flotation: A case of carbonaceous sedimentary phosphate ore. <i>Chemical Engineering Research and Design</i> , 2019, 142, 100-110.	5.6	26
18	Liquid-liquid phase transfer of magnetite nanoparticles - Evaluation of surfactants. <i>Powder Technology</i> , 2013, 247, 265-269.	4.2	25

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19	Evaluation of Magnetic Separation Efficiency on a Cassiterite-Bearing Skarn Ore by Means of Integrative SEM-Based Image and XRF-XRD Data Analysis. <i>Minerals (Basel, Switzerland)</i> , 2018, 8, 390.	2.0	25
20	Wetting and Adhesive Forces on Rough Surfaces – An Experimental and Theoretical Study. <i>Procedia Engineering</i> , 2015, 102, 45-53.	1.2	22
21	Characterization of Protein Capacity of Nanocation Exchanger Particles as Filling Material for Functional Magnetic Beads for Bioseparation Purposes. <i>Biotechnology Progress</i> , 2008, 24, 409-416.	2.6	21
22	Magnetite core-shell nano-composites with chlorine functionality: preparation by miniemulsion polymerization and characterization. <i>Journal of Polymer Research</i> , 2011, 18, 79-88.	2.4	21
23	Coagulation and stabilization of sterically functionalized magnetite nanoparticles in an organic solvent with different technical polymers. <i>Journal of Colloid and Interface Science</i> , 2011, 357, 292-299.	9.4	21
24	Impact of Wetting to the Agglomeration of Dispersed Particles in an Aqueous Medium. <i>Advanced Engineering Materials</i> , 2013, 15, 1299-1306.	3.5	21
25	Wetting and its influence on the filtration ability of ceramic foam filters. <i>Particuology</i> , 2015, 18, 50-57.	3.6	21
26	Viscous force – An important parameter for the modeling of deep bed filtration in liquid media. <i>Powder Technology</i> , 2015, 283, 190-198.	4.2	21
27	Scale-up of steam pressure filtration. <i>Chemical Engineering and Processing: Process Intensification</i> , 1999, 38, 611-619.	3.6	20
28	Characterization of reticulated ceramic foams with mercury intrusion porosimetry and mercury probe atomic force microscopy. <i>Ceramics International</i> , 2018, 44, 22963-22975.	4.8	20
29	Particle adhesion on highly rough hydrophobic surfaces: The distribution of interaction mechanisms. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014, 459, 166-171.	4.7	19
30	Mapping hydrophobicity combining AFM and Raman spectroscopy. <i>Minerals Engineering</i> , 2014, 66-68, 181-190.	4.3	18
31	Stochastic Modeling of Multidimensional Particle Properties Using Parametric Copulas. <i>Microscopy and Microanalysis</i> , 2019, 25, 720-734.	0.4	18
32	A comparison of filtration characterisation devices for compressible suspensions using conventional filtration theory and compressional rheology. <i>Powder Technology</i> , 2019, 346, 49-56.	4.2	16
33	Phase transfer of agglomerated nanoparticles: deagglomeration by adsorbing grafted molecules and colloidal stability in polymer solutions. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	1.9	15
34	Investigating the removal of particles from the air/water-interface – Modelling detachment forces using an energetic approach. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2017, 513, 215-222.	4.7	15
35	Evaluation of Recyclability of a WEEE Slag by Means of Integrative X-Ray Computer Tomography and SEM-Based Image Analysis. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 309.	2.0	15
36	Impact of the Roughness of Alumina and Al ₂ O ₃ – C Substrates on the Adhesion Mechanisms in a Model System. <i>Advanced Engineering Materials</i> , 2017, 19, 1700088.	3.5	14

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37	Multiscale Tomographic Analysis for Micron-Sized Particulate Samples. <i>Microscopy and Microanalysis</i> , 2020, 26, 676-688.	0.4	14
38	A Mössbauer study of the chemical stability of iron oxide nanoparticles in PMMA and PVB beads. <i>Journal of Magnetism and Magnetic Materials</i> , 2008, 320, 2099-2105.	2.3	13
39	Modeling adhesive forces caused by nanobubble capillary bridging. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 509, 457-466.	4.7	13
40	Preparation techniques for micron-sized particulate samples in X-ray microtomography. <i>Powder Technology</i> , 2020, 360, 989-997.	4.2	12
41	Multidimensional characterization of separation processes – Part 2: Comparability of separation efficiency. <i>Minerals Engineering</i> , 2020, 150, 106284.	4.3	12
42	A contribution to exploring the importance of surface air nucleation in froth flotation – The effects of dissolved air on graphite flotation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 633, 127866.	4.7	12
43	Liquid-Liquid Interfacial Transport of Nanoparticles. <i>Physical Separation in Science and Engineering</i> , 2007, 2007, 1-7.	1.0	11
44	Modular process for the flexible synthesis of magnetic beads – Process and product validation. <i>Journal of Applied Polymer Science</i> , 2009, 112, 2366-2373.	2.6	11
45	Review on Zigzag Air Classifier. <i>Processes</i> , 2022, 10, 764.	2.8	11
46	Modeling adhesive force distributions on highly rough surfaces. <i>Powder Technology</i> , 2016, 289, 88-94.	4.2	10
47	Measuring interactions between yeast cells and a micro-sized air bubble via atomic force microscopy. <i>Journal of Colloid and Interface Science</i> , 2018, 532, 689-699.	9.4	10
48	Decoating of Electrode Foils from EOL Lithium-Ion Batteries by Electrohydraulic Fragmentation. <i>Metals</i> , 2022, 12, 209.	2.3	8
49	Comprehensive Characterization of Shredded Lithium-Ion Battery Recycling Material. <i>Chemistry - A European Journal</i> , 2022, 28, .	3.3	8
50	Influence of Wetting on Washing and Filtration Properties. <i>Chemical Engineering and Technology</i> , 2016, 39, 543-550.	1.5	7
51	Influence of cell opening methods on organic solvent removal during pretreatment in lithium-ion battery recycling. <i>Waste Management and Research</i> , 2022, 40, 1015-1026.	3.9	7
52	Electrochemical Stimulation of Water/Oil Interfaces by Nonionic Cationic Block Copolymer Systems. <i>Langmuir</i> , 2021, 37, 1073-1081.	3.5	7
53	Filterkuchenwäsche makroporöser Kieselgelpartikel. <i>Chemie-Ingenieur-Technik</i> , 2019, 91, 1842-1852.	0.8	5
54	PARROT: A Pilot Study on the Open Access Provision of Particle-Discrete Tomographic Datasets. <i>Microscopy and Microanalysis</i> , 2022, 28, 350-360.	0.4	5

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55	The grinding of porous ion exchange particles. Powder Technology, 2016, 291, 14-19.	4.2	4
56	Cake Filtration of Multicomponent Suspensions. Chemical Engineering and Technology, 2018, 41, 96-101.	1.5	4
57	Processing and Characterization of Beads with Graded Layer Compositions Based on Zirconia and TRIPâ€Steel. Advanced Engineering Materials, 2019, 21, 1800615.	3.5	4
58	Synthesis of High Performance Geopolymers by Wet Milling of Blast Furnace Slags. Materials Science Forum, 0, 959, 177-182.	0.3	4
59	Experimental Investigations of the Depth Filtration inside Openâ€Cell Foam Filters Supported by Highâ€Resolution Computed Tomography Scanning and Poreâ€Scale Numerical Simulations. Advanced Engineering Materials, 2020, 22, 1900761.	3.5	4
60	Self-constructed automated syringe for preparation of micron-sized particulate samples in x-ray microtomography. MethodsX, 2020, 7, 100757.	1.6	4
61	Gaseous flow through coarse granular beds: The role of specific surface area. Powder Technology, 2020, 366, 821-831.	4.2	4
62	Influence of Cell Opening Methods on Electrolyte Removal during Processing in Lithium-Ion Battery Recycling. Metals, 2022, 12, 663.	2.3	4
63	Prediction of silo-vibrations using a modified lambdameter. , 2013, , .		3
64	Preparation strategy for statistically significant micrometer-sized particle systems suitable for correlative 3D imaging workflows on the example of X-ray microtomography. Powder Technology, 2022, 395, 235-242.	4.2	3
65	Interaction of liquid movement and steam condensation during steam centrifugation. International Journal of Mineral Processing, 2005, 76, 193-203.	2.6	2
66	Corrosion of Carbon Free and Bonded Refractories for Application in Steel Ingot Casting: An Approach for Improving Steel Quality. Materials Science Forum, 2019, 959, 166-176.	0.3	2
67	Silicon Waste from the Photovoltaic Industry - A Material Source for the Next Generation Battery Technology?. Materials Science Forum, 2019, 959, 107-112.	0.3	2
68	Comprehensive, multidimensional and correlative particle characterization of a saxolite and talcum compound to support the understanding of complex separation processes. Microscopy and Microanalysis, 2021, 27, 934-937.	0.4	2
69	The Influence of Surface Energy on the Washing Quality of Filter Cakes. Advances in Chemical Engineering and Science, 2011, 01, 252-255.	0.5	2
70	Application of a Particle Extraction Process at the Interface of Two Liquids in a Drop Columnâ€”Consideration of the Process Behavior and Kinetic Approach. Advances in Chemical Engineering and Science, 2014, 04, 149-160.	0.5	2
71	Hydrophilic Functionalized Bi-Layered Polymer Magnetic Core/Shell: Preparation and Characterization. Advanced Materials Research, 0, 622-623, 254-258.	0.3	1
72	Effect of solvent exchange on the stability of sterically functionalized magnetite nanoparticles in poly(methyl methacrylate) solutions and resulting spray dried composites. Chemical Engineering Research and Design, 2014, 92, 2523-2533.	5.6	1

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73	Einfluss des Mischprozederes auf die Verfestigung von Glasgemenge. Chemie-Ingenieur-Technik, 2016, 88, 995-1001.	0.8	1
74	Viscosity function of a fast reactive polymerization-Aqueous solution of acrylic acid in a rheometer. Polymer Engineering and Science, 2016, 56, 874-888.	3.1	1
75	Cake Filtration of Multiphase Solid-Liquid-Liquid. Chemie-Ingenieur-Technik, 2017, 89, 1782-1787.	0.8	1
76	Influence of the Wetting Behavior on the Aluminum Melt Filtration. Minerals, Metals and Materials Series, 2019, , 1071-1079.	0.4	1
77	Selective Separation Using Fluid-Liquid Interfaces. Materials Science Forum, 2019, 959, 113-124.	0.3	1
78	Temperature data during steam pressure filtration in combination with a water insoluble pore liquid. Data in Brief, 2020, 31, 105812.	1.0	1
79	On the Role of Hydrolyzable Metal Cations in the Adsorption of Anionic Surfactants on Negatively Charged Surfaces. Frontiers in Materials, 2020, 7, .	2.4	1
80	Neighborhood Relationships of Widely Distributed and Irregularly Shaped Particles in Partially Dewatered Filter Cakes. Transport in Porous Media, 2021, 138, 201-224.	2.6	1
81	Displacement washing of filter cakes from porous particles. Separation and Purification Technology, 2021, 274, 118129.	7.9	1
82	Influence of pre-dewatering on the success of cake washing. Separation Science and Technology, 2023, 58, 175-187.	2.5	1
83	Trockene Desagglomeration von Nanopartikelagglomeraten in einer Sichter. Chemie-Ingenieur-Technik, 2011, 83, 1262-1275.	0.8	0
84	Ressourcentechnologie des 21. Jahrhunderts. Chemie-Ingenieur-Technik, 2014, 86, 751-751.	0.8	0
85	Synthesis of Functionalized Magnetic Beads Using Spray Drying. Lecture Notes in Bioengineering, 2014, , 97-116.	0.4	0
86	Zerkleinerung von polymeren Ionenaustauscherpartikeln durch Feinstmahlung. Chemie-Ingenieur-Technik, 2016, 88, 616-621.	0.8	0
87	A Special Issue of the International Journal of Mineral Processing honoring Prof. Dr. sc. techn. Drs. h.c. Heinrich Schubert. International Journal of Mineral Processing, 2016, 156, 1-2.	2.6	0
88	Displacement washing of filter cakes from porous particles. Separation and Purification Technology, 2021, 274, 118141.	7.9	0
89	Milling Result Prediction. Lecture Notes in Earth System Sciences, 2014, , 717-721.	0.6	0
90	Process Development of a Liquid-Liquid Phase Transfer of Colloidal Particles for Production of High-Quality Organosols. , 2015, , 371-398.		0

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91	Polymerization in Sprays: Atomization and Product Design of Reactive Polymer Solutions. , 2016, , 795-841.		0
92	Atomic Force Microscopy Investigation of the In Situ Formed Oxide Layer at the Interface of Al ₂ O ₃ /C/Steel Melt in Terms of Adhesion Force and Roughness in a Model System. Advanced Engineering Materials, 0, , 2100634.	3.5	0
93	Mechanical and physical processes of battery recycling. , 2022, , 455-486.		0
94	Recycling battery casing materials. , 2022, , 349-370.		0