Jochen Schmidt

List of Publications by Year
in descending order

100 papers	2,293 citations	230014 27 h-index	274796 44 g-index
101 all docs	101 docs citations	101 times ranked	2903 citing authors

#	Article	IF	Citations
1	Temperature influence on the triboelectric powder charging during dry coating of polypropylene with nanosilica particles. Powder Technology, 2022, 399, 117224.	2.1	7
2	Abrasion-Induced Acceleration of Melt Crystallisation of Wet Comminuted Polybutylene Terephthalate (PBT). Polymers, 2022, 14, 810.	2.0	2
3	Enhancing Photoelectric Powder Deposition of Polymers by Charge Control Substances. Polymers, 2022, 14, 1332.	2.0	6
4	Effect of protein adsorption on the dissolution kinetics of silica nanoparticles. Colloids and Surfaces B: Biointerfaces, 2022, 214, 112466.	2.5	10
5	A novel, precipitated polybutylene terephthalate feedstock material for powder bed fusion of polymers (PBF): Material development and initial PBF processability. Materials and Design, 2021, 197, 109265.	3.3	24
6	Improvement of polymer properties for powder bed fusion by combining in situ PECVD nanoparticle synthesis and dry coating. Plasma Processes and Polymers, 2021, 18, 2000247.	1.6	9
7	Grey facet-controlled anatase nanosheets for photocatalytic H₂ evolution without co-catalyst. JPhys Energy, 2021, 3, 034003.	2.3	6
8	Particle Lagrangian CFD Simulation and Experimental Characterization of the Rounding of Polymer Particles in a Downer Reactor with Direct Heating. Processes, 2021, 9, 916.	1.3	4
9	Towards a generally applicable methodology for the characterization of particle properties relevant to processing in powder bed fusion of polymers â€“ From single particle to bulk solid behavior. Additive Manufacturing, 2021, 41, 101957.	1.7	8
10	Infiltration behavior of liquid thermosets in thermoplastic powders for additive manufacturing of polymer composite parts in a combined powder bed fusion process. Polymer Composites, 2021, 42, 5265-5279.	2.3	9
11	Selektives Laserstrahlschmelzen von Polyamid 12 - Einfluss von FlieÄŸhilfsmitteln auf Verarbeitbarkeit und Bauteileigenschaften. , 2021, , 22-36.		0
12	FlÃ¼ssig-FlÃ¼ssig-Phasentrennung und FÃllung zur Herstellung neuartiger Ausgangsmaterialien fÃ¼r das pulverbettbasierte Schmelzen von Polymeren. , 2021, , 10-21.		0
13	Quality over Quantity: How Different Dispersion Qualities of Minute Amounts of Nano-Additives Affect Material Properties in Powder Bed Fusion of Polyamide 12. Materials, 2021, 14, 5322.	1.3	3
14	Development of poly(L-lactide) (PLLA) microspheres precipitated from triacetin for application in powder bed fusion of polymers. Additive Manufacturing, 2020, 32, 100966.	1.7	24
15	Influence of Ti³⁺ defect-type on heterogeneous photocatalytic H₂ evolution activity of TiO₂. Journal of Materials Chemistry A, 2020, 8, 1432-1442.	5.2	89
16	Electrophotographic Multilayer Powder Pattern Deposition for Additive Manufacturing. Jom, 2020, 72, 1366-1375.	0.9	14
17	Production of PBT/PC multi-material particles via a combination of co-grinding and spray-agglomeration for powder bed fusion. Procedia CIRP, 2020, 94, 100-104.	1.0	9
18	On the Development of Polymer Particles for Laser Powder Bed Fusion via Precipitation. Procedia CIRP, 2020, 94, 95-99.	1.0	7

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19	3D printing of magnetic parts by laser powder bed fusion of iron oxide nanoparticle functionalized polyamide powders. Journal of Materials Chemistry C, 2020, 8, 12204-12217.	2.7	27
20	Thermal rounding of micron-sized polymer particles in a downer reactor: direct vs indirect heating. Rapid Prototyping Journal, 2020, 26, 1637-1646.	1.6	14
21	Enhancement of polyamide laser sinter powder reusability by acid catalyzed hydrolysis. Procedia CIRP, 2020, 94, 105-109.	1.0	2
22	Improving the coloring of polypropylene materials for powder bed fusion by plasma surface functionalization. Additive Manufacturing, 2020, 34, 101373.	1.7	6
23	Effective Thermal Conductivity of Nanofluids: Measurement and Prediction. International Journal of Thermophysics, 2020, 41, 1.	1.0	25
24	Establishing High Photocatalytic H₂ Evolution from Multiwalled Titanate Nanotubes. ChemCatChem, 2020, 12, 2951-2956.	1.8	15
25	Grain Structure Evolution of Alâ€“Cu Alloys in Powder Bed Fusion with Laser Beam for Excellent Mechanical Properties. Materials, 2020, 13, 82.	1.3	17
26	Packings of micron-sized spherical particles â€“ Insights from bulk density determination, X-ray microtomography and discrete element simulations. Advanced Powder Technology, 2020, 31, 2293-2304.	2.0	34
27	Cu, Zn doped borate bioactive glasses: antibacterial efficacy and dose-dependent in vitro modulation of murine dendritic cells. Biomaterials Science, 2020, 8, 2143-2155.	2.6	56
28	Development of Polyoxymethylene Particles via the Solution-Dissolution Process and Application to the Powder Bed Fusion of Polymers. Materials, 2020, 13, 1535.	1.3	22
29	Mesoporous silica submicron particles (MCM-41) incorporating nanoscale Ag: synthesis, characterization and application as drug delivery coatings. Journal of Porous Materials, 2019, 26, 443-453.	1.3	12
30	Novel process routes towards the production of spherical polymer powders for selective laser sintering. AIP Conference Proceedings, 2019, , .	0.3	2
31	Formation of spherical micron-sized polyamide particles for additive manufacturing via liquid-liquid phase separation. AIP Conference Proceedings, 2019, , .	0.3	0
32	Production of spherical micron-sized polymer particles for additive manufacturing by liquid phase processes. AIP Conference Proceedings, 2019, , .	0.3	2
33	Formation of drug-loaded nanoemulsions in stirred media mills. Advanced Powder Technology, 2019, 30, 1584-1591.	2.0	9
34	Analysis of Tribo-Charging during Powder Spreading in Selective Laser Sintering: Assessment of Polyamide 12 Powder Ageing Effects on Charging Behavior. Polymers, 2019, 11, 609.	2.0	20
35	MagnÃ©li Phases Doped with Pt for Photocatalytic Hydrogen Evolution. ACS Applied Energy Materials, 2019, 2, 8399-8404.	2.5	18
36	Production of polyamide 11 microparticles for Additive Manufacturing by liquid-liquid phase separation and precipitation. Chemical Engineering Science, 2019, 197, 11-25.	1.9	43

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37	Biodegradabiliy of spherical mesoporous silica particles (MCM-41) in simulated body fluid (SBF). American Mineralogist, 2018, 103, 350-354.	0.9	4
38	Development and characterization of niobium-releasing silicate bioactive glasses for tissue engineering applications. Journal of the European Ceramic Society, 2018, 38, 871-876.	2.8	33
39	Dissolution of commercial nanoscale silica particles in electrolyte solution: The importance of the solid-solvent-ratio to physical and chemical properties of the solid-liquid interface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 537, 591-603.	2.3	3
40	Treatment of polymer powders by combining an atmospheric plasma jet and a fluidized bed reactor. Powder Technology, 2018, 325, 490-497.	2.1	15
41	Spherical Polybutylene Terephthalate (PBT)â€"Polycarbonate (PC) Blend Particles by Mechanical Alloying and Thermal Rounding. Polymers, 2018, 10, 1373.	2.0	26
42	Assessing the influence of viscosity and milling bead size on the stressing conditions in a stirred media mill by single particle probes. Chemical Engineering Research and Design, 2018, 136, 859-869.	2.7	16
43	Synthesis and characterization of manganese containing mesoporous bioactive glass nanoparticles for biomedical applications. Journal of Materials Science: Materials in Medicine, 2018, 29, 64.	1.7	68
44	Production of spherical semi-crystalline polycarbonate microparticles for Additive Manufacturing by liquid-liquid phase separation. Powder Technology, 2018, 335, 275-284.	2.1	32
45	PulverschÃ¼ttungsanalyse fÃ¼r das selektive Laser-Sintern mittels Computertomographie. , 2018, , 299-311.		0
46	Characterization of a downer reactor for particle rounding. Powder Technology, 2017, 316, 357-366.	2.1	17
47	Mechanochemically induced sulfur doping in ZnO via oxygen vacancy formation. Physical Chemistry Chemical Physics, 2017, 19, 13838-13845.	1.3	21
48	Comparison of the effects of 45S5 and 1393 bioactive glass microparticles on hMSC behavior. Journal of Biomedical Materials Research - Part A, 2017, 105, 2772-2782.	2.1	37
49	Influence of Tail Groups during Functionalization of ZnO Nanoparticles on Binding Enthalpies and Photoluminescence. Langmuir, 2017, 33, 13581-13589.	1.6	8
50	Characterization of stressing conditions in mills â€" A comprehensive research strategy based on well-characterized model particles. Powder Technology, 2017, 305, 652-661.	2.1	15
51	Nobleâ€Metalâ€Free Photocatalytic Hydrogen Evolution Activity: The Impact of Ball Milling Anatase Nanopowders with TiH₂. Advanced Materials, 2017, 29, 1604747.	11.1	59
52	Formation of Mefenamic Acid Nanocrystals with Improved Dissolution Characteristics. Chemie-Ingenieur-Technik, 2017, 89, 1060-1071.	0.4	17
53	New approaches towards production of polymer powders for selective laser beam melting of polymers. AIP Conference Proceedings, 2017, , .	0.3	3
54	Production of PBT/PC particle systems by wet grinding. AIP Conference Proceedings, 2017, , .	0.3	4

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55	Design and scale-up of a semi-industrial downer-reactor for the rounding of irregular polymer particles. AIP Conference Proceedings, 2016, , .	0.3	2
56	Production of micron-sized polymer particles for additive manufacturing by melt emulsification. AIP Conference Proceedings, 2016, , .	0.3	2
57	Optimized polybutylene terephthalate powders for selective laser beam melting. Chemical Engineering Science, 2016, 156, 1-10.	1.9	58
58	Impact of formulation and operating parameters on particle size and grinding media wear in wet media milling of organic compounds â€“ A case study for pyrene. Advanced Powder Technology, 2016, 27, 2507-2519.	2.0	29
59	Herstellung und Funktionalisierung neuartiger Pulverwerkstoffe fÃ¼r die additive Fertigung. Chemie-Ingenieur-Technik, 2016, 88, 1208-1208.	0.4	2
60	A novel process for production of spherical PBT powders and their processing behavior during laser beam melting. AIP Conference Proceedings, 2016, , .	0.3	7
61	Mechanochemical aspects in wet stirred media milling. International Journal of Mineral Processing, 2016, 156, 24-31.	2.6	56
62	Production of spherical wax and polyolefin microparticles by melt emulsification for additive manufacturing. Chemical Engineering Science, 2016, 141, 282-292.	1.9	44
63	Impact of stressing conditions and polymerâ€“surfactant interactions on product characteristics of organic nanoparticles produced by media milling. Powder Technology, 2016, 294, 71-79.	2.1	17
64	Effect of polymer species and concentration on the production of mefenamic acid nanoparticles by media milling. European Journal of Pharmaceutics and Biopharmaceutics, 2016, 98, 98-107.	2.0	33
65	Prozessangepasste Charakterisierung der FlieÃŸfÃ¤higkeit pulverfÃ¶rmiger Strahlschmelzmaterialien / New methods for process-adapted characterization for selective beam melting powders. , 2016, , 185-196.		0
66	EinflÃ¼sse von PartikeloberflÃ¤chenmodifikationen auf das Materialverhalten bei Laserstrahlschmelzprozessen / Investigation of surface modifications of particles used in laser beam melting. , 2016, , 197-209.		0
67	Rounding of Irregular Polymer Particles in a Downer Reactor. Procedia Engineering, 2015, 102, 542-549.	1.2	16
68	A novel process route for the production of spherical SLS polymer powders. AIP Conference Proceedings, 2015, , .	0.3	2
69	Functionalization of polymer powders for SLS-processes using an atmospheric plasma jet in a fluidized bed reactor. AIP Conference Proceedings, 2015, , .	0.3	2
70	A Novel Process Chain for the Production of Spherical SLS Polymer Powders with Good Flowability. Procedia Engineering, 2015, 102, 550-556.	1.2	27
71	Increasing flowability and bulk density of PE-HD powders by a dry particle coating process and impact on LBM processes. Rapid Prototyping Journal, 2015, 21, 697-704.	1.6	42
72	Herstellung von Polyolefinstrahlschmelzmaterialien mittels Schmelzeemulgieren zum Einsatz in der additiven Fertigung. , 2015, , 13-23.		0

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73	Local densification of a single micron sized silica sphere by uniaxial compression. Scripta Materialia, 2015, 108, 84-87.	2.6	28
74	Formation of Nanoemulsions by Stirred Media Milling. Procedia Engineering, 2015, 102, 557-564.	1.2	4
75	In Situ Deformation and Breakage of Silica Particles Inside a SEM. Procedia Engineering, 2015, 102, 201-210.	1.2	9
76	Top-down Processing of Submicron 45S5 BioglassÂ® for Enhanced in Vitro Bioactivity and Biocompatibility. Procedia Engineering, 2015, 102, 534-541.	1.2	10
77	In situ cracking of silica beads in the SEM and TEM â€" Effect of particle size on structureâ€"property correlations. Powder Technology, 2015, 270, 337-347.	2.1	35
78	Funktionalisierung von Polymermaterialien fÃ¼r Laserstrahlschmelzverfahren. , 2015, , 25-40.		1
79	Neue AnsÃtze zur Herstellung gut flieÃŸfÃhiger Polymerpartikelsysteme zum Einsatz im Laserstrahlschmelzen von Kunststoffen. , 2015, , 3-11.		0
80	Dry particle coating of polymer particles for tailor-made product properties. , 2014, , .		4
81	Enhancing In Vitro Bioactivity of Meltâ€Derived 45S5 Bioglass^{Â®} by Comminution in a Stirred Media Mill. Journal of the American Ceramic Society, 2014, 97, 150-156.	1.9	39
82	Biocompatibility of submicron Bioglass^{Â®} powders obtained by a topâ€down approach. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 952-961.	1.6	14
83	Production of Al/Cu-Particles and their Potential for Processing by Laser Beam Melting (LBM). Physics Procedia, 2014, 56, 125-134.	1.2	6
84	A novel process route for the production of spherical LBM polymer powders with small size and good flowability. Powder Technology, 2014, 261, 78-86.	2.1	83
85	Mechanical activation of trans-stilbene during wet grinding. Advanced Powder Technology, 2014, 25, 1808-1816.	2.0	12
86	Correlation of Enhanced Strength and Internal Structure for Heatâ€Treated Submicron StÃ¶ber Silica Particles. Particle and Particle Systems Characterization, 2014, 31, 664-674.	1.2	32
87	Cobalt-Releasing 1393 Bioactive Glass-Derived Scaffolds for Bone Tissue Engineering Applications. ACS Applied Materials & Interfaces, 2014, 6, 2865-2877.	4.0	99
88	Functionalization of polymers using an atmospheric plasma jet in a fluidized bed reactor and the impact on SLM-processes. AIP Conference Proceedings, 2014, , .	0.3	2
89	Attractive particle interaction forces and packing density of fine glass powders. Scientific Reports, 2014, 4, 6227.	1.6	138
90	In vitro reactivity of Cu doped 45S5 BioglassÂ® derived scaffolds for bone tissue engineering. Journal of Materials Chemistry B, 2013, 1, 5659.	2.9	119

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91	Formation of nanoemulsions in stirred media mills. Chemical Engineering Science, 2013, 102, 300-308.	1.9	8
92	Conductivity in nonpolar media: Experimental and numerical studies on sodium AOTâ€“hexadecane, lecithinâ€“hexadecane and aluminum(III)-3,5-diisopropyl salicylateâ€“hexadecane systems. Journal of Colloid and Interface Science, 2012, 386, 240-251.	5.0	20
93	Production of polymer particles below 5 Î¼m by wet grinding. Powder Technology, 2012, 228, 84-90.	2.1	70
94	Studies of the Solubility of BaSO₄ Nanoparticles in Water: Kinetic Size Effect, Solubility Product, and Influence of Microporosity. Journal of Physical Chemistry C, 2011, 115, 1388-1397.	1.5	12
95	Dissolution behaviour of a nanoparticle in a microscale volume of solvent: Thermodynamic and kinetic considerations. Inhalation Toxicology, 2009, 21, 8-16.	0.8	1
96	Aqueous Long-Term Solubility of Titania Nanoparticles and Titanium(IV) Hydrolysis in a Sodium Chloride System Studied byÂAdsorptive Stripping Voltammetry. Journal of Solution Chemistry, 2009, 38, 1267-1282.	0.6	120
97	Dissolution kinetics of oxidic nanoparticles: The observation of an unusual behaviour. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 324, 51-57.	2.3	41
98	A Nanoparticle in a Nanoscale Volume of Solvent: Thermodynamic and Kinetic Considerations. Journal of Physical Chemistry C, 2008, 112, 16240-16247.	1.5	3
99	Dissolution Kinetics of Titanium Dioxide Nanoparticles:Â The Observation of an Unusual Kinetic Size Effect. Journal of Physical Chemistry B, 2006, 110, 3955-3963.	1.2	107
100	Semiâ€Crystalline Polyetherimide Microparticles via Liquidâ€Liquid Phase Separation and Precipitation. Macromolecular Materials and Engineering, 0, , 2100797.	1.7	4