Lutz MÃ¤dler

List of Publications by Year
in descending order

216 papers	30,060 citations	19608 61 h-index	4535 171 g-index
223 all docs	223 docs citations	223 times ranked	32956 citing authors

#	Article	IF	Citations
1	Digital research data: from analysis of existing standards to a scientific foundation for a modular metadata schema in nanosafety. Particle and Fibre Toxicology, 2022, 19, 1.	2.8	13
2	Microexplosions of multicomponent drops in spray flames. Combustion and Flame, 2022, 240, 112043.	2.8	15
3	Properties of gas-atomized Cu-Ti-based metallic glass powders for additive manufacturing. Materials and Design, 2022, 215, 110519.	3.3	8
4	A discrete differential geometric formulation of multiphase surface interfaces for scalable multiphysics equilibrium simulations. Chemical Engineering Science, 2022, 257, 117681.	1.9	2
5	The Impact of Support Material of Cobaltâ€Based Catalysts Prepared by Double Flame Spray Pyrolysis on CO₂ Methanation Dynamics. ChemCatChem, 2022, 14, .	1.8	11
6	Phase-selective laserâ€“induced breakdown spectroscopy in flame spray pyrolysis for iron oxide nanoparticle synthesis. Proceedings of the Combustion Institute, 2021, 38, 1711-1718.	2.4	27
7	A review of contact force models between nanoparticles in agglomerates, aggregates, and films. Journal of Aerosol Science, 2021, 153, 105719.	1.8	61
8	Metal Sulfide Nanoparticles: Precursor Chemistry. Chemistry - A European Journal, 2021, 27, 6390-6406.	1.7	19
9	Reducing cohesion of metal powders for additive manufacturing by nanoparticle dry-coating. Powder Technology, 2021, 379, 585-595.	2.1	28
10	Machine learning and materials modelling interpretation of in vivo toxicological response to TiO₂ nanoparticles library (UV and non-UV exposure). Nanoscale, 2021, 13, 14666-14678.	2.8	10
11	Reference data set for three-dimensional measurements of double droplet combustion of p-xylene. Proceedings of the Combustion Institute, 2021, 38, 3151-3158.	2.4	7
12	Unravelling CO oxidation reaction kinetics on single Pd nanoparticles in nanoconfinement using a nanofluidic reactor and DSMC simulations. Chemical Engineering Science: X, 2021, 9, 100088.	1.5	1
13	Double Flame-Fabricated High-Performance AlPO₄/LiMn₂O₄ Cathode Material for Li-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 4428-4443.	2.5	16
14	Frontispiece: Metal Sulfide Nanoparticles: Precursor Chemistry. Chemistry - A European Journal, 2021, 27, .	1.7	0
15	Comparing Coâ€catalytic Effects of ZrO_x, SmO_x, and Pt on CO_x Methanation over Coâ€based Catalysts Prepared by Double Flame Spray Pyrolysis. ChemCatChem, 2021, 13, 2815-2831.	1.8	12
16	Control of Porous Layer Thickness in Thermophoretic Deposition of Nanoparticles. Materials, 2021, 14, 2395.	1.3	2
17	The impact of metal doping on fumed silica structure and amino acid thermal condensation catalytic properties. Journal of Materials Science, 2021, 56, 16916-16927.	1.7	1
18	Porosity and microstructure of steel tubes spray-formed by close-coupled atomizer. Journal of Materials Processing Technology, 2020, 276, 116407.	3.1	5

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19	InnenrÃ¼cktitelbild: Modelâ€Based Nanoengineered Pharmacokinetics of Ironâ€Doped Copper Oxide for Nanomedical Applications (Angew. Chem. 5/2020). Angewandte Chemie, 2020, 132, 2143-2143.	1.6	0
20	Rare-Earth-Doped Y₄Al₂O₉ Nanoparticles for Stable Light-Converting Phosphors. ACS Applied Nano Materials, 2020, 3, 699-710.	2.4	21
21	Modelâ€Based Nanoengineered Pharmacokinetics of Ironâ€Doped Copper Oxide for Nanomedical Applications. Angewandte Chemie, 2020, 132, 1844-1852.	1.6	9
22	Nanoparticle evolution in flame spray pyrolysisâ€"Process design via experimental and computational analysis. AICHE Journal, 2020, 66, e16885.	1.8	50
23	Modelâ€Based Nanoengineered Pharmacokinetics of Ironâ€Doped Copper Oxide for Nanomedical Applications. Angewandte Chemie - International Edition, 2020, 59, 1828-1836.	7.2	35
24	Enhancing the Utilization of Porous Li₄Ti₅O₁₂Layers for Thin-Film Lithium-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 9667-9675.	2.5	5
25	Surface Functionalization of Biomedical Ti-6Al-7Nb Alloy by Liquid Metal Dealloying. Nanomaterials, 2020, 10, 1479.	1.9	19
26	Flame-made Particles for Sensors, Catalysis, and Energy Storage Applications. Energy & Fuels, 2020, 34, 13209-13224.	2.5	48
27	Redox Activity and Nanoâ€"Bio Interactions Determine the Skin Injury Potential of Co₃O₄-Based Metal Oxide Nanoparticles toward Zebrafish. ACS Nano, 2020, 14, 4166-4177.	7.3	17
28	Effect of hot gas atomization on spray forming of steel tubes using a close-coupled atomizer (CCA). Journal of Materials Processing Technology, 2020, 282, 116677.	3.1	15
29	Additive manufacturing of heavy rare earth free high-coercivity permanent magnets. Acta Materialia, 2020, 188, 733-739.	3.8	47
30	The gas-phase formation of tin dioxide nanoparticles in single droplet combustion and flame spray pyrolysis. Combustion and Flame, 2020, 215, 389-400.	2.8	46
31	Influence of the Nonlocal Effect on the Optical Properties of Nonspherical Plasmonic Semiconductor Nanoparticles. Computational Mathematics and Modeling, 2020, 31, 58-74.	0.2	2
32	Binary collision of a burning droplet and a non-burning droplet of xylene: Outcome regimes and flame dynamics. Proceedings of the Combustion Institute, 2019, 37, 3345-3352.	2.4	4
33	Single droplet combustion of precursor/solvent solutions for nanoparticle production: Optical diagnostics on single isolated burning droplets with micro-explosions. Proceedings of the Combustion Institute, 2019, 37, 1203-1211.	2.4	40
34	Unifying double flame spray pyrolysis with lanthanum doping to restrict cobaltâ€"aluminate formation in Co/Al₂O₃ catalysts for the dry reforming of methane. Catalysis Science and Technology, 2019, 9, 4970-4980.	2.1	23
35	A Contact Model for the Discrete Element Simulations of Aggregated Nanoparticle Films. , 2019, , 339-358.		0
36	A High Temperature Drop-On-Demand Droplet Generator for Metallic Melts. Micromachines, 2019, 10, 477.	1.4	21

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37	Asymmetrical Double Flame Spray Pyrolysis-Designed SiO2/Ce0.7Zr0.3O2 for the Dry Reforming of Methane. ACS Applied Materials & Interfaces, 2019, 11, 25766-25777.	4.0	26
38	Experimental investigations on the effects of water vapor and oxygen concentrations in the ambience on the burning constant, lifetime and residuals of single isolated xylene, isobutanol and ethanol droplets. Experimental Thermal and Fluid Science, 2019, 109, 109920.	1.5	12
39	Novel Cooling Rate Correlations in Molten Metal Gas Atomization. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 666-677.	1.0	41
40	Implementation of parcel method for surface reactions in DSMC. Computers and Fluids, 2019, 187, 1-11.	1.3	3
41	Inverse Nanocomposites Based on Indium Tin Oxide for Display Applications: Improved Electrical Conductivity via Polymer Addition. ACS Applied Nano Materials, 2019, 2, 2273-2282.	2.4	11
42	Microstructure Adjustment of Spherical Micro-samples for High-Throughput Analysis Using a Drop-on-Demand Droplet Generator. Materials, 2019, 12, 3769.	1.3	8
43	Compaction-induced restructuring of aggregated nanoparticle films using the discrete element method. Powder Technology, 2019, 342, 773-779.	2.1	15
44	Change of evaporation rate of single monocomponent droplet with temperature using time-resolved phase rainbow refractometry. Proceedings of the Combustion Institute, 2019, 37, 3211-3218.	2.4	12
45	High-Throughput Exploration of Evolutionary Structural Materials. HTM - Journal of Heat Treatment and Materials, 2018, 73, 3-12.	0.1	32
46	Determination of the Flat Band Potential of Nanoparticles in Porous Electrodes by Blocking the Substrateâ€“Electrolyte Contact. Journal of Physical Chemistry C, 2018, 122, 2796-2805.	1.5	27
47	Nanoparticle-induced inflammation can increase tumor malignancy. Acta Biomaterialia, 2018, 68, 99-112.	4.1	24
48	Influence of nanoparticle doping on the colloidal stability and toxicity of copper oxide nanoparticles in synthetic and natural waters. Water Research, 2018, 132, 12-22.	5.3	44
49	Simultaneous measurement of monocomponent droplet temperature/refractive index, size and evaporation rate with phase rainbow refractometry. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 214, 146-157.	1.1	24
50	Internal field distribution of a radially inhomogeneous droplet illuminated by an arbitrary shaped beam. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 210, 19-34.	1.1	7
51	Increasing the amorphous yield of {(Fe 0.6 Co 0.4) 0.75 B 0.2 Si 0.05 } 96 Nb 4 powders by hot gas atomization. Advanced Powder Technology, 2018, 29, 380-385.	2.0	44
52	Fabrication and performance of Li 4 Ti 5 O 12 /C Li-ion battery electrodes using combined double flame spray pyrolysis and pressure-based lamination technique. Journal of Power Sources, 2018, 374, 97-106.	4.0	69
53	Verfahren zur Bestimmung des Flachbandpotenzials von Nanopartikeln in porÃ¶sen Elektroden. Chemie-Ingenieur-Technik, 2018, 90, 1212-1212.	0.4	0
54	The impact of nanoparticle-driven lysosomal alkalinization on cellular functionality. Journal of Nanobiotechnology, 2018, 16, 85.	4.2	30

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55	A model for the drag and heat transfer of spheres in the laminar regime at high temperature differences. International Journal of Thermal Sciences, 2018, 133, 98-105.	2.6	32
56	Electrochemical Behavior of Single CuO Nanoparticles: Implications for the Assessment of their Environmental Fate. Small, 2018, 14, e1801765.	5.2	30
57	A new contact model for the discrete element method simulation of $$hbox {TiO}_2$$ TiO 2 nanoparticle films under mechanical load. Granular Matter, 2018, 20, 1.	1.1	11
58	Flame aerosol deposited Li4Ti5O12 layers for flexible, thin film all-solid-state Li-ion batteries. Nano Energy, 2018, 49, 564-573.	8.2	66
59	Quantitative Characterization of Mixing in Multicomponent Nanoparticle Aggregates. Particle and Particle Systems Characterization, 2018, 35, 1800177.	1.2	8
60	Experimental investigation on microexplosion of single isolated burning droplets containing titanium tetraisopropoxide for nanoparticle production. Proceedings of the Combustion Institute, 2017, 36, 1011-1018.	2.4	37
61	In Silico Design of Optimal Dissolution Kinetics of Feâ€Doped ZnO Nanoparticles Results in Cancerâ€Specific Toxicity in a Preclinical Rodent Model. Advanced Healthcare Materials, 2017, 6, 1601379.	3.9	29
62	An Integrated Data-Driven Strategy for Safe-by-Design Nanoparticles: The FP7 MODERN Project. Advances in Experimental Medicine and Biology, 2017, 947, 257-301.	0.8	6
63	The effect of initial diameter on rainbow positions and temperature distributions of burning single-component n-Alkane droplets. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 195, 164-175.	1.1	30
64	Safe-by-Design CuO NanoparticlesviaFe-Doping, Cuâ€“O Bond Length Variation, and Biological Assessment in Cells and Zebrafish Embryos. ACS Nano, 2017, 11, 501-515.	7.3	107
65	Multipole expansion of circularly symmetric Bessel beams of arbitrary order for scattering calculations. Optics Communications, 2017, 387, 102-109.	1.0	69
66	Nanoparticles for radiooncology: Mission, vision, challenges. Biomaterials, 2017, 120, 155-184.	5.7	87
67	Screening Precursorâ€“Solvent Combinations for Li₄Ti₅O₁₂Energy Storage Material Using Flame Spray Pyrolysis. ACS Applied Materials & Interfaces, 2017, 9, 37760-37777.	4.0	68
68	Structural and spectroscopic comparison between polycrystalline, nanocrystalline and quantum dot visible light photo-catalyst Bi 2 WO 6. Journal of Solid State Chemistry, 2017, 254, 82-89.	1.4	18
69	Phase interferometric particle imaging for simultaneous measurements of evaporating micron-sized droplet and nanoscale size changes. Applied Physics Letters, 2017, 111, .	1.5	29
70	Processing of High-Entropy AlCoCr0.75Cu0.5FeNi Alloy by Spray Forming. Journal of Materials Engineering and Performance, 2017, 26, 5906-5920.	1.2	10
71	Dependencies of the Adhesion Forces between TiO₂ Nanoparticles on Size and Ambient Humidity. Journal of Physical Chemistry C, 2017, 121, 15294-15303.	1.5	17
72	Origin of the dielectric abnormities and tunable dielectric properties in doped KTN single crystals. Applied Physics Letters, 2017, 111, 242902.	1.5	4

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73	Imbibition into Highly Porous Layers of Aggregated Particles. Transport in Porous Media, 2017, 119, 119-141.	1.2	9
74	Solidification of single droplets under combined cooling conditions. IOP Conference Series: Materials Science and Engineering, 2016, 117, 012057.	0.3	13
75	Selectivity Enhancement by Using Double-Layer MOX-Based Gas Sensors Prepared by Flame Spray Pyrolysis (FSP). Sensors, 2016, 16, 1437.	2.1	15
76	Effects of FeCl3as oxidizing agent on the conduction mechanisms in polypyrrole (PPy)/pcâ€“ZnO hybrid heterojunctions grown by oxidative chemical vapor deposition. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1537-1544.	2.4	17
77	Structural and optical characterization of hybrid ZnO/polymer coreâ€shell nanowires fabricated by oxidative chemical vapour deposition. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 614-617.	0.8	4
78	The role of microexplosions in flame spray synthesis for homogeneous nanopowders from lowâ€cost metal precursors. AIChE Journal, 2016, 62, 381-391.	1.8	63
79	Time-resolved detection of diffusion limited temperature gradients inside single isolated burning droplets using Rainbow Refractometry. Combustion and Flame, 2016, 168, 255-269.	2.8	30
80	Repetitive Dosing of Fumed Silica Leads to Profibrogenic Effects through Unique Structureâ€“Activity Relationships and Biopersistence in the Lung. ACS Nano, 2016, 10, 8054-8066.	7.3	58
81	Parametrization of nanoparticles: development of full-particle nanodescriptors. Nanoscale, 2016, 8, 16243-16250.	2.8	30
82	Highly active Coâ€“Al₂O₃-based catalysts for CO₂ methanation with very low platinum promotion prepared by double flame spray pyrolysis. Catalysis Science and Technology, 2016, 6, 7449-7460.	2.1	57
83	General description of circularly symmetric Bessel beams of arbitrary order. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 184, 218-232.	1.1	68
84	Exploring superior structural materials using multi-objective optimization and formal techniques. , 2016, , .		10
85	Decrease of the required dopant concentration for Î´-Bi₂O₃crystal stabilization through thermal quenching during single-step flame spray pyrolysis. CrystEngComm, 2016, 18, 2046-2056.	1.3	38
86	Tailoring High-Performance Pd Catalysts for Chemoselective Hydrogenation Reactions via Optimizing the Parameters of the Double-Flame Spray Pyrolysis. ACS Catalysis, 2016, 6, 2372-2381.	5.5	35
87	Developmental effects of two different copper oxide nanomaterials in sea urchin (<i>Lytechinus) Tj ETQq1 1 0.784314 rgBT /Overlock	1.6	42
88	Designing Photoelectrodes for Photocatalytic Fuel Cells and Elucidating the Effects of Organic Substrates. ChemSusChem, 2015, 8, 4005-4015.	3.6	36
89	Toxicity of 11 Metal Oxide Nanoparticles to Three Mammalian Cell Types <i>In V.itro</i>. Current Topics in Medicinal Chemistry, 2015, 15, 1914-1929.	1.0	190
90	Nanoscale building blocks in a novel lithium arsenotungsten bronze: Synthesis and characterization. Journal of Solid State Chemistry, 2015, 226, 81-87.	1.4	2

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91	Structureâ€“function relationships of conventionally and flame made Pd-doped sensors studied by X-ray absorption spectroscopy and DC-resistance. Sensors and Actuators B: Chemical, 2015, 219, 315-323.	4.0	21
92	Toxicity of Metal Oxide Nanoparticles in Escherichia coli Correlates with Conduction Band and Hydration Energies. Environmental Science & Technology, 2015, 49, 1105-1112.	4.6	127
93	Preferential oxidation of carbon monoxide over Ptâ€“FeO /CeO2 synthesized by two-nozzle flame spray pyrolysis. Journal of Catalysis, 2015, 329, 248-261.	3.1	40
94	Reduction of Acute Inflammatory Effects of Fumed Silica Nanoparticles in the Lung by Adjusting Silanol Display through Calcination and Metal Doping. ACS Nano, 2015, 9, 9357-9372.	7.3	108
95	Toxicity of 12 metal-based nanoparticles to algae, bacteria and protozoa. Environmental Science: Nano, 2015, 2, 630-644.	2.2	174
96	In situ high temperature X-ray diffraction, transmission electron microscopy and theoretical modeling for the formation of WO₃ crystallites. CrystEngComm, 2015, 17, 6985-6998.	1.3	46
97	Influence of single- and double-flame spray pyrolysis on the structure of MnOx/Î³-Al2O3 and FeOx/Î³-Al2O3 catalysts and their behaviour in CO removal under lean exhaust gas conditions. Catalysis Science and Technology, 2015, 5, 455-464.	2.1	31
98	Influence of sintering necks on the spectral behaviour of ITO clusters using the Discrete Dipole Approximation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 159, 11-18.	1.1	14
99	Nanoscale mixing during double-flame spray synthesis of heterostructured nanoparticles. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	29
100	Gasâ€“solid catalytic reactions with an extended <scp>DSMC</scp> model. AICHE Journal, 2015, 61, 2092-2103.	1.8	11
101	Contact Forces between TiO2Nanoparticles Governed by an Interplay of Adsorbed Water Layers and Roughness. Langmuir, 2015, 31, 11288-11295.	1.6	40
102	INFLUENCE OF ATOMIZATION AND SPRAY PARAMETERS ON THE FLAME SPRAY PROCESS FOR NANOPARTICLE PRODUCTION. Atomization and Sprays, 2014, 24, 495-524.	0.3	16
103	A miniaturized solid contact test with Arthrobacter globiformis for the assessment of the environmental impact of silver nanoparticles. Environmental Toxicology and Chemistry, 2014, 33, 1142-1147.	2.2	16
104	New Process Technologies for the Deposition of Semiconducting Metal Oxide Nanoparticles for Sensing. Procedia Engineering, 2014, 87, 24-27.	1.2	16
105	Spray forming of high density sheets. Materialwissenschaft Und Werkstofftechnik, 2014, 45, 642-651.	0.5	7
106	Size- and Composite-Controlled Synthesis of Multi Oxide Nanoparticles Using Double-Flame Spray Pyrolysis. Chemie-Ingenieur-Technik, 2014, 86, 1542-1543.	0.4	0
107	High yield spray forming of small diameter tubes using pressure-gas-atomization. Materialwissenschaft Und Werkstofftechnik, 2014, 45, 699-707.	0.5	6
108	Generation of small batch high quality metal powder. Powder Metallurgy, 2014, 57, 171-175.	0.9	10

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109	Simulation of gas diffusion in highly porous nanostructures by direct simulation Monte Carlo. Chemical Engineering Science, 2014, 105, 69-76.	1.9	31
110	Monocrystalline-silicon-based thermogenerator with broad temperature working range embedded using metal-spray-deposition. Sensors and Actuators A: Physical, 2014, 216, 417-425.	2.0	0
111	Atomization and characterization of a glass forming alloy {(Fe0.6Co0.4)0.75B0.2Si0.05}96Nb4. Journal of Non-Crystalline Solids, 2014, 394-395, 36-42.	1.5	17
112	Contact behavior of size fractionated TiO2 nanoparticle agglomerates and aggregates. Powder Technology, 2014, 256, 345-351.	2.1	21
113	PdO Doping Tunes Band-Gap Energy Levels as Well as Oxidative Stress Responses to a Co₃O₄ p-Type Semiconductor in Cells and the Lung. Journal of the American Chemical Society, 2014, 136, 6406-6420.	6.6	136
114	A soil mediated phyto-toxicological study of iron doped zinc oxide nanoparticles (Fe@ZnO) in green peas (Pisum sativum L.). Chemical Engineering Journal, 2014, 258, 394-401.	6.6	55
115	Gold nanoparticle aerosols for rodent inhalation and translocation studies. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	14
116	Feâ€Doped ZnO Nanoparticles: The Oxidation Number and Local Charge on Iron, Studied by ⁵⁷Fe MÃ¶ÄŸbauer Spectroscopy and DFT Calculations. Chemistry - A European Journal, 2013, 19, 3287-3291.	1.7	26
117	Conduction mechanism in undoped and antimony doped SnO2 based FSP gas sensors. Sensors and Actuators B: Chemical, 2013, 188, 631-636.	4.0	35
118	Numerical simulation of Electron Energy Loss Spectroscopy using a Generalized Multipole Technique. Ultramicroscopy, 2013, 133, 101-108.	0.8	10
119	Maximizing Activity and Stability by Turning Gold Catalysis Upside Down: Oxide Particles on Nanoporous Gold. ChemCatChem, 2013, 5, 2037-2043.	1.8	35
120	Double flame spray pyrolysis as a novel technique to synthesize alumina-supported cobalt Fischerâ€“Tropsch catalysts. Catalysis Today, 2013, 214, 90-99.	2.2	55
121	Disruptive burning of precursor/solvent droplets in flameâ€spray synthesis of nanoparticles. AICHE Journal, 2013, 59, 4553-4566.	1.8	59
122	Ceramic Maskâ€Assisted Flame Spray Pyrolysis for Direct and Accurate Patterning of Metal Oxide Nanoparticles. Advanced Engineering Materials, 2013, 15, 773-779.	1.6	2
123	Flame spray pyrolysis for sensing at the nanoscale. Nanotechnology, 2013, 24, 442001.	1.3	63
124	Custom-Designed Nanomaterial Libraries for Testing Metal Oxide Toxicity. Accounts of Chemical Research, 2013, 46, 632-641.	7.6	58
125	Environmental Health and Safety Considerations for Nanotechnology. Accounts of Chemical Research, 2013, 46, 605-606.	7.6	38
126	Multilayer model for determining the thickness and refractive index of solâ€“gel coatings via laser ellipsometry. Thin Solid Films, 2013, 531, 93-98.	0.8	4

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127	Palladium-doped silicaâ€“alumina catalysts obtained from double-flame FSP for chemoselective hydrogenation of the model aromatic ketone acetophenone. Journal of Catalysis, 2013, 302, 10-19.	3.1	50
128	Transfer of highly porous nanoparticle layers to various substrates through mechanical compression. Nanoscale, 2013, 5, 3764.	2.8	29
129	Zebrafish Highâ€Throughput Screening to Study the Impact of Dissolvable Metal Oxide Nanoparticles on the Hatching Enzyme, ZHE1. Small, 2013, 9, 1776-1785.	5.2	112
130	Metal Oxides: Zebrafish High-Throughput Screening to Study the Impact of Dissolvable Metal Oxide Nanoparticles on the Hatching Enzyme, ZHE1 (Small 9-10/2013). Small, 2013, 9, 1775-1775.	5.2	2
131	Implementation of a Multidisciplinary Approach to Solve Complex Nano EHS Problems by the UC Center for the Environmental Implications of Nanotechnology. Small, 2013, 9, 1428-1443.	5.2	32
132	Two-Nozzle Flame Spray Pyrolysis (FSP) Synthesis of CoMo/Al2O3 Hydrotreating Catalysts. Catalysis Letters, 2013, 143, 386-394.	1.4	25
133	Investigation of a Nanoporous Gold / TiO2 Catalyst by Electron Microscopy and Tomography. Materials Research Society Symposia Proceedings, 2013, 1504, 1.	0.1	0
134	Silicon-based thermogenerator for wide temperature range applications embedded using metal-spray-deposition. , 2013, , .		1
135	Efficient internalization and intracellular translocation of inhaled gold nanoparticles in rat alveolar macrophages. Nanomedicine, 2012, 7, 855-865.	1.7	35
136	Synthesis of polymer/inorganic nanocomposite films using highly porous inorganic scaffolds. Nanoscale, 2012, 4, 2326.	2.8	15
137	Adhesion Mechanisms of the Contact Interface of TiO₂ Nanoparticles in Films and Aggregates. Langmuir, 2012, 28, 11457-11464.	1.6	71
138	Use of Metal Oxide Nanoparticle Band Gap To Develop a Predictive Paradigm for Oxidative Stress and Acute Pulmonary Inflammation. ACS Nano, 2012, 6, 4349-4368.	7.3	718
139	Interactions of Amino Acids and Polypeptides with Metal Oxide Nanoparticles Probed by Fluorescent Indicator Adsorption and Displacement. ACS Nano, 2012, 6, 5668-5679.	7.3	49
140	Bulk and Surface Excitons in Alloyed and Phase-Separated ZnOâ€“MgO Particulate Systems. ACS Applied Materials & Interfaces, 2012, 4, 2490-2497.	4.0	10
141	The Fate of ZnO Nanoparticles Administered to Human Bronchial Epithelial Cells. ACS Nano, 2012, 6, 4921-4930.	7.3	146
142	Protein adsorption on colloidal alumina particles functionalized with amino, carboxyl, sulfonate and phosphate groups. Acta Biomaterialia, 2012, 8, 1221-1229.	4.1	104
143	Quenched, nanocrystalline In4Sn3O12 high temperature phase for gas sensing applications. Sensors and Actuators B: Chemical, 2012, 161, 740-747.	4.0	51
144	Role of Palladium in Iron Based Fischerâ€“Tropsch Catalysts Prepared by Flame Spray Pyrolysis. Journal of Physical Chemistry C, 2011, 115, 1302-1310.	1.5	33

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145	No time to loseâ€"high throughput screening to assess nanomaterial safety. Nanoscale, 2011, 3, 1345.	2.8	153
146	Flame Preparation of Visible-Light-Responsive BiVO₄ Oxygen Evolution Photocatalysts with Subsequent Activation via Aqueous Route. ACS Applied Materials & Interfaces, 2011, 3, 1997-2004.	4.0	128
147	Nanomaterials in the Environment: From Materials to High-Throughput Screening to Organisms. ACS Nano, 2011, 5, 13-20.	7.3	145
148	Stability, Bioavailability, and Bacterial Toxicity of ZnO and Iron-Doped ZnO Nanoparticles in Aquatic Media. Environmental Science & Technology, 2011, 45, 755-761.	4.6	206
149	Role of Fe Doping in Tuning the Band Gap of TiO₂ for the Photo-Oxidation-Induced Cytotoxicity Paradigm. Journal of the American Chemical Society, 2011, 133, 11270-11278.	6.6	346
150	Metal oxide nanomaterials in seawater: Linking physicochemical characteristics with biological response in sea urchin development. Journal of Hazardous Materials, 2011, 192, 1565-1571.	6.5	126
151	High Content Screening in Zebrafish Speeds up Hazard Ranking of Transition Metal Oxide Nanoparticles. ACS Nano, 2011, 5, 7284-7295.	7.3	176
152	Decreased Dissolution of ZnO by Iron Doping Yields Nanoparticles with Reduced Toxicity in the Rodent Lung and Zebrafish Embryos. ACS Nano, 2011, 5, 1223-1235.	7.3	341
153	Evidence for Fe²⁺ in Wurtzite Coordination: Iron Doping Stabilizes ZnO Nanoparticles. Small, 2011, 7, 2879-2886.	5.2	44
154	Doped Nanoparticles: Evidence for Fe2+ in Wurtzite Coordination: Iron Doping Stabilizes ZnO Nanoparticles (Small 20/2011). Small, 2011, 7, 2878-2878.	5.2	1
155	Author response to Letter to the Editor by Professor Bing Guo on the paper â€œBacterial aerosol neutralization by aerodynamic shocks using a novel impactor system: Design and computation,â€•Chem. Eng. Sci., 64, 1953â€“1967, 2009. Chemical Engineering Science, 2011, 66, 229-230.	1.9	0
156	Dopant-free, polymorphic design of TiO2 nanocrystals by flame aerosol synthesis. Chemical Engineering Science, 2011, 66, 2409-2416.	1.9	31
157	Enhancing performance of FSP SnO2-based gas sensors through Sb-doping and Pd-functionalization. Sensors and Actuators B: Chemical, 2011, 158, 388-392.	4.0	43
158	Bacterial aerosol neutralization by aerodynamic shocks using an impactor system: Experimental results for E. coli and analysis. Chemical Engineering Science, 2010, 65, 1490-1502.	1.9	3
159	Bacterial aerosol neutralization by aerodynamic shocks using an impactor system: Experimental results for B. atropheus spores. Chemical Engineering Science, 2010, 65, 4803-4815.	1.9	5
160	Structureâ€"conductivity relations of simulated highly porous nanoparticle aggregate films. Journal of Nanoparticle Research, 2010, 12, 853-863.	0.8	27
161	Photocatalytic H₂ Evolution over TiO₂ Nanoparticles. The Synergistic Effect of Anatase and Rutile. Journal of Physical Chemistry C, 2010, 114, 2821-2829.	1.5	335
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