

Wolfgang Sigmund

List of Publications by Year in descending order

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42
papers

4,218
citations

136950

32
h-index

265206

42
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42
all docs

42
docs citations

42
times ranked

6726
citing authors

#	ARTICLE	IF	CITATIONS
1	Photocatalytic Carbonâ€Nanotubeâ€TiO ₂ Composites. <i>Advanced Materials</i> , 2009, 21, 2233-2239.	21.0	1,307
2	Processing and Structure Relationships in Electrospinning of Ceramic Fiber Systems. <i>Journal of the American Ceramic Society</i> , 2006, 89, 395-407.	3.8	394
3	Defect chemistry and defect engineering of TiO ₂ -based semiconductors for solar energy conversion. <i>Chemical Society Reviews</i> , 2015, 44, 8424-8442.	38.1	276
4	Improvement in nanofiber filtration by multiple thin layers of nanofiber mats. <i>Journal of Aerosol Science</i> , 2010, 41, 230-236.	3.8	149
5	Towards global sustainability: Education on environmentally clean energy technologies. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 81, 2541-2551.	16.4	131
6	Zinc oxide nanowires on carbon nanotubes. <i>Applied Physics Letters</i> , 2002, 81, 2085-2087.	3.3	111
7	Adsorption Enhancement Mechanisms of Silicaâ€Titania Nanocomposites for Elemental Mercury Vapor Removal. <i>Environmental Science & Technology</i> , 2005, 39, 1269-1274.	10.0	107
8	Inactivation of bacterial endospores by photocatalytic nanocomposites. <i>Colloids and Surfaces B: Biointerfaces</i> , 2005, 40, 93-98.	5.0	104
9	Platinum/zinc oxide nanoparticles: Enhanced photocatalysts degrade malachite green dye under visible light conditions. <i>Ceramics International</i> , 2016, 42, 9375-9381.	4.8	99
10	Polyaniline/Polyoxometalate Hybrid Nanofibers as Cathode for Lithium Ion Batteries with Improved Lithium Storage Capacity. <i>Journal of Physical Chemistry C</i> , 2013, 117, 17376-17381.	3.1	86
11	Coaxially Electrospun PVDFâ€Teflon AF and Teflon AFâ€PVDF Coreâ€Sheath Nanofiber Mats with Superhydrophobic Properties. <i>Langmuir</i> , 2010, 26, 12483-12487.	3.5	83
12	Iron particles in carbon nanotubes. <i>Carbon</i> , 2005, 43, 1743-1748.	10.3	78
13	Fluorine doped zinc oxide nanowires: Enhanced photocatalysts degrade malachite green dye under visible light conditions. <i>Ceramics International</i> , 2016, 42, 4672-4678.	4.8	78
14	Towards sustainable energy. Generation of hydrogen fuel using nuclear energy. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 12812-12825.	7.1	75
15	Control of growth orientation for carbon nanotubes. <i>Applied Physics Letters</i> , 2003, 82, 448-450.	3.3	69
16	Magnetically Agitated Photocatalytic Reactor for Photocatalytic Oxidation of Aqueous Phase Organic Pollutants. <i>Environmental Science & Technology</i> , 2005, 39, 8052-8056.	10.0	69
17	Biologically inspired hairy structures for superhydrophobicity. <i>Materials Science and Engineering Reports</i> , 2011, 72, 189-201.	31.8	65
18	Nanostructured Ytria Powders Via Gel Combustion. <i>Journal of Materials Research</i> , 1999, 14, 1524-1531.	2.6	63

#	ARTICLE	IF	CITATIONS
19	The function of polymers in the tape casting of alumina. <i>Advanced Materials</i> , 1992, 4, 73-81.	21.0	60
20	Synthesis of YAG phase by a citrate-nitrate combustion technique. <i>Materials Letters</i> , 1999, 39, 138-141.	2.6	57
21	Nanostructured Silica-Gel Doped with TiO ₂ for Mercury Vapor Control. <i>Journal of Nanoparticle Research</i> , 2003, 5, 281-292.	1.9	55
22	Microwave assisted nanofibrous air filtration for disinfection of bioaerosols. <i>Journal of Aerosol Science</i> , 2010, 41, 880-888.	3.8	52
23	Tin indium oxide/graphene nanosheet nanocomposite as an anode material for lithium ion batteries with enhanced lithium storage capacity and rate capability. <i>Electrochimica Acta</i> , 2013, 91, 275-281.	5.2	50
24	Iron nanoparticles in carbon nanotubes at various temperatures. <i>Journal of Crystal Growth</i> , 2005, 276, 594-605.	1.5	46
25	Direct growth of amorphous silica nanowires by solid state transformation of SiO ₂ films. <i>Chemical Physics Letters</i> , 2004, 383, 380-384.	2.6	45
26	Synthesis of LiNi _{1-x} Fe _x PO ₄ solid solution as cathode materials for lithium ion batteries. <i>Electrochimica Acta</i> , 2013, 108, 827-832.	5.2	45
27	Role of the Surface Chemistry of Ceria Surfaces on Silicate Adsorption. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 7388-7394.	8.0	44
28	Growth mechanism of single-crystal α -Al ₂ O ₃ nanofibers fabricated by electrospinning techniques. <i>Journal of the European Ceramic Society</i> , 2011, 31, 723-731.	5.7	42
29	Amorphous silica nanowires grown by the vapor-solid mechanism. <i>Chemical Physics Letters</i> , 2003, 376, 498-503.	2.6	40
30	Zinc sulfide nanocrystals on carbon nanotubes. <i>Journal of Crystal Growth</i> , 2003, 255, 114-118.	1.5	39
31	Effect of Mn doping on particulate size and magnetic properties of LaFeO ₃ nanofiber synthesized by electrospinning. <i>Journal of Alloys and Compounds</i> , 2018, 749, 599-604.	5.5	37
32	Silicon nanowires with a carbon nanofiber branch as lithium-ion anode material. <i>Journal of Materials Chemistry</i> , 2011, 21, 12619.	6.7	35
33	Temperature induced forming of zirconia from aqueous slurries: mechanism and rheology. <i>Journal of the European Ceramic Society</i> , 2002, 22, 2805-2812.	5.7	33
34	Thermally Tunable Surface Wettability of Electrospun Fiber Mats: Polystyrene/Poly(<i>N</i> -isopropylacrylamide) Blended versus Crosslinked Poly[(<i>N</i> -isopropylacrylamide)- <i>co</i> -(methacrylic acid)]. <i>Macromolecular Rapid Communications</i> , 2011, 32, 1716-1721.	3.9	32
35	Self-Limitation of Native Oxides Explained. <i>Silicon</i> , 2016, 8, 339-343.	3.3	30
36	Photoluminescence from amorphous silica nanowires synthesized using TiN/Ni/SiO ₂ /Si and TiN/Ni/Si substrates. <i>Solid State Communications</i> , 2004, 131, 687-692.	1.9	23

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37	Electrospun Teflon AF fibers for superhydrophobic membranes. <i>Journal of Materials Research</i> , 2010, 25, 1595-1600.	2.6	23
38	Electronic Property Dependence of Electrochemical Performance for TiO ₂ /CNT Core-shell Nanofibers in Lithium Ion Batteries. <i>Electrochimica Acta</i> , 2015, 180, 295-306.	5.2	22
39	Morphological evolution of barium titanate synthesized in water in the presence of polymeric species. <i>Journal of Materials Research</i> , 1999, 14, 1844-1851.	2.6	21
40	Cobalt/zinc oxide hollow spheres: Visible light nanophotocatalysts. <i>Ceramics International</i> , 2016, 42, 2299-2305.	4.8	18
41	ZnO Nanocrystals Synthesized by Physical Vapor Deposition. <i>Journal of Nanoscience and Nanotechnology</i> , 2004, 4, 275-278.	0.9	13
42	Effect of a graphitic structure on the stability of FCC iron. <i>Journal of Crystal Growth</i> , 2004, 267, 738-744.	1.5	12