

Brian S Mitchell

List of Publications by Citations

Source: <https://exaly.com/author-pdf/6720197/brian-s-mitchell-publications-by-citations.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

71
papers

868
citations

16
h-index

28
g-index

75
ext. papers

905
ext. citations

4.2
avg, IF

3.79
L-index

#	Paper	IF	Citations
71	Cytotoxicity of surface-functionalized silicon and germanium nanoparticles: the dominant role of surface charges. <i>Nanoscale</i> , 2013 , 5, 4870-83	7.7	141
70	Mechanochemical Synthesis of Blue Luminescent Alkyl/Alkenyl-Passivated Silicon Nanoparticles. <i>Advanced Materials</i> , 2007 , 19, 3984-3988	24	121
69	Magnetic properties of perovskite-derived air-synthesized RBaCo ₂ O ₅ +[(R=La?Ho) compounds. <i>Physical Review B</i> , 2005 , 71,	3.3	80
68	Nucleation and crystallization in calcium aluminate glasses. <i>Journal of Non-Crystalline Solids</i> , 1999 , 255, 199-207	3.9	41
67	Structure and interfacial properties of nanocrystalline aluminum/mullite composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002 , 326, 317-323	5.3	38
66	Silicon nanoparticles with chemically tailored surfaces. <i>Applied Organometallic Chemistry</i> , 2010 , 24, 236-240	3.4	34
65	Crystal growth kinetics of nanocrystalline aluminum prepared by mechanical attrition in nylon media. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 396, 124-128	5.3	30
64	Hydration and proton conduction in Nafion/ceramic nanocomposite membranes produced by solid-state processing of powders from mechanical attrition. <i>Journal of Applied Polymer Science</i> , 2009 , 113, 243-250	2.9	20
63	Preparation of Micrometer- to Sub-micrometer-Sized Nanostructured Silica Particles Using High-Energy Ball Milling. <i>Journal of the American Ceramic Society</i> , 2004 , 87, 1280-1286	3.8	20
62	A method for determining crystallization kinetic parameters from one nonisothermal calorimetric experiment. <i>Journal of Materials Research</i> , 2000 , 15, 1000-1007	2.5	20
61	Infrared Studies of Calcia-Alumina Fibers. <i>Journal of the American Ceramic Society</i> , 1996 , 79, 2469-2473	3.8	20
60	Phase identification in calcia-alumina fibers crystallized from amorphous precursors. <i>Journal of Non-Crystalline Solids</i> , 1993 , 152, 143-149	3.9	19
59	Infrared studies of preparation effects in calcium aluminate glasses. <i>Journal of Non-Crystalline Solids</i> , 1998 , 224, 184-190	3.9	17
58	The use of polymeric milling media in the reduction of contamination during mechanical attrition. <i>Journal of Materials Research</i> , 2002 , 17, 2997-2999	2.5	17
57	Crystallization kinetics of amorphous silicon carbide derived from polymeric precursors. <i>Thermochimica Acta</i> , 1999 , 337, 155-161	2.9	17
56	Thermal expansion behavior and microstructure in bulk nanocrystalline selenium by thermomechanical analysis. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999 , 270, 237-243	5.3	17
55	Catalyzed self-aldol reaction of valeraldehyde via a mechanochemical method. <i>Journal of Molecular Catalysis A</i> , 2009 , 304, 117-120		16

54	Mild two-step method to construct DNA-conjugated silicon nanoparticles: scaffolds for the detection of microRNA-21. <i>Bioconjugate Chemistry</i> , 2014 , 25, 1739-43	6.3	15
53	Mechanochemical synthesis of functionalized silicon nanoparticles with terminal chlorine groups. <i>Journal of Materials Research</i> , 2011 , 26, 1052-1060	2.5	15
52	A fractionation process of mechanochemically synthesized blue-green luminescent alkyl-passivated silicon nanoparticles. <i>Chemical Engineering Journal</i> , 2011 , 172, 591-600	14.7	14
51	Solid-state blending of poly(ethylene terephthalate) with polystyrene: Extent of compatibilization and its dependence on blend composition. <i>Polymer Engineering and Science</i> , 2008 , 48, 649-655	2.3	11
50	Tuning Carbon Content and Morphology of FeCo/Graphitic Carbon Core/Shell Nanoparticles using a Salt-Matrix-Assisted CVD Process. <i>Particle and Particle Systems Characterization</i> , 2014 , 31, 474-480	3.1	10
49	Silicon nanoparticles synthesised through reactive high-energy ball milling: enhancement of optical properties from the removal of iron impurities. <i>Journal of Experimental Nanoscience</i> , 2015 , 10, 1214-1222	1.9	9
48	The production of mullite fibers via inviscid melt-spinning (IMS). <i>Materials Letters</i> , 1998 , 37, 359-365	3.3	9
47	Synchrotron infrared microspectroscopy characterization of heterogeneities in solid-state blended polymers. <i>Materials Letters</i> , 2007 , 61, 2151-2155	3.3	9
46	Mullite Decomposition Kinetics and Melt Stabilization in the Temperature Range 1900-2000°C. <i>Journal of the American Ceramic Society</i> , 2004 , 83, 761-767	3.8	9
45	Attenuation effects in aluminum and lead fibers formed by inviscid melt-spinning (IMS). <i>Materials Letters</i> , 1990 , 10, 71-74	3.3	8
44	THE PRODUCTION OF BaO-TiO ₂ FIBERS VIA INVISCID MELT-SPINNING (IMS). <i>Chemical Engineering Communications</i> , 1991 , 106, 87-92	2.2	8
43	Water-soluble PEGylated silicon nanoparticles and their assembly into swellable nanoparticle aggregates. <i>Journal of Nanoparticle Research</i> , 2015 , 17, 1	2.3	7
42	Wetting properties of silicon films from alkyl-passivated particles produced by mechanochemical synthesis. <i>Journal of Colloid and Interface Science</i> , 2010 , 348, 634-41	9.3	7
41	Fourier Transform Infrared Studies of Propane Pyrolysis over Calcium Aluminate Melts. <i>Journal of the American Ceramic Society</i> , 2005 , 81, 1045-1049	3.8	7
40	Introduction of new reinforcement for cementitious materials: Calcia/alumina (CA) fibers formed by the inviscid melt-spinning (IMS) process. <i>Cement and Concrete Composites</i> , 1993 , 15, 165-172	8.6	7
39	Crystallization and solidification studies in calcia-alumina fibres formed via inviscid melt spinning (IMS). <i>Ceramics International</i> , 1998 , 24, 67-71	5.1	6
38	Solid state blending of poly(ethylene terephthalate) with polystyrene: Extent of PET amorphization and compositional effects on crystallizability. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2008 , 46, 1348-1359	2.6	6
37	Formation of Nanocrystalline Silicon Carbide Powder from Chlorine-Containing Polycarbosilane Precursors. <i>Journal of the American Ceramic Society</i> , 2004 , 82, 2249-2251	3.8	6

36	A modified diffuse reflectance infrared Fourier transform spectroscopy cell for depth profiling of ceramic fibers. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2000 , 56, 467-73	4.4	6
35	Functionalized silicon nanoparticles from reactive cavitation erosion of silicon wafers. <i>Chemical Communications</i> , 2015 , 51, 1465-8	5.8	5
34	Micro-Raman analysis of calcium aluminate fibers formed by inviscid melt spinning. <i>Materials Letters</i> , 2000 , 45, 138-142	3.3	5
33	Williamson ether synthesis: an efficient one-step route for surface modifications of silicon nanoparticles. <i>Journal of Experimental Nanoscience</i> , 2015 , 10, 588-598	1.9	4
32	The Mechanochemical Formation of Functionalized Semiconductor Nanoparticles for Biological, Electronic and Superhydrophobic Surface Applications. <i>Ceramic Transactions</i> , 2011 , 129-142	0.1	3
31	Chemical stability of inviscid melt-spun (IMS) fibers of calcia-alumina in aqueous media. <i>Materials Chemistry and Physics</i> , 1993 , 34, 219-227	4.4	3
30	Viscosity of eutectic calcia-alumina melts. <i>Materials Chemistry and Physics</i> , 1993 , 34, 81-85	4.4	3
29	Power law modeling of acoustic cavitation erosion: the hemispherical pit model. <i>Journal of Physics Communications</i> , 2019 , 3, 035014	1.2	1
28	Effect of Lubricant on the Surface Structure of Aluminosilicate Fibers. <i>Journal of the American Ceramic Society</i> , 1998 , 81, 3333-3336	3.8	1
27	Appendix 8: Electrical Conductivity of Selected Materials893-899		1
26	Appendix 9: Refractive Index of Selected Materials900-902		1
25	Preparation and characterization of ball-milled Nafion [®] powders for membrane applications. <i>Journal of Applied Polymer Science</i> , 2004 , 93, 2275-2281	2.9	1
24	Nanocrystallinity in heat-treated calcium aluminate fibers. <i>Materials Letters</i> , 2001 , 48, 316-318	3.3	1
23	Formation of Nanocrystalline SiC Powder from Chlorine-Containing Polycarbosilane Precursors. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 581, 205		1
22	Reactive cavitation erosion as a technique for production of functionalized copper hydroxychloride nanomaterials. <i>Journal of Physics Communications</i> , 2020 , 4, 051002	1.2	0
21	Nanostructures from Reactive High-Energy Ball Milling 2015 , 493-510		
20	Kinetic Processes in Materials215-284		
19	Appendix 7: Mechanical Properties of Selected Materials882-892		

18 Appendix 5: Thermal Conductivities of Selected Materials 874-879

17 Appendix 6: Diffusivities in Selected Systems 880-881

16 Thermodynamics of Condensed Phases 136-214

15 Transport Properties of Materials 285-379

14 Appendix 3: Composition of Common Alloys 856-868

13 Appendix 4: Surface and Interfacial Energies 869-873

12 Periodic Table 0-0

11 Appendix 1: Energy Values for Single Bonds 851-851

10 Appendix 2: Structure of Some Common Polymers 852-855

9 The Structure of Materials 1-135

8 Case Studies in Materials Selection 814-850

7 Electrical, Magnetic, and Optical Properties of Materials 537-680

6 Micron to Sub-Micron Sized Highly Ordered Mesoporous Silica Particles Prepared Using a High Energy Ball Milling Process. *Materials Research Society Symposia Proceedings*, **2003**, 775, 3291

5 Processing of Materials 681-813

4 Mechanics of Materials 380-536

3 Crystallization Kinetics of Polysilane Derived SiC. *Key Engineering Materials*, **2001**, 206-213, 55-58 0.4

2 OPTIMIZATION OF PROCESS PARAMETERS IN THE PRODUCTION OF MULLITE FIBERS VIA INVISCID MELT-SPINNING (IMS). *Chemical Engineering Communications*, **1999**, 173, 123-133 2.2

1 Binder Droplet-Fiber Interactions in the Production of Thermal Insulations. *Journal of Thermal Insulation*, **1991**, 15, 30-44

