

Melanie J Kirkham

List of Publications by Year in descending order

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44
papers

1,729
citations

279798

23
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41
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46
docs citations

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times ranked

2949
citing authors

#	ARTICLE	IF	CITATIONS
1	Patterned Growth of Vertically Aligned ZnO Nanowire Arrays on Inorganic Substrates at Low Temperature without Catalyst. <i>Journal of the American Chemical Society</i> , 2008, 130, 14958-14959.	13.7	270
2	Fatigue behavior of bulk-metallic glasses. <i>Intermetallics</i> , 2004, 12, 885-892.	3.9	132
3	Doping and Raman Characterization of Boron and Phosphorus Atoms in Germanium Nanowires. <i>ACS Nano</i> , 2010, 4, 3807-3816.	14.6	99
4	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mi mathvariant="italic"} \rangle \text{Abinitio} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle \text{determination of crystal structures of the thermoelectric material MgAgSb. } \langle \text{mml:math} \rangle \text{Physical Review B, 2012, 85, .}$	3.2	86
5	Structure-transformation-induced abnormal thermoelectric properties in semiconductor copper selenide. <i>Materials Letters</i> , 2013, 93, 121-124.	2.6	75
6	Extremely Durable High-Rate Capability of a $\text{LiNi}_{0.4}\text{Mn}_{0.4}\text{Co}_{0.2}\text{O}_2$ Cathode Enabled with Single-Walled Carbon Nanotubes. <i>Advanced Energy Materials</i> , 2011, 1, 58-62.	19.5	74
7	In Situ XRD of Thin Film Tin Electrodes for Lithium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2012, 159, A294-A299.	2.9	68
8	Characterization of Impurity Doping and Stress in Si/Ge and Ge/Si Core-Shell Nanowires. <i>ACS Nano</i> , 2012, 6, 8887-8895.	14.6	64
9	Solid Au nanoparticles as a catalyst for growing aligned ZnO nanowires: a new understanding of the vapour-liquid-solid process. <i>Nanotechnology</i> , 2007, 18, 365304.	2.6	61
10	Structural and electrolyte properties of $\text{Li}_4\text{P}_2\text{S}_6$. <i>Solid State Ionics</i> , 2016, 284, 61-70.	2.7	59
11	POWGEN: rebuild of a third-generation powder diffractometer at the Spallation Neutron Source. <i>Journal of Applied Crystallography</i> , 2019, 52, 1189-1201.	4.5	57
12	Lattice thermal conductivity of the $\text{Cu}_3\text{SbSe}_4\text{-Cu}_3\text{SbS}_4$ solid solution. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	53
13	Structural phase transition and phonon instability in $\text{Cu}_{12}\text{Mn}_{13}\text{S}_{48}$. <i>Physical Review B</i> , 2016, 93, .	3.2	48
14	Doping Effects on the Thermoelectric Properties of Cu_3SbSe_4 . <i>Science of Advanced Materials</i> , 2011, 3, 602-606.	0.7	47
15	The thermal expansion coefficient as a key design parameter for thermoelectric materials and its relationship to processing-dependent bloating. <i>Journal of Materials Science</i> , 2013, 48, 6233-6244.	3.7	45
16	Density-controlled, solution-based growth of ZnO nanorod arrays via layer-by-layer polymer thin films for enhanced field emission. <i>Nanotechnology</i> , 2008, 19, 435302.	2.6	42
17	Influence of Atomic Layer Deposition Temperatures on $\text{TiO}_2/\text{n-Si}$ MOS Capacitor. <i>ECS Journal of Solid State Science and Technology</i> , 2013, 2, N110-N114.	1.8	39
18	Novel cell design for combined in situ acoustic emission and x-ray diffraction study during electrochemical cycling of batteries. <i>Review of Scientific Instruments</i> , 2011, 82, 075107.	1.3	31

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19	High temperature X-ray studies of mayenite synthesized using the citrate sol-gel method. <i>Ceramics International</i> , 2014, 40, 1117-1123.	4.8	29
20	Metastable $\text{Li}_{1+x}\text{Mn}_2\text{O}_4$ ($0 \leq x \leq 1$) Spinel Phases Revealed by in Operando Neutron Diffraction and First-Principles Calculations. <i>Chemistry of Materials</i> , 2019, 31, 124-134.	6.7	28
21	High-temperature order/disorder transition in the thermoelectric Cu_3SbSe_3 . <i>Journal of Materials Research</i> , 2011, 26, 2001-2005.	2.6	27
22	Magnetic response of microbially synthesized transition metal- and lanthanide-substituted nano-sized magnetites. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 313, 283-292.	2.3	26
23	<i>In situ</i> growth kinetics of ZnO nanobelts. <i>Nanotechnology</i> , 2008, 19, 445708.	2.6	25
24	Effects of combined diffusion treatments and cold working on the sliding friction and wear behavior of $\text{Ti}_6\text{Al}_4\text{V}$. <i>Wear</i> , 2013, 302, 837-844.	3.1	24
25	Crystallite Sizes and Lattice Parameters of Nano-Biomagnetite Particles. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 8298-8306.	0.9	21
26	Lattice dynamics and thermal transport in multiferroic CuCrO_2 . <i>Physical Review B</i> , 2017, 95, .	3.2	19
27	Phase evolution during lithium-indium halide superionic conductor dehydration. <i>Journal of Materials Chemistry A</i> , 2021, 9, 990-996.	10.3	19
28	Determination of Bulk and Surface Atomic Arrangement in $\text{Ni}_{1-x}\text{Zn}_x$ -Brass Phase at Different Ni to Zn Ratios. <i>Chemistry of Materials</i> , 2017, 29, 504-512.	6.7	17
29	The temperature dependence of thermal expansion for p-type $\text{Ce}_{0.9}\text{Fe}_{3.5}\text{Co}_{0.5}\text{Sb}_{12}$ and n-type $\text{Co}_{0.95}\text{Pd}_{0.05}\text{Te}_{0.05}\text{Sb}_3$ skutterudite thermoelectric materials. <i>Philosophical Magazine</i> , 2012, 92, 1261-1286.	1.6	16
30	Microstructural evolution in two alkali multicomponent silicate glasses as a result of long-term exposure to solid oxide fuel cell environments. <i>Journal of Materials Science</i> , 2013, 48, 5880-5898.	3.7	13
31	Effect of thermal processing on the microstructure and composition of CuSbSe compounds. <i>Journal of Materials Science</i> , 2013, 48, 2188-2198.	3.7	13
32	AGES: Automated Gas Environment System for in situ neutron powder diffraction. <i>Review of Scientific Instruments</i> , 2018, 89, 092904.	1.3	12
33	Temperature-dependent Structural and Spectroscopic Studies of $(\text{Bi}_{1-x}\text{Fe}_x)\text{FeO}_3$. <i>Journal of Physical Chemistry C</i> , 2018, 122, 28280-28291.	3.1	12
34	Chloride Reduction of Mn^{3+} in Mild Hydrothermal Synthesis of a Charge Ordered Defect Pyrochlore, $\text{CsMn}_2\text{Mn}_3\text{F}_6$, a Canted Antiferromagnet with a Hard Ferromagnetic Component. <i>Journal of the American Chemical Society</i> , 2021, 143, 11554-11567.	18.7	12
35	Physical and Mechanical Properties of Barium Alkali Silicate Glasses for SOFC Sealing Applications. <i>International Journal of Applied Glass Science</i> , 2012, 3, 369-379.	2.0	11
36	The role of boron segregation in enhanced thermoelectric power factor of $\text{CoSi}_{1-x}\text{B}_x$ alloys. <i>Journal of Applied Physics</i> , 2011, 110, 123711.	2.5	10

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37	Tracking the catalyzed growth process of nanowires by in situ x-ray diffraction. Journal of Applied Physics, 2010, 108, 014304.	2.5	9
38	Thermoelectric properties of Au-containing type-I clathrates $Ba_8Au_xGa_{16-3x}Ge_{30+2x}$. Journal of Alloys and Compounds, 2014, 587, 747-754.	5.5	8
39	The coefficients of thermal expansion of boron arsenide ($B_{12}As_2$) between 25°C and 850°C . Journal of Physics and Chemistry of Solids, 2013, 74, 673-676.	4.0	7
40	Synthesis of a Ferrolite: A Zeolitic Al ϵ -Iron Framework. Angewandte Chemie - International Edition, 2016, 55, 13195-13199.	13.8	7
41	$La_{2}Zr_{2}O_{7}$ Nanoparticle-Mediated Synthesis of Porous Al-Doped $Li_{7}La_{3}Zr_{2}O_{12}$ Garnet. Inorganic Chemistry, 2021, 60, 10012-10021.	4.0	7
42	Incommensurate magnetism in $KMnS_2$ and prospects for tunable frustration in a triangular lattice of pseudo-1D spin chains. Physical Review Materials, 2019, 3, .	2.1	6
43	Neutron and X-ray powder diffraction study of skutterudite thermoelectrics. Powder Diffraction, 2016, 31, 16-22.	0.2	1
44	Control of Noise and Specimen Temperature During 1 kHz Fatigue Experiments. Journal of Testing and Evaluation, 2006, 34, 12724.	0.7	0