

# Melanie J Kirkham

## List of Publications by Year in descending order

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44  
papers

1,729  
citations

279798

23  
h-index

276875

41  
g-index

46  
all docs

46  
docs citations

46  
times ranked

2949  
citing authors

#	ARTICLE	IF	CITATIONS
1	Phase evolution during lithium-antimony halide superionic conductor dehydration. Journal of Materials Chemistry A, 2021, 9, 990-996.	10.3	19
2	La <sub>2</sub> Zr <sub>2</sub> O <sub>7</sub> Nanoparticle-Mediated Synthesis of Porous Al-Doped Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> Garnet. Inorganic Chemistry, 2021, 60, 10012-10021.	4.0	7
3	Chloride Reduction of Mn <sup>3+</sup> in Mild Hydrothermal Synthesis of a Charge Ordered Defect Pyrochlore, CsMn <sub>2</sub> Mn <sub>3</sub> F <sub>6</sub> , a Canted Antiferromagnet with a Hard Ferromagnetic Component. Journal of the American Chemical Society, 2021, 143, 11554-11567.	13.7	12
4	Metastable Li <sub>1+x</sub> Mn <sub>2</sub> O <sub>4</sub> (0 ≤ x ≤ 1) Spinel Phases Revealed by in Operando Neutron Diffraction and First-Principles Calculations. Chemistry of Materials, 2019, 31, 124-134.	6.7	28
5	Incommensurate magnetism in $KMn_2S_6$ and prospects for tunable frustration in a triangular lattice of pseudo-1D spin chains. Physical Review Materials, 2019, 3, .	4.1	6
6	POWGEN: rebuild of a third-generation powder diffractometer at the Spallation Neutron Source. Journal of Applied Crystallography, 2019, 52, 1189-1201.	4.5	57
7	AGES: Automated Gas Environment System for in situ neutron powder diffraction. Review of Scientific Instruments, 2018, 89, 092904.	1.3	12
8	Temperature-dependent Structural and Spectroscopic Studies of (Bi <sub>1-x</sub> Fex)FeO <sub>3</sub> . Journal of Physical Chemistry C, 2018, 122, 28280-28291.	3.1	12
9	Lattice dynamics and thermal transport in multiferroic $CuCrO_2$ . Physical Review B, 2017, 95, .	3.2	19
10	Determination of Bulk and Surface Atomic Arrangement in Ni <sub>1-x</sub> Zn <sub>x</sub> Brass Phase at Different Ni to Zn Ratios. Chemistry of Materials, 2017, 29, 504-512.	6.7	17
11	Neutron and X-ray powder diffraction study of skutterudite thermoelectrics. Powder Diffraction, 2016, 31, 16-22.	0.2	1
12	Synthesis of a Ferrolite: A Zeolitic Aluminosilicate Framework. Angewandte Chemie - International Edition, 2016, 55, 13195-13199.	13.8	7
13	Structural phase transition and phonon instability in $CuS_{12}$ . Physical Review B, 2016, 93, .	3.2	48
14	Structural and electrolyte properties of Li <sub>4</sub> P <sub>2</sub> S <sub>6</sub> . Solid State Ionics, 2016, 284, 61-70.	2.7	59
15	Thermoelectric properties of Au-containing type-I clathrates Ba <sub>8</sub> AuxGa <sub>16</sub> ~ <sub>3</sub> Ge <sub>30</sub> + <sub>2</sub> x. Journal of Alloys and Compounds, 2014, 587, 747-754.	5.5	8
16	High temperature X-ray studies of mayenite synthesized using the citrate sol-gel method. Ceramics International, 2014, 40, 1117-1123.	4.8	29
17	The thermal expansion coefficient as a key design parameter for thermoelectric materials and its relationship to processing-dependent bloating. Journal of Materials Science, 2013, 48, 6233-6244.	3.7	45
18	Microstructural evolution in two alkali multicomponent silicate glasses as a result of long-term exposure to solid oxide fuel cell environments. Journal of Materials Science, 2013, 48, 5880-5898.	3.7	13

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19	Effects of combined diffusion treatments and cold working on the sliding friction and wear behavior of Ti-6Al-4V. <i>Wear</i> , 2013, 302, 837-844.	3.1	24
20	Structure-transformation-induced abnormal thermoelectric properties in semiconductor copper selenide. <i>Materials Letters</i> , 2013, 93, 121-124.	2.6	75
21	The coefficients of thermal expansion of boron arsenide (B12As2) between 25°C and 850°C. <i>Journal of Physics and Chemistry of Solids</i> , 2013, 74, 673-676.	4.0	7
22	Effect of thermal processing on the microstructure and composition of Cu-Sb-Se compounds. <i>Journal of Materials Science</i> , 2013, 48, 2188-2198.	3.7	13
23	Influence of Atomic Layer Deposition Temperatures on TiO <sub>2</sub> /n-Si MOS Capacitor. <i>ECS Journal of Solid State Science and Technology</i> , 2013, 2, N110-N114.	1.8	39
24	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mi mathvariant="italic"} \rangle$ Abinitio determination of crystal structures of the thermoelectric material MgAgSb. <i>Physical Review B</i> , 2012, 85, .	3.2	86
25	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
26	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
27	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
28	The temperature dependence of thermal expansion for p-type Ce <sub>0.9</sub> Fe <sub>3.5</sub> Co <sub>0.5</sub> Sb <sub>12</sub> and n-type Co <sub>0.95</sub> Pd <sub>0.05</sub> Te <sub>0.05</sub> Sb <sub>3</sub> skutterudite thermoelectric materials. <i>Philosophical Magazine</i> , 2012, 92, 1261-1286.	1.6	16
29	Lattice thermal conductivity of the Cu <sub>3</sub> SbSe <sub>4</sub> -Cu <sub>3</sub> Sb <sub>4</sub> solid solution. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	53
30	High-temperature order/disorder transition in the thermoelectric Cu <sub>3</sub> SbSe <sub>3</sub> . <i>Journal of Materials Research</i> , 2011, 26, 2001-2005.	2.6	27
31	The role of boron segregation in enhanced thermoelectric power factor of CoSi <sub>1-x</sub> B <sub>x</sub> alloys. <i>Journal of Applied Physics</i> , 2011, 110, 123711.	2.5	10
32	Extremely Durable High-Rate Capability of a LiNi <sub>0.4</sub> Mn <sub>0.4</sub> Co <sub>0.2</sub> O <sub>2</sub> Cathode Enabled with Single-Walled Carbon Nanotubes. <i>Advanced Energy Materials</i> , 2011, 1, 58-62.	19.5	74
33	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
34	Doping Effects on the Thermoelectric Properties of Cu <sub>3</sub> SbSe <sub>4</sub> . <i>Science of Advanced Materials</i> , 2011, 3, 602-606.	0.7	47
35	Tracking the catalyzed growth process of nanowires by in situ x-ray diffraction. <i>Journal of Applied Physics</i> , 2010, 108, 014304.	2.5	9
36	Crystallite Sizes and Lattice Parameters of Nano-Biomagnetite Particles. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 8298-8306.	0.9	21

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37	Doping and Raman Characterization of Boron and Phosphorus Atoms in Germanium Nanowires. ACS Nano, 2010, 4, 3807-3816.	14.6	99
38	Patterned Growth of Vertically Aligned ZnO Nanowire Arrays on Inorganic Substrates at Low Temperature without Catalyst. Journal of the American Chemical Society, 2008, 130, 14958-14959.	13.7	270
39	Density-controlled, solution-based growth of ZnO nanorod arrays via layer-by-layer polymer thin films for enhanced field emission. Nanotechnology, 2008, 19, 435302.	2.6	42
40	<i>In situ</i> growth kinetics of ZnO nanobelts. Nanotechnology, 2008, 19, 445708.	2.6	25
41	Solid Au nanoparticles as a catalyst for growing aligned ZnO nanowires: a new understanding of the vapour-liquid-solid process. Nanotechnology, 2007, 18, 365304.	2.6	61
42	Magnetic response of microbially synthesized transition metal- and lanthanide-substituted nano-sized magnetites. Journal of Magnetism and Magnetic Materials, 2007, 313, 283-292.	2.3	26
43	Control of Noise and Specimen Temperature During 1 kHz Fatigue Experiments. Journal of Testing and Evaluation, 2006, 34, 12724.	0.7	0
44	Fatigue behavior of bulk-metallic glasses. Intermetallics, 2004, 12, 885-892.	3.9	132