

# Simon A J Kimber

## List of Publications by Year in descending order

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63  
papers

3,782  
citations

159585

30  
h-index

123424

61  
g-index

67  
all docs

67  
docs citations

67  
times ranked

5594  
citing authors

#	ARTICLE	IF	CITATIONS
1	Decoupling Lattice and Magnetic Instabilities in Frustrated $\text{CuMnO}_2$ . <i>Inorganic Chemistry</i> , 2021, 60, 6004-6015.	4.0	7
2	$\text{Nb}_6\text{Mn}_4\text{B}_8$ ( $x = 0.25$ ): A Ferrimagnetic Boride Containing Planar $\text{B}_6$ Rings Interacting with Ferromagnetic Mn Chains. <i>Journal of Physical Chemistry C</i> , 2021, 125, 13635-13640.	3.1	1
3	Colossal Density-Driven Resistance Response in the Negative Charge Transfer Insulator $\text{MnS}_2$ . <i>Physical Review Letters</i> , 2021, 127, 016401.	7.8	11
4	Real-Time Observation of "Magic-Size Clusters during Hydrolysis of the Model Metallodrug Bismuth Disalicylate. <i>Journal of the American Chemical Society</i> , 2021, 143, 16332-16336.	13.7	5
5	ID15A at the ESRF "a beamline for high speed <i>operando</i> X-ray diffraction, diffraction tomography and total scattering. <i>Journal of Synchrotron Radiation</i> , 2020, 27, 515-528.	2.4	85
6	Spin-chain correlations in the frustrated triangular lattice material $\text{CuMnO}_2$ . <i>Journal of Physics Condensed Matter</i> , 2020, 32, 445802.	1.8	2
7	Co-emergence of magnetic order and structural fluctuations in magnetite. <i>Nature Communications</i> , 2019, 10, 2857.	12.8	43
8	Electronic origins of the giant volume collapse in the pyrite mineral $\text{MnS}_2$ . <i>Journal of Solid State Chemistry</i> , 2019, 269, 540-546.	2.9	7
9	Orbital Molecules in the New Spinel $\text{GaV}_2\text{O}_4$ . <i>Inorganic Chemistry</i> , 2018, 57, 2815-2822.	4.0	14
10	A neutron tomography study: probing the spontaneous crystallization of randomly packed granular assemblies. <i>Scientific Reports</i> , 2018, 8, 17637.	3.3	5
11	Real-Time Scattering-Contrast Imaging of a Supported Cobalt-Based Catalyst Body during Activation and Fischer-Tropsch Synthesis Revealing Spatial Dependence of Particle Size and Phase on Catalytic Properties. <i>ACS Catalysis</i> , 2017, 7, 2284-2293.	11.2	54
12	Challenges of Mechanochemistry: Is In Situ Real-Time Quantitative Phase Analysis Always Reliable? A Case Study of Organic Salt Formation. <i>Advanced Science</i> , 2017, 4, 1700132.	11.2	50
13	Persistent three- and four-atom orbital molecules in the spinel $\text{Al}_2\text{VO}_4$ . <i>Physical Review Materials</i> , 2017, 1, 014001.	2.4	30
14	Nanoscale order in the frustrated mixed conductor $\text{La}_{5.6}\text{WO}_{12}$ . <i>Journal of Applied Crystallography</i> , 2016, 49, 997-1008.	4.5	15
15	Effect of delithiation on the dimer transition of the honeycomb-lattice ruthenate $\text{Li}_2\text{Mn}_2\text{O}_7$ . <i>Physical Review B</i> , 2016, 94, .	2.4	1
16	Experimental observation and computational study of the spin-gap excitation in $\text{Ba}_3\text{BiRu}_2\text{O}_9$ . <i>Physical Review B</i> , 2016, 94, .	3.2	9
17	"In Situ" Monitoring and Mechanism of the Mechanochemical Formation of a Microporous MOF-74 Framework. <i>Journal of the American Chemical Society</i> , 2016, 138, 2929-2932.	13.7	194
18	The evolution of crystalline ordering for ligand-ornamented zinc oxide nanoparticles. <i>CrystEngComm</i> , 2016, 18, 2163-2172.	2.6	11

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19	Synchrotron X-Ray Scattering as a Tool for Characterising Catalysts on Multiple Length Scales. Oil and Gas Science and Technology, 2015, 70, 429-436.	1.4	2
20	Spin-driven symmetry breaking in the frustrated fcc pyrite MnS <sub>2</sub> . Journal of Physics Condensed Matter, 2015, 27, 226003.	1.8	8
21	Magnetic structure of the quasi-two-dimensional antiferromagnet $\text{NiPS}_3$ . Physical Review B, 2015, 92, .	1.6	16
22	Universal solvent restructuring induced by colloidal nanoparticles. Science, 2015, 347, 292-294.	12.6	172
23	In situ X-ray diffraction monitoring of a mechanochemical reaction reveals a unique topology metal-organic framework. Nature Communications, 2015, 6, 6662.	12.8	294
24	High-Pressure Annealing of a Prestructured Nanocrystalline Precursor to Obtain Tetragonal and Orthorhombic Polymorphs of $\text{Hf}_3\text{N}_4$ . Materials Research Society Symposia Proceedings, 2014, 1655, 1.	0.1	1
25	Crystal structure transformation in CeRuSn seen via the atomic pair distribution function. Physical Review B, 2014, 89, .	3.2	8
26	Valence bond liquid phase in the honeycomb lattice material $\text{Li}_2\text{RuO}_3$ . Physical Review B, 2014, 89, .	3.2	92
27	Quantitative in situ and real-time monitoring of mechanochemical reactions. Faraday Discussions, 2014, 170, 203-221.	3.2	73
28	Bulk Metallic Glass-like Scattering Signal in Small Metallic Nanoparticles. ACS Nano, 2014, 8, 6163-6170.	14.6	26
29	Giant pressure-induced volume collapse in the pyrite mineral $\text{MnS}_2$ . Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5106-5110.	7.1	37
30	Magnetoelastic effects in multiferroic $\text{HoMnO}_3$ . Solid State Communications, 2014, 180, 46-51.	1.9	4
31	In situ and real-time monitoring of mechanochemical milling reactions using synchrotron X-ray diffraction. Nature Protocols, 2013, 8, 1718-1729.	12.0	132
32	Pair distribution function computed tomography. Nature Communications, 2013, 4, 2536.	12.8	96
33	Real-time In situ Powder X-ray Diffraction Monitoring of Mechanochemical Synthesis of Pharmaceutical Cocrystals. Angewandte Chemie - International Edition, 2013, 52, 11538-11541.	13.8	141
34	Mechanical double loop behavior in $\text{BaTiO}_3$ : Stress induced paraelastic to ferroelastic phase transformation. Applied Physics Letters, 2013, 103, .	3.3	19
35	Real-time and in situ monitoring of mechanochemical milling reactions. Nature Chemistry, 2013, 5, 66-73.	13.6	493
36	Spin orders and lattice distortions of geometrically frustrated 6H-perovskites $\text{Ba}_2\text{O}_2\text{M}_2\text{O}_8$ . Physical Review B, 2013, 87, 041101.	1.2	10

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37	Synthesis of Tetragonal and Orthorhombic Polymorphs of $\text{Hf}_3\text{N}_4$ by High-Pressure Annealing of a Prestructured Nanocrystalline Precursor. <i>Journal of the American Chemical Society</i> , 2013, 135, 9503-9511.	13.7	40
38	Structure and paramagnetism in weakly correlated $\text{Y}_8\text{Co}_5$ . <i>Journal of Physics Condensed Matter</i> , 2013, 25, 125701.	1.8	3
39	Possible high-pressure orbital quantum criticality and an emergent resistive phase in $\text{PbRuO}_3$ . <i>Physical Review B</i> , 2013, 87, .	3.2	7
40	Charge and orbital order in frustrated $\text{Pb}_3\text{Mn}_7\text{O}_{15}$ . <i>Journal of Physics Condensed Matter</i> , 2012, 24, 186002.	1.8	6
41	Negative thermal expansion and antiferromagnetism in the actinide oxynictide $\text{NpFeAsO}$ . <i>Physical Review B</i> , 2012, 85, .	3.2	34
42	Coexistence of long- and short-range magnetic order in the frustrated magnet $\text{SrYb}_2\text{O}_2$ . <i>Physical Review Letters</i> , 2012, 109, 217205.	3.2	34
43	Charge Order and Interplay between the Molecular and Crystal Field in $\text{Ba}_3\text{NaRu}_2\text{O}_{10}$ . <i>Physical Review Letters</i> , 2012, 109, 217205.	3.2	34
44	An eigenstrain-based finite element model and the evolution of shot peening residual stresses during fatigue of GW103 magnesium alloy. <i>International Journal of Fatigue</i> , 2012, 42, 284-295.	5.7	51
45	Helical magnetic order in the distorted triangular antiferromagnet $\text{CaCr}_2\text{O}_7$ . <i>Physical Review Letters</i> , 2011, 107, 077201.	3.2	25
46	Quasiparticle interference in antiferromagnetic parent compounds of iron-based superconductors. <i>Physical Review B</i> , 2011, 83, .	3.2	11
47	Metamagnetism and soliton excitations in the modulated ferromagnetic Ising chain $\text{CoV}_2\text{O}_6$ . <i>Physical Review B</i> , 2011, 84, .	3.2	39
48	Polymorphism and piezochromicity in the three-dimensional network-based phosphate $\text{RbCuPO}_4$ . <i>Acta Crystallographica Section B: Structural Science</i> , 2010, 66, 412-421.	1.8	6
49	From $(\Gamma, 0)$ magnetic order to superconductivity with $(\Gamma, \Gamma)$ magnetic resonance in $\text{Fe}_{1.02}\text{Te}_{1-x}\text{S}_x$ . <i>Nature Materials</i> , 2010, 9, 718-720.	27.5	248
50	Local moments and symmetry breaking in metallic $\text{PrMnSbO}$ . <i>Physical Review B</i> , 2010, 82, .	3.2	33
51	Interlayer tuning of electronic and magnetic properties in honeycomb ordered $\text{Ag}_3\text{LiRu}_2\text{O}_6$ . <i>Journal of Materials Chemistry</i> , 2010, 20, 8021.	6.7	28
52	Suppression of antiferromagnetic spin fluctuations in the collapsed phase of $\text{CaFe}_2\text{As}_2$ . <i>Physical Review B</i> , 2009, 79, .	3.2	61
53	Similarities between structural distortions under pressure and chemical doping in superconducting $\text{BaFe}_2\text{As}_2$ . <i>Nature Materials</i> , 2009, 8, 471-475.	27.5	266
54	Lattice collapse and quenching of magnetism in $\text{CaFe}_2\text{As}_2$ under pressure: A single-crystal neutron and x-ray diffraction investigation. <i>Physical Review B</i> , 2009, 79, .	3.2	164

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55	Metal-Insulator Transition and Orbital Order in $\text{PbRuO}_3$ . <i>Physical Review B</i> , 2008, 77, .	7.8	50
56	Triplet dimerization crossover driven by magnetic frustration in $\text{In}_2\text{V}_2\text{O}_5$ . <i>Physical Review B</i> , 2008, 77, .	3.2	5
57	Quasi-Elastic Neutron Scattering Studies on Clay Interlayer-Space Highlighting the Effect of the Cation in Confined Water Dynamics. <i>Journal of Physical Chemistry C</i> , 2008, 112, 13982-13991.	3.1	87
58	Magnetic ordering and negative thermal expansion in $\text{PrFeAsO}$ . <i>Physical Review B</i> , 2008, 78, .	3.2	94
59	Disrupted antiferromagnetism in the brannerite $\text{MnV}_2\text{O}_6$ . <i>Physical Review B</i> , 2007, 75, .	3.2	19
60	Induced antiferromagnetism and large magnetoresistance in $\text{RuSr}_2(\text{Nd}, \text{Y}, \text{Ce})_2\text{Cu}_2\text{O}_{10}$ ruthenocuprates. <i>Physical Review B</i> , 2007, 76, .	3.2	11
61	Magnetic order in acentric $\text{Pb}_2\text{MnO}_4$ . <i>Journal of Materials Chemistry</i> , 2007, 17, 4885.	6.7	13
62	Chemical Tuning of Positive and Negative Magnetoresistances, and Superconductivity in 1222-Type Ruthenocuprates. <i>Journal of the American Chemical Society</i> , 2006, 128, 12364-12365.	13.7	16
63	High pressure neutron diffraction study of the magnetoresistive 1222-type ruthenocuprate, $\text{RuSr}_2\text{Nd}_{0.9}\text{Y}_{0.2}\text{Ce}_{0.9}\text{Cu}_2\text{O}_{10}$ . <i>Materials Research Bulletin</i> , 2006, 41, 1001-1007.	5.2	1