David A Keen

List of Publications by Year
in descending order

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90 papers	7,472 citations	57758 44 h-index	53230 85 g-index
93 all docs	93 docs citations	93 times ranked	7268 citing authors

#	Article	IF	Citations
1	Orientational order and phase transitions in deuterated methane: a neutron total scattering and reverse Monte Carlo study. Journal of Physics Condensed Matter, 2022, 34, 015401.	1.8	4
2	Principles of melting in hybrid organicâ€“inorganic perovskite and polymorphic ABX₃ structures. Chemical Science, 2022, 13, 2033-2042.	7.4	9
3	Post-Synthetic Modification of a Metalâ€“Organic Framework Glass. Chemistry of Materials, 2022, 34, 2187-2196.	6.7	27
4	Materials Formed by Combining Inorganic Glasses and Metalâ€Organic Frameworks. Chemistry - A European Journal, 2022, 28, .	3.3	7
5	Multivariate analysis of disorder in metalâ€“organic frameworks. Nature Communications, 2022, 13, 2173.	12.8	10
6	Orientational disorder in sulfur hexafluoride: a neutron total scattering and reverse Monte Carlo study. Journal of Physics Condensed Matter, 2022, 34, 295401.	1.8	2
7	Glassy behaviour of mechanically amorphised ZIF-62 isomorphs. Chemical Communications, 2021, 57, 9272-9275.	4.1	15
8	Room temperature crystallography of human acetylcholinesterase bound to a substrate analogue 4K-TMA: Towards a neutron structure. Current Research in Structural Biology, 2021, 3, 206-215.	2.2	6
9	Spin-ice physics in cadmium cyanide. Nature Communications, 2021, 12, 2272.	12.8	7
10	Mixed hierarchical local structure in a disordered metalâ€“organic framework. Nature Communications, 2021, 12, 2062.	12.8	44
11	Advantages of a curved image plate for rapid laboratory-based x-ray total scattering measurements: Application to pair distribution function analysis. Review of Scientific Instruments, 2021, 92, 043107.	1.3	4
12	Melting of hybrid organicâ€“inorganic perovskites. Nature Chemistry, 2021, 13, 778-785.	13.6	65
13	Ionic liquid facilitated melting of the metal-organic framework ZIF-8. Nature Communications, 2021, 12, 5703.	12.8	74
14	Stepwise collapse of a giant pore metalâ€“organic framework. Dalton Transactions, 2021, 50, 5011-5022.	3.3	23
15	Soft-mode anisotropy in the negative thermal expansion material <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>ReO</mml:mi></mml:mrow><mml:mn>3</mml:mn> Physical Review B, 2021, 104, .	3.2	6
16	Metal-organic framework and inorganic glass composites. Nature Communications, 2020, 11, 5800.	12.8	35
17	Total scattering and the pair distribution function in crystallography. Crystallography Reviews, 2020, 26, 143-201.	1.5	39
18	Quantitative understanding of negative thermal expansion in scandium trifluoride from neutron total scattering measurements. Physical Review B, 2020, 102, .	3.2	20

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19	A new route to porous metalâ€"organic framework crystalâ€"glass composites. Chemical Science, 2020, 11, 9910-9918.	7.4	21
20	Investigating the melting behaviour of polymorphic zeolitic imidazolate frameworks. CrystEngComm, 2020, 22, 3627-3637.	2.6	37
21	Unusual Breathing Behavior of Optically Excited Barium Titanate Nanocrystals. Crystals, 2020, 10, 365.	2.2	1
22	Tuning the Morphological Appearance of Iron(III) Fumarate: Impact on Material Characteristics and Biocompatibility. Chemistry of Materials, 2020, 32, 2253-2263.	6.7	19
23	A quantum liquid of magnetic octupoles on the pyrochlore lattice. Nature Physics, 2020, 16, 546-552.	16.7	54
24	Neutron scattering study of the orientational disorder in potassium cyanide. Journal of Physics Communications, 2020, 4, 023001.	1.2	8
25	Halogenated Metalâ€"Organic Framework Glasses and Liquids. Journal of the American Chemical Society, 2020, 142, 3880-3890.	13.7	83
26	Synthesis and Properties of a Compositional Series of MIL-53(Al) Metalâ€"Organic Framework Crystal-Glass Composites. Journal of the American Chemical Society, 2019, 141, 15641-15648.	13.7	65
27	Structural study of bismuth ferrite<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BiFeO</mml:mi><mml:mn>3</mml:mn></mml:msub></m neutron total scattering and the reverse Monte Carlo method. Physical Review B, 2019, 100, .	3.2	5
28	Metal-organic framework crystal-glass composites. Nature Communications, 2019, 10, 2580.	12.8	97
29	Structural evolution in a melt-quenched zeolitic imidazolate framework glass during heat-treatment. Chemical Communications, 2019, 55, 2521-2524.	4.1	21
30	Flux melting of metalâ€"organic frameworks. Chemical Science, 2019, 10, 3592-3601.	7.4	67
31	Structural investigations of amorphous metalâ€"organic frameworks formed <i>via</i> different routes. Physical Chemistry Chemical Physics, 2018, 20, 7857-7861.	2.8	22
32	Magnetic structure of paramagnetic MnO. Physical Review B, 2018, 97, .	3.2	16
33	Dimensional crossover of correlated anion disorder in oxynitride perovskites. Chemical Communications, 2018, 54, 5245-5247.	4.1	12
34	Neutron and X-ray total scattering study of hydrogen disorder in fully hydrated hydrogrossular, Ca3Al2(O4H4)3. Physics and Chemistry of Minerals, 2018, 45, 333-342.	0.8	5
35	Metal-organic framework glasses with permanent accessible porosity. Nature Communications, 2018, 9, 5042.	12.8	147
36	Stochastic Polarization Instability in PbTiO3. Physical Review Letters, 2018, 121, 137602.	7.8	11

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37	Thermodynamic features and enthalpy relaxation in a metalâ€“organic framework glass. Physical Chemistry Chemical Physics, 2018, 20, 18291-18296.	2.8	24
38	Liquid phase blending of metal-organic frameworks. Nature Communications, 2018, 9, 2135.	12.8	69
39	Local-scale structures across the morphotropic phase boundary in PbZr_{1â^'<i>x</i>}Ti<i>_x </i>O₃. IUCrJ, 2018, 5, 73-81.	2.2	24
40	Room Temperature Neutron Crystallography of Drug Resistant HIV-1 Protease Uncovers Limitations of X-ray Structural Analysis at 100 K. Journal of Medicinal Chemistry, 2017, 60, 2018-2025.	6.4	25
41	Gel-based morphological design of zirconium metalâ€“organic frameworks. Chemical Science, 2017, 8, 3939-3948.	7.4	177
42	Liquid metalâ€“organic frameworks. Nature Materials, 2017, 16, 1149-1154.	27.5	326
43	Direct visualization of critical hydrogen atoms in a pyridoxal 5â€²-phosphate enzyme. Nature Communications, 2017, 8, 955.	12.8	55
44	Orbital Dimer Model for the Spin-Glass State in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">Y</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow><mml:m mathvariant="normal">O</mml:mi></mml:mrow><mml:mrow><mml:mn>7</mml:mn></mml:mro. Physical Review Letters, 2017, 118, 067201.	7.8	34
45	Local structure study of the orbital order/disorder transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LaMnO</mml:mi><mml:mn>3</mml:mn></mml:msub></ Physical Review B, 2017, 95, .	3.2	22
46	Longâ€Range Electrostaticsâ€Induced Twoâ€Proton Transfer Captured by Neutron Crystallography in an Enzyme Catalytic Site. Angewandte Chemie - International Edition, 2016, 55, 4924-4927.	13.8	42
47	Emergence of Long-Range Order in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>BaTiO</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn>< Local Symmetry-Breaking Distortions. Physical Review Letters, 2016, 116, 207602.	7.8	114
48	Local structure of the metalâ€“organic perovskite dimethylammonium manganese(<scp>ii</scp>) formate. Dalton Transactions, 2016, 45, 4380-4391.	3.3	44
49	Melt-Quenched Glasses of Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2016, 138, 3484-3492.	13.7	252
50	Connecting defects and amorphization in UiO-66 and MIL-140 metalâ€“organic frameworks: a combined experimental and computational study. Physical Chemistry Chemical Physics, 2016, 18, 2192-2201.	2.8	85
51	A comparison of the amorphization of zeolitic imidazolate frameworks (ZIFs) and aluminosilicate zeolites by ball-milling. Dalton Transactions, 2016, 45, 4258-4268.	3.3	34
52	The crystallography of correlated disorder. Nature, 2015, 521, 303-309.	27.8	262
53	The missing boundary in the phase diagram of PbZr1â^'xTixO3. Nature Communications, 2014, 5, 5231.	12.8	234
54	Ballâ€Millingâ€Induced Amorphization of Zeolitic Imidazolate Frameworks (ZIFs) for the Irreversible Trapping of Iodine. Chemistry - A European Journal, 2013, 19, 7049-7055.	3.3	171

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55	Bifurcated Polarization Rotation in Bismuthâ€Based Piezoelectrics. Advanced Functional Materials, 2013, 23, 185-190.	14.9	150
56	Amorphization of the prototypical zeolitic imidazolate framework ZIF-8 by ball-milling. Chemical Communications, 2012, 48, 7805.	4.1	137
57	Facile Mechanosynthesis of Amorphous Zeolitic Imidazolate Frameworks. Journal of the American Chemical Society, 2011, 133, 14546-14549.	13.7	184
58	Reversible pressure-induced amorphization of a zeolitic imidazolate framework (ZIF-4). Chemical Communications, 2011, 47, 7983.	4.1	192
59	Thermal Amorphization of Zeolitic Imidazolate Frameworks. Angewandte Chemie - International Edition, 2011, 50, 3067-3071.	13.8	146
60	Diffraction study of pressure-amorphized ZrW<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>8</mml:mn></mml:mro	3.2	17
61	Structure and Properties of an Amorphous Metal-Organic Framework. Physical Review Letters, 2010, 104, 115503.	7.8	246
62	The hydrogen-bonding transition and isotope-dependent negative thermal expansion in H₃Co(CN)₆. Journal of Physics Condensed Matter, 2010, 22, 404202.	1.8	15
63	Colossal Positive and Negative Thermal Expansion in the Framework Material Ag ₃ [Co(CN) ₆]. Science, 2008, 319, 794-797.	12.6	575
64	Local structure in Ag₃[Co(CN)₆]: colossal thermal expansion, rigid unit modes and argentophilic interactions. Journal of Physics Condensed Matter, 2008, 20, 255225.	1.8	34
65	Structural Description of Pressure-Induced Amorphization inZrW2O8. Physical Review Letters, 2007, 98, 225501.	7.8	65
66	Local structure in ZrW₂O₈from neutron total scattering. Journal of Physics Condensed Matter, 2007, 19, 335215.	1.8	26
67	RMCProfile: reverse Monte Carlo for polycrystalline materials. Journal of Physics Condensed Matter, 2007, 19, 335218.	1.8	351
68	Magnetic Structure of MnO at 10ÂK from Total Neutron Scattering Data. Physical Review Letters, 2006, 96, 047209.	7.8	74
69	Total scattering and reverse Monte Carlo study of the 105 K displacive phase transition in strontium titanate. Journal of Physics Condensed Matter, 2005, 17, S111-S124.	1.8	38
70	Reverse Monte Carlo modelling of crystalline disorder. Journal of Physics Condensed Matter, 2005, 17, S15-S22.	1.8	52
71	Negative Thermal Expansion inZrW2O8: Mechanisms, Rigid Unit Modes, and Neutron Total Scattering. Physical Review Letters, 2005, 95, 255501.	7.8	164
72	Refinement of the Siâ€“Oâ€“Si bond angle distribution in vitreous silica. Journal of Physics Condensed Matter, 2005, 17, S67-S75.	1.8	56

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73	Neutron total scattering method: simultaneous determination of long-range and short-range order in disordered materials. European Journal of Mineralogy, 2002, 14, 331-348.	1.3	109
74	Disordering phenomena in superionic conductors. Journal of Physics Condensed Matter, 2002, 14, R819-R857.	1.8	112
75	Structural disorder and loss of piezoelectric properties in Î±-quartz at high temperature. Applied Physics Letters, 2002, 81, 2968-2970.	3.3	54
76	Dynamic structural disorder in cristobalite: neutron total scattering measurement and reverse Monte Carlo modelling. Journal of Physics Condensed Matter, 2001, 13, 403-423.	1.8	71
77	A comparison of various commonly used correlation functions for describing total scattering. Journal of Applied Crystallography, 2001, 34, 172-177.	4.5	541
78	Application of the reverse Monte Carlo method to crystalline materials. Journal of Applied Crystallography, 2001, 34, 630-638.	4.5	94
79	MCGRtof: Monte CarloG(r) with resolution corrections for time-of-flight neutron diffractometers. Journal of Applied Crystallography, 2001, 34, 780-782.	4.5	19
80	A detailed structural characterization of quartz on heating through the Î±â€“Î² phase transition. Mineralogical Magazine, 2001, 65, 489-507.	1.4	132
81	Simultaneous analysis of changes in long-range and short-range structural order at the displacive phase transition in quartz. Journal of Physics Condensed Matter, 2000, 12, L723-L730.	1.8	51
82	Local structures of amorphous and crystalline phases of silica, SiO2, by neutron total scattering. Journal of Physics Condensed Matter, 1999, 11, 9263-9273.	1.8	78
83	Determination of structural disorder in superionic by neutron total scattering. Journal of Physics Condensed Matter, 1998, 10, 8217-8234.	1.8	22
84	Refining disordered structural models using reverse monte carlo methods: Application to vitreous silica. Phase Transitions, 1997, 61, 109-124.	1.3	46
85	Direct measurement of the Si-O bond length and orientational disorder in the high-temperature phase of cristobalite. Physics and Chemistry of Minerals, 1997, 24, 311-317.	0.8	99
86	Spin configurations in an amorphous random-anisotropy magnet. Physical Review B, 1996, 54, 1036-1042.	3.2	11
87	Structural changes in silver bromide at the melting point. Journal of Physics Condensed Matter, 1992, 4, 6703-6714.	1.8	59
88	Determination of disordered magnetic structures by RMC modelling of neutron diffraction data. Journal of Physics Condensed Matter, 1991, 3, 7383-7394.	1.8	34
89	Structural modelling of glasses using reverse Monte Carlo simulation. Nature, 1990, 344, 423-425.	27.8	294
90	Structural disorder in AgBr on the approach to melting. Journal of Physics Condensed Matter, 1990, 2, 2773-2786.	1.8	39