Philip A Chater

List of Publications by Year
in descending order

70	4,346	147801 31	106344 65
papers	citations	h-index	g-index

77	77	77	6806
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structure and vibrational features of the protic ionic liquid 1,8-diazabicyclo[5.4.0]-undec-7-ene-8-ium bis(trifluoromethanesulfonyl)amide, [DBUH][TFSI]. Journal of Molecular Liquids, 2022, 347, 117981.	4.9	2
2	Principles of melting in hybrid organicâ€“inorganic perovskite and polymorphic ABX₃ structures. Chemical Science, 2022, 13, 2033-2042.	7.4	9
3	Interfacial Self-Assembly of Silk Fibroin Polypeptides and Î±-NiCo(OH)₂ Nanocrystals with Tunable Energy Storage Applications. ACS Applied Electronic Materials, 2022, 4, 1214-1224.	4.3	0
4	Multivariate analysis of disorder in metalâ€“organic frameworks. Nature Communications, 2022, 13, 2173.	12.8	10
5	Glassy behaviour of mechanically amorphised ZIF-62 isomorphs. Chemical Communications, 2021, 57, 9272-9275.	4.1	15
6	Generating the atomic pair distribution function without instrument or emission profile contributions. Journal of Applied Crystallography, 2021, 54, 444-453.	4.5	3
7	Mixed hierarchical local structure in a disordered metalâ€“organic framework. Nature Communications, 2021, 12, 2062.	12.8	44
8	Melting of hybrid organicâ€“inorganic perovskites. Nature Chemistry, 2021, 13, 778-785.	13.6	65
9	Liquid structure and dynamics in the choline acetate:urea 1:2 deep eutectic solvent. Journal of Chemical Physics, 2021, 154, 244501.	3.0	17
10	Frustrated flexibility in metal-organic frameworks. Nature Communications, 2021, 12, 4097.	12.8	55
11	Correlating Local Structure and Sodium Storage in Hard Carbon Anodes: Insights from Pair Distribution Function Analysis and Solid-State NMR. Journal of the American Chemical Society, 2021, 143, 14274-14286.	13.7	66
12	Lithiation phase behaviors of metal oxide anodes and extra capacities. Cell Reports Physical Science, 2021, 2, 100543.	5.6	6
13	Non-equilibrium metal oxides via reconversion chemistry in lithium-ion batteries. Nature Communications, 2021, 12, 561.	12.8	27
14	Stepwise collapse of a giant pore metalâ€“organic framework. Dalton Transactions, 2021, 50, 5011-5022.	3.3	23
15	Liquid Structure of a Water-in-Salt Electrolyte with a Remarkably Asymmetric Anion. Journal of Physical Chemistry B, 2021, 125, 12500-12517.	2.6	11
16	X-ray pair distribution function analysis and electrical and electrochemical properties of cerium doped Li₅La₃Nb₂O₁₂ garnet solid-state electrolyte. Dalton Transactions, 2020, 49, 11727-11735.	3.3	10
17	A new route to porous metalâ€“organic framework crystalâ€“glass composites. Chemical Science, 2020, 11, 9910-9918.	7.4	21
18	Temperature reversible synergistic formation of cerium oxyhydride and Au hydride: a combined XAS and XPDF study. Physical Chemistry Chemical Physics, 2020, 22, 18882-18890.	2.8	2

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19	Dye-Anchoring Modes at the DyeÂ·Â·Â·TiO₂ Interface of N3- and N749-Sensitized Solar Cells Revealed by Glancing-Angle Pair Distribution Function Analysis. Journal of Physical Chemistry C, 2020, 124, 11935-11945.	3.1	20
20	Exploring the origins of crystallisation kinetics in hierarchical materials using in situ X-ray diffraction and pair distribution function analysis. Physical Chemistry Chemical Physics, 2020, 22, 18860-18867.	2.8	12
21	Halogenated Metalâ€“Organic Framework Glasses and Liquids. Journal of the American Chemical Society, 2020, 142, 3880-3890.	13.7	83
22	Li₂O:Liâ€“Mnâ€“O Disordered Rockâ€Salt Nanocomposites as Cathode Prelithiation Additives for Highâ€Energy Density Liâ€ion Batteries. Advanced Energy Materials, 2020, 10, 1902788.	19.5	42
23	Reversible densification in nano-Li₂MnO₃ cation disordered rock-salt Li-ion battery cathodes. Journal of Materials Chemistry A, 2020, 8, 10998-11010.	10.3	15
24	Fast operando X-ray pair distribution function using the DRIX electrochemical cell. Journal of Synchrotron Radiation, 2020, 27, 1190-1199.	2.4	20
25	High-Energy Adventures at Diamond Light Source. Synchrotron Radiation News, 2020, 33, 31-36.	0.8	5
26	Direct synthesis of a solid calcium-silicate-hydrate (C-S-H). Construction and Building Materials, 2019, 223, 554-565.	7.2	67
27	Average and Local Structure of Apatite-Type Germanates and Implications for Oxide Ion Conductivity. Inorganic Chemistry, 2019, 58, 14853-14862.	4.0	8
28	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
29	1 m long multilayer-coated deformable piezoelectric bimorph mirror for adjustable focusing of high-energy X-rays. Optics Express, 2019, 27, 16121.	3.4	16
30	Metal-organic framework crystal-glass composites. Nature Communications, 2019, 10, 2580.	12.8	97
31	Structural evolution in a melt-quenched zeolitic imidazolate framework glass during heat-treatment. Chemical Communications, 2019, 55, 2521-2524.	4.1	21
32	Atomic insight into hydration shells around facetted nanoparticles. Nature Communications, 2019, 10, 995.	12.8	45
33	A novel, 1â€…m long multilayer-coated piezo deformable bimorph mirror for focusing high-energy x-rays. AIP Conference Proceedings, 2019, , .	0.4	1
34	Hexagonal perovskite related oxide ion conductor Ba₃NbMoO_{8.5}: phase transition, temperature evolution of the local structure and properties. Journal of Materials Chemistry A, 2019, 7, 25503-25510.	10.3	22
35	Interstitial Boron Atoms in the Palladium Lattice of an Industrial Type of Nanocatalyst: Properties and Structural Modifications. Journal of the American Chemical Society, 2019, 141, 19616-19624.	13.7	43
36	Residual strain mapping through pair distribution function analysis of the porcelain veneer within a yttria partially stabilised zirconia dental prosthesis. Dental Materials, 2019, 35, 257-269.	3.5	6

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37	On the origins of strain inhomogeneity in amorphous materials. Scientific Reports, 2018, 8, 1574.	3.3	15
38	Metal-organic framework glasses with permanent accessible porosity. Nature Communications, 2018, 9, 5042.	12.8	147
39	Thermodynamic features and enthalpy relaxation in a metalâ€“organic framework glass. Physical Chemistry Chemical Physics, 2018, 20, 18291-18296.	2.8	24
40	Stability, Composition, and Coreâ€“Shell Particle Structure of Uranium(IV)-Silicate Colloids. Environmental Science & Technology, 2018, 52, 9118-9127.	10.0	21
41	Liquid phase blending of metal-organic frameworks. Nature Communications, 2018, 9, 2135.	12.8	69
42	Supercritical Antisolvent Precipitation of Amorphous Copperâ€“Zinc Georgeite and Acetate Precursors for the Preparation of Ambientâ€Pressure Waterâ€Gasâ€Shift Copper/Zinc Oxide Catalysts. ChemCatChem, 2017, 9, 1621-1631.	3.7	20
43	Phonon broadening from supercell lattice dynamics: Random and correlated disorder (Phys. Status) Tj ETQq1 1 0.784314 rgBT /Overlock	1.5	0
44	A new class of Cu/ZnO catalysts derived from zincian georgeite precursors prepared by co-precipitation. Chemical Science, 2017, 8, 2436-2447.	7.4	32
45	Stable and ordered amide frameworks synthesised under reversible conditions which facilitate error checking. Nature Communications, 2017, 8, 1102.	12.8	126
46	Phonon broadening from supercell lattice dynamics: Random and correlated disorder. Physica Status Solidi (B): Basic Research, 2017, 254, 1600586.	1.5	17
47	Processing two-dimensional X-ray diffraction and small-angle scattering data in DAWN 2. Journal of Applied Crystallography, 2017, 50, 959-966.	4.5	356
48	Three-energy focusing Laue monochromator for the diamond light source x-ray pair distribution function beamline I15-1. AIP Conference Proceedings, 2016, , .	0.4	5
49	Mechanistic insights into sodium storage in hard carbon anodes using local structure probes. Chemical Communications, 2016, 52, 12430-12433.	4.1	223
50	Stable amorphous georgeite as a precursor to a high-activity catalyst. Nature, 2016, 531, 83-87.	27.8	128
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	Fast synthesis and refinement of the atomic pair distribution function. Journal of Applied Crystallography, 2015, 48, 869-875.	4.5	60
53	Nanoscale structural heterogeneity in Ni-rich half-Heusler TiNiSn. Journal of Applied Physics, 2014, 116, .	2.5	44
54	Side-chain control of porosity closure in single- and multiple-peptide-based porous materials by cooperative folding. Nature Chemistry, 2014, 6, 343-351.	13.6	124

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55	Shape Selectivity by Guestâ€Driven Restructuring of a Porous Material. Angewandte Chemie - International Edition, 2014, 53, 4592-4596.	13.8	98
56	Local Crystal Structure of Antiferroelectric Bi₂Mn_{4/3}Ni_{2/3}O₆ in Commensurate and Incommensurate Phases Described by Pair Distribution Function (PDF) and Reverse Monte Carlo (RMC) Modeling. Chemistry of Materials, 2014, 26, 2218-2232.	6.7	8
57	Computational prediction and experimental confirmation of B-site doping in YBa₂Fe₃O₈. Chemical Science, 2014, 5, 1493-1505.	7.4	11
58	Correlated defect nanoregions in a metalâ€“organic framework. Nature Communications, 2014, 5, 4176.	12.8	550
59	Single Sublattice Endotaxial Phase Separation Driven by Charge Frustration in a Complex Oxide. Journal of the American Chemical Society, 2013, 135, 10114-10123.	13.7	27
60	Computationally Assisted Identification of Functional Inorganic Materials. Science, 2013, 340, 847-852.	12.6	62
61	Epitaxial growth and enhanced conductivity of an IT-SOFC cathode based on a complex perovskite superstructure with six distinct cation sites. Chemical Science, 2013, 4, 2403.	7.4	12
62	XPDF @ Diamond: a new dedicated X-ray PDF instrument. Acta Crystallographica Section A: Foundations and Advances, 2013, 69, s577-s577.	0.3	0
63	Chemical Inhomogeneity, Shortâ€Range Order, and Magnetism in the LiNiO₂â€NiO Solid Solution. Chemistry - A European Journal, 2013, 19, 14521-14531.	3.3	22
64	Atomic layer deposition of anatase TiO2 coating on silica particles: growth, characterization and evaluation as photocatalysts for methyl orange degradation and hydrogen production. Journal of Materials Chemistry, 2012, 22, 20203.	6.7	25
65	A Waterâ€Stable Porphyrinâ€Based Metalâ€“Organic Framework Active for Visibleâ€Light Photocatalysis. Angewandte Chemie - International Edition, 2012, 51, 7440-7444.	13.8	680
66	Hydrogen storage and ionic mobility in amideâ€“halide systems. Faraday Discussions, 2011, 151, 271.	3.2	41
67	New B,N-hydrides: Characterization and Chemistry. Materials Research Society Symposia Proceedings, 2009, 1216, 1.	0.1	1
68	Synthesis and characterization of amideâ€“borohydrides: New complex light hydrides for potential hydrogen storage. Journal of Alloys and Compounds, 2007, 446-447, 350-354.	5.5	55
69	Synthesis and structure of the new complex hydride Li2BH4NH2. Chemical Communications, 2007, , 4770.	4.1	45
70	Synthesis and crystal structure of Li4BH4(NH2)3. Chemical Communications, 2006, , 2439.	4.1	137