Helen E A Brand

List of Publications by Year
in descending order

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48 papers	1,827 citations	394421 19 h-index	265206 42 g-index
48 all docs	48 docs citations	48 times ranked	3105 citing authors

#	Article	IF	Citations
1	Human occupation of northern Australia by 65,000 years ago. Nature, 2017, 547, 306-310.	27.8	691
2	Rate Dependent Performance Related to Crystal Structure Evolution of Na_{0.67}Mn_{0.8}Mg_{0.2}O₂ in a Sodium-Ion Battery. Chemistry of Materials, 2015, 27, 6976-6986.	6.7	97
3	Structural evolution of NASICON-type Li_{1+x}Al_xGe_{2â^'x}(PO₄)₃ using in situ synchrotron X-ray powder diffraction. Journal of Materials Chemistry A, 2016, 4, 7718-7726.	10.3	73
4	Solving Key Challenges in Battery Research Using In Situ Synchrotron and Neutron Techniques. Advanced Energy Materials, 2017, 7, 1602831.	19.5	67
5	The Unique Structural Evolution of the O3â€Phase Na_{2/3}Fe_{2/3}Mn_{1/3}O₂ during High Rate Charge/Discharge: A Sodiumâ€Centred Perspective. Advanced Functional Materials, 2015, 25, 4994-5005.	14.9	66
6	Sodium uptake in cell construction and subsequent in operando electrode behaviour of Prussian blue analogues, Fe[Fe(CN)₆]_{1â^'x}Â·yH₂O and FeCo(CN)₆. Physical Chemistry Chemical Physics, 2014, 16, 24178-24187.	2.8	62
7	Structureâ€“Electrochemical Evolution of a Mn-Rich P2 Na_{2/3}Fe_{0.2}Mn_{0.8}O₂ Na-Ion Battery Cathode. Chemistry of Materials, 2017, 29, 7416-7423.	6.7	58
8	Structural evolution of high energy density V³⁺/V⁴⁺ mixed valent Na₃V₂O_{2x}(PO₄)₂F_{3â^'2x} (x = 0.8) sodium vanadium fluorophosphate using in situ synchrotron X-ray powder diffraction. Journal of Materials Chemistry A, 2014, 2, 7766-7779.	10.3	57
9	Graphene and Selected Derivatives as Negative Electrodes in Sodiumâ€and Lithiumâ€Ion Batteries. ChemElectroChem, 2015, 2, 600-610.	3.4	46
10	Ancient micrometeorites suggestive of an oxygen-rich Archaean upper atmosphere. Nature, 2016, 533, 235-238.	27.8	45
11	The thermal expansion and crystal structure of mirabilite (Na2SO4Â·10D2O) from 4.2 to 300ÂK, determined by time-of-flight neutron powder diffraction. Physics and Chemistry of Minerals, 2009, 36, 29-46.	0.8	42
12	Melting curve of copper measured to 16ÂGPa using a multi-anvil press. High Pressure Research, 2006, 26, 185-191.	1.2	39
13	Understanding Solvothermal Crystallization of Mesoporous Anatase Beads by In Situ Synchrotron PXRD and SAXS. Chemistry of Materials, 2014, 26, 4563-4571.	6.7	37
14	XPS and NEXAFS study of fluorine modified TiO2 nano-ovoids reveals dependence of Ti3+ surface population on the modifying agent. RSC Advances, 2014, 4, 20649.	3.6	37
15	New Apatiteâ€Type Oxide Ion Conductor, Bi₂La₈[(GeO₄)₆]O₃: Structure, Properties, and Direct Imaging of Lowâ€Level Interstitial Oxygen Atoms Using Aberrationâ€Corrected Scanning Transmission Electron Microscopy. Advanced Functional Materials, 2017, 27, 1605625.	14.9	37
16	Enhancing Oxygen Reduction Reaction Activity and CO₂ Tolerance of Cathode for Low-Temperature Solid Oxide Fuel Cells by in Situ Formation of Carbonates. ACS Applied Materials & Interfaces, 2019, 11, 26909-26919.	8.0	35
17	3D Transition Metal Ordering and Rietveld Stacking Fault Quantification in the New Oxychalcogenides La₂O₂Cu_{2â€“4x}Cd_{2x}Se₂. Chemistry of Materials, 2016, 28, 3184-3195.	6.7	23
18	Structures and Phase Transitions in Pertechnetates. Inorganic Chemistry, 2019, 58, 10119-10128.	4.0	21

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19	Ordering of iron vacancies in monoclinic jarosites. American Mineralogist, 2010, 95, 1590-1593.	1.9	20
20	Guest Removal and External Pressure Variation Induce Spin Crossover in Halogen-Functionalized 2-D Hofmann Frameworks. Inorganic Chemistry, 2020, 59, 14296-14305.	4.0	19
21	Sc_{1.5}Al_{0.5}W₃O₁₂ Exhibits Zero Thermal Expansion between 4 and 1400 K. Chemistry of Materials, 2021, 33, 3823-3831.	6.7	19
22	Infinitely Adaptive Transition-Metal Ordering in Ln₂O₂MSe₂-Type Oxychalcogenides. Inorganic Chemistry, 2015, 54, 7230-7238.	4.0	18
23	Equation of state and pressure-induced structural changes in mirabilite (Na2SO4Â·10H2O) determined from ab initio density functional theory calculations. Physics and Chemistry of Minerals, 2010, 37, 265-282.	0.8	17
24	In situstudies into the formation kinetics of potassium jarosite. Journal of Applied Crystallography, 2012, 45, 535-545.	4.5	15
25	Structural and Magnetic Studies of ABO₄-Type Ruthenium and Osmium Oxides. Inorganic Chemistry, 2020, 59, 2791-2802.	4.0	15
26	Controlling Oxygen Defect Formation and Its Effect on Reversible Symmetry Lowering and Disorder-to-Order Phase Transformations in Nonstoichiometric Ternary Uranium Oxides. Inorganic Chemistry, 2019, 58, 6143-6154.	4.0	14
27	Effect of Long- and Short-Range Disorder on the Oxygen Ionic Conductivity of Tm₂(Ti_{2â€“x}Tm_x)O_{7â€“x/2} â€œStuffedâ€¦ Pyrochlores. Inorganic Chemistry, 2021, 60, 4517-4530.	4.0	14
28	Jarositeâ€“butlerite intergrowths in non-stoichiometric jarosites: crystal chemistry of monoclinic natrojarositeâ€“hydroniumjarosite phases. Mineralogical Magazine, 2011, 75, 2775-2791.	1.4	12
29	In situsynchrotron diffraction studies on the formation kinetics of jarosites. Journal of Synchrotron Radiation, 2013, 20, 366-375.	2.4	12
30	Using in situ synchrotron x-ray diffraction to study lithium- and sodium-ion batteries: A case study with an unconventional battery electrode (Gd₂TiO₅). Journal of Materials Research, 2015, 30, 381-389.	2.6	12
31	Structural evolution and stability of Sc₂(WO₄)₃after discharge in a sodium-based electrochemical cell. Dalton Transactions, 2018, 47, 1251-1260.	3.3	12
32	Investigation of K modified P2 Na_{0.7}Mn_{0.8}Mg_{0.2}O₂ as a cathode material for sodium-ion batteries. CrystEngComm, 2019, 21, 172-181.	2.6	12
33	Structure and thermal expansion of sulfuric acid octahydrate. Journal of Applied Crystallography, 2012, 45, 1198-1207.	4.5	11
34	Re-examining the crystal structure behaviour of nitrogen and methane. IUCrJ, 2020, 7, 844-851.	2.2	10
35	Aluminum Borohydride Complex with Ethylenediamine: Crystal Structure and Dehydrogenation Mechanism Studies. Journal of Physical Chemistry C, 2016, 120, 10192-10198.	3.1	9
36	Volcanic controls on the microbial habitability of Marsâ€analogue hydrothermal environments. Geobiology, 2021, 19, 489-509.	2.4	9

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37	Research in Art and Archaeology: Capabilities and Investigations at the Australian Synchrotron. Synchrotron Radiation News, 2019, 32, 3-10.	0.8	8
38	P2-Na_{2/3}Mn_{0.8}M_{0.1}Mâ€²_{0.1}O₂ (M = Zn, Fe and Mâ€² = Cu, Al, Ti): A Detailed Crystal Structure Evolution Investigation. Chemistry of Materials, 2021, 33, 3905-3914.	6.7	7
39	In situSAXS studies of the formation of sodium jarosite. Journal of Synchrotron Radiation, 2013, 20, 626-634.	2.4	6
40	Structural and magnetic studies of the electron doped manganites Sr_{0.65}Pr_{0.35â^'x}Ce_xMnO₃(0.00 â‰¤ x â‰¤ 0.15)		
41	Dehydration phase transitions in new aluminium arsenate minerals from the Penberthy Croft mine, Cornwall, UK. Mineralogical Magazine, 2016, 80, 1205-1217.	1.4	4
42	Electrochemically activated solid synthesis: an alternative solid-state synthetic method. Dalton Transactions, 2018, 47, 14604-14611.	3.3	4
43	Hierarchical Spinâ€Crossover Cooperativity in Hybrid 1D Chains of Fe^{II}â€1,2,4â€Triazole Trimers Linked by [Au(CN)₂]^{â^'} Bridges. Chemistry - A European Journal, 2021, 27, 5136-5141.	3.3	4
44	Crystal structure of propionitrile (CH₃CH₂CN) determined using synchrotron powder X-ray diffraction. Journal of Synchrotron Radiation, 2020, 27, 212-216.	2.4	3
45	Mineral Diversity on Europa: Exploration of Phases Formed in the MgSO₄â€“H₂SO₄â€“H₂O Ternary. ACS Earth and Space Chemistry, 2021, 5, 1716-1725.	2.7	2
46	Thermal expansion of deuterated monoclinic natrojarosite; a combined neutronâ€“synchrotron powder diffraction study. Journal of Applied Crystallography, 2017, 50, 340-348.	4.5	1
47	The Sc2WxMo3â^'xO12 series as electrodes in alkali-ion batteries. CrystEngComm, 2021, 23, 3880-3891.	2.6	1
48	Fundamentals of Silico-Ferrite of Calcium and Aluminium (SFCA) and SFCA-I Iron Ore Sinter Bonding Phase Formation: Effects of MgO Source on Phase Formation during Heating. ISIJ International, 2022, 62, 652-657.	1.4	0