

# Helen E A Brand

## List of Publications by Year in descending order

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48  
papers

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citations

394421

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265206

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3105  
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#	ARTICLE	IF	CITATIONS
1	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
2	Hierarchical Spin-Crossover Cooperativity in Hybrid 1D Chains of Fe <sup>II</sup> -1,2,4-Triazole Trimers Linked by [Au(CN) <sub>2</sub> ] <sup>-</sup> Bridges. Chemistry - A European Journal, 2021, 27, 5136-5141.	3.3	4
3	Effect of Long- and Short-Range Disorder on the Oxygen Ionic Conductivity of Tm <sub>2</sub> (Ti <sub>2</sub> xTm <sub>x</sub> )O <sub>7</sub> Stuffed Pyrochlores. Inorganic Chemistry, 2021, 60, 4517-4530.		14
4	P <sub>2</sub> -Na <sub>2/3</sub> Mn <sub>0.8</sub> M <sub>0.1</sub> O <sub>2</sub> (M = Zn, Fe and M <sup>2+</sup> = Cu, Al, Ti): A Detailed Crystal Structure Evolution Investigation. Chemistry of Materials, 2021, 33, 3905-3914.	6.7	7
5	Sc <sub>1.5</sub> Al <sub>0.5</sub> W <sub>3</sub> O <sub>12</sub> Exhibits Zero Thermal Expansion between 4 and 1400 K. Chemistry of Materials, 2021, 33, 3823-3831.	6.7	19
6	Volcanic controls on the microbial habitability of Mars-analogue hydrothermal environments. Geobiology, 2021, 19, 489-509.	2.4	9
7	Mineral Diversity on Europa: Exploration of Phases Formed in the MgSO <sub>4</sub> -H <sub>2</sub> SO <sub>4</sub> -H <sub>2</sub> O Ternary. ACS Earth and Space Chemistry, 2021, 5, 1716-1725.	2.7	2
8	The Sc <sub>2</sub> W <sub>x</sub> Mo <sub>3-x</sub> O <sub>12</sub> series as electrodes in alkali-ion batteries. CrystEngComm, 2021, 23, 3880-3891.	2.6	1
9	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
10	Structural and Magnetic Studies of AB <sub>4</sub> -Type Ruthenium and Osmium Oxides. Inorganic Chemistry, 2020, 59, 2791-2802.	4.0	15
11	Crystal structure of propionitrile (CH <sub>3</sub> CH <sub>2</sub> CN) determined using synchrotron powder X-ray diffraction. Journal of Synchrotron Radiation, 2020, 27, 212-216.	2.4	3
12	Re-examining the crystal structure behaviour of nitrogen and methane. IUCr, 2020, 7, 844-851.	2.2	10
13	Structures and Phase Transitions in Perchnetates. Inorganic Chemistry, 2019, 58, 10119-10128.	4.0	21
14	Enhancing Oxygen Reduction Reaction Activity and CO <sub>2</sub> 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
15	Investigation of K modified P <sub>2</sub> Na <sub>0.7</sub> Mn <sub>0.8</sub> Mg <sub>0.2</sub> O <sub>2</sub> as a cathode material for sodium-ion batteries. CrystEngComm, 2019, 21, 172-181.	2.6	12
16	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
17	Research in Art and Archaeology: Capabilities and Investigations at the Australian Synchrotron. Synchrotron Radiation News, 2019, 32, 3-10.	0.8	8
18	Structural evolution and stability of Sc <sub>2</sub> (WO <sub>4</sub> ) <sub>3</sub> after discharge in a sodium-based electrochemical cell. Dalton Transactions, 2018, 47, 1251-1260.	3.3	12

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19	Electrochemically activated solid synthesis: an alternative solid-state synthetic method. Dalton Transactions, 2018, 47, 14604-14611.	3.3	4
20	New Apatite-type Oxide Ion Conductor, Bi <sub>2</sub> La <sub>8</sub> [(GeO <sub>4</sub> ) <sub>6</sub> ]O <sub>3</sub> : Structure, Properties, and Direct Imaging of Low-Level Interstitial Oxygen Atoms Using Aberration-Corrected Scanning Transmission Electron Microscopy. Advanced Functional Materials, 2017, 27, 1605625.	14.9	37
21	Thermal expansion of deuterated monoclinic natrojarosite; a combined neutron-synchrotron powder diffraction study. Journal of Applied Crystallography, 2017, 50, 340-348.	4.5	1
22	Solving Key Challenges in Battery Research Using In Situ Synchrotron and Neutron Techniques. Advanced Energy Materials, 2017, 7, 1602831.	19.5	67
23	Human occupation of northern Australia by 65,000 years ago. Nature, 2017, 547, 306-310.	27.8	691
24	Structure Electrochemical Evolution of a Mn-Rich P2 Na <sub>2/3</sub> Fe <sub>0.2</sub> Mn <sub>0.8</sub> O <sub>2</sub> Na-Ion Battery Cathode. Chemistry of Materials, 2017, 29, 7416-7423.	6.7	58
25	Dehydration phase transitions in new aluminium arsenate minerals from the Penberthy Croft mine, Cornwall, UK. Mineralogical Magazine, 2016, 80, 1205-1217.	1.4	4
26	3D Transition Metal Ordering and Rietveld Stacking Fault Quantification in the New Oxychalcogenides La <sub>2</sub> O <sub>2</sub> Cu <sub>2</sub> Te <sub>4</sub> Cd <sub>2</sub> Se <sub>2</sub> . Chemistry of Materials, 2016, 28, 3184-3195.	6.7	23
27	Structural evolution of NASICON-type Li <sub>1+x</sub> Al <sub>x</sub> Ge <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> using in situ synchrotron X-ray powder diffraction. Journal of Materials Chemistry A, 2016, 4, 7718-7726.	10.3	73
28	Aluminum Borohydride Complex with Ethylenediamine: Crystal Structure and Dehydrogenation Mechanism Studies. Journal of Physical Chemistry C, 2016, 120, 10192-10198.	3.1	9
29	Ancient micrometeorites suggestive of an oxygen-rich Archaean upper atmosphere. Nature, 2016, 533, 235-238.	27.8	45
30	The Unique Structural Evolution of the O <sub>3</sub> Phase Na <sub>2/3</sub> Fe <sub>2/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> during High Rate Charge/Discharge: A Sodium-Centred Perspective. Advanced Functional Materials, 2015, 25, 4994-5005.	14.9	66
31	Graphene and Selected Derivatives as Negative Electrodes in Sodium- and Lithium-Ion Batteries. ChemElectroChem, 2015, 2, 600-610.	3.4	46
32	Infinitely Adaptive Transition-Metal Ordering in Ln <sub>2</sub> O <sub>2</sub> MSe <sub>2</sub> -Type Oxychalcogenides. Inorganic Chemistry, 2015, 54, 7230-7238.	4.0	18
33	Using in situ synchrotron x-ray diffraction to study lithium- and sodium-ion batteries: A case study with an unconventional battery electrode (Gd <sub>2</sub> TiO <sub>5</sub> ). Journal of Materials Research, 2015, 30, 381-389.	2.6	12
34	Rate Dependent Performance Related to Crystal Structure Evolution of Na <sub>0.67</sub> Mn <sub>0.8</sub> Mg <sub>0.2</sub> O <sub>2</sub> in a Sodium-Ion Battery. Chemistry of Materials, 2015, 27, 6976-6986.	6.7	97
35	Sodium uptake in cell construction and subsequent in operando electrode behaviour of Prussian blue analogues, Fe[Fe(CN) <sub>6</sub> ] <sub>1-x</sub> ·yH <sub>2</sub> O and FeCo(CN) <sub>6</sub> . Physical Chemistry Chemical Physics, 2014, 16, 24178-24187.	2.8	62
36	Understanding Solvothermal Crystallization of Mesoporous Anatase Beads by In Situ Synchrotron PXRD and SAXS. Chemistry of Materials, 2014, 26, 4563-4571.	6.7	37

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37	XPS and NEXAFS study of fluorine modified TiO <sub>2</sub> nano-ovals reveals dependence of Ti <sup>3+</sup> surface population on the modifying agent. RSC Advances, 2014, 4, 20649.	3.6	37
38	Structural evolution of high energy density V <sup>3+</sup> /V <sup>4+</sup> mixed valent Na <sub>3</sub> V <sub>2</sub> O <sub>2</sub> (PO <sub>4</sub> ) <sub>2</sub> F <sub>3</sub> (x = 0.8) sodium vanadium fluorophosphate using <i>in situ</i> synchrotron X-ray powder diffraction. Journal of Materials Chemistry A, 2014, 2, 7766-7779.	10.3	57
39	Structural and magnetic studies of the electron doped manganites Sr <sub>0.65</sub> Pr <sub>0.35</sub> Ce <sub>x</sub> MnO <sub>3</sub> (0.00 ≤ x ≤ 1.0). J. ETQq 1 1 0.7843	1.0	1
40	In situ synchrotron diffraction studies on the formation kinetics of jarosites. Journal of Synchrotron Radiation, 2013, 20, 366-375.	2.4	12
41	<i>In situ</i> SAXS studies of the formation of sodium jarosite. Journal of Synchrotron Radiation, 2013, 20, 626-634.	2.4	6
42	Structure and thermal expansion of sulfuric acid octahydrate. Journal of Applied Crystallography, 2012, 45, 1198-1207.	4.5	11
43	<i>In situ</i> studies into the formation kinetics of potassium jarosite. Journal of Applied Crystallography, 2012, 45, 535-545.	4.5	15
44	Jarosite-butlerite intergrowths in non-stoichiometric jarosites: crystal chemistry of monoclinic natrojarosite-hydrone jarosite phases. Mineralogical Magazine, 2011, 75, 2775-2791.	1.4	12
45	Equation of state and pressure-induced structural changes in mirabilite (Na <sub>2</sub> SO <sub>4</sub> ·10H <sub>2</sub> O) determined from ab initio density functional theory calculations. Physics and Chemistry of Minerals, 2010, 37, 265-282.	0.8	17
46	Ordering of iron vacancies in monoclinic jarosites. American Mineralogist, 2010, 95, 1590-1593.	1.9	20
47	The thermal expansion and crystal structure of mirabilite (Na <sub>2</sub> SO <sub>4</sub> ·10H <sub>2</sub> O) from 4.2 to 300 K, determined by time-of-flight neutron powder diffraction. Physics and Chemistry of Minerals, 2009, 36, 29-46.	0.8	42
48	Melting curve of copper measured to 16 GPa using a multi-anvil press. High Pressure Research, 2006, 26, 185-191.	1.2	39