Helen E Maynard-Casely

List of Publications by Year
in descending order

60 papers	991 citations	471509 17 h-index	454955 30 g-index
62 all docs	62 docs citations	62 times ranked	1516 citing authors

#	Article	IF	Citations
1	Use of a miniature diamond-anvil cell in a joint X-ray and neutron high-pressure study on copper sulfate pentahydrate. IUCrJ, 2022, 9, 73-85.	2.2	2
2	Correction to â€œThe Effect of High Pressure on the Crystal Structures of Polymorphs of <scp>l</scp>-Histidineâ€• Crystal Growth and Design, 2022, 22, 937-938.	3.0	1
3	Neutron diffraction study of the monoclinic â€“ tetragonalÂphase transition in NdNbO₄ and NdTaO₄. Dalton Transactions, 2021, 50, 11485-11497.	3.3	9
4	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
5	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
6	Titan in a Test Tube: Organic Co-crystals and Implications for Titan Mineralogy. Accounts of Chemical Research, 2021, 54, 3050-3059.	15.6	17
7	Accurate H-atom parameters for the two polymorphs of <scp>L</scp>-histidine at 5, 105 and 295â€…K. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2021, 77, 785-800.	1.1	3
8	The crystal structure, thermal expansion and far-IR spectrum of propanal (CH₃CH₂CHO) determined using powder X-ray diffraction, neutron scattering, periodic DFT and synchrotron techniques. Physical Chemistry Chemical Physics, 2021, 24, 122-128.	2.8	1
9	Phase Trapping in Acetonitrile, a Metastable Mineral for Saturnâ€™s Moon Titan. ACS Earth and Space Chemistry, 2020, 4, 1324-1331.	2.7	4
10	Properties and Behavior of the Acetonitrileâ€“Acetylene Co-Crystal under Titan Surface Conditions. ACS Earth and Space Chemistry, 2020, 4, 1375-1385.	2.7	13
11	Effect of High Pressure on the Crystal Structures of Polymorphs of <scp>l</scp>-Histidine. Crystal Growth and Design, 2020, 20, 7788-7804.	3.0	15
12	The Effect of Sterically Active Ligand Substituents on Gas Adsorption within a Family of 3D Zn-Based Coordination Polymers. Inorganic Chemistry, 2020, 59, 8871-8881.	4.0	7
13	Consequences of long-term water exposure for bulk crystal structure and surface composition/chemistry of nickel-rich layered oxide materials for Li-ion batteries. Journal of Power Sources, 2020, 470, 228370.	7.8	17
14	Rhenium(<scp>i</scp>) complexationâ€“dissociation strategy for synthesising fluorine-18 labelled pyridine bidentate radiotracers. RSC Advances, 2020, 10, 8853-8865.	3.6	7
15	Mixed Hydrocarbon and Cyanide Ice Compositions for Titanâ€™s Atmospheric Aerosols: A Ternary-Phase Co-crystal Predicted by Density Functional Theory. ACS Earth and Space Chemistry, 2020, 4, 1195-1200.	2.7	11
16	Rapid Formation of Clathrate Hydrate From Liquid Ethane and Water Ice on Titan. Geophysical Research Letters, 2020, 47, e2019GL086265.	4.0	19
17	Solar System Physics for Exoplanet Research. Publications of the Astronomical Society of the Pacific, 2020, 132, 102001.	3.1	29
18	Anisotropic thermal expansion of the acetyleneâ€“ammonia co-crystal under Titan's conditions. Journal of Applied Crystallography, 2020, 53, 1524-1530.	4.5	7

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19	Re-examining the crystal structure behaviour of nitrogen and methane. IUCrJ, 2020, 7, 844-851.	2.2	10
20	Supercritical Fluids in Planetary Environments. , 2020, , 181-198.		0
21	High-Pressure Neutron Powder Diffraction Study of Îµ-CL-20: A Gentler Way to Study Energetic Materials. Journal of Physical Chemistry C, 2020, 124, 27985-27995.	3.1	9
22	Spin-disorder state near nonmagnetic impurities in the frustrated antiferromagnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">YMnO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review B, 2020, 102, .	3.2	0
23	Potential of neutron powder diffraction for the study of solid triacylglycerols. Food Structure, 2019, 22, 100124.	4.5	1
24	Squeezing electrons out of 6s2 lone-pairs in perovskite-type oxides. Chemical Communications, 2019, 55, 3887-3890.	4.1	1
25	Color centers in NaCl single crystals induced by pulsed intense relativistic electron beams to simulate radiation bursts in Europa. Japanese Journal of Applied Physics, 2019, 58, 046003.	1.5	3
26	Neutron diffraction of deuterated tripalmitin and the influence of shear on its crystallisation. Chemistry and Physics of Lipids, 2019, 221, 108-113.	3.2	2
27	A Co-Crystal between Acetylene and Butane: A Potentially Ubiquitous Molecular Mineral on Titan. ACS Earth and Space Chemistry, 2019, 3, 2808-2815.	2.7	19
28	The Acetylene-Ammonia Co-crystal on Titan. ACS Earth and Space Chemistry, 2018, 2, 366-375.	2.7	30
29	Franklin and Lonsdale: two role models for our time. Canadian Journal of Physics, 2018, 96, xxiii-xxiv.	1.1	0
30	Prospects for mineralogy on Titan. American Mineralogist, 2018, 103, 343-349.	1.9	35
31	Deformation-resembling microstructure created by fluid-mediated dissolutionâ€“precipitation reactions. Nature Communications, 2017, 8, 14032.	12.8	34
32	Neutron powder diffraction study on the iron-based nitride superconductor ThFeAsN. Europhysics Letters, 2017, 117, 57005.	2.0	15
33	Structural and Magnetic Properties of the Osmium Double Perovskites Ba_{2â€“x}Sr_xYOsO₆. Inorganic Chemistry, 2017, 56, 6565-6575.	4.0	11
34	The next dimension of structural science communication: simple 3D printing directly from a crystal structure. CrystEngComm, 2017, 19, 690-698.	2.6	14
35	Raman spectroscopy of methane (CH₄) to 165ÂGPa: Effect of structural changes on Raman spectra. Journal of Raman Spectroscopy, 2017, 48, 1777-1782.	2.5	16
36	What you see and what you get: combining near-infrared spectroscopy with powder diffraction. Powder Diffraction, 2017, 32, S3-S8.	0.2	1

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37	â€˜Peaks in spaceâ€™ â€“ crystallography in planetary science: past impacts and future opportunities. Crystallography Reviews, 2017, 23, 74-117.	1.5	2
38	Three impossible things before lunch â€“ theÂtask of a sample environment specialist. Journal of Neutron Research, 2017, 19, 49-56.	1.1	2
39	A co-crystal between benzene and ethane: a potential evaporite material for Saturn's moon Titan. IUCrJ, 2016, 3, 192-199.	2.2	26
40	Characterisation of blue pigments from ceremonial objects of the Southern Highlands in Papua New Guinea using vibrational spectroscopy and X-ray diffraction. Vibrational Spectroscopy, 2016, 85, 43-47.	2.2	4
41	An indirect generation of 1D M^{II}-2,5-dihydroxybenzoquinone coordination polymers, their structural rearrangements and generation of materials with a high affinity for H₂, CO₂ and CH₄. Dalton Transactions, 2016, 45, 1339-1344.	3.3	26
42	Raman, FTIR and XRD study of Icelandic tephra minerals: implications for Mars. Journal of Raman Spectroscopy, 2015, 46, 846-855.	2.5	7
43	A New Structural Family of Gasâ€Sorbing Coordination Polymers Derived from Phenolic Carboxylic Acids. Chemistry - A European Journal, 2015, 21, 18057-18061.	3.3	21
44	Dripping with science. Physics World, 2015, 28, 37-38.	0.0	1
45	Australian update on women in physics in 2014. AIP Conference Proceedings, 2015, , .	0.4	0
46	Soluble Xanthate Compounds for the Solution Deposition of Metal Sulfide Thin Films. ChemPlusChem, 2015, 80, 107-118.	2.8	13
47	The magnetic structures and transitions of a potential multiferroic orthoferrite ErFeO₃. Journal of Applied Physics, 2015, 117, 164105.	2.5	45
48	The crystal structure of methane B at 8 GPaâ€”An Î±-Mn arrangement of molecules. Journal of Chemical Physics, 2014, 141, 234313.	3.0	18
49	Phase relations between the water-rich sulfuric acid hydrates, potential markers of thermal history on Jupiterâ€™s icy moons. Icarus, 2014, 238, 59-65.	2.5	2
50	Isomeric Ionic Lithium Isonicotinate Three-Dimensional Networks and Single-Crystal-to-Single-Crystal Rearrangements Generating Microporous Materials. Inorganic Chemistry, 2014, 53, 4956-4969.	4.0	22
51	Li+ and Ca2+ Derivatives of the Isonicotinate-N-oxide Ion Including Single Crystal-to-Single Crystal Transformations. Crystal Growth and Design, 2014, 14, 4602-4609.	3.0	8
52	In situ studies of structural changes in DME synthesis catalyst with synchrotron powder diffraction. Applied Catalysis A: General, 2014, 486, 49-54.	4.3	4
53	Reactivity of Xenon with Ice at Planetary Conditions. Physical Review Letters, 2013, 110, 265501.	7.8	40
54	Copper(ii) coordination polymers of imdcâ¯ (H2imdc+ = the 1,3-bis(carboxymethyl)imidazolium cation): unusual sheet interpenetration and an unexpected single crystal-to-single crystal transformation. CrystEngComm, 2013, 15, 9729.	2.6	16

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55	A new material for the icy Galilean moons: The structure of sulfuric acid hexahydrate. Journal of Geophysical Research E: Planets, 2013, 118, 1895-1902.	3.6	9
56	Structure and thermal expansion of sulfuric acid octahydrate. Journal of Applied Crystallography, 2012, 45, 1198-1207.	4.5	11
57	Crystal engineering of energetic materials: Co-crystals of CL-20. CrystEngComm, 2012, 14, 3742.	2.6	196
58	Compressibility change in iron-rich melt and implications for core formation models. Earth and Planetary Science Letters, 2011, 306, 118-122.	4.4	56
59	Putting the squeeze on energetic materialsâ€"structural characterisation of a high-pressure phase of CL-20. CrystEngComm, 2010, 12, 2524.	2.6	61
60	Observation of ammonia dihydrate in the AMH-VI structure at room temperature â€“ possible implications for the outer solar system. High Pressure Research, 2009, 29, 396-404.	1.2	17