Stephen P Thompson

List of Publications by Year
in descending order

43 papers	1,769 citations	361413 20 h-index	265206 42 g-index
47 all docs	47 docs citations	47 times ranked	2962 citing authors

#	Article	IF	Citations
1	Solvent-switchable continuous-breathing behaviour in a diamondoid metalâ€“organic framework and its influence on CO2 versus CH4 selectivity. Nature Chemistry, 2017, 9, 882-889.	13.6	293
2	Elucidating the Breathing of the Metalâ€“Organic Framework MIL-53(Sc) with ab Initio Molecular Dynamics Simulations and in Situ X-ray Powder Diffraction Experiments. Journal of the American Chemical Society, 2013, 135, 15763-15773.	13.7	173
3	Understanding Carbon Dioxide Adsorption on Univalent Cation Forms of the Flexible Zeolite Rho at Conditions Relevant to Carbon Capture from Flue Gases. Journal of the American Chemical Society, 2012, 134, 17628-17642.	13.7	158
4	Fast X-ray powder diffraction on I11 at Diamond. Journal of Synchrotron Radiation, 2011, 18, 637-648.	2.4	108
5	Cation Gating and Relocation during the Highly Selective â€œTrapdoorâ€•Adsorption of CO₂ on Univalent Cation Forms of Zeolite Rho. Chemistry of Materials, 2014, 26, 2052-2061.	6.7	96
6	A novel structural form of MIL-53 observed for the scandium analogue and its response to temperature variation and CO₂adsorption. Dalton Transactions, 2012, 41, 3937-3941.	3.3	95
7	New Twists on the Perovskite Theme: Crystal Structures of the Elusive Phases R and S of NaNbO₃. Inorganic Chemistry, 2012, 51, 6876-6889.	4.0	78
8	Structural Chemistry, Monoclinic-to-Orthorhombic Phase Transition, and CO₂ Adsorption Behavior of the Small Pore Scandium Terephthalate, Sc₂(O₂CC₆H₄CO₂)₃, and Its Nitro- And Amino-Functionalized Derivatives. Inorganic Chemistry, 2011, 50, 10844-10858.	4.0	75
9	High-Throughput Continuous Hydrothermal Synthesis of an Entire Nanoceramic Phase Diagram. ACS Combinatorial Science, 2009, 11, 829-834.	3.3	65
10	Experimental and DFT-D Studies of the Molecular Organic Energetic Material RDX. Journal of Physical Chemistry C, 2013, 117, 8062-8071.	3.1	56
11	A Localized Tolerance in the Substrate Specificity of the Fluorinase Enzyme enables â€œLastâ€Stepâ€• ¹⁸Fâ€…Fluorination of a RGD Peptide under Ambient Aqueous Conditions. Angewandte Chemie - International Edition, 2014, 53, 8913-8918.	13.8	48
12	Cation Control of Molecular Sieving by Flexible Li-Containing Zeolite Rho. Journal of Physical Chemistry C, 2016, 120, 19652-19662.	3.1	45
13	Molecular Modeling, Multinuclear NMR, and Diffraction Studies in the Templated Synthesis and Characterization of the Aluminophosphate Molecular Sieve STA-2. Journal of Physical Chemistry C, 2010, 114, 12698-12710.	3.1	44
14	A co-templating route to the synthesis of Cu SAPO STA-7, giving an active catalyst for the selective catalytic reduction of NO. Microporous and Mesoporous Materials, 2011, 146, 36-47.	4.4	44
15	Novel Large-Pore Aluminophosphate Molecular Sieve STA-15 Prepared Using the Tetrapropylammonium Cation As a Structure Directing Agent. Chemistry of Materials, 2010, 22, 338-346.	6.7	35
16	New synchrotron powder diffraction facility for long-duration experiments. Journal of Applied Crystallography, 2017, 50, 172-183.	4.5	35
17	High-performance X-ray detectors for the new powder diffraction beamline I11 at Diamond. Journal of Synchrotron Radiation, 2008, 15, 43-49.	2.4	29
18	High-throughput powder diffraction on beamline I11 at Diamond. Journal of Applied Crystallography, 2011, 44, 102-110.	4.5	28

#	Article	IF	Citations
19	Zipping and Unzipping of a Paddlewheel Metalâ€“Organic Framework to Enable Twoâ€Step Synthetic and Structural Transformation. Chemistry - A European Journal, 2013, 19, 3552-3557.	3.3	28
20	Fine-grained amorphous calcium silicate CaSiO3 from vacuum dried solâ€“gel â€“ Production, characterisation and thermal behaviour. Journal of Non-Crystalline Solids, 2012, 358, 885-892.	3.1	24
21	Exploration of a potential difluoromethyl-nucleoside substrate with the fluorinase enzyme. Bioorganic Chemistry, 2016, 64, 37-41.	4.1	20
22	Long-Term Stability of MFM-300(Al) toward Toxic Air Pollutants. ACS Applied Materials & Interfaces, 2020, 12, 42949-42954.	8.0	19
23	The role of residual stress in the fracture properties of a natural ceramic. Journal of Materials Chemistry, 2005, 15, 947.	6.7	18
24	Structural Phase Transition in theS=1/2Kagome System Cs2ZrCu3F12and a Comparison to the Valence-Bond-Solid Phase in Rb2SnCu3F12. Chemistry of Materials, 2011, 23, 4234-4240.	6.7	18
25	Structural changes of synthetic paulingite (Na,H-ECR-18) upon dehydration and CO₂ adsorption. Zeitschrift Fur Kristallographie - Crystalline Materials, 2015, 230, 223-231.	0.8	13
26	Enzymatic transhalogenation of dendritic RGD peptide constructs with the fluorinase. Organic and Biomolecular Chemistry, 2016, 14, 3120-3129.	2.8	13
27	Thermal breakdown of calcium carbonate and constraints on its use as a biomarker. Icarus, 2014, 229, 1-10.	2.5	11
28	Mapping the structural transitions controlled by the trilinear coupling in Ca3-xSrxTi2O7. Journal of Applied Physics, 2019, 125, 244102.	2.5	11
29	Re-entrant structural phase transition in a frustrated kagome magnet, Rb2SnCu3F12. CrystEngComm, 2013, 15, 7426.	2.6	10
30	Effects of quenching on phase transformations and ferroelectric properties of 0.35BCZT-0.65KBT ceramics. Journal of the European Ceramic Society, 2019, 39, 4070-4084.	5.7	10
31	Software for automatic calibration of synchrotron powder diffractometers. Journal of Synchrotron Radiation, 2003, 10, 183-186.	2.4	9
32	Crystallisation processes in cosmic silicates: Laboratory progress towards understanding structuralâ€“spectral relationships. Advances in Space Research, 2007, 39, 375-391.	2.6	9
33	Synthesis and structural characterisation using Rietveld and pair distribution function analysis of layered mixed titaniumâ€“zirconium phosphates. Journal of Solid State Chemistry, 2010, 183, 2196-2204.	2.9	9
34	Thermal processing and crystallization of amorphous Mgâ€Ca silicates. Meteoritics and Planetary Science, 2013, 48, 1459-1471.	1.6	7
35	In situ apparatus for the study of clathrate hydrates relevant to solar system bodies using synchrotron X-ray diffraction and Raman spectroscopy. Astronomy and Astrophysics, 2015, 574, A91.	5.1	5
36	Amorphous silicate nanoparticles with controlled Fe-Mg pyroxene compositions. Journal of Non-Crystalline Solids, 2016, 447, 255-261.	3.1	4

#	Article	IF	Citations
37	Phase space investigation of the lithium amide halides. Journal of Alloys and Compounds, 2015, 645, S343-S346.	5.5	2
38	Multi-stimulus linear negative expansion of a breathing M(O₂CR)₄-node MOF. Faraday Discussions, 2021, 225, 133-151.	3.2	2
39	Dynamic strain propagation in nanoparticulate zirconia refractory. Journal of Applied Crystallography, 2015, 48, 386-392.	4.5	1
40	A slow-cooling-ratein situcell for long-duration studies of mineral precipitation in cold aqueous environments on Earth and other planetary bodies. Journal of Applied Crystallography, 2018, 51, 1197-1210.	4.5	1
41	X-ray powder diffraction study of the stability of clathrate hydrates in the presence of salts with relevance to the Martian cryosphere. Geochimica Et Cosmochimica Acta, 2019, 245, 304-315.	3.9	1
42	Laboratory exploration of mineral precipitates from Europa's subsurface ocean. Journal of Applied Crystallography, 2021, 54, 1455-1479.	4.5	1
43	Crystallisation of amorphous Mg-Fe silicates produced from microwave-dried sol-gels. Proceedings of the International Astronomical Union, 2019, 15, 408-409.	0.0	0