Asami Sano-Furukawa

List of Publications by Year
in descending order

79 papers	1,762 citations	257101 24 h-index	288905 40 g-index
81 all docs	81 docs citations	81 times ranked	1630 citing authors

#	Article	IF	Citations
1	Aluminous hydrous mineral Î´â€AlOOH as a carrier of hydrogen into the coreâ€mantle boundary. Geophysical Research Letters, 2008, 35, .	1.5	103
2	Design and performance of high-pressure PLANET beamline at pulsed neutron source at J-PARC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 780, 55-67.	0.7	96
3	Metastable garnet in oceanic crust at the top of the lower mantle. Nature, 2002, 420, 803-806.	13.7	89
4	In situ X-ray observation of decomposition of hydrous aluminum silicate AlSiO3OH and aluminum oxide hydroxide d-AlOOH at high pressure and temperature. Journal of Physics and Chemistry of Solids, 2004, 65, 1547-1554.	1.9	85
5	Change in compressibility of Â-AlOOH and Â-AlOOD at high pressure: A study of isotope effect and hydrogen-bond symmetrization. American Mineralogist, 2009, 94, 1255-1261.	0.9	85
6	Materials and Life Science Experimental Facility (MLF) at the Japan Proton Accelerator Research Complex II: Neutron Scattering Instruments. Quantum Beam Science, 2017, 1, 9.	0.6	69
7	Site occupancy of interstitial deuterium atoms in face-centred cubic iron. Nature Communications, 2014, 5, 5063.	5.8	67
8	Six-axis multi-anvil press for high-pressure, high-temperature neutron diffraction experiments. Review of Scientific Instruments, 2014, 85, 113905.	0.6	62
9	The stability and equation of state for the cotunnite phase of TiO2 up to 70ÂGPa. Physics and Chemistry of Minerals, 2010, 37, 129-136.	0.3	60
10	Neutron diffraction study of Â-AlOOD at high pressure and its implication for symmetrization of the hydrogen bond. American Mineralogist, 2008, 93, 1558-1567.	0.9	55
11	Hydrogenation of iron in the early stage of Earthâ€™s evolution. Nature Communications, 2017, 8, 14096.	5.8	50
12	Ice Ic without stacking disorder by evacuating hydrogen from hydrogen hydrate. Nature Communications, 2020, 11, 464.	5.8	50
13	Direct observation of symmetrization of hydrogen bond in Î´-AlOOH under mantle conditions using neutron diffraction. Scientific Reports, 2018, 8, 15520.	1.6	48
14	Interstitial hydrogen atoms in face-centered cubic iron in the Earthâ€™s core. Scientific Reports, 2019, 9, 7108.	1.6	42
15	Water controls the fields of metastable olivine in cold subducting slabs. Geophysical Research Letters, 2005, 32, .	1.5	39
16	Observation of pressure-induced phase transition of Î´-AlOOH by using single-crystal synchrotron X-ray diffraction method. Physics and Chemistry of Minerals, 2014, 41, 303-312.	0.3	38
17	Bulk moduli and equations of state of ice VII and ice VIII. Physical Review B, 2017, 95, .	1.1	36
18	Pressureâ€Induced Dielsâ€“Alder Reactions in C₆H₆â€C₆F₆ Cocrystal towards Graphane Structure. Angewandte Chemie - International Edition, 2019, 58, 1468-1473.	7.2	36

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19	A new high-pressure polymorph of Ti₂O₃: implication for high-pressure phase transition in sesquioxides. High Pressure Research, 2009, 29, 379-388.	0.4	33
20	Redetermination of the high-pressure modification of AlOOH from single-crystal synchrotron data. Acta Crystallographica Section E: Structure Reports Online, 2006, 62, i216-i218.	0.2	32
21	Partially ordered state of ice XV. Scientific Reports, 2016, 6, 28920.	1.6	31
22	Ice VII from aqueous salt solutions: From a glass to a crystal with broken H-bonds. Scientific Reports, 2016, 6, 32040.	1.6	31
23	Hexagonal Close-packed Iron Hydride behind the Conventional Phase Diagram. Scientific Reports, 2019, 9, 12290.	1.6	31
24	Investigation of hydrogen sites of wadsleyite: A neutron diffraction study. Physics of the Earth and Planetary Interiors, 2011, 189, 56-62.	0.7	28
25	Phase Transitions and Polymerization of C₆H₆â€“C₆F₆ Cocrystal under Extreme Conditions. Journal of Physical Chemistry C, 2016, 120, 29510-29519.	1.5	25
26	Formation of NaCl-Type Monodeuteride LaD by the Disproportionation Reaction of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>LaD</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2012, 108, 205501.	2.9	24
27	Development of a technique for high pressure neutron diffraction at 40â€…GPa with a Paris-Edinburgh press. High Pressure Research, 2019, 39, 417-425.	0.4	23
28	Distance-Selected Topochemical Dehydro-Dielsâ€“Alder Reaction of 1,4-Diphenylbutadiyne toward Crystalline Graphitic Nanoribbons. Journal of the American Chemical Society, 2020, 142, 17662-17669.	6.6	23
29	Neutron diffraction study of aluminous hydroxide Î´-AlOOD. Physics and Chemistry of Minerals, 2007, 34, 657-661.	0.3	21
30	High-Pressureâ€“High-Temperature Study of Benzene: Refined Crystal Structure and New Phase Diagram up to 8 GPa and 923 K. Crystal Growth and Design, 2018, 18, 3016-3026.	1.4	20
31	Suppressed Lattice Disorder for Large Emission Enhancement and Structural Robustness in Hybrid Lead Iodide Perovskite Discovered by Highâ€Pressure Isotope Effect. Advanced Functional Materials, 2021, 31, 2009131.	7.8	20
32	Compression behaviors of distorted rutile-type hydrous phases, MOOH (MÂ=ÂGa, In, Cr) and CrOOD. Physics and Chemistry of Minerals, 2012, 39, 375-383.	0.3	19
33	Crystal structure of magnesium dichloride decahydrate determined by X-ray and neutron diffraction under high pressure. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2015, 71, 74-80.	0.5	19
34	Anomalous hydrogen dynamics of the ice VIIâ€“VIII transition revealed by high-pressure neutron diffraction. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 6356-6361.	3.3	17
35	Developments of nano-polycrystalline diamond anvil cells for neutron diffraction experiments. High Pressure Research, 2020, 40, 184-193.	0.4	16
36	X-ray diffraction study of high pressure transition in InOOH. Journal of Mineralogical and Petrological Sciences, 2008, 103, 152-155.	0.4	15

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37	The crystal structure of Â-Al(OH)3: Neutron diffraction measurements and ab initio calculations. American Mineralogist, 2011, 96, 854-859.	0.9	15
38	Effects of Mg and Si ions on the symmetry of Î´-AlOOH. Physics and Chemistry of Minerals, 2011, 38, 727-733.	0.3	15
39	In situ X-ray diffraction study of the effect of water on the garnetâ€“perovskite transformation in MORB and implications for the penetration of oceanic crust into the lower mantle. Physics of the Earth and Planetary Interiors, 2006, 159, 118-126.	0.7	13
40	First principles prediction of new high-pressure phase of InOOH. Journal of Mineralogical and Petrological Sciences, 2008, 103, 116-120.	0.4	13
41	Phase transitions and hydrogen bonding in deuterated calcium hydroxide: High-pressure and high-temperature neutron diffraction measurements. Journal of Solid State Chemistry, 2014, 218, 95-102.	1.4	12
42	Pressure responses of portlandite and Hâ€“D isotope effects on pressure-induced phase transitions. Physics and Chemistry of Minerals, 2011, 38, 777-785.	0.3	11
43	Observation of Dihydrogen Bonds in High-Pressure Phases of Ammonia Borane by X-ray and Neutron Diffraction Measurements. Inorganic Chemistry, 2021, 60, 3065-3073.	1.9	11
44	Infrared absorption spectra of Î´-AlOOH and its deuteride at high pressure and implication to pressure response of the hydrogen bonds. Journal of Physics: Conference Series, 2010, 215, 012052.	0.3	10
45	Behavior of intermolecular interactions in Î±-glycine under high pressure. Journal of Chemical Physics, 2018, 148, 044507.	1.2	9
46	Structure change of monoclinic ZrO₂ baddeleyite involving softenings of bulk modulus and atom vibrations. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2019, 75, 742-749.	0.5	9
47	Structure refinement of black phosphorus under high pressure. Journal of Chemical Physics, 2020, 153, 014704.	1.2	9
48	X-ray and Neutron Study on the Structure of Hydrous SiO2 Glass up to 10 GPa. Minerals (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	0.8	9
49	Neutron powder diffraction of small-volume samples at high pressure using compact opposed-anvil cells and focused beam. Journal of Physics: Conference Series, 2012, 377, 012013.	0.3	8
50	Crystalline Fully Carboxylated Polyacetylene Obtained under High Pressure as a Li-Ion Battery Anode Material. Journal of Physical Chemistry Letters, 2021, 12, 12055-12061.	2.1	7
51	A cubic-anvil high-pressure device for pulsed neutron powder diffraction. Review of Scientific Instruments, 2010, 81, 043910.	0.6	6
52	Synthesis, Structure, and Pressure-Induced Polymerization of Li3Fe(CN)6 Accompanied with Enhanced Conductivity. Inorganic Chemistry, 2015, 54, 11276-11282.	1.9	6
53	Crystal and Magnetic Structures of Double Hexagonal Close-Packed Iron Deuteride. Scientific Reports, 2020, 10, 9934.	1.6	6
54	Crystal structure of nesquehonite, MgCO₃·3H(D)₂O by neutron diffraction and effect of pH on structural formulas of nesquehonite. Journal of Mineralogical and Petrological Sciences, 2021, 116, 96-103.	0.4	6

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55	High pressure experiments with the Engineering Materials Diffractometer (BL-19) at J-PARC. Journal of Physics: Conference Series, 2010, 215, 012023.	0.3	5
56	Neutron diffraction study on the deuterium composition of nickel deuteride at high temperatures and high pressures. Physica B: Condensed Matter, 2020, 587, 412153.	1.3	5
57	High-pressure and high-temperature neutron-diffraction experiments using Kawai-type multi-anvil assemblies. High Pressure Research, 2021, 41, 65-74.	0.4	5
58	Pressure-induced stacking disorder in boehmite. Physical Chemistry Chemical Physics, 2018, 20, 16650-16656.	1.3	4
59	Crystal structure change of katoite, Ca3Al2(O4D4)3, with temperature at high pressure. Physics and Chemistry of Minerals, 2019, 46, 459-469.	0.3	4
60	Practical effects of pressure-transmitting media on neutron diffraction experiments using Parisâ€“Edinburgh presses. High Pressure Research, 2020, 40, 325-338.	0.4	4
61	Crystal structure and magnetism of MnO under pressure. Physical Review B, 2020, 101, .	1.1	4
62	Halide Perovskites: Suppressed Lattice Disorder for Large Emission Enhancement and Structural Robustness in Hybrid Lead Iodide Perovskite Discovered by Highâ€Pressure Isotope Effect (Adv. Funct.) Tj ETQq0 0 0 rgBT /Overlock 10 T		
63	Behavior of light elements in iron-silicate-water-sulfur system during early Earthâ€™s evolution. Scientific Reports, 2021, 11, 12632.	1.6	4
64	Multi-methodical study of the Ti, Fe2+ and Fe3+ distribution in chevkinite-subgroup minerals: X-ray diffraction, neutron diffraction, 57Fe MÃ¶ssbauer spectroscopy and electron-microprobe analyses. Physics and Chemistry of Minerals, 2020, 47, 1.	0.3	3
65	Origin of magnetovolume effect in a cobaltite. Physical Review B, 2021, 103, .	1.1	3
66	Neutron diffraction study of hydrogen site occupancy in Fe_{0.95}Si_{0.05} at 14.7 GPa and 800 K. Journal of Mineralogical and Petrological Sciences, 2021, 116, 309-313.	0.4	2
67	Toward the High-Pressure and Temperature Neutron Diffraction Using Large Volume Press. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2016, 26, 99-107.	0.1	1
68	Pressureâ€Induced Dielsâ€“Alder Reactions in C₆H₆â€C₆F₆ Cocrystal towards Graphane Structure. Angewandte Chemie, 2019, 131, 1482-1487.	1.6	1
69	Hydrogen motions of Mg(OD)2and Ca(OD)2at several temperatures. Acta Crystallographica Section A: Foundations and Advances, 2011, 67, C241-C241.	0.3	0
70	Overview of High-Pressure Neutron Beamline, PLANET, and Practical Aspects of the Experiments. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2016, 26, 89-98.	0.1	0
71	What can we do with the High-Pressure Neutron Diffractometer PLANET?. Nihon Kessho Gakkaishi, 2017, 59, 301-308.	0.0	0
72	In-situ Neutron Diffraction of Iron Hydride in Iron-silicate-water System under High Pressure and High Temperature Condition. Hamon, 2017, 27, 104-108.	0.0	0

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73	Neutron diffraction study on the pressure-induced cubic-tetragonal structural distortion in LaD2using total scattering spectrometer NOVA. Acta Crystallographica Section A: Foundations and Advances, 2011, 67, C331-C331.	0.3	0
74	Neutron Diffraction Study on Hydrogen Bond in Mineral in the Deep Earth. Hamon, 2012, 22, 162-165.	0.0	0
75	Formation of NaCl-type Lanthanum Monohydride under High Pressure. Hamon, 2013, 23, 131-136.	0.0	0
76	Site Occupation State of Deuterium Atoms in fcc Fe. Hamon, 2015, 25, 26-31.	0.0	0
77	How had the High-Pressure Neutron Diffractometer PLANET been Constructed?. Hamon, 2016, 26, 85-90.	0.0	0
78	Crystal chemistry of Srâ€“rich piemontite from manganese ore deposit of the Tone mine, Nishisonogi Peninsula, Nagasaki, southwest Japan. Journal of Mineralogical and Petrological Sciences, 2020, 115, 391-406.	0.4	0
79	Pressure Effect on Isotope Fractionation Factor. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2020, 30, 85-94.	0.1	0