Hiroshi Fujihisa

List of Publications by Year in Descending Order

130 papers	4,106 citations	34 h-index	62 g-index
135 ext. papers	4,486 ext. citations	4.6 avg, IF	4.86 L-index

#	Paper	IF	Citations
130	Infrared spectra of the and phases of oleic acid under high pressure. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2022**, 265, 120290	4.4	
129	Antiperovskite Superconductor LaPdP with Noncentrosymmetric Cubic Structure. *Inorganic Chemistry*, **2021**, 60, 18017-18023	5.1	1
128	Mixed-valence state and structure changes of EuH (x = 2 and 2 . *Journal of Alloys and Compounds*, **2021**, 865, 158637	5.7	0
127	Calcium-free double-layered cuprate superconductors with critical temperature above 100 K. *Communications Materials*, **2021**, 2,	6	1
126	Observation of Dihydrogen Bonds in High-Pressure Phases of Ammonia Borane by X-ray and Neutron Diffraction Measurements. *Inorganic Chemistry*, **2021**, 60, 3065-3073	5.1	4
125	Superconductivity of centrosymmetric and non-centrosymmetric phases in antiperovskite (Ca,Sr)Pd3P. *Journal of Alloys and Compounds*, **2021**, 882, 160733	5.7	2
124	Posttreatment Effects on the Crystal Structure and Superconductivity of Ca-Free Double-Layered Cuprate Sr2SrCu2O4+yF2y. *Chemistry of Materials*, **2021**, 33, 9690-9697	9.6	
123	Beryllium polyhydride Be4H8(H2)2 synthesized at high pressure and temperature. *Physical Review Materials*, **2020**, 4,	3.2	1
122	Experimental and Computational Determination of Optimal Boron Content in Layered Superconductor ScCBC. *Inorganic Chemistry*, **2020**, 59, 14290-14295	5.1	0
121	Structural Phase Transitions and Superconductivity Induced in Antiperovskite Phosphide CaPdP. *Inorganic Chemistry*, **2020**, 59, 12397-12403	5.1	5
120	Relation between O8 cluster shape and vibrational spectra in the phase of solid oxygen. *Japanese Journal of Applied Physics*, **2019**, 58, 095502	1.4	1
119	Superconductivity in a Scandium Borocarbide with a Layered Crystal Structure. *Inorganic Chemistry*, **2019**, 58, 15629-15636	5.1	3
118	Superconductivity induced by Mg deficiency in noncentrosymmetric phosphide Mg2Rh3P. *Physical Review Materials*, **2019**, 3,	3.2	5
117	Superconductivity in Uncollapsed Tetragonal LaFeAs. *Journal of Physical Chemistry Letters*, **2019**, 10, 1018-1023	6.4	8
116	Superconductivity in a New 1144-Type Family of (La,Na)AFeAs (A = Rb or Cs). *Journal of Physical Chemistry Letters*, **2018**, 9, 868-873	6.4	13
115	Superconductivity on Hole-Doping Side of (LaNa)FeAs. *Journal of the American Chemical Society*, **2018**, 140, 369-374	16.4	14
114	Fe-Based Superconductors of (LnNa)FeAs (Ln = Ce, Pr). *Inorganic Chemistry*, **2018**, 57, 9223-9229	5.1	3

113	Superconducting state in (Eu1-xCax)RbFe4As4with 1144-type Structure. *Journal of Physics: Conference Series*, **2018**, 969, 012027	0.3	7
112	Solving Crystal Structures Under High Pressure by Powder X-Ray Diffraction Experiments. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **2018**, 28, 123-130	0	
111	Synthesis and the physical properties of layered copper oxytellurides Sr2TMCu2Te2O2 (TM = Mn, Co, Zn). *Journal of Materials Chemistry C*, **2018**, 6, 12260-12266	7.1	10
110	Reinvestigation of Crystal Structures of Hydrogen Sulfide under High Pressure. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **2018**, 28, 260-267	0	
109	Superconductivity in a 122-type Fe-based compound (La,Na,K)FeAs. *Scientific Reports*, **2018**, 8, 16827	4.9	0
108	Coexistence of a metastable double hcp phase in bcc–fcc structure transition of Te under high pressure. *Japanese Journal of Applied Physics*, **2018**, 57, 025601	1.4	5
107	Synthesis and Superconductivity of a Strontium Digermanide SrGe with ThSi Structure. *Inorganic Chemistry*, **2017**, 56, 8590-8595	5.1	5
106	Phase stability and magnetic behavior of hexagonal phase of N2O2 system with kagome lattice under high pressure and low temperature. *Physical Review B*, **2016**, 94,	3.3	3
105	Superconductivity in layered ZrP2Sexwith PbFCl-type structure. *Superconductor Science and Technology*, **2016**, 29, 055004	3.1	10
104	New-Structure-Type Fe-Based Superconductors: CaAFe4As4 (A = K, Rb, Cs) and SrAFe4As4 (A = Rb, Cs). *Journal of the American Chemical Society*, **2016**, 138, 3410-5	16.4	169
103	Phase Transition of a Structure II Cubic Clathrate Hydrate to a Tetragonal Form. *Angewandte Chemie*, **2016**, 128, 9433-9437	3.6	5
102	Superconductivity in Fe-Based Compound EuAFe4As4 (A = Rb and Cs). *Journal of the Physical Society of Japan*, **2016**, 85, 064710	1.5	53
101	Phase Transition of a Structure II Cubic Clathrate Hydrate to a Tetragonal Form. *Angewandte Chemie - International Edition*, **2016**, 55, 9287-91	16.4	13
100	Synthesis, structure, and phase diagram of (Sr1Nax)Fe2As2superconductors. *Superconductor Science and Technology*, **2015**, 28, 062001	3.1	16
99	Phase boundaries and molar volumes of high-temperature and high-pressure phase V of LiBH4. *Journal of Physics and Chemistry of Solids*, **2015**, 76, 40-44	3.9	5
98	High-pressure structural study of solid mercury up to 200 GPa. *Materials Research Express*, **2015**, 2, 016502	1.7	6
97	Structural Analysis of Some High-Pressure Stable and Metastable Phases in Lithium Borohydride LiBH4. *Journal of Physical Chemistry C*, **2015**, 119, 3911-3917	3.8	8
96	A new layered iron arsenide superconductor: (Ca,Pr)FeAs2. *Journal of the American Chemical Society* , **2014**, 136, 846-9	16.4	92

95	Crystal structure and superconductivity of BaIrGe3 and Ba1−xIrGe3 with two-dimensional Ba-Ge networks. *Journal of the American Chemical Society*, **2014**, 136, 5245-8	16.4	8
94	Structure of intermediate phase II of LiNH2 under high pressure. *Journal of Physical Chemistry B*, **2014**, 118, 9991-6	3.4	2
93	New Intermetallic Ternary Phosphide Chalcogenide AP2−xXx (A = Zr, Hf; X = S, Se) Superconductors with PbFCl-Type Crystal Structure. *Journal of the Physical Society of Japan*, **2014**, 83, 074713	1.5	12
92	Phase changes in lithium amide–borohydride complexes under high pressure. *Solid State Ionics*, **2014**, 262, 490-494	3.3	
91	Bcc-fcc structure transition of Te. *Journal of Physics: Conference Series*, **2014**, 500, 192018	0.3	8
90	Pressure-Induced Enhancement of Superconductivity and Structural Transition in BiS2-Layered LaO1−xFxBiS2. *Journal of the Physical Society of Japan*, **2014**, 83, 063704	1.5	93
89	High-pressure phase diagram of O2and N2binary system: formation of kagome-lattice of O2. *Journal of Physics: Conference Series*, **2014**, 500, 182001	0.3	6
88	distribution of butane in the host water cage of structure II clathrate hydrates. *Chemistry - A European Journal*, **2014**, 20, 17207-13	4.8	30
87	Collapse of CuO Double Chains and Suppression of Superconductivity in High-Pressure Phase of YBa2Cu4O8. *Journal of the Physical Society of Japan*, **2014**, 83, 093601	1.5	9
86	Methane Clathrate Hydrates Formed within Hydrophilic and Hydrophobic Media: Kinetics of Dissociation and Distortion of Host Structure. *Journal of Physical Chemistry C*, **2013**, 117, 7081-7085	3.8	30
85	Thermal Decomposition of Pentaerythritol Tetranitrate under Static High Pressure. *Propellants, Explosives, Pyrotechnics*, **2013**, 38, 394-398	1.7	4
84	New Member of BiS2-Based Superconductor NdO1-xFxBiS2. *Journal of the Physical Society of Japan*, **2013**, 82, 033708	1.5	222
83	Ca-VII: a chain ordered host-guest structure of calcium above 210 GPa. *Physical Review Letters*, **2013** , 110, 235501	7.4	29
82	Distinct responses to mechanical grinding and hydrostatic pressure in luminescent chromism of tetrathiazolylthiophene. *Journal of the American Chemical Society*, **2013**, 135, 10322-5	16.4	377
81	Phase-Contrast X-ray Images of Ice and Water on Carbon Paper for Fuel Cells Measured by Diffraction-Enhanced Imaging Technique. *Japanese Journal of Applied Physics*, **2013**, 52, 048002	1.4	4
80	Emergent phases of nodeless and nodal superconductivity separated by antiferromagnetic order in iron-based superconductor (Ca4Al2O6)Fe2(As1−xPx)2: 75As- and 31P-NMR studies. *Physical Review B*, **2013**, 87,	3.3	16
79	Formation of LiBH4 hydrate with dihydrogen bonding. *Journal of Alloys and Compounds*, **2012**, 541, 111-114	3.0	13
78	BiS2-based layered superconductor Bi4O4S3. *Physical Review B*, **2012**, 86,	3.3	336

77	Superconductivity in Novel BiS2-Based Layered Superconductor LaO1-xFxBiS2. *Journal of the Physical Society of Japan*, **2012**, 81, 114725	1.5	344
76	Crystal Structure of High-Pressure Phases V and VI of Potassium Dihydrogen Phosphate. *Journal of the Physical Society of Japan*, **2012**, 81, 064706	1.5	2
75	Identification of superlattice structure cI16 in the P-VI phase of phosphorus at 340 GPa and room temperature via x-ray diffraction. *Physical Review B*, **2012**, 86,	3.3	16
74	Crystal structure of anhydrous 5-aminotetrazole and its high-pressure behavior. *CrystEngComm*, **2011**, 13, 99-102	3.3	15
73	Structural and valence changes of europium hydride induced by application of high-pressure H□ *Physical Review Letters*, **2011**, 107, 025501	7.4	27
72	Na-Au intermetallic compounds formed under high pressure at room temperature. *Physical Review B*, **2011**, 84,	3.3	5
71	High-Pressure Transformations and Ionic Conductivity in Low-Z Complex Hydride LiBH4. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **2011**, 21, 213-220	0	7
70	Ca-VI: A high-pressure phase of calcium above 158 GPa. *Physical Review B*, **2010**, 81,	3.3	36
69	Phase transition analysis of 5-aminotetrazole from room temperature to the melting point. *Journal of Physical Chemistry B*, **2010**, 114, 12572-6	3.4	4
68	Changes in structure and proton conductivity at II□I phase transition of Rb3H(SO4)2. *Solid State Ionics*, **2010**, 181, 567-571	3.3	3
67	Single composite crystal structure analysis of incommensurate spin-ladder compound Sr2.5Ca11.5Cu24O41. *Physica C: Superconductivity and Its Applications*, **2010**, 470, S219-S220	1.3	
66	Vibrational and structural study in phase I of Rb3H(SO4)2. *Physica B: Condensed Matter*, **2010**, 405, 291-295	2.8	5
65	Crystal structures of calcium IV and V under high pressure. *Physical Review Letters*, **2008**, 101, 095503	7.4	45
64	Infrared study of proton□deuteron mutual diffusion in a CsHSO4/CsDSO4 solid under high pressure. *Physica B: Condensed Matter*, **2008**, 403, 2643-2648	2.8	1
63	Crystal Structure of the High-Pressure □Phase of Mercury: A Novel Monoclinic Distortion of the Close-Packed Structure. *Journal of the Physical Society of Japan*, **2007**, 76, 023601	1.5	13
62	Hexaaquazinc(II) dipicrate trihydrate. *Acta Crystallographica Section C: Crystal Structure Communications*, **2007**, 63, m423-6		2
61	Using X-ray diffraction to study thermal phase transitions in Cs5H3(SO4)4□xH2O. *Solid State Ionics*, **2007**, 178, 1262-1267	3.3	6
60	Vibrational spectra of CsHSO4 at high pressure and high temperature. *Physical Review B*, **2007**, 75,	3.3	6

59	Incommensurate Structure of Phosphorus Phase IV. *Physical Review Letters*, **2007**, 98,	7.4	43
58	O8 cluster structure of the epsilon phase of solid oxygen. *Physical Review Letters*, **2006**, 97, 085503	7.4	95
57	Crystal structure of the high-pressure phase of hexahydro-1,3,5-trinitro-1,3,5-triazine (gamma-RDX). *Journal of Physical Chemistry B*, **2006**, 110, 23655-9	3.4	32
56	Structure analysis of mutually incommensurate composite crystal (Ca0.5Y0.5)0.80CuO2. *Journal of Alloys and Compounds*, **2006**, 408-412, 1226-1229	5.7	2
55	The structural representation and properties of mutually incommensurate composite crystal (BiS)x TS2 (T = Ti, V, Nb and Ta). *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 2852-2855	1.6	1
54	Mg-doping experiment and electrical transport measurement of boron nanobelts. *Journal of Solid State Chemistry*, **2006**, 179, 2799-2804	3.3	15
53	Phase transition in a superprotonic conductor Cs2(HSO4)(H2PO4) induced by water vapor. *Solid State Ionics*, **2006**, 177, 1275-1279	3.3	8
52	Incommensurate composite crystal structure of scandium-II. *Physical Review B*, **2005**, 72,	3.3	47
51	Infrared study on crystalline and amorphous phases of 2-propyn-1-ol under high pressure. *Physica B: Condensed Matter*, **2005**, 369, 44-50	2.8	1
50	Recent Progress in the Powder X-Ray Diffraction Image Analysis Program PIP. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **2005**, 15, 29-35	0	9
49	New helical chain structure for scandium at 240 GPa. *Physical Review Letters*, **2005**, 94, 195503	7.4	41
48	Structural phase transitions in iodine under high pressure. *Zeitschrift Fur Kristallographie - Crystalline Materials*, **2004**, 219, 749-754	1	8
47	Spiral chain structure of high pressure selenium[]? and sulfur[] from powder x-ray diffraction. *Physical Review B*, **2004**, 70,	3.3	37
46	Molecular dissociation and two low-temperature high-pressure phases of H2S. *Physical Review B*, **2004**, 69,	3.3	37
45	Incommensurately Modulated Phase of Iodine Under High Pressure. *Ferroelectrics*, **2004**, 305, 103-106	0.6	3
44	Powder X-ray diffraction study of the volume change of ice VIII under high pressure. *Physica B: Condensed Matter*, **2004**, 344, 260-264	2.8	5
43	Modulated structure of solid iodine during its molecular dissociation under high pressure. *Nature*, **2003**, 423, 971-4	50.4	130
42	Infrared observation of the phase transitions of ice at low temperatures and pressures up to 50 GPa and the metastability of low-temperature ice VII. *Physical Review B*, **2003**, 68,	3.3	17

41	Infrared investigation on ice VIII and the phase diagram of dense ices. *Physical Review B*, **2003**, 68,	3.3	49
40	High-pressure spectroscopic measurement on diffusion with a diamond-anvil cell. *Review of Scientific Instruments*, **2003**, 74, 2472-2476	1.7	2
39	Comparative Study on Pressure-Induced Structural Changes between C 6 O 2 I 4 and C 6 I 6. *High Pressure Research*, **2002**, 22, 415-419	1.6	
38	Axial ratio of Zn at high pressure and low temperature. *Physical Review B*, **2002**, 65,	3.3	21
37	High-Pressure X-ray Studies of Zn at Room and Low Temperatures with a He-Pressure Medium. *High Pressure Research*, **2002**, 22, 337-341	1.6	8
36	High-pressure structures of methane hydrate. *Journal of Physics Condensed Matter*, **2002**, 14, 11443-11446	1.8	2
35	High-pressure powder x-ray diffraction experiments on Zn at low temperature. *Journal of Physics Condensed Matter*, **2002**, 14, 10563-10568	1.8	7
34	Protonic diffusion in high-pressure ice VII. *Science*, **2002**, 295, 1264-6	33.3	39
33	Pressure-induced phase transition in C6O2I4. *Journal of Physics Condensed Matter*, **2002**, 14, 10415-10418	1.8	1
32	Proton Diffusion in High Pressure Ice. *High Pressure Research*, **2002**, 22, 9-11	1.6	0
31	High-pressure structures of methane hydrate observed up to 8 GPa at room temperature. *Journal of Chemical Physics*, **2001**, 115, 7066-7070	3.9	91
30	"Devil□s staircase"-type phase transition in NaV2O5 under high pressure. *Physical Review Letters*, **2001**, 87, 086402	7.4	53
29	Structural study on pressure-induced metallization of C6I6. *Synthetic Metals*, **2001**, 120, 767-768	3.6	9
28	Shock and Static Compression of Nitrobenzene. *Japanese Journal of Applied Physics*, **2000**, 39, 4875-4880	1.4	6
27	Infrared spectroscopic study of H2O□D2O mixed ice up to 100 GPa. *Physical Review B*, **2000**, 62, 2976-2979	3.3	17
26	Raman study of phase transition and hydrogen bond symmetrization in solid DCl at high pressure. *Physical Review B*, **2000**, 61, 119-124	3.3	21
25	Structural study of hexaiodobenzene up to 9.7 GPa. *Physical Review B*, **2000**, 62, 8759-8765	3.3	8
24	Methane Hydrate Behavior under High Pressure. *Journal of Physical Chemistry B*, **2000**, 104, 1429-1433	3.4	78

23	Molecular Dissociation in Deuterium Sulfide under High Pressure: Infrared and Raman Study. *Journal of Physical Chemistry A*, **2000**, 104, 8838-8842	2.8	15
22	Raman and infrared study of phase transitions in solid HBr under pressure. *Physical Review B*, **1999**, 59, 11244-11250	3.3	39
21	Infrared absorption study of Fermi resonance and hydrogen-bond symmetrization of ice up to 141 GPa. *Physical Review B*, **1999**, 60, 12644-12650	3.3	61
20	Hydrogen-bond symmetrization and molecular dissociation in hydrogen halids. *Physica B: Condensed Matter*, **1999**, 265, 83-86	2.8	27
19	Structural change of iodanil under high pressure. *Synthetic Metals*, **1999**, 103, 1901-1902	3.6	10
18	An X-ray Powder Pattern Analysis Program for Imaging Plate.. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **1999**, 9, 65-70	0	12
17	Structures of H2S: Phases I? and IV under high pressure. *Physical Review B*, **1998**, 57, 2651-2654	3.3	39
16	Introduction to DAC Techniques. High Pressure X-ray Powder Diffraction Experiments and Intensity Analyses.. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **1998**, 8, 4-9	0	9
15	High-pressure phase transitions of solid H2S probed by Fourier-transform infrared spectroscopy. *Physical Review B*, **1997**, 55, 5538-5541	3.3	19
14	Pressure-Induced Molecular Dissociation and Metallization in Hydrogen-Bonded H2S Solid. *Physical Review Letters*, **1997**, 79, 1082-1085	7.4	63
13	Pressure dependence of the lattice constant of diamond: Isotopic effects. *JETP Letters*, **1996**, 63, 83-88	1.2	8
12	Infrared absorption study of the hydrogen-bond symmetrization in ice to 110 GPa. *Physical Review B*, **1996**, 54, 15673-15677	3.3	147
11	Equation of state of cobalt up to 79 GPa. *Physical Review B*, **1996**, 54, 5-7	3.3	35
10	Pressure dependence of the electron density in solid iodine by the maximum-entropy method. *High Pressure Research*, **1996**, 14, 335-340	1.6	10
9	Stability and the equation of state of alpha -manganese under ultrahigh pressure. *Physical Review B* , **1995**, 52, 13257-13260	3.3	46
8	Structural aspects of dense solid halogens under high pressure studied by x-ray diffraction Molecular dissociation and metallization. *Journal of Physics and Chemistry of Solids*, **1995**, 56, 1439-1444	3.9	56
7	Rietveld analysis of high-pressure phase of praseodymium. *AIP Conference Proceedings*, **1994**,	0	5
6	Crystal structure of the distorted FCC high-pressure phase of praseodymium. *Journal of Physics Condensed Matter*, **1993**, 5, L369-L374	1.8	41

5	High-pressure structural phase transition in indium. *Physical Review B*, **1993**, 47, 8465-8470	3.3	32
4	Application of an imaging plate to high-pressure x-ray study with a diamond anvil cell (invited). *Review of Scientific Instruments*, **1992**, 63, 967-973	1.7	160
3	Cs(VI): A new high-pressure polymorph of cesium above 72 GPa. *Physical Review Letters*, **1991**, 66, 2014-2017	7.4	42
2	Evidence for molecular dissociation in bromine near 80 GPa. *Physical Review Letters*, **1989**, 63, 536-539	7.4	83
1	Synthesis PbFCl-Type Mixed Anion APX(A=Hf, X=S, Se) Superconductors Related with Topological Materials by High-Pressure Technique. *Materials Science Forum*,1016, 708-714	0.4	