Akihiko Hirata

List of Publications by Year
in descending order

166 papers	15,580 citations	19657 61 h-index	16650 123 g-index
170 all docs	170 docs citations	170 times ranked	18550 citing authors

#	Article	IF	Citations
1	Nanoporous metal/oxide hybrid electrodes for electrochemical supercapacitors. Nature Nanotechnology, 2011, 6, 232-236.	31.5	1,914
2	Ultrastrong steel via minimal lattice misfit and high-density nanoprecipitation. Nature, 2017, 544, 460-464.	27.8	843
3	Atomic origins of the high catalytic activity of nanoporous gold. Nature Materials, 2012, 11, 775-780.	27.5	803
4	Nanoporous Graphene with Singleâ€Atom Nickel Dopants: An Efficient and Stable Catalyst for Electrochemical Hydrogen Production. Angewandte Chemie - International Edition, 2015, 54, 14031-14035.	13.8	628
5	Versatile nanoporous bimetallic phosphides towards electrochemical water splitting. Energy and Environmental Science, 2016, 9, 2257-2261.	30.8	535
6	Direct observation of local atomic order in a metallic glass. Nature Materials, 2011, 10, 28-33.	27.5	483
7	Geometric Frustration of Icosahedron in Metallic Glasses. Science, 2013, 341, 376-379.	12.6	423
8	Characterization of Nanoscale Mechanical Heterogeneity in a Metallic Glass by Dynamic Force Microscopy. Physical Review Letters, 2011, 106, 125504.	7.8	347
9	Atomic structure of nanoclusters in oxide-dispersion-strengthened steels. Nature Materials, 2011, 10, 922-926.	27.5	306
10	Monolayer MoS₂ Films Supported by 3D Nanoporous Metals for Highâ€Efficiency Electrocatalytic Hydrogen Production. Advanced Materials, 2014, 26, 8023-8028.	21.0	299
11	Grain rotation mediated by grain boundary dislocations in nanocrystalline platinum. Nature Communications, 2014, 5, 4402.	12.8	286
12	Nanoporous PdNi Bimetallic Catalyst with Enhanced Electrocatalytic Performances for Electro-oxidation and Oxygen Reduction Reactions. Advanced Functional Materials, 2011, 21, 4364-4370.	14.9	251
13	Enhanced Supercapacitor Performance of MnO₂ by Atomic Doping. Angewandte Chemie - International Edition, 2013, 52, 1664-1667.	13.8	251
14	Wrinkled Nanoporous Gold Films with Ultrahigh Surface-Enhanced Raman Scattering Enhancement. ACS Nano, 2011, 5, 4407-4413.	14.6	249
15	Direct Observation of High-Temperature Superconductivity in One-Unit-Cell FeSe Films. Chinese Physics Letters, 2014, 31, 017401.	3.3	222
16	Hierarchical structures of amorphous solids characterized by persistent homology. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7035-7040.	7.1	221
17	Nanoporous Metal Enhanced Catalytic Activities of Amorphous Molybdenum Sulfide for Highâ€Efficiency Hydrogen Production. Advanced Materials, 2014, 26, 3100-3104.	21.0	204
18	Intrinsic correlation between Î²-relaxation and spatial heterogeneity in a metallic glass. Nature Communications, 2016, 7, 11516.	12.8	197

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19	3D Nanoporous Nitrogenâ€Doped Graphene with Encapsulated RuO₂ Nanoparticles for Liâ€“O₂ Batteries. Advanced Materials, 2015, 27, 6137-6143.	21.0	195
20	Nanoscale phase separation in a fcc-based CoCrCuFeNiAl0.5 high-entropy alloy. Acta Materialia, 2015, 84, 145-152.	7.9	193
21	Transmission electron microscopy characterization of dislocation structure in a face-centered cubic high-entropy alloy Al0.1CoCrFeNi. Acta Materialia, 2018, 144, 107-115.	7.9	187
22	High-temperature bulk metallic glasses developed by combinatorial methods. Nature, 2019, 569, 99-103.	27.8	185
23	Nanoporous Gold Based Optical Sensor for Sub-ppt Detection of Mercury Ions. ACS Nano, 2013, 7, 4595-4600.	14.6	175
24	3D Nanoporous Metal Phosphides toward Highâ€Efficiency Electrochemical Hydrogen Production. Advanced Materials, 2016, 28, 2951-2955.	21.0	163
25	Chemically exfoliated ReS₂nanosheets. Nanoscale, 2014, 6, 12458-12462.	5.6	160
26	Formation and Characterization of Hydrogen Boride Sheets Derived from MgB₂ by Cation Exchange. Journal of the American Chemical Society, 2017, 139, 13761-13769.	13.7	157
27	Microstructure characterization of Cu-rich nanoprecipitates in a Feâ€“2.5 Cuâ€“1.5 Mnâ€“4.0 Niâ€“1.0 Al multicomponent ferritic alloy. Acta Materialia, 2013, 61, 2133-2147.	7.9	153
28	Geometrically Controlled Nanoporous PdAu Bimetallic Catalysts with Tunable Pd/Au Ratio for Direct Ethanol Fuel Cells. ACS Catalysis, 2013, 3, 1220-1230.	11.2	152
29	Selfâ€Grown Oxyâ€Hydroxide@ Nanoporous Metal Electrode for Highâ€Performance Supercapacitors. Advanced Materials, 2014, 26, 269-272.	21.0	152
30	In situ atomic-scale observation of continuous and reversible lattice deformation beyond the elastic limit. Nature Communications, 2013, 4, 2413.	12.8	147
31	Fabrication of large-scale nanoporous nickel with a tunable pore size for energy storage. Journal of Power Sources, 2014, 247, 896-905.	7.8	140
32	Atomic-scale disproportionation in amorphous silicon monoxide. Nature Communications, 2016, 7, 11591.	12.8	138
33	Bicontinuous nanotubular grapheneâ€“polypyrrole hybrid for high performance flexible supercapacitors. Nano Energy, 2016, 19, 391-400.	16.0	137
34	Lithium intercalation into bilayer graphene. Nature Communications, 2019, 10, 275.	12.8	136
35	Effect of Chemical Doping on Cathodic Performance of Bicontinuous Nanoporous Graphene for Liâ€O₂ Batteries. Advanced Energy Materials, 2016, 6, 1501870.	19.5	132
36	Three-dimensional bicontinuous nanoporous materials by vapor phase dealloying. Nature Communications, 2018, 9, 276.	12.8	123

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37	A Coreâ€Shell Nanoporous Ptâ€Cu Catalyst with Tunable Composition and High Catalytic Activity. Advanced Functional Materials, 2013, 23, 4156-4162.	14.9	118
38	Correlation between Local Structure Order and Spatial Heterogeneity in a Metallic Glass. Physical Review Letters, 2017, 119, 215501.	7.8	116
39	Structural Origins of the Excellent Glass Forming Ability of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Pd</mml:mi><mml:mn>40</mml:mn></mml:msub><mml:msub><mml:mi>Ni</mml:mi><mml:mn>40</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">P</mml:mi><mml:mn>20</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2012, 108, 175501.	7.8	115
40	Spatial heterogeneity as the structure feature for structureâ€“property relationship of metallic glasses. Nature Communications, 2018, 9, 3965.	12.8	115
41	Atomic Observation of Catalysis-Induced Nanopore Coarsening of Nanoporous Gold. Nano Letters, 2014, 14, 1172-1177.	9.1	109
42	Chemical Vapor Deposition of Monolayer Mo1â^'xWxS2 Crystals with Tunable Band Gaps. Scientific Reports, 2016, 6, 21536.	3.3	101
43	Structure and mechanical properties of boron-rich boron carbides. Journal of the European Ceramic Society, 2017, 37, 4514-4523.	5.7	89
44	Synergistic alloying effect on microstructural evolution and mechanical properties of Cu precipitation-strengthened ferritic alloys. Acta Materialia, 2013, 61, 7726-7740.	7.9	85
45	Visualizing Underâ€Coordinated Surface Atoms on 3D Nanoporous Gold Catalysts. Advanced Materials, 2016, 28, 1753-1759.	21.0	85
46	High-energy-density nonaqueous MnO2@nanoporous gold based supercapacitors. Journal of Materials Chemistry A, 2013, 1, 9202.	10.3	84
47	A nanoscale co-precipitation approach for property enhancement of Fe-base alloys. Scientific Reports, 2013, 3, 1327.	3.3	79
48	Asymmetric metal oxide pseudocapacitors advanced by three-dimensional nanoporous metal electrodes. Journal of Materials Chemistry A, 2014, 2, 8448.	10.3	74
49	Intercalation pseudocapacitance of amorphous titanium dioxide@nanoporous graphene for high-rate and large-capacity energy storage. Nano Energy, 2018, 49, 354-362.	16.0	74
50	Persistent homology and many-body atomic structure for medium-range order in the glass. Nanotechnology, 2015, 26, 304001.	2.6	73
51	Electroplated Thick Manganese Oxide Films with Ultrahigh Capacitance. Advanced Energy Materials, 2013, 3, 857-863.	19.5	70
52	Engineering the internal surfaces of three-dimensional nanoporous catalysts by surfactant-modified dealloying. Nature Communications, 2017, 8, 1066.	12.8	69
53	Effect of Residual Silver on Surface-Enhanced Raman Scattering of Dealloyed Nanoporous Gold. Journal of Physical Chemistry C, 2011, 115, 19583-19587.	3.1	66
54	Onâ€Chip Microâ€Pseudocapacitors for Ultrahigh Energy and Power Delivery. Advanced Science, 2015, 2, 1500067.	11.2	66

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55	Characterization of oxide nanoprecipitates in an oxide dispersion strengthened 14YWT steel using aberration-corrected STEM. Acta Materialia, 2012, 60, 5686-5696.	7.9	65
56	Full Performance Nanoporous Graphene Based Liâ€O₂ Batteries through Solution Phase Oxygen Reduction and Redoxâ€Additive Mediated Li₂O₂ Oxidation. Advanced Energy Materials, 2017, 7, 1601933.	19.5	65
57	Heavily Doped and Highly Conductive Hierarchical Nanoporous Graphene for Electrochemical Hydrogen Production. Angewandte Chemie - International Edition, 2018, 57, 13302-13307.	13.8	64
58	Operando Observations of SEI Film Evolution by Massâ€Sensitive Scanning Transmission Electron Microscopy. Advanced Energy Materials, 2019, 9, 1902675.	19.5	64
59	Compositional dependence of local atomic structures in amorphousFe100â^'xBx(x=14,17,20)alloys studied by electron diffraction and high-resolution electron microscopy. Physical Review B, 2006, 74, .	3.2	63
60	Synthesizing 1Tâ€“1H Two-Phase Mo_{1â€“x}W_xS₂ Monolayers by Chemical Vapor Deposition. ACS Nano, 2018, 12, 1571-1579.	14.6	62
61	Nobleâ€Metalâ€Free Metallic Glass as a Highly Active and Stable Bifunctional Electrocatalyst for Water Splitting. Advanced Materials Interfaces, 2017, 4, 1601086.	3.7	60
62	A nanoporous metal recuperated MnO₂anode for lithium ion batteries. Nanoscale, 2015, 7, 15111-15116.	5.6	58
63	Structure and properties of densified silica glass: characterizing the order within disorder. NPG Asia Materials, 2020, 12, .	7.9	57
64	Raman characterization of pseudocapacitive behavior of polypyrrole on nanoporous gold. Physical Chemistry Chemical Physics, 2014, 16, 3523.	2.8	56
65	Tuning Surface Structure of 3D Nanoporous Gold by Surfactantâ€Free Electrochemical Potential Cycling. Advanced Materials, 2017, 29, 1703601.	21.0	54
66	Bilayered nanoporous graphene/molybdenum oxide for high rate lithium ion batteries. Nano Energy, 2018, 45, 273-279.	16.0	54
67	Deposition of multicomponent metallic glass films by single-target magnetron sputtering. Intermetallics, 2012, 21, 105-114.	3.9	52
68	Hierarchical nanoporosity enhanced reversible capacity of bicontinuous nanoporous metal based Li-O2 battery. Scientific Reports, 2016, 6, 33466.	3.3	52
69	Nanocrystallization of complex Fe23B6-type structure in glassy Feâ€“Coâ€“Bâ€“Siâ€“Nb alloy. Intermetallics, 2008, 16, 491-497.	3.9	50
70	Extraordinary Supercapacitor Performance of a Multicomponent and Mixedâ€Valence Oxyhydroxide. Angewandte Chemie - International Edition, 2015, 54, 8100-8104.	13.8	50
71	Crystallization process and glass stability of an<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Fe</mml:mtext></mml:mrow><mml:mrow><mml:mn>48</mml:mn></mml:mrow> Physical Review B, 2008, 78, .	3.2	49
72	Free-standing nanoporous gold for direct plasmon enhanced electro-oxidation of alcohol molecules. Nano Energy, 2019, 56, 286-293.	16.0	48

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73	Operando observations of RuO2 catalyzed Li2O2 formation and decomposition in a Li-O2 micro-battery. Nano Energy, 2018, 47, 427-433.	16.0	47
74	Dealloying Kinetics of AgAu Nanoparticles by In Situ Liquid-Cell Scanning Transmission Electron Microscopy. Nano Letters, 2020, 20, 1944-1951.	9.1	47
75	Nanoporous metal/oxide hybrid materials for rechargeable lithiumâ€“oxygen batteries. Journal of Materials Chemistry A, 2015, 3, 3620-3626.	10.3	45
76	Initial Atomic Motion Immediately Following Femtosecond-Laser Excitation in Phase-Change Materials. Physical Review Letters, 2016, 117, 135501.	7.8	45
77	Volume swelling of amorphous SiC during ion-beam irradiation. Physical Review B, 2005, 72, .	3.2	43
78	Microstructural origins for a strong and ductile Al0.1CoCrFeNi high-entropy alloy with ultrafine grains. Materialia, 2018, 4, 395-405.	2.7	43
79	Local atomic structure of Pdâ€“Niâ€“P bulk metallic glass examined by high-resolution electron microscopy and electron diffraction. Intermetallics, 2006, 14, 903-907.	3.9	42
80	Local atomic ordering and nanoscale phase separation in a Pd-Ni-P bulk metallic glass. Physical Review B, 2006, 73, .	3.2	41
81	Direct Observations of the Formation and Redoxâ€Mediatorâ€Assisted Decomposition of Li₂O₂ in a Liquidâ€Cell Liâ€“O₂ Microbattery by Scanning Transmission Electron Microscopy. Advanced Materials, 2017, 29, 1702752.	21.0	41
82	Effects of mixing enthalpy and cooling rate on phase formation of AlxCoCrCuFeNi high-entropy alloys. Materialia, 2019, 6, 100292.	2.7	40
83	Direct observations of thermally induced structural changes in amorphous silicon carbide. Journal of Applied Physics, 2008, 104, .	2.5	39
84	Time-resolved atomic-scale observations of deformation and fracture of nanoporous gold under tension. Acta Materialia, 2019, 165, 99-108.	7.9	39
85	Sample size induced brittle-to-ductile transition of single-crystal aluminum nitride. Acta Materialia, 2015, 88, 252-259.	7.9	38
86	Tunable Nanoporous Metallic Glasses Fabricated by Selective Phase Dissolution and Passivation for Ultrafast Hydrogen Uptake. Chemistry of Materials, 2017, 29, 4478-4483.	6.7	38
87	Mechanism of nanocrystalline microstructure formation in amorphousFeâ^'Nbâ^'Balloys. Physical Review B, 2006, 74, .	3.2	37
88	Fast coalescence of metallic glass nanoparticles. Nature Communications, 2019, 10, 5249.	12.8	37
89	Graphene-based quasi-solid-state lithiumâ€“oxygen batteries with high energy efficiency and a long cycling lifetime. NPG Asia Materials, 2018, 10, 1037-1045.	7.9	35
90	Distortion of Local Atomic Structures in Amorphous Ge-Sb-Te Phase Change Materials. Physical Review Letters, 2018, 120, 205502.	7.8	35

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91	Direct imaging of local atomic ordering in a Pdâ€“Niâ€“P bulk metallic glass using Cs-corrected transmission electron microscopy. Ultramicroscopy, 2007, 107, 116-123.	1.9	34
92	Asymmetric twins in rhombohedral boron carbide. Applied Physics Letters, 2014, 104, 021907.	3.3	32
93	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Fe</mml:mtext></mml:mrow><mml:mrow><mml:mn>23</mml:mn> quasicrystal-like structures without icosahedral atomic arrangement in an Fe-based metallic glass. Physical Review B, 2009, 80, .	3.2	27
94	Innovative processing of high-strength and low-cost ferritic steels strengthened by Yâ€“Tiâ€“O nanoclusters. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 544, 59-69.	5.6	27
95	Threeâ€Dimensional Hierarchical Nanoporosity for Ultrahigh Power and Excellent Cyclability of Electrochemical Pseudocapacitors. Advanced Energy Materials, 2014, 4, 1301809.	19.5	27
96	Local Atomic Structure Analysis of Zr-Ni and Zr-Cu Metallic Glasses Using Electron Diffraction. Materials Transactions, 2007, 48, 1299-1303.	1.2	26
97	Nanoporous Metal Papers for Scalable Hierarchical Electrode. Advanced Science, 2015, 2, 1500086.	11.2	26
98	Operando characterization of cathodic reactions in a liquid-state lithium-oxygen micro-battery by scanning transmission electron microscopy. Scientific Reports, 2018, 8, 3134.	3.3	25
99	Local structure changes on annealing in an Feâ€“Siâ€“Bâ€“P bulk metallic glass. Intermetallics, 2009, 17, 186-189.	3.9	24
100	Specific surface effect on transport properties of NiO/MgO heterostructured nanowires. Applied Physics Letters, 2009, 95, 133110.	3.3	23
101	Non-aqueous nanoporous gold based supercapacitors with high specific energy. Scripta Materialia, 2016, 116, 76-81.	5.2	22
102	Structural changes during glass formation extracted by computational homology with machine learning. Communications Materials, 2020, 1, .	6.9	22
103	Unveiling Three-Dimensional Stacking Sequences of 1T Phase MoS₂ Monolayers by Electron Diffraction. ACS Nano, 2016, 10, 10308-10316.	14.6	21
104	Local Atomic Structures of Amorphous Fe₈₀B₂₀ and Fe₇₀Nb₁₀B₂₀ Alloys Studied by Electron Diffraction. Materials Transactions, 2005, 46, 2781-2784.	1.2	20
105	Structure and viscosity of phaseâ€separated BaOâ€“SiO₂ glasses. Journal of the American Ceramic Society, 2017, 100, 1982-1993.	3.8	20
106	Vapor phase dealloying kinetics of MnZn alloys. Acta Materialia, 2021, 212, 116916.	7.9	19
107	Earthâ€Abundant and Durable Nanoporous Catalyst for Exhaustâ€Gas Conversion. Advanced Functional Materials, 2016, 26, 1609-1616.	14.9	18
108	Extraordinary Supercapacitor Performance of a Multicomponent and Mixedâ€Valence Oxyhydroxide. Angewandte Chemie, 2015, 127, 8218-8222.	2.0	16

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109	Transparent magnetic semiconductor with embedded metallic glass nano-granules. Materials and Design, 2017, 132, 208-214.	7.0	16
110	Temperature-dependent compression behavior of an Al0.5CoCrCuFeNi high-entropy alloy. Materialia, 2019, 5, 100243.	2.7	16
111	Improving glass forming ability of off-eutectic metallic glass formers by manipulating primary crystallization reactions. Acta Materialia, 2020, 200, 710-719.	7.9	16
112	Local structural fluctuation in Pdâ€“Niâ€“P bulk metallic glasses examined using nanobeam electron diffraction. Journal of Alloys and Compounds, 2009, 483, 64-69.	5.5	15
113	Angstrom-beam electron diffraction of amorphous materials. Journal of Non-Crystalline Solids, 2014, 383, 52-58.	3.1	15
114	Kinetic process of the phase separation in the alloyNi3Al0.52V0.48. Physical Review B, 2004, 70, .	3.2	14
115	Topological characterization of metallic glasses by neutron diffraction and RMC modeling. Physica B: Condensed Matter, 2006, 385-386, 259-262.	2.7	14
116	Characteristic features of theFe7Mo6-type structure in a transition-metal alloy examined using transmission electron microscopy. Physical Review B, 2006, 74, .	3.2	14
117	Structure Analyses of Fe-based Metallic Glasses by Electron Diffraction. Materials, 2010, 3, 5263-5273.	2.9	14
118	Depth-resolution imaging of crystalline nanoclusters attached on and embedded in amorphous films using aberration-corrected TEM. Ultramicroscopy, 2015, 151, 224-231.	1.9	13
119	An ultrahigh volumetric capacitance of squeezable three-dimensional bicontinuous nanoporous graphene. Nanoscale, 2016, 8, 18551-18557.	5.6	13
120	Quasicrystal-like structure and its crystalline approximant in an Fe48Cr15Mo14C15B6Tm2 bulk metallic glass. Journal of Alloys and Compounds, 2010, 504, S186-S189.	5.5	12
121	Direct synthesis of fullerene-intercalated porous carbon nanofibers by chemical vapor deposition. Carbon, 2012, 50, 5162-5166.	10.3	12
122	Graphene@Nanoporous Nickel Cathode for Liâˆ’O₂ Batteries. ChemNanoMat, 2016, 2, 176-181.	2.8	12
123	Nanoscale metastable state exhibiting pseudotenfold diffraction pattern in Fe-based bulk metallic glass. Physical Review B, 2009, 79, .	3.2	11
124	Local structure analysis of amorphous materials by angstrom-beam electron diffraction. Microscopy (Oxford, England), 2021, 70, 171-177.	1.5	11
125	Relationship between diffraction peak, network topology, and amorphous-forming ability in silicon and silica. Scientific Reports, 2021, 11, 22180.	3.3	11
126	Chemical short-range order in ion-beam-induced amorphous SiC: Irradiation temperature dependence. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 473-475.	1.4	10

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127	Ni thin films vacuum-evaporated on polyethylene naphthalate substrates with and without the application of magnetic field. Applied Surface Science, 2009, 255, 3706-3712.	6.1	10
128	Chemical Selectivity at Grain Boundary Dislocations in Monolayer Mo_{1â€“x}W_xS₂ Transition Metal Dichalcogenides. ACS Applied Materials & Interfaces, 2017, 9, 29438-29444.	8.0	10
129	Heavily Doped and Highly Conductive Hierarchical Nanoporous Graphene for Electrochemical Hydrogen Production. Angewandte Chemie, 2018, 130, 13486-13491.	2.0	10
130	Unveiling a Chemisorbed Crystallographically Heterogeneous Graphene/L1₀-FePd Interface with a Robust and Perpendicular Orbital Moment. ACS Nano, 2022, 16, 4139-4151.	14.6	10
131	Crystallization behaviours around the glass transition temperature in an amorphous Feâ€“Nbâ€“B alloy. Intermetallics, 2009, 17, 796-801.	3.9	9
132	Crystallization behaviors in superionic conductor Na3PS4. Journal of Power Sources, 2021, 511, 230444.	7.8	9
133	Role of the triclinic Al₂Fe structure in the formation of the Al₅Fe₂-approximant. Philosophical Magazine Letters, 2008, 88, 491-500.	1.2	8
134	Structural Analysis of Metallic Glasses with Computational Homology. SpringerBriefs in the Mathematics of Materials, 2016, , .	0.3	7
135	Structure of crystallized particles in sputter-deposited amorphous germanium films. Journal of Applied Crystallography, 2018, 51, 1467-1473.	4.5	7
136	Application of energy-filtering TEM to the nanocrystallization process in amorphous Fe84Nb7B9 alloy. Journal of Materials Science, 2006, 41, 2597-2600.	3.7	6
137	Change of Nanostructure in (Fe_{0.5}Co_{0.5})₇₂B₂₀Si<sub>4</sub Metallic Glass on Annealing. Materials Science Forum, 2007, 539-543, 2077-2081.		
138	Structural Analysis of Polycrystalline BiFeO₃ Films by Transmission Electron Microscopy. Materials Transactions, 2007, 48, 2370-2373.	1.2	5
139	Crystalline Approximant of Amorphous Fe-Si-B Structures. Materials Transactions, 2018, 59, 1047-1050.	1.2	5
140	The fabrication of Ni quantum cross devices with a 17 nm junction and their currentâ€“voltage characteristics. Nanotechnology, 2010, 21, 015301.	2.6	4
141	Topological trends in ionic transport through metal-oxide composites. Applied Physics Letters, 2021, 118, 054102.	3.3	4
142	Nanometer-Size Polycrystallization in bcc→hcp+C15 Structural Change of a Ti-30 mol%Cr Alloy. Materials Transactions, 2001, 42, 2553-2558.	1.2	3
143	Modulated Na$_{2}$Ti$_{4}$O$_{9}$:Zr Nanobelt via Site-Specific Zr Doping. Applied Physics Express, 2011, 4, 085003.	2.4	3
144	Electron diffraction study on chemical short-range order in covalent amorphous solids. Nuclear Instruments & Methods in Physics Research B, 2012, 277, 70-76.	1.4	3

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145	Deformation behaviour of 18R long-period stacking ordered structure in an Mg-Zn-Y alloy under shock loading. Intermetallics, 2018, 102, 21-25.	3.9	3
146	New Chemical Layered Structure in Ti-Cr Alloys. Materials Transactions, 2002, 43, 1689-1695.	1.2	2
147	Visualization of topological landscape in shear-flow dynamics of amorphous solids. Europhysics Letters, 2015, 110, 38002.	2.0	2
148	Frank-Kasper Z16 local structures in Cu-Zr metallic glasses. Physical Review B, 2020, 102, .	3.2	2
149	Fabrication of Nickel/Organic-Molecule/Nickel Nanoscale Junctions Utilizing Thin-Film Edges and Their Structural and Electrical Properties. Japanese Journal of Applied Physics, 2012, 51, 065202.	1.5	1
150	Structure Analysis of Amorphous Materials Using a STEM Electron Diffraction Method. Materia Japan, 2016, 55, 8-14.	0.1	1
151	Effect of Ca Doping on Modulated Structures in Multiferroic Bi_{1â^'}_xCa_xFeO₃. Journal of the Physical Society of Japan, 2019, 88, 054601.	1.6	1
152	Correlation between the Charge-Transport Properties and the 3D-Phase Connectivities in Patterned Pt/CeO₂ Nanostructured Composites: Implications for Solid-Oxide Fuel Cells. ACS Applied Nano Materials, 2021, 4, 13602-13611.	5.0	1
153	Local Structure Study of Metallic Glasses by Means of Advanced Electron Microscopy Techniques. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2007, 54, 747-753.	0.2	0
154	Post-annealing recrystallization and damage recovery process in Fe ion implanted Si. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 340-343.	1.4	0
155	Fabrication and Current-Voltage Characteristics of Ni Spin Quantum Cross Devices with P3HT:PCBM Organic Materials. Materials Research Society Symposia Proceedings, 2010, 1252, 8.	0.1	0
156	Local Structure Analysis of Metallic Glasses by Angstrom Beam Electron Diffraction Using Aberration Corrected STEM. Nihon Kessho Gakkaishi, 2011, 53, 326-331.	0.0	0
157	TEM Analysis on Nanovoid Formation in Annealed Amorphous Oxides. Materials Science Forum, 0, 695, 541-544.	0.3	0
158	B11-O-06Depth-Resolution Imaging of Crystalline Nano Clusters Using Aberration-Corrected TEM. Microscopy (Oxford, England), 2015, 64, i13.1-i13.	1.5	0
159	Metallic Glasses. SpringerBriefs in the Mathematics of Materials, 2016, , 9-14.	0.3	0
160	2pA_SS3-7Direct observation and modeling of local atomic structures of amorphous materials. Microscopy (Oxford, England), 2018, 67, i22-i22.	1.5	0
161	Amorphous Structure Analysis of Si Anode for Li Ion Battery. Microscopy and Microanalysis, 2018, 24, 1526-1527.	0.4	0
162	The Characterization of the Oxide Film Formed on Brightly Annealed Al-Added 18ï¼…Cr Steel. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2021, , .	0.4	0

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163	Observation of Local Atomic Structure in Pd-Ni-P Bulk Metallic Glass using Cs-corrected TEM. Materia Japan, 2006, 45, 848-848.	0.1	0
164	Surface and Interface Structures and Magnetic Properties of Ni and Ni75Fe25 Thin Films on Polyethylene Naphthalate Organic Substrates. Journal of the Vacuum Society of Japan, 2011, 54, 203-206.	0.3	0
165	Understanding Diffraction from Disordered Materials and the Extraction of Topology Hidden in the Pairwise Correlations by Persistent Homology. Nihon Kessho Gakkaishi, 2020, 62, 43-50.	0.0	0
166	Boson Peak Investigation of Unusually Disproportionated Amorphous Silicon Monoxide via Terahertz Spectroscopy. , 2020, , .		0