Takeshi Fujita

List of Publications by Year
in descending order

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252 papers	31,098 citations	7568 77 h-index	4432 172 g-index
263 all docs	263 docs citations	263 times ranked	34080 citing authors

#	Article	IF	Citations
1	Photoluminescence from Chemically Exfoliated MoS₂. Nano Letters, 2011, 11, 5111-5116.	9.1	3,402
2	Enhanced catalytic activity in strained chemically exfoliated WS2 nanosheets for hydrogen evolution. Nature Materials, 2013, 12, 850-855.	27.5	2,326
3	Conducting MoS₂ Nanosheets as Catalysts for Hydrogen Evolution Reaction. Nano Letters, 2013, 13, 6222-6227.	9.1	1,948
4	Nanoporous metal/oxide hybrid electrodes for electrochemical supercapacitors. Nature Nanotechnology, 2011, 6, 232-236.	31.5	1,914
5	Coherent Atomic and Electronic Heterostructures of Single-Layer MoS₂. ACS Nano, 2012, 6, 7311-7317.	14.6	806
6	Atomic origins of the high catalytic activity of nanoporous gold. Nature Materials, 2012, 11, 775-780.	27.5	803
7	Multifunctional Porous Graphene for Highâ€Efficiency Steam Generation by Heat Localization. Advanced Materials, 2015, 27, 4302-4307.	21.0	769
8	High Catalytic Activity of Nitrogen and Sulfur Coâ€Doped Nanoporous Graphene in the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2015, 54, 2131-2136.	13.8	760
9	Oxygen reduction in nanoporous metalâ€“ionic liquid composite electrocatalysts. Nature Materials, 2010, 9, 904-907.	27.5	638
10	Covalent functionalization of monolayered transition metal dichalcogenides by phase engineering. Nature Chemistry, 2015, 7, 45-49.	13.6	637
11	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
12	Tunable Photoluminescence from Graphene Oxide. Angewandte Chemie - International Edition, 2012, 51, 6662-6666.	13.8	584
13	Versatile nanoporous bimetallic phosphides towards electrochemical water splitting. Energy and Environmental Science, 2016, 9, 2257-2261.	30.8	535
14	Direct observation of local atomic order in a metallic glass. Nature Materials, 2011, 10, 28-33.	27.5	483
15	Geometric Frustration of Icosahedron in Metallic Glasses. Science, 2013, 341, 376-379.	12.6	423
16	Highly optimized embedded-atom-method potentials for fourteen fcc metals. Physical Review B, 2011, 83, .	3.2	422
17	Nanoporous Copper with Tunable Nanoporosity for SERS Applications. Advanced Functional Materials, 2009, 19, 1221-1226.	14.9	336
18	Surface enhanced Raman scattering of nanoporous gold: Smaller pore sizes stronger enhancements. Applied Physics Letters, 2007, 90, 153120.	3.3	333

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19	Atomic structure of nanoclusters in oxide-dispersion-strengthened steels. Nature Materials, 2011, 10, 922-926.	27.5	306
20	Monolayer MoS₂ Films Supported by 3D Nanoporous Metals for Highâ€Efficiency Electrocatalytic Hydrogen Production. Advanced Materials, 2014, 26, 8023-8028.	21.0	299
21	Achieving High Strength and High Ductility in Precipitation-Hardened Alloys. Advanced Materials, 2005, 17, 1599-1602.	21.0	273
22	Bicontinuous Nanoporous Nâ€doped Graphene for the Oxygen Reduction Reaction. Advanced Materials, 2014, 26, 4145-4150.	21.0	261
23	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
24	Enhanced Supercapacitor Performance of MnO₂ by Atomic Doping. Angewandte Chemie - International Edition, 2013, 52, 1664-1667.	13.8	251
25	Three-dimensional morphology of nanoporous gold. Applied Physics Letters, 2008, 92, .	3.3	235
26	Direct Observation of High-Temperature Superconductivity in One-Unit-Cell FeSe Films. Chinese Physics Letters, 2014, 31, 017401.	3.3	222
27	Highâ€Quality Threeâ€Dimensional Nanoporous Graphene. Angewandte Chemie - International Edition, 2014, 53, 4822-4826.	13.8	215
28	Nanoporous Gold Catalyst for Highly Selective Semihydrogenation of Alkynes: Remarkable Effect of Amine Additives. Journal of the American Chemical Society, 2012, 134, 17536-17542.	13.7	201
29	Li Storage in 3D Nanoporous Auâ€Supported Nanocrystalline Tin. Advanced Materials, 2011, 23, 2443-2447.	21.0	198
30	3D Nanoporous Nitrogenâ€Doped Graphene with Encapsulated RuO₂ Nanoparticles for Liâ€“O₂ Batteries. Advanced Materials, 2015, 27, 6137-6143.	21.0	195
31	Photocatalytic uphill conversion of natural gas beyond the limitation of thermal reaction systems. Nature Catalysis, 2020, 3, 148-153.	34.4	194
32	Nanoscale phase separation in a fcc-based CoCrCuFeNiAl0.5 high-entropy alloy. Acta Materialia, 2015, 84, 145-152.	7.9	193
33	Atomic structure of amorphous shear bands in boron carbide. Nature Communications, 2013, 4, 2483.	12.8	190
34	Atomic-Scale Heterogeneity of a Multicomponent Bulk Metallic Glass with Excellent Glass Forming Ability. Physical Review Letters, 2009, 103, 075502.	7.8	189
35	Toward the Theoretical Capacitance of RuO₂ Reinforced by Highly Conductive Nanoporous Gold. Advanced Energy Materials, 2013, 3, 851-856.	19.5	184
36	Chemically exfoliated ReS₂nanosheets. Nanoscale, 2014, 6, 12458-12462.	5.6	160

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37	A Threeâ€Dimensional Goldâ€Decorated Nanoporous Copper Coreâ€“Shell Composite for Electrocatalysis and Nonenzymatic Biosensing. Advanced Functional Materials, 2010, 20, 2279-2285.	14.9	159
38	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
39	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
40	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
41	Selfâ€Grown Oxyâ€Hydroxide@ Nanoporous Metal Electrode for Highâ€Performance Supercapacitors. Advanced Materials, 2014, 26, 269-272.	21.0	152
42	Structural origins of Johari-Goldstein relaxation in a metallic glass. Nature Communications, 2014, 5, 3238.	12.8	144
43	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
44	Field Emission from Atomically Thin Edges of Reduced Graphene Oxide. ACS Nano, 2011, 5, 4945-4952.	14.6	139
45	Atomic-scale disproportionation in amorphous silicon monoxide. Nature Communications, 2016, 7, 11591.	12.8	138
46	Lithium intercalation into bilayer graphene. Nature Communications, 2019, 10, 275.	12.8	136
47	Highâ€Resolution Electrochemical Mapping of the Hydrogen Evolution Reaction on Transitionâ€Metal Dichalcogenide Nanosheets. Angewandte Chemie - International Edition, 2020, 59, 3601-3608.	13.8	136
48	Effect of Chemical Doping on Cathodic Performance of Bicontinuous Nanoporous Graphene for Liâ€O₂ Batteries. Advanced Energy Materials, 2016, 6, 1501870.	19.5	132
49	Three-dimensional bicontinuous nanoporous materials by vapor phase dealloying. Nature Communications, 2018, 9, 276.	12.8	123
50	Enhanced mechanical properties of nanocrystalline boron carbide by nanoporosity and interface phases. Nature Communications, 2012, 3, 1052.	12.8	119
51	A Coreâ€Shell Nanoporous Ptâ€Cu Catalyst with Tunable Composition and High Catalytic Activity. Advanced Functional Materials, 2013, 23, 4156-4162.	14.9	118
52	Aligned Nanoporous Ptâ€“Cu Bimetallic Microwires with High Catalytic Activity toward Methanol Electrooxidation. ACS Catalysis, 2015, 5, 3779-3785.	11.2	117
53	Correlation between Local Structure Order and Spatial Heterogeneity in a Metallic Glass. Physical Review Letters, 2017, 119, 215501.	7.8	116
54	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:m mathvariant="normal">P</mml:mi><mml:mn>20</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2012, 108, 175501.	7.8	115

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55	Regulating Infrared Photoresponses in Reduced Graphene Oxide Phototransistors by Defect and Atomic Structure Control. ACS Nano, 2013, 7, 6310-6320.	14.6	112
56	Correlation between Chemical Dopants and Topological Defects in Catalytically Active Nanoporous Graphene. Advanced Materials, 2016, 28, 10644-10651.	21.0	110
57	Atomic Observation of Catalysis-Induced Nanopore Coarsening of Nanoporous Gold. Nano Letters, 2014, 14, 1172-1177.	9.1	109
58	Formation of an intermediate compound with a B12H12cluster: experimental and theoretical studies on magnesium borohydride Mg(BH4)2. Nanotechnology, 2009, 20, 204013.	2.6	104
59	Chemical Vapor Deposition of Monolayer Mo1â^'xWxS2 Crystals with Tunable Band Gaps. Scientific Reports, 2016, 6, 21536.	3.3	101
60	Three-dimensional bicontinuous nanoporous Au/polyaniline hybrid films for high-performance electrochemical supercapacitors. Journal of Power Sources, 2012, 197, 325-329.	7.8	100
61	Unsupported Nanoporous Gold Catalyst for Highly Selective Hydrogenation of Quinolines. Organic Letters, 2013, 15, 1484-1487.	4.6	99
62	Tailored Catalytic Nanoframes from Metalâ€“Organic Frameworks by Anisotropic Surface Modification and Etching for the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2021, 60, 4747-4755.	13.8	92
63	Nanoporous gold for enzyme-free electrochemical glucose sensors. Scripta Materialia, 2011, 65, 17-20.	5.2	90
64	Structure and mechanical properties of boron-rich boron carbides. Journal of the European Ceramic Society, 2017, 37, 4514-4523.	5.7	89
65	Nanoporous ultra-high-entropy alloys containing fourteen elements for water splitting electrocatalysis. Chemical Science, 2021, 12, 11306-11315.	7.4	88
66	Nanoporous metal based flexible asymmetric pseudocapacitors. Journal of Materials Chemistry A, 2014, 2, 10910-10916.	10.3	87
67	Synergistic alloying effect on microstructural evolution and mechanical properties of Cu precipitation-strengthened ferritic alloys. Acta Materialia, 2013, 61, 7726-7740.	7.9	85
68	Visualizing Underâ€Coordinated Surface Atoms on 3D Nanoporous Gold Catalysts. Advanced Materials, 2016, 28, 1753-1759.	21.0	85
69	Grain refinement and superplastic flow in an aluminum alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 408, 141-146.	5.6	84
70	High-energy-density nonaqueous MnO2@nanoporous gold based supercapacitors. Journal of Materials Chemistry A, 2013, 1, 9202.	10.3	84
71	Characteristic Length Scale of Bicontinuous Nanoporous Structure by Fast Fourier Transform. Japanese Journal of Applied Physics, 2008, 47, 1161.	1.5	80
72	Using grain boundary engineering to evaluate the diffusion characteristics in ultrafine-grained Alâ€Mg and Alâ€Zn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 371, 241-250.	5.6	79

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73	Unusually Small Electrical Resistance of Three-Dimensional Nanoporous Gold in External Magnetic Fields. Physical Review Letters, 2008, 101, 166601.	7.8	79
74	Characteristic Length and Temperature Dependence of Surface Enhanced Raman Scattering of Nanoporous Gold. Journal of Physical Chemistry C, 2009, 113, 10956-10961.	3.1	79
75	A nanoscale co-precipitation approach for property enhancement of Fe-base alloys. Scientific Reports, 2013, 3, 1327.	3.3	79
76	Ultra-Large Room-Temperature Compressive Plasticity of a Nanocrystalline Metal. Nano Letters, 2007, 7, 2108-2111.	9.1	78
77	Correlation between structural relaxation and shear transformation zone volume of a bulk metallic glass. Applied Physics Letters, 2009, 95, .	3.3	77
78	Micromechanisms of serrated flow in a Ni50Pd30P20 bulk metallic glass with a large compression plasticity. Acta Materialia, 2008, 56, 2834-2842.	7.9	75
79	Geometric effect on surface enhanced Raman scattering of nanoporous gold: Improving Raman scattering by tailoring ligament and nanopore ratios. Applied Physics Letters, 2009, 94, .	3.3	75
80	Coupling between chemical and dynamic heterogeneities in a multicomponent bulk metallic glass. Physical Review B, 2010, 81, .	3.2	74
81	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
82	Characteristics of diffusion in Al-Mg alloys with ultrafine grain sizes. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2002, 82, 2249-2262.	0.6	73
83	Electroplated Thick Manganese Oxide Films with Ultrahigh Capacitance. Advanced Energy Materials, 2013, 3, 857-863.	19.5	70
84	Large Enhancement of Quantum Dot Fluorescence by Highly Scalable Nanoporous Gold. Advanced Materials, 2014, 26, 1289-1294.	21.0	69
85	Engineering the internal surfaces of three-dimensional nanoporous catalysts by surfactant-modified dealloying. Nature Communications, 2017, 8, 1066.	12.8	69
86	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
87	Onâ€Chip Microâ€Pseudocapacitors for Ultrahigh Energy and Power Delivery. Advanced Science, 2015, 2, 1500067.	11.2	66
88	Characterization of oxide nanoprecipitates in an oxide dispersion strengthened 14YWT steel using aberration-corrected STEM. Acta Materialia, 2012, 60, 5686-5696.	7.9	65
89	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
90	Heavily Doped and Highly Conductive Hierarchical Nanoporous Graphene for Electrochemical Hydrogen Production. Angewandte Chemie - International Edition, 2018, 57, 13302-13307.	13.8	64

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91	Operando Observations of SEI Film Evolution by Massâ€Sensitive Scanning Transmission Electron Microscopy. Advanced Energy Materials, 2019, 9, 1902675.	19.5	64
92	Photoinduced hydrogen release from hydrogen boride sheets. Nature Communications, 2019, 10, 4880.	12.8	63
93	Synthesizing 1Tâ€“1H Two-Phase Mo_{1â€“x}W_xS₂ Monolayers by Chemical Vapor Deposition. ACS Nano, 2018, 12, 1571-1579.	14.6	62
94	Conversion of methane with carbon dioxide into C2 hydrocarbons over metal oxides. Applied Catalysis A: General, 1995, 126, 245-255.	4.3	60
95	Biofunctionalized nanoporous gold for electrochemical biosensors. Electrochimica Acta, 2012, 67, 1-5.	5.2	60
96	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
97	Reduced Graphene Oxide Thin Films as Ultrabarriers for Organic Electronics. Advanced Energy Materials, 2014, 4, 1300986.	19.5	59
98	A nanoporous metal recuperated MnO₂anode for lithium ion batteries. Nanoscale, 2015, 7, 15111-15116.	5.6	58
99	Influences of grain size and grain boundary segregation on mechanical behavior of nanocrystalline Ni. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 2297-2304.	5.6	55
100	Tuning Surface Structure of 3D Nanoporous Gold by Surfactantâ€Free Electrochemical Potential Cycling. Advanced Materials, 2017, 29, 1703601.	21.0	54
101	Bilayered nanoporous graphene/molybdenum oxide for high rate lithium ion batteries. Nano Energy, 2018, 45, 273-279.	16.0	54
102	Formation Mechanism of Boron-Based Nanosheet through the Reaction of MgB₂ with Water. Journal of Physical Chemistry C, 2017, 121, 10587-10593.	3.1	53
103	Size dependence of molecular fluorescence enhancement of nanoporous gold. Applied Physics Letters, 2010, 96, 073701.	3.3	52
104	Deposition of multicomponent metallic glass films by single-target magnetron sputtering. Intermetallics, 2012, 21, 105-114.	3.9	52
105	Ultrahigh capacitance of nanoporous metal enhanced conductive polymer pseudocapacitors. Journal of Power Sources, 2013, 225, 304-310.	7.8	52
106	Hierarchical nanoporosity enhanced reversible capacity of bicontinuous nanoporous metal based Li-O2 battery. Scientific Reports, 2016, 6, 33466.	3.3	52
107	Extraordinary Supercapacitor Performance of a Multicomponent and Mixedâ€Valence Oxyhydroxide. Angewandte Chemie - International Edition, 2015, 54, 8100-8104.	13.8	50
108	Hierarchical nanoporous metals as a path toward the ultimate three-dimensional functionality. Science and Technology of Advanced Materials, 2017, 18, 724-740.	6.1	50

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109	3D Bicontinuous Nanoporous Reduced Graphene Oxide for Highly Sensitive Photodetectors. Advanced Functional Materials, 2016, 26, 1271-1277.	14.9	48
110	Nanoindentation characterization of deformation and failure of aluminum oxynitride. Acta Materialia, 2011, 59, 1671-1679.	7.9	47
111	Shear amorphization of boron suboxide. Scripta Materialia, 2014, 76, 9-12.	5.2	47
112	Electric Properties of Dirac Fermions Captured into 3D Nanoporous Graphene Networks. Advanced Materials, 2016, 28, 10304-10310.	21.0	47
113	Operando observations of RuO2 catalyzed Li2O2 formation and decomposition in a Li-O2 micro-battery. Nano Energy, 2018, 47, 427-433.	16.0	47
114	Visible-light-driven dry reforming of methane using a semiconductor-supported catalyst. Chemical Communications, 2020, 56, 4611-4614.	4.1	46
115	Pressure-induced depolarization and resonance in Raman scattering of single-crystalline boron carbide. Physical Review B, 2010, 81, .	3.2	43
116	Promoted Câ€“C bond cleavage over intermetallic TaPt₃ catalyst toward low-temperature energy extraction from ethanol. Energy and Environmental Science, 2015, 8, 1685-1689.	30.8	43
117	Low-temperature solution-processable Ni(OH)₂ ultrathin nanosheet/N-graphene nanohybrids for high-performance supercapacitor electrodes. Nanoscale, 2014, 6, 5960-5966.	5.6	41
118	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
119	Synthesis and Optical Properties of Three-Dimensional Porous Coreâˆ'Shell Nanoarchitectures. Langmuir, 2008, 24, 4426-4429.	3.5	40
120	Thermoelectric power factor enhancement based on carrier transport physics in ultimately phonon-controlled Si nanostructures. Materials Today Energy, 2019, 13, 56-63.	4.7	39
121	Time-resolved atomic-scale observations of deformation and fracture of nanoporous gold under tension. Acta Materialia, 2019, 165, 99-108.	7.9	39
122	Sample size induced brittle-to-ductile transition of single-crystal aluminum nitride. Acta Materialia, 2015, 88, 252-259.	7.9	38
123	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
124	The aging characteristics of an Alâ€“Ag alloy processed by equal-channel angular pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 437, 240-247.	5.6	37
125	Surface-Enhanced Raman Scattering of Silver@Nanoporous Copper Coreâˆ'Shell Composites Synthesized by an In Situ Sacrificial Template Approach. Journal of Physical Chemistry C, 2009, 113, 14195-14199.	3.1	36
126	Large-scale growth of sharp gold nano-cones for single-molecule SERS detection. RSC Advances, 2016, 6, 2882-2887.	3.6	36

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127	Stimulation of Electro-oxidation Catalysis by Bulk-Structural Transformation in Intermetallic ZrPt₃ Nanoparticles. ACS Applied Materials & Interfaces, 2014, 6, 16124-16130.	8.0	35
128	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
129	Distortion of Local Atomic Structures in Amorphous Ge-Sb-Te Phase Change Materials. Physical Review Letters, 2018, 120, 205502.	7.8	35
130	Asymmetric twins in rhombohedral boron carbide. Applied Physics Letters, 2014, 104, 021907.	3.3	32
131	Two-Dimensional Hallmark of Highly Interconnected Three-Dimensional Nanoporous Graphene. ACS Omega, 2017, 2, 3691-3697.	3.5	32
132	NbPt₃ Intermetallic Nanoparticles: Highly Stable and COâ€Tolerant Electrocatalyst for Fuel Oxidation. ChemElectroChem, 2014, 1, 728-732.	3.4	31
133	The synergistic effect of nanoporous AuPd alloy catalysts on highly chemoselective 1,4-hydrosilylation of conjugated cyclic enones. Chemical Communications, 2014, 50, 3344.	4.1	31
134	Hierarchical Nanoporous Copper Architectures via 3D Printing Technique for Highly Efficient Catalysts. Small, 2019, 15, e1805432.	10.0	31
135	Low temperature uniform plastic deformation of metallic glasses during elastic iteration. Acta Materialia, 2012, 60, 3741-3747.	7.9	30
136	Tailored nanoporous gold for ultrahigh fluorescence enhancement. Physical Chemistry Chemical Physics, 2011, 13, 3795.	2.8	29
137	3D bicontinuous nanoporous plasmonic heterostructure for enhanced hydrogen evolution reaction under visible light. Nano Energy, 2019, 58, 552-559.	16.0	29
138	Electrochemical synthesis of palladium nanostructures with controllable morphology. Nanotechnology, 2010, 21, 085601.	2.6	27
139	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
140	Threeâ€Ðimensional Hierarchical Nanoporosity for Ultrahigh Power and Excellent Cyclability of Electrochemical Pseudocapacitors. Advanced Energy Materials, 2014, 4, 1301809.	19.5	27
141	Three-Dimensional Nanoporous Heterojunction of Monolayer MoS₂@rGO for Photoenhanced Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2018, 1, 2183-2191.	5.1	27
142	Topologically immobilized catalysis centre for long-term stable carbon dioxide reforming of methane. Chemical Science, 2019, 10, 3701-3705.	7.4	27
143	Boron effects on the ductility of a nano-cluster-strengthened ferritic steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 855-859.	5.6	26
144	Nanoporous Metal Papers for Scalable Hierarchical Electrode. Advanced Science, 2015, 2, 1500086.	11.2	26

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145	Interface structure and properties of a brass-reinforced Ni59Zr20Ti16Si2Sn3 bulk metallic glass composite. Acta Materialia, 2008, 56, 3077-3087.	7.9	25
146	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
147	Atomic and electronic structure of Pd<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>40</mml:mn></mml:msub></mml:math>Ni<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>40</mml:mn></mml:msub></mml:math>P<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:	3.2	24
148	Scanning distortion correction in STEM images. Ultramicroscopy, 2018, 184, 274-283.	1.9	23
149	Doping Effect on High-Pressure Structural Stability of ZnO Nanowires. Journal of Physical Chemistry C, 2009, 113, 1164-1167.	3.1	22
150	Nano-twinned structure and photocatalytic properties under visible light for undoped nano-titania synthesised by hydrothermal reaction in waterâ€“ethanol mixture. Journal of Supercritical Fluids, 2011, 58, 136-141.	3.2	22
151	Thermal properties of nanoporous gold. Physical Review B, 2012, 85, .	3.2	22
152	Environment-Sensitive Thermal Coarsening of Nanoporous Gold. Materials Transactions, 2015, 56, 468-472.	1.2	22
153	Non-aqueous nanoporous gold based supercapacitors with high specific energy. Scripta Materialia, 2016, 116, 76-81.	5.2	22
154	Electron holography of single-crystal iron nanorods encapsulated in carbon nanotubes. Journal of Applied Physics, 2007, 101, 014323.	2.5	21
155	High-pressure Raman spectroscopy of carbon onions and nanocapsules. Applied Physics Letters, 2009, 95, .	3.3	21
156	Unveiling Three-Dimensional Stacking Sequences of 1T Phase MoS₂ Monolayers by Electron Diffraction. ACS Nano, 2016, 10, 10308-10316.	14.6	21
157	Crystalline boron monosulfide nanosheets with tunable bandgaps. Journal of Materials Chemistry A, 2021, 9, 24631-24640.	10.3	21
158	Doping and temperature dependence of Raman scattering from<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>NdFeAsO</mml:mtext></mml:mrow><mml:mrow><mml:mn>1</mml:r xmlns:mml="http://www.w3.org/1998/Math/MathML"		

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163	Crystallographic orientation contrast associated with Ga+ ion channelling for Fe and Cu in focused ion beam method. Journal of Electron Microscopy, 2004, 53, 571-576.	0.9	19
164	Cobalt nanorods fully encapsulated in carbon nanotube and magnetization measurements by off-axis electron holography. Applied Physics Letters, 2006, 88, 243118.	3.3	19
165	Plastic deformation energy of bulk metallic glasses. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 148, 101-104.	3.5	19
166	Photo-assisted Dry Reforming of Methane over Strontium Titanate. Chemistry Letters, 2018, 47, 935-937.	1.3	19
167	Synergistic photothermal and photochemical partial oxidation of methane over noble metals incorporated in mesoporous silica. Chemical Communications, 2019, 55, 13765-13768.	4.1	19
168	Active faceted nanoporous ruthenium for electrocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2020, 8, 19788-19792.	10.3	19
169	Electrical conductivity of a bulk metallic glass composite. Applied Physics Letters, 2007, 91, .	3.3	18
170	Earthâ€Abundant and Durable Nanoporous Catalyst for Exhaustâ€Gas Conversion. Advanced Functional Materials, 2016, 26, 1609-1616.	14.9	18
171	Nanophase-separated Ni₃Nb as an automobile exhaust catalyst. Chemical Science, 2017, 8, 3374-3378.	7.4	18
172	Tailored Catalytic Nanoframes from Metalâ€“Organic Frameworks by Anisotropic Surface Modification and Etching for the Hydrogen Evolution Reaction. Angewandte Chemie, 2021, 133, 4797-4805.	2.0	18
173	Metal Carbide as A Lightâ€Harvesting and Anticoking Catalysis Support for Dry Reforming of Methane. Global Challenges, 2020, 4, 1900067.	3.6	17
174	Acid Assisted Synthesis of HB Sheets through Exfoliation of MgB₂ Bulk in Organic Media. Chemistry Letters, 2020, 49, 1194-1196.	1.3	17
175	Reconstruction technique for off-axis electron holography using coarse fringes. Ultramicroscopy, 2006, 106, 486-491.	1.9	16
176	Extraordinary Supercapacitor Performance of a Multicomponent and Mixedâ€Valence Oxyhydroxide. Angewandte Chemie, 2015, 127, 8218-8222.	2.0	16
177	Temperature-dependent compression behavior of an Al0.5CoCrCuFeNi high-entropy alloy. Materialia, 2019, 5, 100243.	2.7	16
178	Improving glass forming ability of off-eutectic metallic glass formers by manipulating primary crystallization reactions. Acta Materialia, 2020, 200, 710-719.	7.9	16
179	Hydrogen Boride Sheets as Reductants and the Formation of Nanocomposites with Metal Nanoparticles. Chemistry Letters, 2020, 49, 789-793.	1.3	16
180	Visible-light-driven photocatalysis via reductant-to-band charge transfer in Cr(III) nanocluster-loaded SrTiO3 system. Applied Catalysis B: Environmental, 2020, 270, 118883.	20.2	16

#	Article	IF	Citations
181	Application of equal-channel angular pressing to Cuâ€“Co alloy with ferromagnetic precipitates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 417, 149-157.	5.6	15
182	Encapsluation of Co and Pd multi-metal nanowires inside multiwalled carbon nanotubes by microwave plasma chemical vapor deposition. Diamond and Related Materials, 2007, 16, 1200-1203.	3.9	15
183	Stability limits and transformation pathways ofÎ±-quartz under high pressure. Physical Review B, 2017, 95, .	3.2	15
184	Thermoelectric Properties of Epitaxial Î²-FeSi2 Thin Films on Si(111) and Approach for Their Enhancement. Journal of Electronic Materials, 2017, 46, 3235-3241.	2.2	15
185	Photocatalytic Partial Oxidation of Methane on Palladiumâ€Loaded Strontium Tantalate. Solar Rrl, 2019, 3, 1900076.	5.8	15
186	Enhanced Electrochemical Performances of Nanoporous Gold by Surface Modification of Titanium Dioxide Nanoparticles. Materials Transactions, 2010, 51, 1566-1569.	1.2	14
187	In-Situ TEM Study of a Nanoporous Niâ€“Co Catalyst Used for the Dry Reforming of Methane. Metals, 2017, 7, 406.	2.3	14
188	CO2 oxidative coupling of methane using an earth-abundant CaO-based catalyst. Scientific Reports, 2019, 9, 15454.	3.3	14
189	Methodology of Thermoelectric Power Factor Enhancement by Nanoscale Thermal Management in Bulk SiGe Composites. ACS Applied Energy Materials, 2020, 3, 1235-1241.	5.1	14
190	On the effect of impurities in metallic glass formation. Applied Physics Letters, 2010, 96, .	3.3	13
191	Valenceâ€band electronic structure evolution of graphene oxide upon thermal annealing for optoelectronics. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2380-2386.	1.8	13
192	An ultrahigh volumetric capacitance of squeezable three-dimensional bicontinuous nanoporous graphene. Nanoscale, 2016, 8, 18551-18557.	5.6	13
193	Graphene-coated nanoporous nickel towards a metal-catalyzed oxygen evolution reaction. Nanoscale, 2021, 13, 10916-10924.	5.6	13
194	Microstructural characterization of dispersion-strengthened Cuâ€“Tiâ€“Al alloys obtained by reaction milling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 454-455, 183-193.	5.6	12
195	Direct synthesis of fullerene-intercalated porous carbon nanofibers by chemical vapor deposition. Carbon, 2012, 50, 5162-5166.	10.3	12
196	Anomalous Nernst effect in Cox(MgO)1-x granular thin films. Applied Physics Letters, 2020, 116, .	3.3	12
197	Encapsulation of segmented Pdâ€“Co nanocomposites into vertically aligned carbon nanotubes by plasma-hydrogen-induced demixing. Applied Physics Letters, 2007, 90, 133116.	3.3	11
198	Addition of Fe2O3 as oxygen carrier for preparation of nanometer-sized oxide strengthened steels. Journal of Nuclear Materials, 2010, 405, 199-202.	2.7	11

#	Article	IF	Citations
199	Highâ€Resolution Electrochemical Mapping of the Hydrogen Evolution Reaction on Transitionâ€Metal Dichalcogenide Nanosheets. Angewandte Chemie, 2020, 132, 3629-3636.	2.0	11
200	Selected area nanodiffraction fluctuation electron microscopy for studying structural order in amorphous solids. Scripta Materialia, 2008, 58, 303-306.	5.2	10
201	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
202	Heavily Doped and Highly Conductive Hierarchical Nanoporous Graphene for Electrochemical Hydrogen Production. Angewandte Chemie, 2018, 130, 13486-13491.	2.0	10
203	Intermetallic Pd₃X (X = Ti and Zr) nanocrystals for electro-oxidation of alcohols and formic acid in alkaline and acidic media. Science and Technology of Advanced Materials, 2020, 21, 573-583.	6.1	10
204	Microstructural Control of a Precipitate-Hardenable Al-Ag Alloy Using Severe Plastic Deformation. Materials Science Forum, 2003, 426-432, 2637-2642.	0.3	9
205	Nanoporous Nickel Composite Catalyst for the Dry Reforming of Methane. ACS Omega, 2018, 3, 16651-16657.	3.5	9
206	Charge partitioning by intertwined metal-oxide nano-architectural networks for the photocatalytic dry reforming of methane. Chem Catalysis, 2022, 2, 321-329.	6.1	9
207	Construction of Ti-Al-Cr Phase Diagram Using Quantitative X-ray Microanalysis in Analytical Electron Microscope. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2001, 65, 382-388.	0.4	8
208	TEM Sample Preparation for Microcompressed Nanocrystalline Ni. Materials Transactions, 2008, 49, 2091-2095.	1.2	8
209	Correlation between surface whisker growth and interfacial precipitation in aluminum thin films on silicon substrates. Journal of Materials Science, 2010, 45, 3367-3374.	3.7	8
210	Effect of doping and counterdoping on high-pressure phase transitions of silicon. Applied Physics Letters, 2010, 96, 251910.	3.3	8
211	Deformation-induced change in the structure of metallic glasses during multistep indentation. Physical Review B, 2010, 81, .	3.2	8
212	Determination of absolute thickness and mean free path of thin foil specimen by Â-factor method. Journal of Electron Microscopy, 2004, 53, 137-142.	0.9	7
213	Local atomic structure of Ni60Pd20P20 and Ni60Pd20P17B3 bulk metallic glasses and the origin of glass forming ability. Journal of Alloys and Compounds, 2010, 496, 135-139.	5.5	7
214	Distorted icosahedral Ni5Nb3Zr5 clusters in the as-quenched and hydrogenated amorphous (Ni0.6Nb0.4)0.65Zr0.35 alloys. Journal of Non-Crystalline Solids, 2011, 357, 3357-3360.	3.1	7
215	Direct structural evidence for dynamic heterogeneity in supercooled liquid bulk metallic glass. Scripta Materialia, 2012, 66, 927-930.	5.2	7
216	Gasâ€Phase Photoelectrocatalysis Mediated by Oxygen Ions for Uphill Conversion of Greenhouse Gases. ChemPhotoChem, 2021, 5, 275-281.	3.0	7

#	Article	IF	Citations
217	Active site separation of photocatalytic steam reforming of methane using a gas-phase photoelectrochemical system. Chemical Communications, 2021, 57, 8007-8010.	4.1	7
218	Phase recovery for electron holography using Gerchbergâ€“Papoulis iterative algorithm. Ultramicroscopy, 2005, 102, 279-286.	1.9	6
219	Progress in environmental high-voltage transmission electron microscopy for nanomaterials. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190602.	3.4	6
220	Diffusion in Fine-Grained Al Alloys Having Low and High Angle Grain Boundaries. Materials Science Forum, 2002, 396-402, 1061-1066.	0.3	5
221	Demixing of Solid-Soluted Co-Pd Binary Alloy Induced by Microwave Plasma Hydrogen Irradiation Technique. Japanese Journal of Applied Physics, 2006, 45, L860-L863.	1.5	5
222	Thermoelectric properties of epitaxial Î²-FeSi₂thin films grown on Si(111) substrates with various film qualities. Japanese Journal of Applied Physics, 2017, 56, 05DC04.	1.5	5
223	Synthesis of Metastable Au-Fe Alloy Using Ordered Nanoporous Silica as a Hard Template. Metals, 2018, 8, 17.	2.3	5
224	Bismuth/Porous Graphene Heterostructures for Ultrasensitive Detection of Cd (II). Materials, 2020, 13, 5102.	2.9	5
225	Terahertz and infrared response assisted by heat localization in nanoporous graphene. Carbon, 2021, 173, 403-409.	10.3	5
226	Determination of Technetium by Laser Induced Photoacoustic Spectroscopy Coupled with a Wave-Length Shifter Method. Radiochimica Acta, 1993, 63, 45-48.	1.2	4
227	Inelastic electron-tunneling spectroscopy of nanoporous gold films. Physical Review B, 2014, 89, .	3.2	4
228	Growth and Nanoscale Magnetic Properties of Ferromagnetic Nanowire Encapsulated Inside Carbon Nanotubes. IEEE Transactions on Magnetics, 2009, 45, 2488-2491.	2.1	3
229	Structural Features of the Extraordinary Low Glass Transition Temperature for Au₆₅Cu₁₈Si₁₇ Bulk Metallic Glass. Materials Transactions, 2013, 54, 1351-1355.	1.2	3
230	Mixing Time of Molecules Inside of Nanoporous Gold. SIAM Journal on Applied Mathematics, 2014, 74, 1298-1314.	1.8	3
231	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
232	Response to the commentary by Robert Tournier and Michael Ojovan on our publication entitled â€œImproving glass forming ability of off-eutectic metallic glass formers by manipulating primary crystallization reactionsâ€• Scripta Materialia, 2021, 205, 114035.	5.2	3
233	Advanced form of Â-factor method in analytical electron microscopy. Journal of Electron Microscopy, 1999, 48, 561-568.	0.9	2
234	Microstructures after Processing by Aging and ECAP for Al-Mg₂Si Alloys Containing Excess Si or Mg. Materials Science Forum, 2005, 475-479, 4047-4050.	0.3	2

#	Article	IF	Citations
235	Microstructure and local magnetic induction of segmented and alloyed Pd/Co nanocomposites encapsulated inside vertically aligned multiwalled carbon nanotubes. Diamond and Related Materials, 2008, 17, 1525-1528.	3.9	2
236	Structural Study of Zr-Cu-Ag Bulk Metallic Glasses Using the Anomalous X-ray Scattering Method. Journal of Physics: Conference Series, 2014, 502, 012027.	0.4	2
237	Visualization of topological landscape in shear-flow dynamics of amorphous solids. Europhysics Letters, 2015, 110, 38002.	2.0	2
238	Intertwined Nickel and Magnesium Oxide Rival Precious Metals for Catalytic Reforming of Greenhouse Gases. Advanced Sustainable Systems, 2020, 4, 2000041.	5.3	2
239	Fast attenuation of high-frequency acoustic waves in bicontinuous nanoporous gold. Applied Physics Letters, 2021, 119, .	3.3	2
240	Deformation of Second Phase Particles in Al Alloy Using Severe Plastic Deformation Process. Materia Japan, 2003, 42, 863-863.	0.1	2
241	Quantitative electron holographic tomography for a spherical object. Microscopy (Oxford, England), 2009, 58, 301-304.	1.5	1
242	Diversity of Nanoporous Metals. Metals, 2019, 9, 996.	2.3	1
243	NiYAl-Derived Nanoporous Catalysts for Dry Reforming of Methane. Materials, 2020, 13, 2044.	2.9	1
244	Distorted planar defects stabilize tetragonal boron. Scripta Materialia, 2021, 194, 113685.	5.2	1
245	Diffusion Analysis across Grain Boundary in Al-3.7 mass%Cu Alloy Using Analytical Electron Microscopy. Materials Transactions, 2003, 44, 1336-1342.	1.2	0
246	é›»å¢·šãƒ›ãƒã‚°ãƒ©ãƒ•ã‚£ãƒ¼ã«ãŠã‘ã‚‹è§£æžæ‰‹æ³•ã®å®Ÿéš›. Materia Japan, 2006, 45, 535-539.	0.1	0
247	Microstructural Origin of Superior Compressive Ductility of a Nanocrystalline Metal. Materials Science Forum, 2009, 633-634, 73-84.	0.3	0
248	Formation of various epitaxial nanodots in Si films for thermoelectric materials. Journal of Physics: Conference Series, 2018, 1052, 012135.	0.4	0
249	SIM Observation of Ultrafine-Grained Al Alloy After Superplastic Deformation. Materia Japan, 2000, 39, 984-984.	0.1	0
250	Relationship between Misorientation Angle and Precipitate Free Zones of Warm Rolled 7475 Based Aluminum Alloy Sheet. Materia Japan, 2003, 42, 857-857.	0.1	0
251	Quantitative Electron Tomography of Nanoporous Gold. Materia Japan, 2007, 46, 784-784.	0.1	0
252	Precipitation Behavior in Age-Hardenable Alloys after Severe Plastic Deformation. , 2006, , 129-136.		0