Daisuke Nishio-Hamane

List of Publications by Year
in descending order

99	2,949	25	52
papers	citations	h-index	g-index
		236925	175258

103	103	103	3803
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Large anomalous Nernst effect at room temperature in a chiral antiferromagnet. Nature Physics, 2017, 13, 1085-1090.	16.7	432
2	Giant anomalous Nernst effect and quantum-critical scaling in a ferromagnetic semimetal. Nature Physics, 2018, 14, 1119-1124.	16.7	366
3	Gold nanoparticles stabilized on nanocrystalline magnesium oxide as an active catalyst for reduction of nitroarenes in aqueous medium at room temperature. Green Chemistry, 2012, 14, 3164.	9.0	326
4	Development of a Software Suite on X-ray Diffraction Experiments. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2010, 20, 269-276.	0.0	208
5	Iron-based binary ferromagnets for transverse thermoelectric conversion. Nature, 2020, 581, 53-57.	27.8	162
6	Anomalous transport due to Weyl fermions in the chiral antiferromagnets Mn3X, Xâ€‰=â€‰Sn, Ge. Nature Communications, 2021, 12, 572.	12.8	90
7	Hybrid Amineâ€Functionalized Graphene Oxide as a Robust Bifunctional Catalyst for Atmospheric Pressure Fixation of Carbon Dioxide using Cyclic Carbonates. ChemSusChem, 2016, 9, 644-650.	6.8	75
8	Partitioning of iron between perovskite/postperovskite and ferropericlase in the lower mantle. Journal of Geophysical Research, 2008, 113, .	3.3	73
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.	0.8	60
10	Electrospinning Synthesis of Wire-Structured LiCoO₂ for Electrode Materials of High-Power Li-Ion Batteries. Journal of Physical Chemistry C, 2012, 116, 10774-10780.	3.1	51
11	Spin transition of ferric iron in Al-bearing Mgâ€“perovskite up to 200 GPa and its implication for the lower mantle. Earth and Planetary Science Letters, 2012, 317-318, 407-412.	4.4	47
12	Synthesis of LiNi0.5Mn1.5O4 and 0.5Li2MnO3â€“0.5LiNi1/3Co1/3Mn1/3O2 hollow nanowires by electrospinning. CrystEngComm, 2013, 15, 2592.	2.6	39
13	Effect of FeAlO3 incorporation into MgSiO3 on the bulk modulus of perovskite. Physics of the Earth and Planetary Interiors, 2008, 166, 219-225.	1.9	37
14	Synthesis of oxamate and urea by oxidative single and double carbonylation of amines using immobilized palladium metal-containing ionic liquid@SBA-15. Journal of Molecular Catalysis A, 2015, 400, 170-178.	4.8	37
15	Continuous Hydrothermal Synthesis of Nickel Ferrite Nanoparticles Using a Central Collision-Type Micromixer: Effects of Temperature, Residence Time, Metal Salt Molality, and NaOH Addition on Conversion, Particle Size, and Crystal Phase. Industrial & Engineering Chemistry Research, 2011, 50, 9625-9631.	3.7	36
16	Magnetic properties of Mnâ€“Bi melt-spun ribbons. Journal of Magnetism and Magnetic Materials, 2014, 349, 9-14.	2.3	35
17	Topochemical synthesis of phase-pure Mo₂AlB₂ through staging mechanism. Chemical Communications, 2019, 55, 9295-9298.	4.1	34
18	Fe3+and Al solubilities in MgSiO3perovskite: implication of the Fe3+AlO3substitution in MgSiO3perovskite at the lower mantle condition. Geophysical Research Letters, 2005, 32, .	4.0	33

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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.	1.2	33
20	Magnetic properties of Smâ€"Feâ€"Ti nanocomposite magnets with a ThMn12 structure. Journal of Alloys and Compounds, 2012, 519, 144-148.	5.5	33
21	Magnetic properties of SmCo5â^'xFex (x=0â€"4) melt-spun ribbon. Journal of Alloys and Compounds, 2014, 585, 423-427.	5.5	33
22	Stability of the perovskite structure and possibility of the transition to the post-perovskite structure in CaSiO3, FeSiO3, MnSiO3 and CoSiO3. Physics of the Earth and Planetary Interiors, 2009, 177, 147-151.	1.9	29
23	Quantum valence criticality in a correlated metal. Science Advances, 2018, 4, eaao3547.	10.3	28
24	Electrochemical properties of LiMnxFe1â^'xPO4 (xÂ=Â0, 0.2, 0.4, 0.6, 0.8 and 1.0)/vapor grown carbon fiber coreâ€"sheath composite nanowire synthesized by electrospinning method. Journal of Power Sources, 2014, 248, 615-620.	7.8	27
25	Omnidirectional Control of Large Electrical Output in a Topological Antiferromagnet. Advanced Functional Materials, 2021, 31, 2008971.	14.9	26
26	Semimetallic transport properties of epitaxially stabilized perovskite CaIrO3 films. Applied Physics Letters, 2015, 107, .	3.3	25
27	Effect of the incorporation of FeAlO3into MgSiO3perovskite on the post-perovskite transition. Geophysical Research Letters, 2007, 34, .	4.0	24
28	Theoretical and experimental evidence for the post-cotunnite phase transition in zirconia at high pressure. Physics and Chemistry of Minerals, 2015, 42, 385-392.	0.8	24
29	High-pressure phase behavior of MnTiO3: decomposition of perovskite into MnO and MnTi2O5. Physics and Chemistry of Minerals, 2011, 38, 251-258.	0.8	21
30	â€œVisibleâ€•5d Orbital States in a Pleochroic Oxychloride. Journal of the American Chemical Society, 2017, 139, 10784-10789.	13.7	21
31	Direct Observation of Short-Range Structural Coherence During a Charge Transfer Induced Spin Transition in a CoFe Prussian Blue Analogue by Transmission Electron Microscopy. Journal of the American Chemical Society, 2015, 137, 14686-14693.	13.7	20
32	Successive phase transitions driven by orbital ordering and electron transfer in quasi-two-dimensional<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>CrSe</mml:mtext><mml:mn>2</mml:mn></mml:msu a triangular lattice. Physical Review B, 2014, 89, .	3.2	19
33	Magnetic properties of SmFe12-based magnets produced by spark plasma sintering method. Journal of Alloys and Compounds, 2019, 773, 1018-1022.	5.5	19
34	Equations of state for postperovskite phases in the MgSiO3â€"FeSiO3â€"FeAlO3 system. Physics of the Earth and Planetary Interiors, 2009, 175, 145-150.	1.9	18
35	Structural discrimination of double-walled carbon nanotubes by chiral diporphyrin nanocalipers. Journal of Materials Chemistry A, 2014, 2, 19067-19074.	10.3	16
36	Synthesis of Polyester Amide by Carbonylationâ€"Polycondensation Reaction Using Immobilized Palladium Metal Containing Ionic Liquid on SBA-15 as a Phosphine-Free Catalytic System. Catalysis Letters, 2015, 145, 824-833.	2.6	16

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37	Enhancement of magnetic properties by Zn addition in Nd-Fe-B hot-deformed magnets produced by spark plasma sintering method. Journal of Alloys and Compounds, 2016, 687, 662-666.	5.5	16
38	High-coercivity SmCo5/Î±-Fe nanocomposite magnets. Journal of Alloys and Compounds, 2018, 735, 218-223.	5.5	15
39	Spin transition, substitution, and partitioning of iron in lower mantle minerals. Physics of the Earth and Planetary Interiors, 2014, 228, 186-191.	1.9	14
40	Epidote-(Sr), CaSrAl2Fe3+(Si2O7)(SiO4)(OH), a new mineral from the Ananai mine, Kochi Prefecture, Japan. Journal of Mineralogical and Petrological Sciences, 2008, 103, 400-406.	0.9	13
41	Ionic Liquid Immobilized on Grapheneâ€Oxideâ€Containing Palladium Metal Ions as an Efficient Catalyst for the Alkoxy, Amino, and Phenoxy Carbonylation Reactions. ChemNanoMat, 2018, 4, 575-582.	2.8	13
42	Ferromagnetic carbon materials prepared from polyacrylonitrile. Applied Physics Letters, 2011, 98, .	3.3	12
43	Size-controllable gold nanoparticles prepared from immobilized gold-containing ionic liquids on SBA-15. Catalysis Today, 2018, 309, 109-118.	4.4	12
44	Magnetic and thermoelectric properties of melt-spun ribbons of Fe2XAl (X = Co, Ni) Heusler compounds. Journal of Applied Physics, 2018, 124, 075105.	2.5	11
45	Kitaev Spin Liquid Candidate Os<i>_x</i>Cl₃ Comprised of Honeycomb Nano-Domains. Journal of the Physical Society of Japan, 2020, 89, 114709.	1.6	11
46	VGCF-core@LiMn0.4Fe0.6PO4-sheath heterostructure nanowire for high rate Li-ion batteries. CrystEngComm, 2013, 15, 6638.	2.6	10
47	Continuous Hydrothermal Synthesis of Pr-Doped CaTiO₃ Nanoparticles from a TiO₂ Sol. Industrial & Engineering Chemistry Research, 2016, 55, 7628-7634.	3.7	10
48	High-pressure synthesis of tetragonal iron aluminide FeAl2. Scripta Materialia, 2017, 141, 107-110.	5.2	10
49	Ehimeite, NaCa2Mg4CrSi6Al2O22(OH)2: The first Cr-dominant amphibole from the Akaishi Mine, Higashi-Akaishi Mountain, Ehime Prefecture, Japan. Journal of Mineralogical and Petrological Sciences, 2012, 107, 1-7.	0.9	10
50	Ultrafast hydrothermal synthesis of Pr-doped Ca0.6Sr0.4TiO3 red phosphor nanoparticles using corrosion resistant microfluidic devices with Ti-lined structure under high-temperature and high-pressure condition. Chemical Engineering Journal, 2014, 239, 360-363.	12.7	9
51	New hard magnetic phase in Mnâ€"Gaâ€"Al system alloys. Journal of Alloys and Compounds, 2015, 632, 486-489.	5.5	9
52	Synthesis, Structure, and Electromagnetic Properties of Manganese Hollandite, K_{<i>x</i>}Mn₈O₁₆. Journal of the Physical Society of Japan, 2012, 81, 104701.	1.6	8
53	Magnetic properties of Sm-Fe-N bulk magnets prepared from Sm2Fe17N3 melt-spun ribbons. Journal of Applied Physics, 2015, 117, .	2.5	8
54	Ferriakasakaite-(La) and ferriandrosite-(La): new epidote-supergroup minerals from Ise, Mie Prefecture, Japan. Mineralogical Magazine, 2015, 79, 735-753.	1.4	8

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55	Phase stability and thermoelectric properties of semiconductor-like tetragonal FeAl₂. Science and Technology of Advanced Materials, 2019, 20, 937-948.	6.1	8
56	Synthesis of Sm(Co,Fe)4B compounds by rapid quenching and subsequent heat treatment. Intermetallics, 2019, 107, 6-9.	3.9	8
57	Modern Alchemy: Making â€œPlasticsâ€•from Paper. Industrial & Engineering Chemistry Research, 2021, 60, 355-360.	3.7	8
58	Reaction of forsterite with hydrogen molecules at high pressure and temperature. Physics and Chemistry of Minerals, 2012, 39, 123-129.	0.8	7
59	Contrasting Pressure-Induced Metallization Processes in Layered Perovskites, <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î±</mml:mi></mml:mrow></mml:math> - <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Sr</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></m mathvariant="normal">O</mml:mi></mml:mrow><mml:mrow><mml:mn>4</mml:mn></mml:m. Physical	7.8	7
60	Momoiite, (Mn2+,Ca)3(V3+,Al)2Si3O12, a new manganese vanadium garnet from Japan. Journal of Mineralogical and Petrological Sciences, 2010, 105, 92-96.	0.9	7
61	Spin transition and substitution of Fe3+ in Al-bearing post-Mg-perovskite. Physics of the Earth and Planetary Interiors, 2013, 217, 31-35.	1.9	6
62	High coercivity in Mn-Ga-Cu alloys. AIP Advances, 2016, 6, .	1.3	6
63	Aurihydrargyrumite, a Natural Au6Hg5 Phase from Japan. Minerals (Basel, Switzerland), 2018, 8, 415.	2.0	6
64	High-coercivity Sm(Fe,V,Ti)12 bulk magnets. Materials Research Bulletin, 2021, 133, 111060.	5.2	6
65	Iwateite, Na2BaMn(PO4)2, a new mineral from the Tanohata mine, Iwate Prefecture, Japan. Journal of Mineralogical and Petrological Sciences, 2014, 109, 34-37.	0.9	5
66	Magnetic Properties of Sm-Zr-Fe Melt-Spun Ribbons. IEEE Transactions on Magnetics, 2013, 49, 3345-3348.	2.1	4
67	Iseite, Mn2Mo3O8, a new mineral from Ise, Mie Prefecture, Japan. Journal of Mineralogical and Petrological Sciences, 2013, 108, 37-41.	0.9	4
68	Synthesis and crystal chemistry of mukhinite, V-analogue of clinozoisite on the join Ca2Al3Si3O12(OH)â€"Ca2Al2VSi3O12(OH). Physics and Chemistry of Minerals, 2019, 46, 63-76.	0.8	4
69	Fabrication of BaSnO3 thin films on SiO2 glass substrates using excimer laser-assisted metal organic decomposition. Applied Surface Science, 2020, 506, 144915.	6.1	4
70	Synthesis of SmFe5 intermetallic compound. AIP Advances, 2020, 10, .	1.3	4
71	The structural state of Finnish Cr- and V-bearing clinozoisite: insights from Raman spectroscopy. Physics and Chemistry of Minerals, 2021, 48, 1.	0.8	4
72	Ferric iron and aluminum partitioning between MgSiO3- and CaSiO3-perovskites under oxidizing conditions. Journal of Mineralogical and Petrological Sciences, 2007, 102, 291-297.	0.9	4

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73	Dimer Crystallization Induced by Elemental Substitution in the Honeycomb Lattice of Ru_{1âˆ’}<i>_x</i>Os<i>_x</i>Cl₃. Journal of the Physical Society of Japan, 2022, 91, .	1.6	4
74	Anomalous Hall effect in nanoscale structures of the antiferromagnetic Weyl semimetal Mn₃Sn at room temperature. Applied Physics Letters, 2022, 121, 013103.	3.3	4
75	Magnetic properties of Pr-Fe-Ti-B nanocomposite magnets produced by spark plasma sintering method. Journal of Applied Physics, 2011, 109, 07A754.	2.5	3
76	Enhanced Flux Pinning and Microstructural Study of Single-Domain Gd-Ba-Cu-O Bulk Superconductors With the Addition of Fe-Containing Alloy Particles. IEEE Transactions on Magnetics, 2011, 47, 4139-4142.	2.1	3
77	Magnetic properties of (Sm,Y)5Fe17 melt-spun ribbons. Journal of Applied Physics, 2011, 109, 07A724.	2.5	3
78	Miyahisaite, (Sr,Ca)2Ba3(PO4)3F, a new mineral of the hedyphane group in the apatite supergroup from the Shimoharai mine, Oita Prefecture, Japan. Journal of Mineralogical and Petrological Sciences, 2012, 107, .	0.9	3
79	Impurityâ€Induced Firstâ€Order Phase Transitions in Highly Crystalline V₂O₃ Nanocrystals. Advanced Materials Interfaces, 2015, 2, 1500132.	3.7	3
80	Bunnoite, a new hydrous manganese aluminosilicate from Kamo Mountain, Kochi prefecture, Japan. Mineralogy and Petrology, 2016, 110, 917-926.	1.1	3
81	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.	0.8	3
82	Takanawaite-(Y), a new mineral of the M-type polymorph with Y(Ta,Nb)O4 from Takanawa Mountain, Ehime Prefecture, Japan. Journal of Mineralogical and Petrological Sciences, 2013, 108, 335-344.	0.9	2
83	Coercivity of Nd-Fe-B hot-deformed magnets produced by the spark plasma sintering method. AIP Advances, 2017, 7, .	1.3	2
84	Contrasted Sn substitution effects on Dirac line node semimetals SrIrO3 and CaIrO3. APL Materials, 2019, 7, 121101.	5.1	2
85	Production of (Sm,Zr)Fe3 magnets and their magnetic properties. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 264, 114990.	3.5	2
86	Magnetic Properties of Sm(FeTi)â‚â‚, Hot-Deformed Magnets. IEEE Transactions on Magnetics, 2022, 58, 1-4.	2.1	2
87	Photocatalytic Silicaâ€"Resin Coating for Environmental Protection of Paper as a Plastic Substitute. Industrial & Engineering Chemistry Research, 2022, 61, 6967-6972.	3.7	2
88	Effects of titanium and zirconium addition on magnetic properties of Sm2Fe17 melt-spun ribbons. AIP Advances, 2018, 8, 056230.	1.3	1
89	Transmission electron microscopy study of the epitaxial association of hedenbergite whiskers with babingtonite. Mineralogical Magazine, 2018, 82, 23-33.	1.4	1
90	Structures and magnetic properties of (Ce,Sm)Co2Fe2B melt-spun ribbons. Journal of Magnetism and Magnetic Materials, 2020, 513, 167189.	2.3	1

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91	Production of anisotropic SmFe3 magnets by hot deformation. AIP Advances, 2020, 10, 015134.	1.3	1
92	Structures and magnetic properties of SmFe5âˆ’xTix melt-spun ribbons with SmFe5 and Sm5Fe17 phases. Journal of Magnetism and Magnetic Materials, 2021, 535, 168070.	2.3	1
93	Magnetic Properties of SmFe₃-Type Smâ€“Zrâ€“Feâ€“Coâ€“Ti Melt-Spun Ribbons. Materials Transactions, 2019, 60, 1384-1389.	1.2	1
94	Defect-Free Nanocrystals: Impurity-Induced First-Order Phase Transitions in Highly Crystalline V2O3Nanocrystals (Adv. Mater. Interfaces 12/2015). Advanced Materials Interfaces, 2015, 2, n/a-n/a.	3.7	0
95	Behavior of Xenon-Iron System under the Core Pressure. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2011, 21, 109-114.	0.0	0
96	Mineral assemblage in the deep interior of the giant planet investigated by the high pressure and temperature phase transition in titanate. Ganseki Kobutsu Kagaku, 2013, 42, 12-17.	0.1	0
97	Miyahisaite, a new mineral. Ganseki Kobutsu Kagaku, 2015, 44, 57-59.	0.1	0
98	The Role of Scandium Substitution in Babingtonite Group Minerals. Minerals (Basel, Switzerland), 2022, 12, 333.	2.0	0
99	Magnetic properties of Sm(Fe,Ti)10 alloys and their nitrides. Journal of Magnetism and Magnetic Materials, 2022, 560, 169638.	2.3	0