

Hisazumi Akai

List of Publications by Year in descending order

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docs citations

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times ranked

1511
citing authors

#	ARTICLE	IF	CITATIONS
1	Atomistic Theory of Thermally Activated Magnetization Processes in Nd ₂ Fe ₁₄ B Permanent Magnet. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2022, 69, S126-S146.	0.2	1
2	Understanding and Optimization of Hard Magnetic Compounds from First Principles. Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2022, 69, S99-S108.	0.2	0
3	Automatic exhaustive calculations of large material space by Korringa-Kohn-Rostoker coherent potential approximation method applied to equiatomic quaternary high entropy alloys. Physical Review Materials, 2022, 6, .	2.4	6
4	A new type of half-metallic fully compensated ferrimagnet. Scientific Reports, 2022, 12, .	3.3	3
5	Data assimilation method for experimental and first-principles data: Finite-temperature magnetization of $\langle \text{mml:math} \rangle$		

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19	Quantum Theory of Rare-Earth Magnets. Journal of the Physical Society of Japan, 2018, 87, 041009.	1.6	65
20	Element Selectivity in Second-Harmonic Generation of GaFeO_3 by a Soft-X-Ray Free-Electron Laser. Physical Review Letters, 2018, 120, 223902.	7.8	29
21	Atomistic-model study of temperature-dependent domain walls in the neodymium permanent magnet $\text{Nd}_2\text{Z}_{1-x}\text{Mn}_x$. Physical Review B, 2017, 95, .	3.2	33
22	First-principles study of intersite magnetic couplings in NdFe_{12} and NdFe_{12}X (X = B, C, N, O, F). Journal of Applied Physics, 2017, 122, .	2.5	24
23	Determination of the element-specific complex permittivity using a soft x-ray phase modulator. Physical Review B, 2017, 96, .	3.2	10
24	L -edge resonant magneto-optical Kerr effect of a buried Fe nanofilm. Physical Review B, 2017, 96, .	3.2	4
25	Schottky Junctions Studied Using Kohn-Rostoker Nonequilibrium Green's Function Method. Journal of the Physical Society of Japan, 2016, 85, 104715.	1.6	2
26	Monte Carlo analysis for finite-temperature magnetism of $\text{Nd}_2\text{Z}_{1-x}\text{Mn}_x$ permanent magnet. Physical Review B, 2016, 94, .	3.2	47
27	Role of N in the Permanent Magnet Material $\text{Sm}_2\text{Fe}_{17}\text{N}_x$. Journal of the Physical Society of Japan, 2015, 84, 084702.	1.6	14
28	Theory of Hyperfine Interactions in Metals. Progress of Theoretical Physics Supplement, 2013, 101, 11-77.	0.1	3
29	Effects of spin-wave excitations in half-metallic materials. Physical Review B, 2012, 85, .	3.2	8
30	Enhancement of Magnetism of Fe by Cr and V. Journal of the Physical Society of Japan, 2011, 80, 104711.	1.6	12
31	An Interpretation of Martensitic Transformation in L_{12} -Type Fe_3Pt from Its Electronic Structure. Materials Transactions, 2010, 51, 896-898.	1.2	16
32	Electromagnetic Moments of Proton-Rich ^{28}P and Decomposition of Its Spin. , 2010, .		0
33	First-principles and Monte Carlo study of magnetostructural transition and magnetocaloric properties of $\text{Ni-Mn}_2\text{Z}$. Physical Review B, 2010, 81, .	3.2	119
34	Design of half-metallic ferrimagnets: Doped MnX (X=Te, Se, S). Journal of Applied Physics, 2009, 106, .	2.5	2
35	<i>Ab initio</i> simulations of diluted magnetic semiconductors: cobalt-doped zinc oxide. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1839-1846.	1.8	10
36	Monte Carlo study of the influence of antiferromagnetic exchange interactions on the phase transitions of ferromagnetic Ni-Mn-X alloys. Physical Review B, 2008, 77, .		

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37	Manipulation of Nuclear Spins in Interfaces of Diluted Magnetic Semiconductors. E-Journal of Surface Science and Nanotechnology, 2008, 6, 7-10.	0.4	0
38	Electric-field-driven nuclear spin control using diluted magnetic semiconductors. Applied Physics Letters, 2007, 91, 253118.	3.3	7
39	First-principles calculation of the Curie temperature Slater-Pauling curve. Journal of Physics Condensed Matter, 2007, 19, 365233.	1.8	38
40	Hyperfine interactions of half-metallic diluted antiferromagnetic semiconductors. Hyperfine Interactions, 2007, 176, 21-25.	0.5	3
41	Nuclear spin manipulation in interfaces of diluted magnetic semiconductors. Hyperfine Interactions, 2007, 176, 59-63.	0.5	1
42	Temperature dependence of Knight shifts for 12 B in Pt. Hyperfine Interactions, 2007, 178, 73-77.	0.5	3
43	Spin-lattice relaxation of 25Al and 28P in Pt. Hyperfine Interactions, 2007, 178, 83-86.	0.5	3
44	Ab-initio Calculation of Electronic and Magnetic Properties of $\text{AMn}_{1-x}\text{Cr}_x\text{Te}$. Journal of Superconductivity and Novel Magnetism, 2007, 20, 473-478.	1.8	7
45	Half-Metallic Diluted Antiferromagnetic Semiconductors. Physical Review Letters, 2006, 97, 026401.	7.8	94
46	Half-metallic diluted antiferromagnetic semiconductors. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 4160-4163.	0.8	4
47	Curie temperature of GaMnN and GaMnAs from LDA-SIC electronic structure calculations. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 4155-4159.	0.8	45
48	Advanced Inter-/Multi-Disciplinary Graduate-Level Programs for Education, Research, and Training in Nanoscience and Nanotechnology Offered at Osaka University. Materials Research Society Symposia Proceedings, 2006, 931, 1.	0.1	1
49	The full potential Korringa-Kohn-Rostoker method and its application in electric field gradient calculations. Journal of Physics Condensed Matter, 2005, 17, 5741-5755.	1.8	31
50	Magnetic Properties and the Electric Field Gradients of Fe ₄ N and Fe ₄ C. Hyperfine Interactions, 2004, 158, 19-23.	0.5	6
51	Electric Field Gradients of Fluorides Calculated by the Full Potential KKR Green's Function Method. Hyperfine Interactions, 2004, 158, 95-98.	0.5	0
52	Electric Field Gradients of Light Impurities in TiO ₂ Calculated by the Full Potential KKR Green's Function Method. Hyperfine Interactions, 2004, 158, 99-103.	0.5	2
53	Electric Field Gradients of B in TiO ₂ . Hyperfine Interactions, 2004, 158, 413-416.	0.5	5
54	NOVEL SPINTRONIC MATERIALS BASED ON FERROMAGNETIC SEMICONDUCTOR CHALCOPYRITES. International Journal of Nanoscience, 2004, 03, 39-50.	0.7	8

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55	Magnetic Properties of Chalcopyrite-Based Diluted Magnetic Semiconductors. Journal of Superconductivity and Novel Magnetism, 2003, 16, 95-97.	0.5	12
56	Electronic Structure And Magnetism of Novel Diluted Magnetic Semiconductors CdGeP ₂ : Mn and ZnGeP ₂ : Mn. Phase Transitions, 2003, 76, 401-411.	1.3	20
57	First-Principles Calculations of the Instabilities in Fe-(Ni, Co, Pt) Alloys. Phase Transitions, 2002, 75, 195-200.	1.3	2
58	Magnetochemical origin for Invar anomalies in iron-nickel alloys. Physical Review B, 2002, 66, .	3.2	83
59	Electronic and Magnetic Properties of Ferromagnet-Semiconductor Heterostructure Systems. Phase Transitions, 2002, 75, 113-123.	1.3	5
60	Development of a Nuclear Spin Dewar: Hyperfine Interactions of the Short-Lived Emitter ¹² B in TiO ₂ . Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2002, 57, 599-602.	1.5	1
61	First Principles Calculation of Hyperfine Fields of Li Impurities in Ferromagnetic Nickel. Journal of the Physical Society of Japan, 2001, 70, 2019-2024.	1.6	2
62	A Possible Nuclear Spin Dewar. Hyperfine Interactions of Short-Lived ⁸ Li and ¹² B in TiO ₂ . Hyperfine Interactions, 2001, 136/137, 195-199.	0.5	21
63	Hyperfine Interactions of ⁸ Li in Ferromagnetic Single Crystal Fe. Hyperfine Interactions, 2001, 136/137, 379-384.	0.5	5
64	Understanding iron and its alloys from first principles. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2000, 80, 141-153.	0.6	17
65	Electromagnetic moments of short lived ¹² emitters ²¹ F, ²³ Mg, ²⁷ Si and ³⁹ Ca. , 1999, 120/121, 673-677.		13
66	Knight shifts for short-lived ¹² emitters in Pt. , 1999, 120/121, 719-723.		14
67	Theory of hyperfine fields of iron. , 1999, 120/121, 3-11.		22
68	Ab initio calculations of electric field gradients detected by impurities in TiO ₂ , Al ₂ O ₃ and CaCO ₃ . , 1999, 120/121, 145-149.		13
69	Sign of the quadrupole moment of proton drip-line nucleus ⁸ B. , 1999, 120/121, 689-694.		7
70	Ab initio Calculations of Electric Field Gradients for Transition Metal Impurities in TiO ₂ . Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1998, 53, 396-403.	1.5	8
71	NMR Detection of Oxygen Isotopes in TiO ₂ Single Crystal. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1998, 53, 305-308.	1.5	2
72	Hyperfine interaction of ¹³ O and ²³ Mg implanted in Pt. Hyperfine Interactions, 1996, 97-98, 501-508.	0.5	13

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73	Hyperfine field calculation for various alloy systems. <i>Hyperfine Interactions</i> , 1992, 68, 3-14.	0.5	27
74	Theoretical study of magnetic and magneto-optical properties of Fe-based transition metal alloys. <i>Journal of Applied Physics</i> , 1990, 67, 4798-4800.	2.5	17
75	Fast Korringa-Kohn-Rostoker coherent potential approximation and its application to FCC Ni-Fe systems. <i>Journal of Physics Condensed Matter</i> , 1989, 1, 8045-8064.	1.8	238
76	Electronic Structure of Impurities in Ferromagnetic Iron. III. Light Interstitials. <i>Journal of the Physical Society of Japan</i> , 1987, 56, 1064-1077.	1.6	41
77	Antiferromagnetic Susceptibility of Chromium Alloys with Non-Transition Metal Elements. <i>Journal of the Physical Society of Japan</i> , 1985, 54, 3537-3542.	1.6	8
78	Electronic Structure of Impurities in Ferromagnetic Iron. II. 3d and 4d Impurities. <i>Journal of the Physical Society of Japan</i> , 1985, 54, 4257-4264.	1.6	76
79	Electronic Structure of Impurities in Ferromagnetic Iron. I. s,p Valence Impurities. <i>Journal of the Physical Society of Japan</i> , 1985, 54, 4246-4256.	1.6	81
80	Ab initio calculations for impurities in Cu and Ni. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1985, 51, 137-150.	0.6	40
81	A simple improved iteration scheme for electronic structure calculations. <i>Journal of Physics C: Solid State Physics</i> , 1985, 18, 2455-2460.	1.5	27
82	CPA Calculation of the Electronic Structure of Transition Metal Alloys with Muffin-Tin Potential Model. <i>Journal of the Physical Society of Japan</i> , 1982, 51, 1176-1184.	1.6	8
83	Electronic Structure Ni-Pd Alloys Calculated by the Self-Consistent KKR-CPA Method. <i>Journal of the Physical Society of Japan</i> , 1982, 51, 468-474.	1.6	96
84	On the Disappearance of Ferromagnetism in Disordered Fe-Al Alloys. <i>Journal of the Physical Society of Japan</i> , 1981, 50, 70-76.	1.6	15
85	Residual resistivity of Ni-Fe, Ni-Cr and other ferromagnetic alloys. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1977, 86-88, 539-540.	0.9	16