

Soon Cheol Hong

List of Publications by Year in descending order

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117
papers

4,623
citations

236925

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98798

67
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117
all docs

117
docs citations

117
times ranked

7519
citing authors

#	ARTICLE	IF	CITATIONS
1	Robust half-metallicities of alkali-metal-based half-Heusler compounds. <i>Physical Review Materials</i> , 2022, 6, .	2.4	9
2	First-principles study on magnetocrystalline anisotropy of cobalt films: hcp vs fcc. <i>Current Applied Physics</i> , 2022, 41, 148-155.	2.4	2
3	First-Principles Prediction of Enhanced Magnetic Anisotropy of $\sqrt{3}$ -Phase Fe_2N , With B and C Impurities. <i>IEEE Transactions on Magnetics</i> , 2021, 57, 1-3.	2.1	3
4	First-principles prediction of rare-earth free permanent magnet: FeNi with enhanced magnetic anisotropy and stability through interstitial boron. <i>AIP Advances</i> , 2021, 11, .	1.3	5
5	Simultaneous tuning of the magnetic anisotropy and thermal stability of α -phase Fe_{16}N_2 . <i>Scientific Reports</i> , 2021, 11, 7823.	3.3	6
6	Interface Defect Engineering of a Large-Scale CVD-Grown MoS_2 Monolayer via Residual Sodium at the SiO_2/Si Substrate. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100428.	3.7	14
7	Interface Defect Engineering of MoS_2 Monolayer: Interface Defect Engineering of a Large-Scale CVD-Grown MoS_2 Monolayer via Residual Sodium at the SiO_2/Si Substrate (Adv. Mater. Interfaces 14/2021). <i>Advanced Materials Interfaces</i> , 2021, 8, 2170080.	3.7	1
8	Spin-orbit torque engineering in W/CoFeB heterostructures with W-Ta or W-V alloy layers between W and CoFeB . <i>NPG Asia Materials</i> , 2021, 13, .	7.9	11
9	Enhancing magnetic anisotropy and stability of $\sqrt{3}$ - Fe_{16}N_2 phase by Co and V co-substitution. <i>AIP Advances</i> , 2021, 11, .	1.3	5
10	Anisotropic behavior of excitons in single-crystal $\sqrt{3}$ - SnS . <i>AIP Advances</i> , 2020, 10, .	1.3	9
11	Enhancing Energy Product and Thermal Stability of SmFe_{12} by Interstitial Doping. <i>Physical Review Applied</i> , 2020, 13, .	3.8	16
12	Enhanced voltage-controlled magnetic anisotropy via magnetoelasticity in $\text{FePt}/\text{MgO}(001)$. <i>Physical Review B</i> , 2020, 101, .	3.2	9
13	First-Principles Prediction of Possible Rare-Earth Free Permanent Magnet of Tetragonal FeCo with Enhanced Magnetic Anisotropy and Energy Product through Interstitial Nitrogen. <i>Physical Review Applied</i> , 2019, 11, .	3.8	21
14	Thermally driven homonuclear-stacking phase of MoS_2 through desulfurization. <i>Nanoscale</i> , 2019, 11, 11138-11144.	5.6	4
15	Hydrogen interaction with selectively desulfurized MoS_2 surface using Ne^+ sputtering. <i>Journal of Applied Physics</i> , 2019, 125, .	2.5	10
16	Hydrogen interaction with a sulfur-vacancy-induced occupied defect state in the electronic band structure of MoS_2 . <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 15302-15309.	2.8	17
17	Tunability of magnetic anisotropy of Co on two-dimensional materials by tetrahedral bonding. <i>Physical Review B</i> , 2019, 99, .	3.2	9
18	Inducing and manipulating magnetization in 2D zinc oxide by strain and external voltage. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 145802.	1.8	0

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19	Sulfur-vacancy-dependent geometric and electronic structure of bismuth adsorbed on MoS_2 surface: A first-principles study. Physical Review B, 2018, 97, .	3.2	4
20	First-principles study of magnetization reorientation and large perpendicular magnetic anisotropy in Fe/Cu heterostructures. Physical Review B, 2018, 98, .	3.2	4
21	Electric control of magnetism in low-dimensional magnets on ferroelectric surfaces. AIP Advances, 2017, 7, 055816.	1.3	3
22	Hydrogen physisorption based on the dissociative hydrogen chemisorption at the sulphur vacancy of MoS_2 surface. Scientific Reports, 2017, 7, 7152.	3.3	32
23	Introduction to First-principles Study in Magnetism : A Brief Guide to Nonexperts. Journal of the Korean Magnetism Society, 2017, 27, 190-197.	0.0	1
24	Seasonal Pattern of Preterm Births in Korea for 2000-2012. Journal of Korean Medical Science, 2016, 31, 1797.	2.5	4
25	Electron beam-formed ferromagnetic defects on MoS_2 surface along Γ phase transition. Scientific Reports, 2016, 6, 38730.	3.3	29
26	Investigation of electron irradiation-induced magnetism in layered MoS_2 single crystals. Applied Physics Letters, 2016, 109, .	3.3	23
27	Density functional theory study of the electronic structure and the thermoelectric properties of strained Mn_4Si_7 . Journal of the Korean Physical Society, 2016, 69, 402-405.	0.7	2
28	Magnetocrystalline anisotropy of pure magnetic semiconductors of MnGeP_2 and MnGeAs_2 : A first-principles study. Journal of Magnetism and Magnetic Materials, 2016, 419, 202-209.	2.3	6
29	Theory of perpendicular magnetocrystalline anisotropy in Fe/MgO (001). Journal of Magnetism and Magnetic Materials, 2016, 414, 126-131.	2.3	18
30	Magnetism of Asymmetrically Terminated FeRh (001) Thin Films: A First-Principle Study. IEEE Transactions on Magnetics, 2016, 52, 1-3.	2.1	0
31	Magnetism of $\text{Pd}(111)$ Thin Films: A First-principles Calculation. Journal of the Korean Magnetism Society, 2016, 26, 1-6.	0.0	0
32	First-principles Calculations on Magnetism of 1H/1T Boundary in Monolayer MoS_2 . Journal of the Korean Magnetism Society, 2016, 26, 71-75.	0.0	0
33	First Principle Studies on Magnetism and Electronic Structure of Perovskite Structured CoFe_3X ($\text{X} = \text{Ti, Ta, Nb}$). Journal of Applied Physics, 2016, 119, 084101.	0.0	0
34	Surface-termination-dependent magnetism and strong perpendicular magnetocrystalline anisotropy of an FeRh (001) thin film. Physical Review B, 2015, 92, .	3.2	30
35	New synthesis of MnSi_2 thin film and its thermoelectric properties. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	2.1	3
36	Strain effect on electronic structure and thermoelectric properties of orthorhombic SnSe : A first principles study. AIP Advances, 2015, 5, .	1.3	35

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37	Magnetocrystalline Anisotropy of NaN(001) Thin Films: A Density Functional Study. Journal of Nanoscience and Nanotechnology, 2015, 15, 2356-2359.	0.9	1
38	Thickness effect on magnetocrystalline anisotropy of Co/Pd(111) films: A density functional study. Journal of Applied Physics, 2015, 117, 17E105.	2.5	5
39	Jahn-Teller driven perpendicular magnetocrystalline anisotropy in metastable ruthenium. Physical Review B, 2015, 91, .	3.2	21
40	Magnetocrystalline anisotropy of 4d/5d transition metals on a Co(0001) surface: A first-principles study. Journal of Applied Physics, 2015, 117, 17A327.	2.5	4
41	Magnetism and Magnetocrystalline Anisotropy of Ni/Fe(001) Surface: A First Principles Study. Journal of the Korean Magnetism Society, 2015, 25, 101-105.	0.0	1
42	Magnetic anisotropy energy and effective exchange interactions in Co intercalated graphene on Ir(111). Journal of Physics Condensed Matter, 2014, 26, 476003.	1.8	6
43	Ultrafast above-transition-temperature resurrection of spin density wave driven by coherent phonon generation in BaFe_2As_2 . New Journal of Physics, 2014, 16, 043010.	2.9	4
44	Magnetism and Magnetocrystalline Anisotropy of 3d Transition Metal Monolayers on Pt(001): A Density-Functional Study. Journal of Nanoscience and Nanotechnology, 2014, 14, 9011-9013.	0.9	3
45	A first-principles study of magnetostrictions of Fe_3O_4 and CoFe_2O_4 . Journal of Applied Physics, 2014, 115, .	2.5	26
46	Magnetism and Magnetocrystalline Anisotropy of CoFe Thin Films: A First-principles Study. Journal of the Korean Magnetism Society, 2014, 24, 35-40.	0.0	2
47	Electronic structure and magnetism of various surfaces of the catalytic material Pt_3Ni : Density-functional study. Journal of Magnetism and Magnetic Materials, 2013, 339, 89-93.	2.3	2
48	A first-principles study of magnetism of lithium fluorosulphate LiFeSO_4F . Journal of Applied Physics, 2013, 113, .	2.5	11
49	Soft x-ray magnetic circular dichroism study of valence and spin states in Fe_2O_4 ($\text{T}=\text{V, Cr}$) spinel oxides. Journal of Applied Physics, 2013, 113, 17E116.	2.5	9
50	Controlling Ferromagnetic Easy Axis in a Layered MoS_2 Single Crystal. Physical Review Letters, 2013, 110, 247201.	7.8	108
51	Extremely large perpendicular magnetic anisotropy of an Fe(001) surface capped by transition metal monolayers: A density functional study. Physical Review B, 2013, 88, .	3.2	48
52	Strain-induced modification in the magnetic properties of Mn_5Ge_3 thin films. Journal of Applied Physics, 2013, 114, .	2.5	17
53	Interplay between $\text{R}_2\text{Mn}_4\text{f}$ and Fe states	3.2	7
54	Magnetostriction of B2-structured FeX (X = Al, Si, Ni, Ga, Ge, and Sn) Alloys: A First-principles Study. Journal of the Korean Magnetism Society, 2013, 23, 117-121.	0.0	0

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55	Strong perpendicular magnetocrystalline anisotropy of bulk and the (001) surface of $\text{DO}_{22}\text{Mn}_3\text{Ga}$: a density functional study. Journal of Physics Condensed Matter, 2012, 24, 416003.	1.8	10
56	Preparation of $\text{MoO}_3/\text{MoS}_2/\text{TiO}_2$ Composites for Catalytic Degradation of Methylene Blue. Journal of Nanoscience and Nanotechnology, 2012, 12, 5884-5891.	0.9	14
57	Electronic origin of the negligible magnetostriction of an electric steel $\text{Fe}_{1-x}\text{Six}$ alloy: A density-functional study. Journal of Applied Physics, 2012, 111, .	2.5	2
58	Phototransistors: High- ϵ Detectivity Multilayer MoS_2 Phototransistors with Spectral Response from Ultraviolet to Infrared (Adv. Mater. 43/2012). Advanced Materials, 2012, 24, 5902-5902.	21.0	24
59	Band-gap expansion in the surface-localized electronic structure of MoS_2 (2×2) (0002). Physical Review B, 2012, 86, .	3.2	47
60	High- ϵ Detectivity Multilayer MoS_2 Phototransistors with Spectral Response from Ultraviolet to Infrared. Advanced Materials, 2012, 24, 5832-5836.	21.0	970
61	Thickness and strain effects on electronic structures of transition metal dichalcogenides: ZrM_2X_2		

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91	Half metallic ferromagnetism of Mn doped AlSb: A first principles study. Physica Status Solidi (B): Basic Research, 2007, 244, 4435-4438.	1.5	30
92	Magnetism of zinc blende CrP(001) surface. Journal of Magnetism and Magnetic Materials, 2007, 310, 2192-2194.	2.3	19
93	The electronic structure and magnetism of GdSi2 by first-principles study. Journal of Magnetism and Magnetic Materials, 2006, 304, e31-e33.	2.3	1
94	Magnetic and electronic structures of zinc-blende FeX (X=P, As, Sb) by first principles calculations. Journal of Magnetism and Magnetic Materials, 2006, 304, e146-e148.	2.3	7
95	First-principles calculations on electronic structure and magnetism of $\hat{\Gamma}^2$ -Mn. Journal of Magnetism and Magnetic Materials, 2006, 304, e477-e479.	2.3	4
96	Epitaxial (Mn _{0.7} Cr _{0.3}) ₂ As and (Fe _{0.7} Mn _{0.3}) ₂ As thin films: Structural and magnetic properties. Journal of Magnetism and Magnetic Materials, 2006, 304, e474-e476.	2.3	0
97	Analysis of the energy distribution of field electrons from metals and semiconductors. Journal of Vacuum Science & Technology B, 2006, 24, 913.	1.3	1
98	Theoretical analysis of triple junction field emission for a type of cold cathode. Journal of Vacuum Science & Technology B, 2006, 24, 909.	1.3	16
99	Surface effect on the magnetism of aMnPt ₃ -type ordered surface alloy on Pt(001). Physical Review B, 2004, 70, .	3.2	9
100	Synthesis of new pure ferromagnetic semiconductors: MnGeP ₂ and MnGeAs ₂ . Solid State Communications, 2004, 129, 609-613.	1.9	49
101	Electronic and magnetic properties of MnSnAs ₂ . Physica Status Solidi (B): Basic Research, 2004, 241, 1462-1465.	1.5	17
102	Resistivities and magnetoresistances of pure, Co- and V-doped Ge single crystals. Physica Status Solidi (B): Basic Research, 2004, 241, 1518-1520.	1.5	2
103	Ferromagnetic properties in Cr, Fe-doped Ge single crystals. Journal of Applied Physics, 2003, 93, 7670-7672.	2.5	40
104	Growth and atomic structure of ordered Mn surface alloys on Au(001). Physical Review B, 2002, 65, .	3.2	19
105	Ferromagnetism in Cr-doped Ge. Applied Physics Letters, 2002, 81, 3606-3608.	3.3	45
106	Room-Temperature Ferromagnetism in (Zn _{1-x} Mn _x)GeP ₂ Semiconductors. Physical Review Letters, 2002, 88, 257203.	7.8	151
107	Ferromagnetism in Mn-doped Ge. Physical Review B, 2002, 66, .	3.2	259
108	Surface alloying and magnetism of ultrathin Fe films on Pd(001). Physical Review B, 2001, 65, .	3.2	20

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109	Rippled surface structure and electronic and magnetic properties of Ni ₃ Al(001). Physical Review B, 2000, 62, 6982-6985.	3.2	4
110	Suppression of ferromagnetic order of Fe overlayers on the Rh(001) surface. Physical Review B, 1999, 60, 14429-14433.	3.2	19
111	Subsurface growth of Ni atoms deposited on a Cu(001) surface. Physical Review B, 1997, 55, 7904-7909.	3.2	43
112	Effects of an electrostatic field on the normal and superconducting states of a Mo-C film. Physical Review B, 1995, 51, 3238-3241.	3.2	0
113	ALL-ELECTRON LOCAL-DENSITY DETERMINATION OF THE ELECTRONIC STRUCTURE AND SURFACE ENERGY OF ZR(0001). International Journal of Modern Physics B, 1993, 07, 520-523.	2.0	1
114	Electronic structure of the Mo(001) surface. Physical Review B, 1993, 48, 4755-4759.	3.2	5
115	Photoemission study of the surface band structure of the reconstructed Mo(001) surface. Physical Review B, 1993, 47, 13594-13598.	3.2	9
116	Evidence for the origin of reconstruction of the Mo(001) surface. Physical Review Letters, 1992, 69, 2228-2231.	7.8	28
117	MBE growth and magnetic properties of GaSb/MnSb superlattices. , 0, , .		1