

Kei Hayashi

List of Publications by Year in descending order

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109
papers

1,536
citations

331670

21
h-index

414414

32
g-index

110
all docs

110
docs citations

110
times ranked

1406
citing authors

#	ARTICLE	IF	CITATIONS
1	Significant displacement of calcium and barium ions in ferroelectric (Ba _{0.9} Ca _{0.1})TiO ₃ revealed by x-ray fluorescence holography. Applied Physics Letters, 2022, 120, .	3.3	11
2	Relationships between crystallite size and thermoelectric properties of nano-structured CrSi ₂ prepared by the reduction-diffusion and spark plasma sintering methods. Journal of Alloys and Compounds, 2021, 861, 157967.	5.5	5
3	Effects of Disorder on the Electronic Structure and Thermoelectric Properties of an Inverse Full-Heusler Mn ₂ CoAl Alloy. Chemistry of Materials, 2021, 33, 2543-2547.	6.7	16
4	Chemical-Pressure-Induced Point Defects Enable Low Thermal Conductivity for Mg ₂ Sn and Mg ₂ Si Single Crystals. ACS Applied Energy Materials, 2021, 4, 5123-5131.	5.1	16
5	Enhanced thermoelectric performance in MnTe due to doping and in-situ nanocompositing effects by Ag ₂ S addition, Journal of Materials, 2021, 7, 577-584. Outstanding thermoelectric performance of $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle$	5.7	11
6			

#	ARTICLE	IF	CITATIONS
19	Effects of Cobalt Substitution on Crystal Structure and Thermoelectric Properties of Melt-Grown Higher Manganese Silicides. <i>Journal of Electronic Materials</i> , 2019, 48, 1902-1908.	2.2	13
20	Preparation and thermoelectric properties of pseudogap intermetallic (Ti1-V)NiSi solid solutions. <i>Journal of Alloys and Compounds</i> , 2019, 771, 111-116.	5.5	8
21	Pyroelectric Energy Harvesting Using Ferroelectric Ba _{1-x} Ca _x TiO ₃ . <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1701002.	1.8	5
22	Design and fabrication of full-Heusler compound with positive Seebeck coefficient as a potential thermoelectric material. <i>Scripta Materialia</i> , 2018, 150, 130-133.	5.2	9
23	Improved thermoelectric performance from CrSi ₂ by Cu substitution into Si sites. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 121801.	1.5	11
24	Fabrication and Thermoelectric Properties of Al/Mg₂Si Composite Materials. <i>Materials Transactions</i> , 2018, 59, 1041-1045.	1.2	9
25	Thermoelectric Properties of Mo and Ge co-substituted CrSi₂. <i>Transactions of the Materials Research Society of Japan</i> , 2018, 43, 85-91.	0.2	7
26	Thermoelectric properties of olivine-type sulfides $Tm_{2-x}X_4S_4$ ($Tm = Mn, Fe, X = Si, Ge$). <i>Transactions of the Materials Research Society of Japan</i> , 2018, 43, 13-17.	0.2	3
27	Preparation and optical properties of higher manganese silicide, (Mn,Fe)Si, thin films. <i>Applied Surface Science</i> , 2018, 458, 700-704.	6.1	4
28	Crystal Structure and Thermoelectric Properties of Lightly Substituted Higher Manganese Silicides. <i>Materials</i> , 2018, 11, 926.	2.9	29
29	Pyroelectric Energy Harvesting Using Ferroelectric Ba _{1-x} Ca _x TiO ₃ (Phys. Status Solidi A 111(2018)). <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1870023.	1.8	1
30	Polymer electrolyte liquid crystal mixtures as phase-dependent thermoelectric materials. <i>Molecular Crystals and Liquid Crystals</i> , 2017, 642, 9-17.	0.9	4
31	Preparation and thermoelectric properties of mixed valence compound Sn ₂ S ₃ . <i>Japanese Journal of Applied Physics</i> , 2017, 56, 061201.	1.5	4
32	Crystal Structure and Thermoelectric Properties of Lightly Vanadium-Substituted Higher Manganese	2.2	28
33	Structural and Thermoelectric Properties of Ternary Full-Heusler Alloys. <i>Journal of Electronic Materials</i> , 2017, 46, 2710-2716.	2.2	33
34	Structural and thermoelectric properties of TTFâ€ _{0.71} organic compound. <i>Physica Status Solidi (B): Basic Research</i> , 2017, 254, 1600513.	1.5	2
35	Enhanced Thermoelectric Properties of Chimney-ladder Type Higher Manganese Silicides. <i>Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2017, 64, 461-466.	0.2	1
36	Crystal Structure and Thermoelectric Properties of Magnesium Silicide. <i>Materia Japan</i> , 2017, 56, 546-553.	0.1	0

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37	Crystal Structure and Thermoelectric Properties of the Incommensurate Chimneyâ€“Ladder Compound $VGe\hat{3}$ ($\hat{3} \sim 1.82$). Journal of Electronic Materials, 2016, 45, 1365-1368.	2.2	10
38	Thermoelectric and magnetic properties of Yb_2MgSi_2 prepared by spark plasma sintering method. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	1
39	Effects of Ge substitution on thermoelectric properties of $CrSi_{2₂}$. Japanese Journal of Applied Physics, 2016, 55, 111801.	1.5	11
40	Thermoelectric Hexagonal A-Mg-Si with $A\hat{=}\hat{S}r$ and Ba Zintl Phases. Journal of Electronic Materials, 2016, 45, 5238-5245.	2.2	5
41	Effects of Nb substitution on thermoelectric properties of $CrSi_2$. Journal of Alloys and Compounds, 2016, 687, 37-41.	5.5	18
42	Electronic structure and thermoelectric properties of boron doped Mg_2Si . Scripta Materialia, 2016, 123, 59-63.	5.2	24
43	Effect of Interstitial Mg in $Mg_{2+x}Si$ on Electrical Conductivity and Seebeck Coefficient. Journal of Electronic Materials, 2016, 45, 1589-1593.	2.2	19
44	Crystal structure and thermoelectric properties of the incommensurate chimneyâ€“ladder compound $RhGe_{\hat{3}</sub>}$ ($\hat{3} \hat{=} 1.293$). Journal of Materials Research, 2015, 30, 2611-2617.	2.6	12
45	Ionic liquid entrapment by an electrospun polymer nanofiber matrix as a high conductivity polymer electrolyte. RSC Advances, 2015, 5, 48217-48223.	3.6	24
46	Theoretical and experimental investigation of the excellent $\hat{=}$ n control in yttrium aluminoborides. Science and Technology of Advanced Materials, 2014, 15, 035012.	6.1	14
47	Fabrication of Multilayer-Type Mn-Si Thermoelectric Device. Journal of Electronic Materials, 2014, 43, 1993-1999.	2.2	6
48	Thermoelectric Potential of Polymer-Scaffolded Ionic Liquid Membranes. Journal of Electronic Materials, 2014, 43, 1585-1589.	2.2	5
49	Quantitative analysis of interstitial Mg in Mg_2Si studied by single crystal X-ray diffraction. Journal of Alloys and Compounds, 2014, 617, 389-392.	5.5	41
50	Al insertion and additive effects on the thermoelectric properties of yttrium boride. Journal of Applied Physics, 2014, 115, 123702.	2.5	21
51	High temperature X-ray diffraction study on incommensurate composite crystal $MnSi \hat{=}$ “(3+1)-dimensional superspace approach. Journal of Alloys and Compounds, 2014, 616, 263-267.	5.5	39
52	Microstructure and thermoelectric properties of $Y_xAl_yB_{14}$ samples fabricated through the spark plasma sintering. Materials for Renewable and Sustainable Energy, 2014, 3, 1.	3.6	11
53	High-Performance p-Type Magnesium Silicon Thermoelectrics. Journal of Electronic Materials, 2013, 42, 1855-1863.	2.2	12
54	Crystal Structure and Thermoelectric Properties of Misfit-Layered Sulfides $[Ln_2S_2]_pNbS_2$ ($Ln\hat{=}\hat{A}$ Lanthanides). Journal of Electronic Materials, 2013, 42, 1335-1339.	2.2	16

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55	Viscosity and drag force involved in organelle transport: Investigation of the fluctuation dissipation theorem. European Physical Journal E, 2013, 36, 136.	1.6	17
56	Structural, magnetic, and ferroelectric properties of $\text{CuFe}_{1-x}\text{Mn}_x\text{O}_2$. $\text{Mn}_{1-x}\text{Cr}_x\text{Si}$ ($\text{Fe}^{1/4}\text{1.7}$) Solid Solution. Japanese Journal of Applied Physics, 2012, 51, 085801.	3.2	33
57	ZrMn_2O_7 Thermoelectric Properties of Higher Manganese Silicides with Complicated Modulated Structure. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2013, 2013.5, 279-280.	0.0	0
58	Enhanced Thermoelectric Performance of a Chimney-Ladder ($\text{Mn}_{1-x}\text{Cr}_x$) Si ($\text{Fe}^{1/4}\text{1.7}$) Solid Solution. Japanese Journal of Applied Physics, 2012, 51, 085801.	1.5	42
59	Anisotropic Thermoelectric Properties of $\text{MnSi}_{1-x}\text{Cr}_x$ Film Prepared on R-Sapphire. Applied Physics Express, 2012, 5, 055501.	2.4	7
60	Excellent p-n control in a high temperature thermoelectric boride. Applied Physics Letters, 2012, 101, .	3.3	44
61	Cation Distribution Dependence on Thermoelectric Properties of Doped Spinel $\text{M}_{1-x}\text{Fe}_x\text{O}$. Materials Transactions, 2012, 53, 1164-1168.	1.2	6
62	Enhanced Thermoelectric Performance of a Chimney-Ladder ($\text{Mn}_{1-x}\text{Cr}_x$) Si ($\text{Fe}^{1/4}\text{1.7}$) Solid Solution. Japanese Journal of Applied Physics, 2012, 51, 085801.	1.5	9
63	Fabrication of iodine-doped pentacene thin films for organic thermoelectric devices. Journal of Applied Physics, 2011, 109, .	2.5	23
64	Thermoelectric properties of iodine doped pentacene thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 592-594.	0.8	6
65	Preparation and Thermoelectric Properties of a Chimney-Ladder ($\text{Mn}_{1-x}\text{Fe}_x$) Si ($\text{Fe}^{1/4}\text{1.7}$) Solid Solution. Japanese Journal of Applied Physics, 2011, 50, 035804.	1.5	30
66	Phase separation in thermoelectric delafossite $\text{CuFe}_{1-x}\text{Ni}_x\text{O}_2$ observed by soft x-ray magnetic circular dichroism. Applied Physics Letters, 2011, 99, 012108.	3.3	9
67	Soft x-ray synchrotron radiation spectroscopy study of $\text{CuFe}_{1-x}\text{Ni}_x\text{O}_2$ ($0 \leq x \leq 0.03$) delafossite oxides. Journal of Applied Physics, 2011, 109, .	2.5	7
68	Preparation and Thermoelectric Properties of a Chimney-Ladder ($\text{Mn}_{1-x}\text{Fe}_x$) Si ($\text{Fe}^{1/4}\text{1.7}$) Solid Solution. Japanese Journal of Applied Physics, 2011, 50, 035804.	1.5	26
69	Mn-Substitution Effect on Thermal Conductivity of Delafossite-Type Oxide CuFeO_2 . Journal of Electronic Materials, 2010, 39, 1798-1802.	2.2	35
70	Rubbing effect on surface morphology and thermoelectric properties of TTFa€TCNQ thin films. Applied Surface Science, 2010, 256, 4554-4558.	6.1	10
71	Effect of Cobalt-Substitution on the Structure and Thermoelectric Properties of Chimney-Ladder Solid Solution ($\text{Mn}_{1-x}\text{Co}_x$) Si ($\text{Fe}^{1/4}\text{1.7}$). Advances in Science and Technology, 2010, 74, 22-25.	0.2	6
72	Thermoelectric Iron Oxides. Advances in Science and Technology, 2010, 74, 66-71.	0.2	9

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73	Spin dynamics of triangular lattice antiferromagnet CuFeO_2 . Crossover from spin-liquid to paramagnetic phase. <i>Physical Review B</i> , 2009, 80, .	3.2	21
74	Structure and High-Temperature Thermoelectric Properties of the n-Type Layered Oxide $\text{Ca}_{2-x}\text{Bi}_x\text{MnO}_4$. <i>Journal of Electronic Materials</i> , 2009, 38, 1159-1162.	2.2	17
75	Electronic Structure and Thermoelectric Properties of the Delafossite-Type Oxides $\text{CuFe}_{1-x}\text{Ni}_x\text{O}_2$. <i>Journal of Electronic Materials</i> , 2009, 38, 1282-1286.	2.2	23
76	Effect of Doping on Thermoelectric Properties of Delafossite-Type Oxide CuCrO_2 . <i>Japanese Journal of Applied Physics</i> , 2008, 47, 59.	1.5	60
77	Modulated crystal structure of chimney-ladder higher manganese silicides MnSi . <i>Physical Review B</i> , 2008, 78, .	3.2	133
78	Spectroscopic Evidence for Energy Loss of Photoelectrons Interacting with Image Charge. <i>Journal of the Physical Society of Japan</i> , 2007, 76, 044604.	1.6	6
79	Thermoelectric Properties of Delafossite-Type Oxide $\text{CuFe}_{1-x}\text{Ni}_x\text{O}_2$ (0 $\leq x \leq$ 0.05). <i>Journal of Chemical Engineering of Japan</i> , 2007, 40, 1205-1209.	0.6	35
80	Structural and Magnetic Transition Temperatures of Full Heusler Ni-Mn-Sn Alloys Determined by Van der Pauw Method. <i>Journal of Chemical Engineering of Japan</i> , 2007, 40, 1328-1329.	0.6	6
81	High temperature thermoelectric properties of delafossite-type oxides $\text{CuFe}_{1-x}\text{M}_x\text{O}_2$ (M=Mg, Zn, Ni, Co.) <i>Tj ETQq1 1 0.784314 rgBT / O</i>		
82	Fabrication and in-plane electrical resistivity of Ge/SiGe quantum dot superlattices. , 2007, , .		0
83	Structure and High Temperature Thermoelectric Properties of Delafossite-Type Oxide $\text{CuFe}_{1-x}\text{Ni}_x\text{O}_2$ (0 $\leq x \leq$ 0.05). <i>Japanese Journal of Applied Physics</i> , 2007, 46, 5226.	1.5	48
84	Vibrationally Induced Inelastic Structures in Laser Photoemission Spectra. <i>Hyomen Kagaku</i> , 2007, 28, 378-384.	0.0	0
85	Detection of the frustrated rotation mode of CO on Cu(001) by very low energy photoelectron spectroscopy. <i>Surface Science</i> , 2006, 600, 3536-3539.	1.9	7
86	Derivative Spectra of Very Low Energy Photoelectrons from CO/Cu(001) Surface Obtained by a Lock-in Technique. <i>Journal of the Physical Society of Japan</i> , 2006, 75, 104303.	1.6	4
87	Dynamics of very low energy photoelectrons interacting with image charge of Cs^+ -Cu(111) surface. <i>Physical Review B</i> , 2005, 72, .	3.2	6
88	Inelastic Photoemission due to Scattering by Surface Adsorbate Vibrations. <i>Physical Review Letters</i> , 2005, 95, 207601.	7.8	19
89	Very Low Energy Photoelectron Spectroscopy: Energy Loss of Photoelectrons. <i>Hyomen Kagaku</i> , 2005, 26, 741-745.	0.0	1
90	Energy Loss of Photoelectrons by Interaction with Image Charge. <i>Physical Review Letters</i> , 2004, 92, 247601.	7.8	24

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91	Magnetic Dead Layers Induced by Strain at fct Fe/Rh(001) Interface. Journal of the Physical Society of Japan, 2004, 73, 2550-2553.	1.6	15
92	Magnetic dead layers in Fe films induced by a lattice mismatch at an interface. Physica B: Condensed Matter, 2004, 351, 324-327.	2.7	8
93	Spike structure in the very low energy photoelectron spectra of Ag(O ₂). Applied Surface Science, 2004, 237, 296-300.	6.1	11
94	Perpendicular Magnetic Anisotropy of Co/Pd(111) Studied by Spin-Resolved Photoelectron Spectroscopy. Journal of the Physical Society of Japan, 2003, 72, 1161-1165.	1.6	15
95	ELECTRONIC STRUCTURES AND REORIENTATION OF PERPENDICULAR MAGNETIC ANISOTROPY OF Co/Au(111) and Co/Pd(111). Surface Review and Letters, 2002, 09, 865-869.	1.1	0
96	Spin-resolved photoemission and electronic structures of magnetic thin films. Journal of Electron Spectroscopy and Related Phenomena, 2002, 124, 281-288.	1.7	1
97	Electronic structure and magnetic anisotropy of Co/Au(111): a spin-resolved photoelectron spectroscopy study. Physical Review B, 2001, 63, .	3.2	17
98	Electronic structure and magnetic anisotropy of Co/Au(111): a spin-resolved photoelectron spectroscopy study. AIP Conference Proceedings, 2001, , .	0.4	0
99	Structure and magnetism of Fe thin films grown on Rh(001) studied by spin-resolved photoelectron spectroscopy. AIP Conference Proceedings, 2001, , .	0.4	0
100	Growth of Fe films on Rh(001): a photoemission study. Applied Surface Science, 2001, 169-170, 375-379.	6.1	3
101	Electronic structures of magnetic ultrathin films Co/Au(1 1 1) studied by spin-resolved photoelectron spectroscopy. Applied Surface Science, 2001, 169-170, 176-179.	6.1	1
102	Structure and magnetism of Fe thin films grown on Rh(001) studied by photoelectron spectroscopy. Physical Review B, 2001, 64, .	3.2	20
103	MAGNETIC PROPERTIES OF fcc Fe THIN FILMS. Surface Review and Letters, 2000, 07, 667-671.	1.1	1
104	Magnetic Properties of fcc Fe Thin Films. Surface Review and Letters, 2000, 7, 667-671.	1.1	0
105	Electronic States of fcc Fe/Co(001) of 5-11 Monolayers Probed by Spin-Resolved Photoemission Spectroscopy. Japanese Journal of Applied Physics, 1999, 38, 415.	1.5	2
106	Perpendicular magnetic anisotropy and magneto-optical properties of evaporated (Fe,Co) rare-earth amorphous binary alloy films. Journal of Applied Physics, 1988, 64, 5492-5494.	2.5	5
107	Thermoelectric Energy Conversion and Ceramic Thermoelectrics. Materials Science Forum, 0, 671, 1-20.	0.3	4
108	Magnetic Full-Heusler Compounds for Thermoelectric Applications. , 0, , .		3

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109	Realizing p-type Mg ₂ Sn Thermoelectrics via Ga-Doping and Point Defect Engineering. ACS Applied Energy Materials, 0, , .	5.1	6