

Young-Han Shin

List of Publications by Year in descending order

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all docs

99
docs citations

99
times ranked

5088
citing authors

#	ARTICLE	IF	CITATIONS
1	Optoelectronics properties of Janus SnSSe monolayer for solar cells applications. Physica B: Condensed Matter, 2022, 625, 413487.	2.7	24
2	Tuning the optoelectronic and thermoelectric characteristics of narrow bandgap Rb ₂ AlInX ₆ (X= Cl, Br, I) by intercalation of organic cations. Journal of Applied Physics, 2021, 124, 175102.	4.0	35
3	Enhanced out-of-plane electromechanical response of Janus ZrSeO. Physical Chemistry Chemical Physics, 2021, 23, 16289-16295.	2.8	9
4	Quantitative assessment of the structure of Ge ₂₀ Ge ₇ chalcogenide glass by first-principles molecular dynamics. Physical Review B, 2021, 103, 104107.	3.2	4
5	Effects of gallium and arsenic substitution on the electronic and magnetic properties of monolayer SnS. Physica Scripta, 2021, 96, 095803.	2.5	2
6	Stabilization of 6H-Hexagonal SrMnO ₃ Polymorph by Al ₂ O ₃ insertion. Journal of the European Ceramic Society, 2021, 41, 5155-5162.	5.7	4
7	Resistive switching characteristics of epitaxial NiO thin films affected by lattice strains and external forces. Applied Surface Science, 2021, 566, 150685.	6.1	5
8	Revealing the role of dopants in mitigating degradation phenomena in sodium-ion layered cathodes. Physical Chemistry Chemical Physics, 2021, 23, 2038-2045.	2.8	5
9	Vacancy- and doping- dependent electronic and magnetic properties of monolayer SnS ₂ . Journal of the American Ceramic Society, 2020, 103, 391-402.	3.8	16
10	Highly ordered lead-free double perovskite halides by design. Journal of Materiomics, 2020, 6, 651-660.	5.7	27
11	The effect of non-analytical corrections on the phononic thermal transport in InX (X= S, Se, Te) monolayers. Scientific Reports, 2020, 10, 1093.	3.3	23
12	TiO ₂ Nanorod Array Conformally Coated with a Monolayer MoS ₂ Film: An Efficient Electrocatalyst for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2020, 3, 10854-10862.	5.1	11
13	Ultrahigh and anisotropic thermal transport in the hybridized monolayer (BC ₂ N) of boron nitride and graphene: a first-principles study. Physical Chemistry Chemical Physics, 2019, 21, 17306-17313.	2.8	15
14	A theoretical study on tuning band gaps of monolayer and bilayer SnS ₂ and SnSe ₂ under external stimuli. Current Applied Physics, 2019, 19, 709-714.	2.4	32
15	Structure stability and high Li storage capacity of the unzipped graphene oxide monolayer. Applied Surface Science, 2019, 475, 151-157.	6.1	17
16	Stability, spontaneous and induced polarization in monolayer MoC, WC, WS, and WSe. Journal of Physics Condensed Matter, 2019, 31, 045301.	1.8	6
17	Enhanced ferroelectricity in perovskite oxysulfides. Physical Review Materials, 2019, 3, 010401.	2.4	4
18	Switchable Polarization in Mn Embedded Graphene. Scientific Reports, 2018, 8, 4538.	3.3	4

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19	Computational predictions of stable phase for antiperovskite Na ₃ OCl via tilting of Na ₆ O octahedra. Journal of Applied Physics, 2018, 124, .	2.5	13
20	H ₂ S adsorption process on (0001) <i>c</i> -quartz SiO ₂ surfaces. Journal of Applied Physics, 2018, 124, .	2.5	12
21	Influences of vacancy and doping on electronic and magnetic properties of monolayer SnS. Journal of Applied Physics, 2018, 124, .	2.5	31
22	Superionic and electronic conductivity in monolayer W ₂ C: ab initio predictions. Journal of Materials Chemistry A, 2017, 5, 11094-11099.	10.3	51
23	Thermoelectric and phonon transport properties of two-dimensional IV-VI compounds. Scientific Reports, 2017, 7, 506.	3.3	224
24	Adsorption and diffusion of mono, di, and trivalent ions on two-dimensional TiS ₂ . Nanotechnology, 2017, 28, 175401.	2.6	124
25	MoS ₂ @VS ₂ Nanocomposite as a Superior Hybrid Anode Material. ACS Applied Materials & Interfaces, 2017, 9, 29942-29949.	8.0	74
26	Strain engineering of phonon thermal transport properties in monolayer 2H-MoTe ₂ . Physical Chemistry Chemical Physics, 2017, 19, 32072-32078.	2.8	78
27	Ultra low lattice thermal conductivity and high carrier mobility of monolayer SnS ₂ and SnSe ₂ : a first principles study. Physical Chemistry Chemical Physics, 2017, 19, 20677-20683.	2.8	166
28	Switchable polarization in an unzipped graphene oxide monolayer. Physical Chemistry Chemical Physics, 2016, 18, 20443-20449.	2.8	16
29	Ferroelectric switching response of P(VDF-TrFE) nanodots with and without nanomolds. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	2
30	First principles study of a SnS ₂ /graphene heterostructure: a promising anode material for rechargeable Na ion batteries. Journal of Materials Chemistry A, 2016, 4, 14316-14323.	10.3	132
31	First-Principles Study of the $\sqrt{2} \times \sqrt{2}$ Phase Transition of Ferroelectric Poly(vinylidene difluoride): Observation of Multiple Transition Pathways. Journal of Physical Chemistry B, 2016, 120, 3240-3249.	2.6	21
32	Effects of Cl-Based Ligand Structures on Atomic Layer Deposited HfO ₂ . Journal of Physical Chemistry C, 2016, 120, 5958-5967.	3.1	18
33	Hydrogen and fluorine co-decorated silicene: A first principles study of piezoelectric properties. Journal of Applied Physics, 2015, 117, .	2.5	29
34	Piezoelectric enhancement by surface effect in hydrofluorinated graphene bilayer. Journal of Applied Physics, 2015, 117, 145304.	2.5	15
35	Imprint Control of Nonvolatile Shape Memory with Asymmetric Ferroelectric Multilayers. Chemistry of Materials, 2014, 26, 6911-6914.	6.7	17
36	Dipolar polarization and piezoelectricity of a hexagonal boron nitride sheet decorated with hydrogen and fluorine. Physical Chemistry Chemical Physics, 2014, 16, 6575.	2.8	92

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37	Computational Studies of Lead-based Relaxor Ferroelectrics. <i>Ferroelectrics</i> , 2014, 469, 1-13.	0.6	8
38	Domain switching of fatigued ferroelectric thin films. <i>Applied Physics Letters</i> , 2014, 104, 192902.	3.3	7
39	Semicrystalline D π A Copolymers with Different Chain Curvature for Applications in Polymer Optoelectronic Devices. <i>Macromolecules</i> , 2014, 47, 1604-1612.	4.8	95
40	Origin of piezoelectricity in monolayer halogenated graphane piezoelectrics. <i>Chemical Physics Letters</i> , 2014, 603, 62-66.	2.6	30
41	Formation of Locally Crystallized Ferroelectric Poly(vinylidene Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 587 Td (fluoride-<i>ran</i> of Physical Chemistry C, 2013, 117, 12890-12894.	3.1	9
42	Four-States Multiferroic Memory Embodied Using Mn-Doped BaTiO ₃ Nanorods. <i>ACS Nano</i> , 2013, 7, 5522-5529.	14.6	71
43	PREDICTION OF DIELECTRIC DISPERSION FOR LEAD BASED PEROVSKITES AND STUDY OF LOCAL DIELECTRIC RESPONSE IN $0.75\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3 \approx 0.25\text{PbTiO}_3$. <i>Journal of Advanced Dielectrics</i> , 2012, 02, 1241009.	2.4	5
44	Density functional study of $\hat{I} \hat{I}^2$ phase transition of polyvinylidene difluoride. <i>Physica Status Solidi - Rapid Research Letters</i> , 2012, 6, 217-219.	2.4	4
45	Multiferroic Properties of Self-Aligned BiMnO_3 Nanosquares. <i>Journal of the American Ceramic Society</i> , 2012, 95, 2474-2477.	3.8	4
46	Strain-Induced High Polarization of a KNbO_3 Thin Film on a Single Crystalline R_h Substrate. <i>Journal of the American Ceramic Society</i> , 2012, 95, 2773-2776.	3.8	13
47	Intaglio Nanotemplates Based on Atomic Force Microscopy for Ferroelectric Nanodots. <i>Journal of Physical Chemistry C</i> , 2011, 115, 14077-14080.	3.1	9
48	High-Mobility Graphene Nanoribbons Prepared Using Polystyrene Dip-Pen Nanolithography. <i>Journal of the American Chemical Society</i> , 2011, 133, 5623-5625.	13.7	64
49	Nanoscale resistive random access memory consisting of a NiO nanodot and Au nanowires formed by dip-pen nanolithography. <i>Applied Surface Science</i> , 2011, 257, 9885-9887.	6.1	10
50	Spin domain mapping of a CrO ₂ thin film using spin-polarized current microscopy. <i>Solid State Communications</i> , 2011, 151, 1192-1195.	1.9	0
51	Selective Ferroelectric Domain Mapping of PbTiO ₃ Thin Films Using Self-Assembled Polyelectrolyte. <i>Journal of the Electrochemical Society</i> , 2011, 158, D546.	2.9	2
52	Fast Domain Wall Switching in a Thin Ferroelectric Polymer Layer. <i>Electrochemical and Solid-State Letters</i> , 2011, 14, G1.	2.2	3
53	Formation of Semiconducting ZnO Nanowires Using Dip-Pen Nanolithography and Step Edge Decoration Approach. <i>Electrochemical and Solid-State Letters</i> , 2011, 14, H397.	2.2	2
54	Fabrication of Ultrathin Nb Nanopin Arrays. <i>Electrochemical and Solid-State Letters</i> , 2011, 14, D33.	2.2	2

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55	A HfO ₂ Thin Film Resistive Switch Based on Conducting Atomic Force Microscopy. <i>Electrochemical and Solid-State Letters</i> , 2011, 14, H311.	2.2	15
56	Structural and magnetic properties of Ge _{0.7} Mn _{0.3} thin films. <i>Thin Solid Films</i> , 2010, 518, 2665-2668.	1.8	1
57	Kelvin probe force microscopy for conducting nanobits of NiO thin films. <i>Nanotechnology</i> , 2010, 21, 215704.	2.6	10
58	Studies of Perovskite Materials for High-Performance Storage Media, Piezoelectric, and Solar Energy Conversion Devices. , 2010, , .		3
59	NiO Resistive Random Access Memory Nanocapacitor Array on Graphene. <i>ACS Nano</i> , 2010, 4, 2655-2658.	14.6	171
60	A Nonvolatile Memory Device Made of a Ferroelectric Polymer Gate Nanodot and a Single-Walled Carbon Nanotube. <i>ACS Nano</i> , 2010, 4, 7315-7320.	14.6	62
61	Self-Formed Exchange Bias of Switchable Conducting Filaments in NiO Resistive Random Access Memory Capacitors. <i>ACS Nano</i> , 2010, 4, 3288-3292.	14.6	61
62	Multiferroic Properties of Highly c-Oriented BiFeO ₃ Thin Films on Glass Substrates. <i>Electrochemical and Solid-State Letters</i> , 2010, 13, G5.	2.2	9
63	Collective Coherent Control: Synchronization of Polarization in Ferroelectric PbTiO_3 by Shaped THz Fields. <i>Physical Review Letters</i> , 2009, 102, 247603.	7.8	124
64	Molecular Dynamics Study of Dielectric Response in a Relaxor Ferroelectric. <i>Physical Review Letters</i> , 2009, 103, 197601.	7.8	62
65	Atomistic modeling of III-V nitrides: modified embedded-atom method interatomic potentials for GaN, InN and GaInN. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 325801.	1.8	22
66	Highly c-Oriented PbZr _{0.48} Ti _{0.52} O ₃ Thin Films on Glass Substrates. <i>Electrochemical and Solid-State Letters</i> , 2009, 12, G20.	2.2	5
67	Electrical and optical observations of ferromagnetism in Ge _{0.7} Mn _{0.3} semiconductor. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 085005.	2.8	2
68	Interface roughness effect between gate oxide and metal gate on dielectric property. <i>Thin Solid Films</i> , 2009, 517, 3892-3895.	1.8	11
69	Epitaxially strained Na _{0.7} CoO ₂ thin films on SrTiO ₃ buffer layer. <i>Journal of Crystal Growth</i> , 2009, 311, 1021-1024.	1.5	1
70	Modified embedded-atom method interatomic potentials for pure Mn and the Fe-Mn system. <i>Acta Materialia</i> , 2009, 57, 474-482.	7.9	67
71	Heteroepitaxial Ferroelectric ZnSnO ₃ Thin Film. <i>Journal of the American Chemical Society</i> , 2009, 131, 8386-8387.	13.7	93
72	Dip-Pen Lithography of Ferroelectric PbTiO ₃ Nanodots. <i>Journal of the American Chemical Society</i> , 2009, 131, 14676-14678.	13.7	57

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73	Polarization switching characteristics of BiFeO ₃ thin films epitaxially grown on Pt/MgO at a low temperature. Applied Physics Letters, 2009, 95, 242902.	3.3	30
74	Enhanced Magnetization and Modulated Orbital Hybridization in Epitaxially Constrained BiFeO ₃ Thin Films with Rhombohedral Symmetry. Chemistry of Materials, 2009, 21, 5050-5057.	6.7	64
75	Formation of Self-Assembled Polyelectrolyte Multilayer Nanodots by Scanning Probe Microscopy. Journal of the American Chemical Society, 2009, 131, 1634-1635.	13.7	10
76	Surface charge dynamics on ferroelectric PbZr _{0.48} Ti _{0.52} O ₃ films responding to the switching bias of electric force microscope. Applied Physics Letters, 2009, 94, 162902.	3.3	13
77	Thin film growth and magnetic anisotropy of epitaxial Sr _{0.775} Y _{0.225} CoO ₃ . Journal of Crystal Growth, 2008, 310, 3649-3652.	1.5	8
78	Fabrication and optical conductivities of strained epitaxial Na _x CoO ₂ thin films: x=0.5, 0.7. Journal of Solid State Chemistry, 2008, 181, 2020-2023.	2.9	3
79	Carbon diffusion around the edge region of nickel nanoparticles. Applied Physics Letters, 2008, 92, 043103.	3.3	22
80	A modified embedded-atom method interatomic potential for indium. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32, 82-88.	1.6	19
81	A modified embedded-atom method interatomic potential for Germanium. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32, 34-42.	1.6	18
82	Direct observation of conducting filaments on resistive switching of NiO thin films. Applied Physics Letters, 2008, 92, .	3.3	257
83	Modeling of Materials for Naval SONAR, Pollution Control and Nonvolatile Memory Application. , 2008, , .		0
84	Order-disorder character of PbTiO ₃ . Journal of Physics Condensed Matter, 2008, 20, 015224.	1.8	26
85	Enhanced domain wall speed in non-c-oriented SrBi ₂ Ta ₂ O ₉ thin film. Journal Physics D: Applied Physics, 2008, 41, 155307.	2.8	2
86	Bistable resistive states of amorphous SrRuO ₃ thin films. Applied Physics Letters, 2008, 92, 133510.	3.3	14
87	Epitaxial BiAlO ₃ thin film as a lead-free ferroelectric material. Applied Physics Letters, 2008, 92, .	3.3	50
88	Multiferroic BiMnO ₃ thin films with double SrTiO ₃ buffer layers. Applied Physics Letters, 2008, 93, 062902.	3.3	38
89	Writing ferroelectric domain bits on the PbZr _{0.48} Ti _{0.52} O ₃ thin film. Journal of Applied Physics, 2008, 104, 064101.	2.5	13
90	Enhanced power factor of epitaxial layered cobaltite Na _x CoO ₂ thin film induced by strain: x=0.5,0.7. Journal of Applied Physics, 2008, 104, 033538.	2.5	1

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91	Bond-Valence Model of Ferroelectric PbTiO ₃ . Journal of the Korean Physical Society, 2008, 52, 1206-1210.	0.7	2
92	Nucleation and growth mechanism of ferroelectric domain-wall motion. Nature, 2007, 449, 881-884.	27.8	340
93	Development of a bond-valence molecular-dynamics model for complex oxides. Physical Review B, 2005, 71, .	3.2	78
94	Effect of Hydrogen on Carbon Diffusion on Ni(111). Japanese Journal of Applied Physics, 2004, 43, 773-774.	1.5	6
95	Correlation between Kolmogorov-Sinai entropy and self-diffusion coefficient in simple fluids. Physical Review E, 2003, 67, 027205.	2.1	2
96	Crystal Shape of a Nickel Particle Related to Carbon Nanotube Growth. Japanese Journal of Applied Physics, 2002, 41, 6142-6144.	1.5	41
97	Lyapunov instability of rigid diatomic molecules in three dimensions. Physical Review E, 2001, 64, 041106.	2.1	1
98	Correlation between the Kolmogorov-Sinai entropy and the self-diffusion coefficient in simple liquids. Physical Review E, 2000, 62, 6516-6521.	2.1	38
99	Lyapunov instability of rigid diatomic molecules via diatomic potential molecular dynamics. Physical Review E, 1998, 58, 7243-7248.	2.1	8