List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Effects of oxygen sources on properties of atomic-layer-deposited ferroelectric hafnium zirconium oxide thin films. Ceramics International, 2022, 48, 3280-3286.	4.8	2
2	Stepwise growth of crystalline MoS ₂ in atomic layer deposition. Journal of Materials Chemistry C, 2022, 10, 7031-7038.	5.5	5
3	Oxidation of thermoelectric Bi2Te3-based alloys by atomic layer deposition of Ru metal. Materials Letters, 2022, 320, 132321.	2.6	2
4	Thermal stress-assisted annealing to improve the crystalline quality of an epitaxial YSZ buffer layer on Si. Journal of Materials Chemistry C, 2022, 10, 10027-10036.	5.5	5
5	Atomically sculptured heart in oxide film using convergent electron beam. Applied Microscopy, 2021, 51, 1.	1.4	1
6	Wide-temperature (up to 100°C) operation of thermostable vanadium oxide based microbolometers with Ti/MgF2 infrared absorbing layer for long wavelength infrared (LWIR) detection. Applied Surface Science, 2021, 547, 149142.	6.1	14
7	Hot rolling process for texture development and grain refinement of n-type Bi2Te3 alloys. Materials Letters, 2021, 301, 130278.	2.6	2
8	Defect-Controlled, Scalable Layer-by-Layer Assembly of High-k Perovskite Oxide Nanosheets for All Two-Dimensional Nanoelectronics. Chemistry of Materials, 2021, 33, 8685-8692.	6.7	8
9	Wafer-Scale, Conformal, and Low-Temperature Synthesis of Layered Tin Disulfides for Emerging Nonplanar and Flexible Electronics. ACS Applied Materials & Interfaces, 2020, 12, 2679-2686.	8.0	20
10	Substrate Surface Modification for Enlarging Two-Dimensional SnS Grains at Low Temperatures. Chemistry of Materials, 2020, 32, 9026-9033.	6.7	9
11	Domain engineering of epitaxial (001) Bi2Te3 thin films by miscut GaAs substrate. Acta Materialia, 2020, 197, 309-315.	7.9	6
12	Combined hot extrusion and spark plasma sintering method for producing highly textured thermoelectric Bi2Te3 alloys. Journal of the European Ceramic Society, 2020, 40, 3042-3048.	5.7	11
13	Direct Growth of Ferroelectric Oxide Thin Films on Polymers through Laser-Induced Low-Temperature Liquid-Phase Crystallization. Chemistry of Materials, 2020, 32, 6483-6493.	6.7	11
14	Carrier Modulation in Bi2Te3-Based Alloys via Interfacial Doping with Atomic Layer Deposition. Coatings, 2020, 10, 572.	2.6	10
15	Selective growth and texturing of VO2(B) thin films for high-temperature microbolometers. Journal of the European Ceramic Society, 2020, 40, 5582-5588.	5.7	13
16	Mapping thermoelectric properties of polycrystalline n-type Bi2Te3-xSex alloys by composition and doping level. Journal of Alloys and Compounds, 2020, 844, 155828.	5.5	7
17	3D architectures of single-crystalline complex oxides. Materials Horizons, 2020, 7, 1552-1557.	12.2	9
18	Enhanced thermal stability of Bi2Te3-based alloys via interface engineering with atomic layer deposition. Journal of the European Ceramic Society, 2020, 40, 3592-3599.	5.7	11

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19	Atomic layer deposition of SnO2 thin films using tetraethyltin and H2O2. Ceramics International, 2019, 45, 20600-20605.	4.8	17
20	Atomic and Electronic Reconstruction at the a-LAO/STO Interface by E-Beam Induced Crystallization. Microscopy and Microanalysis, 2019, 25, 1894-1895.	0.4	0
21	Gate-tunable giant nonreciprocal charge transport in noncentrosymmetric oxide interfaces. Nature Communications, 2019, 10, 4510.	12.8	44
22	Precision Interface Engineering of an Atomic Layer in Bulk Bi ₂ Te ₃ Alloys for High Thermoelectric Performance. ACS Nano, 2019, 13, 7146-7154.	14.6	66
23	Optical investigation of the metal-insulator transition in the manganite films with the thickness dependence. Current Applied Physics, 2019, 19, 1019-1023.	2.4	3
24	Li alloy-based non-volatile actuators. Nano Energy, 2019, 57, 653-659.	16.0	11
25	Probing surface electronic properties of a patterned conductive STO by reactive ion etching. Applied Surface Science, 2019, 466, 730-736.	6.1	7
26	Study of Rashba Spin–Orbit Field at LaAlO3/SrTiO3 Heterointerfaces. Journal of Electronic Materials, 2019, 48, 1347-1352.	2.2	2
27	Impurity-free, mechanical doping for the reproducible fabrication of the reliable n-type Bi2Te3-based thermoelectric alloys. Acta Materialia, 2018, 150, 153-160.	7.9	23
28	All villi-like metal oxide nanostructures-based chemiresistive electronic nose for an exhaled breath analyzer. Sensors and Actuators B: Chemical, 2018, 257, 295-302.	7.8	51
29	A novel class of oxynitrides stabilized by nitrogen dimer formation. Scientific Reports, 2018, 8, 14471.	3.3	6
30	Laser-irradiated inclined metal nanocolumns for selective, scalable, and room-temperature synthesis of plasmonic isotropic nanospheres. Journal of Materials Chemistry C, 2018, 6, 6038-6045.	5.5	37
31	A possible superconductor-like state at elevated temperatures near metal electrodes in an LaAlO3/SrTiO3 interface. Scientific Reports, 2018, 8, 11558.	3.3	1
32	Low-temperature wafer-scale synthesis of two-dimensional SnS ₂ . Nanoscale, 2018, 10, 17712-17721.	5.6	30
33	Texture-induced reduction in electrical resistivity of p-type (Bi,Sb)2Te3 by a hot extrusion. Journal of Alloys and Compounds, 2018, 764, 261-266.	5.5	12
34	Interface Engineering for Extremely Large Grains in Explosively Crystallized TiO ₂ Films Grown by Low-Temperature Atomic Layer Deposition. Chemistry of Materials, 2017, 29, 2046-2054.	6.7	19
35	Fabrication of high-performance p-type thin film transistors using atomic-layer-deposited SnO films. Journal of Materials Chemistry C, 2017, 5, 3139-3145.	5.5	81
36	Dramatic enhancement of the saturation magnetization of a sol-gel synthesized Y 3 Fe 5 O 12 by a mechanical pressing process. Journal of Alloys and Compounds, 2017, 711, 693-697.	5.5	16

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#	Article	IF	CITATIONS
37	Design and Experimental Investigation of Thermoelectric Generators for Wearable Applications. Advanced Materials Technologies, 2017, 2, 1600292.	5.8	28
38	A highly-efficient, concentrating-photovoltaic/thermoelectric hybrid generator. Nano Energy, 2017, 37, 242-247.	16.0	91
39	Mechanically Robust, Stretchable Solar Absorbers with Submicron-Thick Multilayer Sheets for Wearable and Energy Applications. ACS Applied Materials & Interfaces, 2017, 9, 18061-18068.	8.0	16
40	Domain engineering in BiFeO3 thin films. Current Applied Physics, 2017, 17, 688-703.	2.4	16
41	Nonlocal Spin Diffusion Driven by Giant Spin Hall Effect at Oxide Heterointerfaces. Nano Letters, 2017, 17, 36-43.	9.1	37
42	Electron beam induced epitaxial crystallization in a conducting and insulating a-LaAlO ₃ /SrTiO ₃ system. RSC Advances, 2017, 7, 40279-40285.	3.6	10
43	A two-step synthesis process of thermoelectric alloys for the separate control of carrier density and mobility. Journal of Alloys and Compounds, 2017, 727, 191-195.	5.5	6
44	Synthesis of SnS Thin Films by Atomic Layer Deposition at Low Temperatures. Chemistry of Materials, 2017, 29, 8100-8110.	6.7	68
45	Origin of insulating weak-ferromagnetic phase in ultra-thin La0.67Sr0.33MnO3 films on SrTiO3 substrate. AlP Advances, 2017, 7, 085224.	1.3	6
46	Harman Measurements for Thermoelectric Materials and Modules under Non-Adiabatic Conditions. Scientific Reports, 2016, 6, 39131.	3.3	19
47	Effect of spark plasma sintering conditions on the thermoelectric properties of (Bi0.25Sb0.75)2Te3 alloys. Journal of Alloys and Compounds, 2016, 678, 396-402.	5.5	25
48	Wafer-scale growth of MoS ₂ thin films by atomic layer deposition. Nanoscale, 2016, 8, 10792-10798.	5.6	139
49	Correction of the Electrical and Thermal Extrinsic Effects in Thermoelectric Measurements by the Harman Method. Scientific Reports, 2016, 6, 26507.	3.3	11
50	Enhancement of Mechanical Hardness in SnO _{<i>x</i>} N _{<i>y</i>} with a Dense High-Pressure Cubic Phase of SnO ₂ . Chemistry of Materials, 2016, 28, 7051-7057.	6.7	23
51	Free-electron creation at the 60 \hat{A}° twin boundary in Bi2Te3. Nature Communications, 2016, 7, 12449.	12.8	59
52	Large linear magnetoresistance in heavily-doped Nb:SrTiO3 epitaxial thin films. Scientific Reports, 2016, 6, 34295.	3.3	12
53	Thermal stability of 2DEG at amorphous LaAlO3/crystalline SrTiO3 heterointerfaces. Nano Convergence, 2016, 3, 7.	12.1	5
54	Impedance-based interpretations in 2-dimensional electron gas conduction formed in the LaAlO 3 /Sr x Ca 1â^'x TiO 3 /SrTiO 3 system. Journal of Physics and Chemistry of Solids, 2016, 93, 131-136.	4.0	0

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55	Comprehensive study on critical role of surface oxygen vacancies for 2DEG formation and annihilation in LaAlO3/SrTiO3 heterointerfaces. Electronic Materials Letters, 2016, 12, 243-250.	2.2	12
56	Structural approaches for enhancing output power of piezoelectric polyvinylidene fluoride generator. Nano Energy, 2016, 22, 514-523.	16.0	38
57	Thickness-Dependent Electrocaloric Effect in Pb0.9La0.1Zr0.65Ti0.35O3 Films Grown by Sol–Gel Process. Journal of Electronic Materials, 2016, 45, 1057-1064.	2.2	12
58	Enhanced piezoelectric properties of vertically aligned single-crystalline NKN nano-rod arrays. Scientific Reports, 2015, 5, 10151.	3.3	20
59	Giant Electroresistive Ferroelectric Diode on 2DEG. Scientific Reports, 2015, 5, 10548.	3.3	10
60	Hardening of Bi–Te based alloys by dispersing B4C nanoparticles. Acta Materialia, 2015, 97, 68-74.	7.9	19
61	Conductance Change Induced by the Rashba Effect in the LaAlO ₃ /SrTiO ₃ Interface. Journal of Nanoscience and Nanotechnology, 2015, 15, 8632-8636.	0.9	3
62	Electric-field-induced Shift in the Threshold Voltage in LaAlO3/SrTiO3 Heterostructures. Scientific Reports, 2015, 5, 8023.	3.3	13
63	Powerful curved piezoelectric generator for wearable applications. Nano Energy, 2015, 13, 174-181.	16.0	159
64	Effect of Sn Doping on the Thermoelectric Properties of n-type Bi2(Te,Se)3 Alloys. Journal of Electronic Materials, 2015, 44, 1926-1930.	2.2	8
65	A differential method for measuring cooling performance of a thermoelectric module. Applied Thermal Engineering, 2015, 87, 209-213.	6.0	3
66	Sn doping in thermoelectric Bi2Te3 films by metal-organic chemical vapor deposition. Applied Surface Science, 2015, 353, 232-237.	6.1	18
67	High Output Piezo/Triboelectric Hybrid Generator. Scientific Reports, 2015, 5, 9309.	3.3	216
68	Impedance-based interfacial analysis of the LaAlO3/SrTiO3 oxide heterostructure involving a 2-dimensional electron gas layer. Journal of Physics and Chemistry of Solids, 2015, 82, 60-66.	4.0	1
69	Thermoelectric Properties of Sn-Doped Bi0.4Sb1.6Te3 Thin Films. Journal of Electronic Materials, 2015, 44, 1573-1578.	2.2	3
70	Symmetry-dependent interfacial reconstruction to compensate polar discontinuity at perovskite oxide interfaces (LaAlO3/SrTiO3 and LaAlO3/CaTiO3). Applied Physics Letters, 2015, 106, .	3.3	7
71	Growth Enhancement and Nitrogen Loss in ZnO _{<i>x</i>} N _{<i>y</i>} Low-Temperature Atomic Layer Deposition with NH ₃ . Journal of Physical Chemistry C, 2015, 119, 23470-23477.	3.1	7
72	Control of the initial growth in atomic layer deposition of Pt films by surface pretreatment. Nanotechnology, 2015, 26, 304003.	2.6	21

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73	Orientation-Controlled Growth of Pt Films on SrTiO ₃ (001) by Atomic Layer Deposition. Chemistry of Materials, 2015, 27, 6779-6783.	6.7	9
74	Dynamic temperature response of electrocaloric multilayer capacitors. Applied Physics Letters, 2014, 104, .	3.3	11
75	Enhancement of Initial Growth of ZnO Films on Layer-Structured Bi ₂ Te ₃ by Atomic Layer Deposition. Chemistry of Materials, 2014, 26, 6448-6453.	6.7	14
76	Thermopower Enhancement of Bi2Te3 Films by Doping I Ions. Journal of Electronic Materials, 2014, 43, 2000-2005.	2.2	9
77	Tailoring the domain structure of epitaxial BiFeO3 thin films. Current Opinion in Solid State and Materials Science, 2014, 18, 39-45.	11.5	24
78	Ferroelastic domain switching dynamics under electrical and mechanical excitations. Nature Communications, 2014, 5, 3801.	12.8	135
79	Thermoelectric Properties of Highly Deformed and Subsequently Annealed p-Type (Bi0.25Sb0.75)2Te3 Alloys. Journal of Electronic Materials, 2014, 43, 1726-1732.	2.2	4
80	Strain-assisted, low-temperature synthesis of high-performance thermoelectric materials. Physical Chemistry Chemical Physics, 2014, 16, 3529.	2.8	13
81	Nonvolatile Resistance Switching on Two-Dimensional Electron Gas. ACS Applied Materials & Interfaces, 2014, 6, 17785-17791.	8.0	5
82	Influence of Gas Ambient on Charge Writing at the LaAlO ₃ /SrTiO ₃ Heterointerface. ACS Applied Materials & Interfaces, 2014, 6, 14037-14042.	8.0	5
83	Impact of parasitic thermal effects on thermoelectric property measurements by Harman method. Review of Scientific Instruments, 2014, 85, 045108.	1.3	21
84	Effect of Heat Treatment on the Thermoelectric Properties of Bismuth–Antimony–Telluride Prepared by Mechanical Deformation and Mechanical Alloying. Journal of Electronic Materials, 2014, 43, 2255-2261.	2.2	14
85	SnO 2 thin films grown by atomic layer deposition using a novel Sn precursor. Applied Surface Science, 2014, 320, 188-194.	6.1	35
86	Full Range Dielectric Characteristics of Calcium Copper Titanate Thin Films Prepared by Continuous Composition-Spread Sputtering. ACS Combinatorial Science, 2014, 16, 478-484.	3.8	15
87	Nonâ€Volatile Control of 2DEG Conductivity at Oxide Interfaces. Advanced Materials, 2013, 25, 4612-4617.	21.0	47
88	Composition-Dependent Thermoelectric Properties of n-Type Bi2Te2.7Se0.3 Doped with In4Se3. Journal of Electronic Materials, 2013, 42, 2178-2183.	2.2	6
89	Atomic-scale mechanisms of ferroelastic domain-wall-mediated ferroelectric switching. Nature Communications, 2013, 4, .	12.8	152
			2012

90 Tunable conductivity at LaAlO3/SrxCa1â[°]xTiO3 (0 â‰**å**€‰x â‰**å**€‰1) heterointerfaces. Applied Physics Letters, 2013, 102, 012903.

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91	Epitaxial integration of perovskite-based multifunctional oxides on silicon. Acta Materialia, 2013, 61, 2734-2750.	7.9	95
92	Capacitance–voltage analysis of LaAlO3/SrTiO3 heterostructures. Applied Physics Letters, 2013, 102, 112906.	3.3	8
93	<i>A Special Section on</i> Selected Peer-Reviewed Articles from the International Conference on Advanced Electromaterials 2011 (ICAE2011). Journal of Nanoscience and Nanotechnology, 2013, 13, 3254-3259.	0.9	0
94	Effect of Mechanical Deformation on Thermoelectric Properties of p-Type(Bi0.225Sb0.775)2Te3Alloys. Journal of Nanomaterials, 2013, 2013, 1-6.	2.7	3
95	Active Control of Ferroelectric Switching Using Defectâ€Dipole Engineering. Advanced Materials, 2012, 24, 6490-6495.	21.0	76
96	Interface Effects on Static and Dynamic Properties of Multiferroic BiFeO3. Microscopy and Microanalysis, 2012, 18, 320-321.	0.4	0
97	Direct Observations of Retention Failure in Ferroelectric Memories by in situ Transmission Electron Microscopy. Microscopy and Microanalysis, 2012, 18, 1846-1847.	0.4	0
98	Epitaxial growth of CdTe films on GaAs-buffered (001) Si substrates by metal organic chemical vapor deposition. Materials Letters, 2012, 87, 139-141.	2.6	3
99	Growth and thermoelectric properties of Bi2Te3 films deposited by modified MOCVD. Journal of Crystal Growth, 2012, 346, 17-21.	1.5	31
100	Giant piezoelectricity in PMN-PT thin films: Beyond PZT. MRS Bulletin, 2012, 37, 1022-1029.	3.5	55
101	A Structural Investigation of CdTe(001) Thin Films on GaAs/Si(001) Substrates by High-Resolution Electron Microscopy. Journal of Electronic Materials, 2012, 41, 2795-2798.	2.2	2
102	Nonlinearity in the high-electric-field piezoelectricity of epitaxial BiFeO3 on SrTiO3. Applied Physics Letters, 2012, 100, 062906.	3.3	14
103	Continuous Control of Charge Transport in Biâ€Đeficient BiFeO ₃ Films Through Local Ferroelectric Switching. Advanced Functional Materials, 2012, 22, 4962-4968.	14.9	40
104	Thermoelectric Properties of Indium-Selenium Nanocomposites Prepared by Mechanical Alloying and Spark Plasma Sintering. Journal of Electronic Materials, 2012, 41, 1354-1359.	2.2	17
105	Three-Dimensional Bi2Te3 Nanocrystallites Embedded in 2D Bi2Te3 Films Grown by MOCVD. Journal of Electronic Materials, 2012, 41, 1237-1241.	2.2	3
106	Direct Observations of Retention Failure in Ferroelectric Memories. Advanced Materials, 2012, 24, 1106-1110.	21.0	56
107	Structural Consequences of Ferroelectric Nanolithography. Nano Letters, 2011, 11, 3080-3084.	9.1	22
108	Spontaneous Vortex Nanodomain Arrays at Ferroelectric Heterointerfaces. Nano Letters, 2011, 11, 828-834.	9.1	419

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109	Domain Dynamics During Ferroelectric Switching. Science, 2011, 334, 968-971.	12.6	320
110	Revealing the role of defects in ferroelectric switching with atomic resolution. Nature Communications, 2011, 2, 591.	12.8	214
111	Giant Piezoelectricity on Si for Hyperactive MEMS. Science, 2011, 334, 958-961.	12.6	394
112	Thick lead-free ferroelectric films with high Curie temperatures through nanocomposite-induced strain. Nature Nanotechnology, 2011, 6, 491-495.	31.5	220
113	The Nature of Polarization Fatigue in BiFeO ₃ . Advanced Materials, 2011, 23, 1621-1625.	21.0	127
114	Self-assembled oxide nanopillars in epitaxial BaFe2As2 thin films for vortex pinning. Applied Physics Letters, 2011, 98, .	3.3	42
115	Twin wall distortions through structural investigation of epitaxial BiFeO ₃ thin films. Journal of Materials Research, 2011, 26, 2844-2853.	2.6	5
116	Phaseâ€Transition Temperatures of Strained Singleâ€Crystal SrRuO ₃ Thin Films. Advanced Materials, 2010, 22, 759-762.	21.0	78
117	Ferroelastic switching for nanoscale non-volatile magnetoelectric devices. Nature Materials, 2010, 9, 309-314.	27.5	407
118	Template engineering of Co-doped BaFe2As2 single-crystal thin films. Nature Materials, 2010, 9, 397-402.	27.5	185
119	Anisotropic relaxation and crystallographic tilt in BiFeO3 on miscut SrTiO3 (001). Applied Physics Letters, 2010, 96, 051901.	3.3	12
120	Metallicity in <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>LaTiO</mml:mtext></mml:mrow><mml:mr films induced by lattice deformation. Physical Review B, 2010, 81, .</mml:mr </mml:msub></mml:mrow></mml:math>	1> 3. 2/mml	:m5na
121	Domain Engineering for Enhanced Ferroelectric Properties of Epitaxial (001) BiFeO Thin Films. Advanced Materials, 2009, 21, 817-823.	21.0	277
122	Electrical control of antiferromagnetic domains in multiferroic BiFeO3 films at room temperature. Nature Materials, 2006, 5, 823-829.	27.5	1,160