Zhigao Hu

List of Publications by Year
in descending order

192 papers	3,861 citations	136950 32 h-index	206112 48 g-index
193 all docs	193 docs citations	193 times ranked	5117 citing authors

#	Article	IF	Citations
1	Unipolar barrier photodetectors based on van der Waals heterostructures. Nature Electronics, 2021, 4, 357-363.	26.0	292
2	Vapomechanically Responsive Motion of Microchannelâ€Programmed Actuators. Advanced Materials, 2017, 29, 1702231.	21.0	138
3	Blackbody-sensitive room-temperature infrared photodetectors based on low-dimensional tellurium grown by chemical vapor deposition. Science Advances, 2021, 7, .	10.3	121
4	Effect of oxygen defects on ferromagnetic of undoped ZnO. Journal of Applied Physics, 2011, 110, 013901.	2.5	99
5	Efficient and Holeâ€Transportingâ€Layerâ€Free CsPbI₂Br Planar Heterojunction Perovskite Solar Cells through Rubidium Passivation. ChemSusChem, 2019, 12, 983-989.	6.8	79
6	Airâ€Stable Lowâ€Symmetry Narrowâ€Bandgap 2D Sulfide Niobium for Polarization Photodetection. Advanced Materials, 2020, 32, e2005037.	21.0	68
7	Structural, electronic band transition and optoelectronic properties of delafossite CuGa1â^'xCrxO2 (0) Tj ETQq1 1 0.784314 rgBT /Ov 18463.	6.7	66
8	Growth of Bi2O3 Ultrathin Films by Atomic Layer Deposition. Journal of Physical Chemistry C, 2012, 116, 3449-3456.	3.1	62
9	Copper ferrites@reduced graphene oxide anode materials for advanced lithium storage applications. Scientific Reports, 2017, 7, 8903.	3.3	62
10	Largeâ€Scale Growth and Fieldâ€Effect Transistors Electrical Engineering of Atomicâ€Layer SnS₂. Small, 2019, 15, e1904116.	10.0	58
11	Tuning Coupling Behavior of Stacked Heterostructures Based on MoS2, WS2, and WSe2. Scientific Reports, 2017, 7, 44712.	3.3	56
12	Superior adsorption and photoinduced carries transfer behaviors of dandelion-shaped Bi2S3@MoS2: experiments and theory. Scientific Reports, 2017, 7, 42484.	3.3	52
13	High Responsivity and External Quantum Efficiency Photodetectors Based on Solution-Processed Ni-Doped CuO Films. ACS Applied Materials & Interfaces, 2020, 12, 11797-11805.	8.0	51
14	Enhanced carrier separation in ferroelectric In₂Se₃/MoS₂ van der Waals heterostructure. Journal of Materials Chemistry C, 2020, 8, 11160-11167.	5.5	44
15	Intrinsic evolutions of optical functions, band gap, and higher-energy electronic transitions in VO2 film near the metal-insulator transition region. Applied Physics Letters, 2011, 99, .	3.3	43
16	A type-II GaSe/GeS heterobilayer with strain enhanced photovoltaic properties and external electric field effects. Journal of Materials Chemistry C, 2020, 8, 89-97.	5.5	42
17	Structure, Optical, and Room-Temperature Ferromagnetic Properties of Pure and Transition-Metal-(Cr,) Tj ETQq1 1 0.784314 rgBT /Ov Chemistry C, 2010, 114, 11951-11957.	3.1	41
18	Interface Modification for Planar Perovskite Solar Cell Using Room-Temperature Deposited Nb₂O₅ as Electron Transportation Layer. ACS Applied Energy Materials, 2018, 1, 2000-2006.	5.1	41

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19	<i>In situ</i> carbon encapsulation of vertical MoS₂ arrays with SnO₂ for durable high rate lithium storage: dominant pseudocapacitive behavior. Nanoscale, 2018, 10, 741-751.	5.6	41
20	Titanium-induced structure modification for thermal stability enhancement of a GeTeTi phase change material. RSC Advances, 2015, 5, 24966-24974.	3.6	40
21	Direct Observation of Landau Level Resonance and Mass Generation in Dirac Semimetal Cd₃As₂ Thin Films. Nano Letters, 2017, 17, 2211-2219.	9.1	40
22	Highly durable and cycle-stable lithium storage based on MnO nanoparticle-decorated 3D interconnected CNT/graphene architecture. Nanoscale, 2018, 10, 13140-13148.	5.6	40
23	Temperature dependence of phonon modes, dielectric functions, and interband electronic transitions in Cu2ZnSnS4 semiconductor films. Physical Chemistry Chemical Physics, 2012, 14, 9936.	2.8	38
24	Temperature dependence of electronic transitions and optical properties in multiferroic BiFeO3 nanocrystalline film determined from transmittance spectra. Applied Physics Letters, 2010, 97, .	3.3	37
25	Photoluminescence and low-threshold lasing of ZnO nanorod arrays. Optics Express, 2012, 20, 14857.	3.4	37
26	Enhanced performance of carbon-based planar CsPbBr3 perovskite solar cells with room-temperature sputtered Nb2O5 electron transport layer. Solar Energy, 2019, 191, 263-271.	6.1	37
27	Optical properties of pulsed laser deposited rutile titanium dioxide films on quartz substrates determined by Raman scattering and transmittance spectra. Applied Physics Letters, 2008, 93, 181910.	3.3	36
28	Electronic transition and electrical transport properties of delafossite CuCr1â^’xMgxO2 (0â€‰â‰â€‰xâ€‰â‰â€‰12%) films prepared by the sol-gel method: A composition dependence study. Journal of Applied Physics, 2013, 114, 163526.	2.5	36
29	Enhanced Photoelectrochemical Activity of ZnO-Coated TiO2 Nanotubes and Its Dependence on ZnO Coating Thickness. Nanoscale Research Letters, 2016, 11, 104.	5.7	35
30	A novel Sn particles coated composite of SnO /ZnO and N-doped carbon nanofibers as high-capacity and cycle-stable anode for lithium-ion batteries. Journal of Alloys and Compounds, 2020, 819, 153036.	5.5	34
31	Optoelectronic properties and polar nano-domain behavior of solâ€“gel derived K_{0.5}Na_{0.5}Nb_{1â^’x}Mn_xO_{3â^’Î´}nanocrystalline films with enhanced ferroelectricity. Journal of Materials Chemistry C, 2015, 3, 8225-8234.	5.5	33
32	Manipulations from oxygen partial pressure on the higher energy electronic transition and dielectric function of VO₂ films during a metalâ€“insulator transition process. Journal of Materials Chemistry C, 2015, 3, 5033-5040.	5.5	33
33	Superior and Reversible Lithium Storage of SnO₂/Graphene Composites by Silicon Doping and Carbon Sealing. ACS Applied Materials & Interfaces, 2020, 12, 20824-20837.	8.0	33
34	Significantly enhanced lithium storage by in situ grown CoS2@MoS2 coreâ€“shell nanorods anchored on carbon cloth. Chemical Engineering Journal, 2021, 420, 127714.	12.7	33
35	Enhanced photoelectrochemical activity of vertically aligned ZnO-coated TiO2 nanotubes. Applied Physics Letters, 2014, 104, 053114.	3.3	31
36	Electronic structures and excitonic transitions in nanocrystalline iron-doped tin dioxide diluted magnetic semiconductor films: an optical spectroscopic study. Physical Chemistry Chemical Physics, 2011, 13, 6211.	2.8	30

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37	Temperature-dependent Raman scattering and multiple phase coexistence in relaxor ferroelectric Pb(In1â^•2Nb1â^•2)O3-Pb(Mg1â^•3Nb2â^•3)O3-PbTiO3 single crystals. Journal of Applied Physics, 2013, 114, .	2.5	30
38	Structural distortion, phonon behavior and electronic transition of Aurivillius layered ferroelectric CaBi2Nb2â^'W O9 ceramics. Journal of Alloys and Compounds, 2015, 653, 168-174.	5.5	30
39	Temperature dependent phonon evolutions and optical properties of highly <i>c</i>-axis oriented CuGaO2 semiconductor films grown by the sol-gel method. Applied Physics Letters, 2011, 99, .	3.3	29
40	Probing Effective Outâ€ofâ€Plane Piezoelectricity in van der Waals Layered Materials Induced by Flexoelectricity. Small, 2019, 15, e1903106.	10.0	29
41	Temperature and concentration dependent crystallization behavior of Ge₂Sb₂Te₅phase change films: tungsten doping effects. RSC Advances, 2014, 4, 57218-57222.	3.6	28
42	High-capacity and long-life lithium storage boosted by pseudocapacitance in three-dimensional MnOâ€"Cuâ€"CNT/graphene anodes. Nanoscale, 2018, 10, 2944-2954.	5.6	28
43	Composition dependence of dielectric function in ferroelectric BaCoxTi1â^'xO3 films grown on quartz substrates by transmittance spectra. Applied Physics Letters, 2008, 92, 081904.	3.3	27
44	External Electric Field Manipulations on Structural Phase Transition of Vanadium Dioxide Nanoparticles and Its Application in Field Effect Transistor. Journal of Physical Chemistry C, 2011, 115, 23558-23563.	3.1	26
45	Mixed-Dimensional Van der Waals Heterostructure Photodetector. ACS Applied Materials & Interfaces, 2020, 12, 18674-18682.	8.0	26
46	Composition Dependence of Microstructure, Phonon Modes, and Optical Properties in Rutile TiO₂:Fe Nanocrystalline Films Prepared by a Nonhydrolytic Solâ^'Gel Route. Journal of Physical Chemistry C, 2010, 114, 15157-15164.	3.1	25
47	Effects from <i>A</i>-site substitution on morphotropic phase boundary and phonon modes of (Pb1â€"1.5<i>x</i>La<i>x</i>)(Zr0.42Sn0.40Ti0.18)O3 ceramics by temperature dependent Raman spectroscopy. Journal of Applied Physics, 2013, 114, .	2.5	25
48	Robust three-dimensional porous rGO aerogel anchored with ultra-fine Î±-Fe2O3 nanoparticles exhibit dominated pseudocapacitance behavior for superior lithium storage. Journal of Alloys and Compounds, 2020, 816, 152627.	5.5	25
49	Ultrabroadband Tellurium Photoelectric Detector from Visible to Millimeter Wave. Advanced Science, 2022, 9, e2103873.	11.2	25
50	Annealing time modulated the film microstructures and electrical properties of P-type CuO field effect transistors. Applied Surface Science, 2019, 481, 632-636.	6.1	24
51	Electric field and temperature-induced phase transition in Mn-doped Na1/2Bi1/2TiO3-5.0 at.%BaTiO3 single crystals investigated by micro-Raman scattering. Applied Physics Letters, 2014, 104, .	3.3	23
52	Temperature-dependent lattice dynamics and electronic transitions in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mn>0.93</mml:mn><mml:mi mathvariant="normal">P</mml:mi><mml:mtext>b</mml:mtext><mml:mo>(</mml:mo><mml:mrow><mml:msub><mml:mi>Zn</mml:m Physical Review B, 2015, 91, .	3.2	23
53	Phase transitions and phonon thermodynamics in giant piezoelectric Mn-doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">K</mml:mi><mml:mrow><mml:mn>0.5</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi>Na</mm crystals studied b. Physical Review B, 2020, 102, .	3.2	23
54	Simultaneously achieving large energy density and high efficiency in NaNbO₃â€"(Sr,Bi)TiO₃â€"Bi(Mg,Zr)O₃ relaxor ferroelectric ceramics for dielectric capacitor applications. Journal of Materials Chemistry A, 2022, 10, 13907-13916.	10.3	23

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55	Ultraviolet-infrared dielectric functions and electronic band structures of monoclinic VO2 nanocrystalline film: Temperature-dependent spectral transmittance. Journal of Applied Physics, 2011, 110, 013504.	2.5	22
56	Abnormal temperature dependence of interband electronic transitions in relaxor-based ferroelectric (1â˜'x)Pb(Mg1/3Nb2/3)O3â˜'xPbTiO3 (x=0.24 and 0.31) single crystals. Applied Physics Letters, 2011, 98, .	3.3	22
57	Spin-phonon interactions of multiferroic Bi4Ti3O12-BiFeO3 ceramics: Low-temperature Raman scattering and infrared reflectance spectra investigations. Journal of Applied Physics, 2014, 115, .	2.5	22
58	Origin of Improved Photoelectrochemical Water Splitting in Mixed Perovskite Oxides. Advanced Energy Materials, 2018, 8, 1801972.	19.5	22
59	Inherent optical behavior and structural variation in Na0.5Bi0.5TiO3-6%BaTiO3 revealed by temperature dependent Raman scattering and ultraviolet-visible transmittance. Applied Physics Letters, 2014, 104, .	3.3	21
60	Efficient carbon-based planar CsPbBr3 perovskite solar cells with Li-doped amorphous Nb2O5 layer. Journal of Alloys and Compounds, 2020, 842, 155984.	5.5	21
61	Coexistence of Ferroelectric Phases and Phonon Dynamics in Relaxor Ferroelectric Na_{0.5}Bi_{0.5}TiO₃ Based Single Crystals. Journal of the American Ceramic Society, 2016, 99, 2408-2414.	3.8	20
62	The electro-optic mechanism and infrared switching dynamic of the hybrid multilayer VO2/Al:ZnO heterojunctions. Scientific Reports, 2017, 7, 4425.	3.3	20
63	Manipulating Behaviors from Heavy Tungsten Doping on Interband Electronic Transition and Orbital Structure Variation of Vanadium Dioxide Films. ACS Applied Materials & Interfaces, 2018, 10, 30548-30557.	8.0	20
64	Transition-Metal Substitution-Induced Lattice Strain and Electrical Polarity Reversal in Monolayer WS₂. ACS Applied Materials & Interfaces, 2020, 12, 18650-18659.	8.0	20
65	Intrinsic evolutions of dielectric function and electronic transition in tungsten doping Ge2Sb2Te5 phase change films discovered by ellipsometry at elevated temperatures. Applied Physics Letters, 2015, 106, .	3.3	19
66	Exploring lattice symmetry evolution with discontinuous phase transition by Raman scattering criteria: The single-crystalline <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mo>(</mml:mo><mml:mi>) Tj ETQq0 0 0 rgBT /O model system. Physical Review B, 2019, 100, .	3.2	19
67	Ferroelectric and dipole control of band alignment in the two dimensional InTe/In₂Se₃ heterostructure. Journal of Physics Condensed Matter, 2020, 32, 055703.	1.8	19
68	Enhanced Crystallization Behaviors of Silicon-Doped Sb2Te Films: Optical Evidences. Scientific Reports, 2016, 6, 33639.	3.3	17
69	Free-anchored Nb₂O₅@graphene networks for ultrafast-stable lithium storage. Nanotechnology, 2018, 29, 185401.	2.6	17
70	Decoding Phases of Matter by Machine-Learning Raman Spectroscopy. Physical Review Applied, 2019, 12, .	3.8	17
71	Enhanced photovoltaic response of lead-free ferroelectric solar cells based on (K,Bi)(Nb,Yb)O₃ films. Physical Chemistry Chemical Physics, 2020, 22, 3691-3701.	2.8	17
72	Optically Modulated HfS₂-Based Synapses for Artificial Vision Systems. ACS Applied Materials & Interfaces, 2021, 13, 50132-50140.	8.0	17

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73	Applications of Nickelâ€Based Electrocatalysts for Hydrogen Evolution Reaction. Advanced Energy and Sustainability Research, 2022, 3, .	5.8	17
74	Electronic properties of nanocrystalline LaNiO3 and La0.5Sr0.5CoO3 conductive films grown on silicon substrates determined by infrared to ultraviolet reflectance spectra. Applied Physics Letters, 2009, 94, 221104.	3.3	16
75	Evolution of orientation degree, lattice dynamics and electronic band structure properties in nanocrystalline lanthanum-doped bismuth titanate ferroelectric films by chemical solution deposition. Dalton Transactions, 2011, 40, 7967.	3.3	16
76	Abnormal electronic transition variations of lanthanum-modified lead zironate stannate titanate ceramics near morphotropic phase boundary: A spectroscopic evidence. Applied Physics Letters, 2012, 101, .	3.3	16
77	Fabrication of Cu₂ZnSnS₄ absorbers by sulfurization of Snâ€rich precursors. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 1493-1497.	1.8	16
78	Enhanced FrÃ¶hlich interaction of semiconductor cuprous oxide films determined by temperatureâ€dependent Raman scattering and spectral transmittance. Journal of Raman Spectroscopy, 2013, 44, 142-146.	2.5	16
79	Lowâ€temperature sintering and electrical properties of Sr₂Nb₂O₇ piezoceramics by CuO addition. Journal of the American Ceramic Society, 2017, 100, 2397-2401.	3.8	16
80	Blue luminescent amorphous carbon nanoparticles synthesized by microplasma processing of folic acid. Plasma Processes and Polymers, 2018, 15, 1700088.	3.0	16
81	Annealing effects on sulfur vacancies and electronic transport of MoS2 films grown by pulsed-laser deposition. Applied Physics Letters, 2019, 115, .	3.3	16
82	Temperature and pressure manipulation of magnetic ordering and phonon dynamics with phase transition in multiferroic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>GdFeO</mml:mi><mml:mn>3</mml:mn></mml:msub></m : Evidence from Raman scattering. Physical Review B, 2020, 102, .	3.2	16
83	Flexo-photoelectronic effect in n-type/p-type two-dimensional semiconductors and a deriving light-stimulated artificial synapse. Materials Horizons, 2021, 8, 1985-1997.	12.2	16
84	Effects of LaNiO3 bottom electrode on structural and dielectric properties of CaCu3Ti4O12 films fabricated by sol-gel method. Applied Physics Letters, 2008, 92, 042901.	3.3	15
85	Temperature-dependent dielectric functions and interband critical points of relaxor lead hafnate-modified PbSc_{1/2}Ta_{1/2}O₃ ferroelectric ceramics by spectroscopic ellipsometry. Applied Physics Letters, 2013, 102, 151908.	3.3	15
86	Temperature Dependence of Phonon Modes, Optical Constants, and Optical Band Gap in Two-Dimensional ReS2 Films. Journal of Physical Chemistry C, 2018, 122, 29464-29469.	3.1	15
87	Composition Dependence of Optical Properties and Band Structures in p-Type Ni-Doped CuO Films: Spectroscopic Experiment and First-Principles Calculation. Journal of Physical Chemistry C, 2019, 123, 27165-27171.	3.1	15
88	Two-dimensional mesoporous sensing materials. Chinese Chemical Letters, 2020, 31, 521-524.	9.0	15
89	New Pressure Stabilization Structure in Two-Dimensional PtSe₂. Journal of Physical Chemistry Letters, 2020, 11, 7342-7349.	4.6	15
90	2D Transition Metal Dichalcogenide with Increased Entropy for Piezoelectric Electronics. Advanced Materials, 2022, 34, e2201630.	21.0	15

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91	Electronic transitions of the transparent delafossite-type CuGa_{1â^’x}Cr_xO₂ system: first-principles calculations and temperature-dependent spectral experiments. Journal of Materials Chemistry C, 2017, 5, 183-191.	5.5	14
92	Doping effect on the phase transition temperature in ferroelectric SrBi_{2â^’<i>x</i>}Nd<i>_x</i>Nb₂O₉ layerâ€structured ceramics: a microâ€Raman scattering study. Journal of Raman Spectroscopy, 2012, 43, 583-587.	2.5	13
93	Relationship between negative thermal expansion and lattice dynamics in a tetragonal PbTiO₃â€“Bi(Mg_{1/2}Ti_{1/2})O₃ perovskite single crystal. RSC Advances, 2016, 6, 3159-3164.	3.6	13
94	Spectral assignments in the infrared absorption region and anomalous thermal hysteresis in the interband electronic transition of vanadium dioxide films. Physical Chemistry Chemical Physics, 2016, 18, 6239-6246.	2.8	13
95	Three-dimensional porous Co₃O₄â€“CoO@GO composite combined with N-doped carbon for superior lithium storage. Nanotechnology, 2019, 30, 425404.	2.6	13
96	Ferroelectric-Modulated MoS₂ Field-Effect Transistors as Multilevel Nonvolatile Memory. ACS Applied Materials & Interfaces, 2020, 12, 44902-44911.	8.0	13
97	Sandwiched CdS/Au/ZnO Nanorods with Enhanced Ultraviolet and Visible Photochemical and Photoelectrochemical Properties via Semiconductor and Metal Cosensitizing. Journal of Physical Chemistry C, 2020, 124, 10941-10950.	3.1	13
98	High Quality <i>P</i>-Type Mg-Doped Î²-Ga₂O_{3â€“Î´} Films for Solar-Blind Photodetectors. IEEE Electron Device Letters, 2022, 43, 580-583.	3.9	13
99	Structure evolution mechanism of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Na</mml:mi><mml:mrow><mml:mn>0.5 mathvariant="normal">W</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mr. Physical Review B, 2017, 96, .	3.2	12
100	Enhanced exciton emission behavior and tunable band gap of ternary W(S_xSe_{1â^’x})₂ monolayer: temperature dependent optical evidence and first-principles calculations. Nanoscale, 2018, 10, 11553-11563.	5.6	12
101	Pâ€“N conversion of charge carrier types and high photoresponsive performance of composition modulated ternary alloy W(SxSe1â^’x)2 field-effect transistors. Nanoscale, 2020, 12, 15304-15317.	5.6	12
102	Phase diagram with an antiferroelectric/ferroelectric phase boundary in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>AgNbO</mml:mi><mml:mn>3</mml:mn> energy-storage ceramics by lattice dynamics and electronic transitions. Physical Review B, 2021, 104, .	3.2	12
103	Phonon mode and phase transition behaviors of (1-x)PbSc1/2Ta1/2O3-xPbHfO3 relaxor ferroelectric ceramics determined by temperature-dependent Raman spectra. Applied Physics Letters, 2011, 99, 041902.	3.3	11
104	Temperature dependent phonon Raman scattering of Heusler alloy Co2MnxFe1â^’xAl/GaAs films grown by molecular-beam epitaxy. RSC Advances, 2012, 2, 9899.	3.6	11
105	Metallic attenuated total reflection infrared hollow fibers for robust optical transmission systems. Applied Physics Letters, 2014, 105, .	3.3	11
106	Evaluation of lattice dynamics, infrared optical properties and visible emissions of hexagonal GeO₂ films prepared by liquid phase deposition. Journal of Materials Chemistry C, 2017, 5, 12792-12799.	5.5	11
107	Phonon behaviors and dielectric functions in Bi 0.5 Na 0.5 TiO 3 â€based ceramics by Raman scattering and optical ellipsometry. Journal of the American Ceramic Society, 2018, 102, 2791.	3.8	11
108	Facile fabrication of 3D porous MnO@GS/CNT architecture as advanced anode materials for high-performance lithium-ion battery. Nanotechnology, 2018, 29, 315403.	2.6	11

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109	Controllable fabrication of Bi2O3 nanoparticles by atomic layer deposition on TiO2 films and application in photodegradation. Solar Energy Materials and Solar Cells, 2020, 204, 110218.	6.2	11
110	Strong charge-density-wave order of large-area 2D metallic VSe2 nanosheets discovered by temperature-dependent Raman spectra. Applied Physics Letters, 2020, 116, 033102.	3.3	11
111	CuO: Synthesis in a Highly Excited Oxygen-Copper Plasma and Decoration of ZnO Nanorods for Enhanced Photocatalysis. Journal of Physical Chemistry C, 2021, 125, 9119-9128.	3.1	11
112	Improved electric behaviors of the Pt/Bi1â^'xLaxFe0.92Mn0.08O3/n+-Si heterostructure for nonvolatile ferroelectric random-access memory. Journal of Materials Chemistry C, 2013, 1, 6252.	5.5	10
113	Intrinsic relationship between electronic structures and phase transition of SrBi2â^'xNdxNb2O9 ceramics from ultraviolet ellipsometry at elevated temperatures. Journal of Applied Physics, 2014, 115, 054107.	2.5	10
114	Effects of deposition methods and processing techniques on band gap, interband electronic transitions, and optical absorption in perovskite CH3NH3PbI3 films. Applied Physics Letters, 2017, 111, .	3.3	10
115	Full three-dimensional morphology evolution of amorphous thin films for atomic layer deposition. AIP Advances, 2018, 8, .	1.3	10
116	A novel composite of SnO nanoparticles and SiO2@N-doped carbon nanofibers with durable lifespan for diffusion-controlled lithium storage. Journal of Alloys and Compounds, 2022, 897, 162703.	5.5	10
117	Annealing behaviors of structural, interfacial and optical properties of HfO2 thin films prepared by plasma assisted reactive pulsed laser deposition. Journal of Materials Research, 2010, 25, 680-686.	2.6	9
118	Diversity of electronic transitions and photoluminescence properties in nanocrystalline Mn/Fe-doped tin dioxide semiconductor films: An effect from oxygen pressure. Journal of Applied Physics, 2011, 110, 123502.	2.5	9
119	Temperature dependent photoluminescence properties of needle-like ZnO nanostructures deposited on carbon nanotubes. Applied Physics A: Materials Science and Processing, 2011, 105, 463-468.	2.3	9
120	Electronic transitions and dielectric functions of relaxor ferroelectric Pb(In1â^•2Nb1â^•2)O3-Pb(Mg1â^•3Nb2â^•3)O3-PbTiO3 single crystals: Temperature dependent spectroscopic study. Applied Physics Letters, 2014, 104, .	3.3	9
121	Lattice Dynamics, Dielectric Constants, and Phase Diagram of Bismuth Layered Ferroelectric Bi₃Ti_{1â^'<i>x</i>}W_{<i>x</i>}NbO_{9+Î´} Ceramics. Journal of the American Ceramic Society, 2016, 99, 3610-3615.	3.8	9
122	<i>In Situ</i> Exploration of Thermal-Induced Domain Evolution with Phase Transition in LiNbO₃-Modified K_{0.5}Na_{0.5}NbO₃ Single Crystal. Journal of Physical Chemistry C, 2017, 121, 14322-14329.	3.1	9
123	Interlayer coupling and the phase transition mechanism of stacked MoS₂/TaS₂ heterostructures discovered using temperature dependent Raman and photoluminescence spectroscopy. RSC Advances, 2018, 8, 21968-21974.	3.6	9
124	Probing electromechanical behaviors by datacube piezoresponse force microscopy in ambient and aqueous environments. Nanotechnology, 2019, 30, 235701.	2.6	9
125	Influence of CsPbBr3/TiO2 interfaces deposited with magnetron sputtering and spin-coating methods on the open voltage deficit and efficiency of all-inorganic CsPbBr3 planar solar cells. Journal of Alloys and Compounds, 2021, 860, 157900.	5.5	9
126	ZnS Covering of ZnO Nanorods for Enhancing UV Emission from ZnO. Journal of Physical Chemistry C, 2021, 125, 13732-13740.	3.1	9

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127	Strain and electric field tunable electronic and optical properties in antimonene/C3N van der Waals heterostructure. Solid State Sciences, 2021, 122, 106771.	3.2	9
128	Feasible Way to Achieve Multifunctional (K, Na)NbO₃-Based Ceramics: Controlling Long-Range Ferroelectric Ordering. ACS Applied Materials & Interfaces, 2021, 13, 60227-60240.	8.0	9
129	Enhancement effects of interlayer orbital hybridization in Janus MoSSe and tellurene heterostructures for photovoltaic applications. Physical Review Materials, 2021, 5, .	2.4	9
130	Temperature dependent Raman scattering and far-infrared reflectance spectra of MgO modified Pb0.99(Zr0.95Ti0.05)0.98Nb0.02O3 ceramics: A composition effect. Journal of Applied Physics, 2014, 116, 093513.	2.5	8
131	Spin-manipulated phonon dynamics during magnetic phase transitions in triangular lattice antiferromagnet CuCr_{1â^'x}Mg_xO₂ semiconductor films. RSC Advances, 2016, 6, 27136-27142.	3.6	8
132	Lattice dynamics, phase transition, and tunable fundamental band gap of photovoltaic (K,Ba)(Ni,Nb) <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mn>3</mml:mn><mml:mo>â^'</mml:mo><mml:mi>Î´</mml:mi></mml:mrow></ ceramics from spectral measurements and first-principles calculations. Physical Review B, 2018, 97, .	3.2	8
133	Controllable interlayer space effects of layered potassium triniobate nanoflakes on enhanced pH dependent adsorption-photocatalysis behaviors. Scientific Reports, 2018, 8, 6616.	3.3	8
134	Self-assembly of a lateral quasi-Ohmic CuInSe2/InSe isotype heterojunction for flexible devices by pulsed laser deposition. Applied Physics Letters, 2019, 115, .	3.3	8
135	Precursor solution temperature dependence of the optical constants, band gap and Urbach tail in organicâ€“inorganic hybrid halide perovskite films. Journal Physics D: Applied Physics, 2019, 52, 045103.	2.8	8
136	Electrical characteristics and carrier injection mechanisms of atomic layer deposition synthesized n-SnO₂/p-Si heterojunction. Materials Research Express, 2019, 6, 035909.	1.6	8
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