

Zhigao Hu

List of Publications by Year in descending order

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192
papers

3,861
citations

136740

32
h-index

205818

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. <i>Nature Electronics</i> , 2021, 4, 357-363.	13.1	292
2	Vapomechanically Responsive Motion of Microchannel-Programmed Actuators. <i>Advanced Materials</i> , 2017, 29, 1702231.	11.1	138
3	Blackbody-sensitive room-temperature infrared photodetectors based on low-dimensional tellurium grown by chemical vapor deposition. <i>Science Advances</i> , 2021, 7, .	4.7	121
4	Effect of oxygen defects on ferromagnetic of undoped ZnO. <i>Journal of Applied Physics</i> , 2011, 110, 013901.	1.1	99
5	Efficient and Hole-Transporting-Free CsPbI ₂ Br Planar Heterojunction Perovskite Solar Cells through Rubidium Passivation. <i>ChemSusChem</i> , 2019, 12, 983-989.	3.6	79
6	Air-Stable Low-Symmetry Narrow-Bandgap 2D Sulfide Niobium for Polarization Photodetection. <i>Advanced Materials</i> , 2020, 32, e2005037.	11.1	68
7	Structural, electronic band transition and optoelectronic properties of delafossite CuGa _{1-x} Cr _x O ₂ (0) Tj ETQq1 1 0.784314 rgBT /Over 18463.	6.7	66
8	Growth of Bi ₂ O ₃ Ultrathin Films by Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2012, 116, 3449-3456.	1.5	62
9	Copper ferrites@reduced graphene oxide anode materials for advanced lithium storage applications. <i>Scientific Reports</i> , 2017, 7, 8903.	1.6	62
10	Large-Scale Growth and Field-Effect Transistors Electrical Engineering of Atomic-Layer SnS ₂ . <i>Small</i> , 2019, 15, e1904116.	5.2	58
11	Tuning Coupling Behavior of Stacked Heterostructures Based on MoS ₂ , WS ₂ , and WSe ₂ . <i>Scientific Reports</i> , 2017, 7, 44712.	1.6	56
12	Superior adsorption and photoinduced carries transfer behaviors of dandelion-shaped Bi ₂ S ₃ @MoS ₂ : experiments and theory. <i>Scientific Reports</i> , 2017, 7, 42484.	1.6	52
13	High Responsivity and External Quantum Efficiency Photodetectors Based on Solution-Processed Ni-Doped CuO Films. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 11797-11805.	4.0	51
14	Enhanced carrier separation in ferroelectric In ₂ Se ₃ /MoS ₂ van der Waals heterostructure. <i>Journal of Materials Chemistry C</i> , 2020, 8, 11160-11167.	2.7	44
15	Intrinsic evolutions of optical functions, band gap, and higher-energy electronic transitions in VO ₂ film near the metal-insulator transition region. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	43
16	A type-II GaSe/GeS heterobilayer with strain enhanced photovoltaic properties and external electric field effects. <i>Journal of Materials Chemistry C</i> , 2020, 8, 89-97.	2.7	42
17	Structure, Optical, and Room-Temperature Ferromagnetic Properties of Pure and Transition-Metal-(Cr,) Tj ETQq1 1 0.784314 rgBT /Over Chemistry C, 2010, 114, 11951-11957.	1.5	41
18	Interface Modification for Planar Perovskite Solar Cell Using Room-Temperature Deposited Nb ₂ O ₅ as Electron Transportation Layer. <i>ACS Applied Energy Materials</i> , 2018, 1, 2000-2006.	2.5	41

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19	<i>In situ</i> carbon encapsulation of vertical MoS ₂ arrays with SnO ₂ for durable high rate lithium storage: dominant pseudocapacitive behavior. <i>Nanoscale</i> , 2018, 10, 741-751.	2.8	41
20	Titanium-induced structure modification for thermal stability enhancement of a GeTeTi phase change material. <i>RSC Advances</i> , 2015, 5, 24966-24974.	1.7	40
21	Direct Observation of Landau Level Resonance and Mass Generation in Dirac Semimetal Cd ₃ As ₂ Thin Films. <i>Nano Letters</i> , 2017, 17, 2211-2219.	4.5	40
22	Highly durable and cycle-stable lithium storage based on MnO nanoparticle-decorated 3D interconnected CNT/graphene architecture. <i>Nanoscale</i> , 2018, 10, 13140-13148.	2.8	40
23	Temperature dependence of phonon modes, dielectric functions, and interband electronic transitions in Cu ₂ ZnSnS ₄ semiconductor films. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 9936.	1.3	38
24	Temperature dependence of electronic transitions and optical properties in multiferroic BiFeO ₃ nanocrystalline film determined from transmittance spectra. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	37
25	Photoluminescence and low-threshold lasing of ZnO nanorod arrays. <i>Optics Express</i> , 2012, 20, 14857.	1.7	37
26	Enhanced performance of carbon-based planar CsPbBr ₃ perovskite solar cells with room-temperature sputtered Nb ₂ O ₅ electron transport layer. <i>Solar Energy</i> , 2019, 191, 263-271.	2.9	37
27	Optical properties of pulsed laser deposited rutile titanium dioxide films on quartz substrates determined by Raman scattering and transmittance spectra. <i>Applied Physics Letters</i> , 2008, 93, 181910.	1.5	36
28	Electronic transition and electrical transport properties of delafossite CuCr _{1-x} Mg _x O ₂ (0 ≤ x ≤ 12%) films prepared by the sol-gel method: A composition dependence study. <i>Journal of Applied Physics</i> , 2013, 114, 163526.	1.1	36
29	Enhanced Photoelectrochemical Activity of ZnO-Coated TiO ₂ Nanotubes and Its Dependence on ZnO Coating Thickness. <i>Nanoscale Research Letters</i> , 2016, 11, 104.	3.1	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. <i>Journal of Alloys and Compounds</i> , 2020, 819, 153036.	2.8	34
31	Optoelectronic properties and polar nano-domain behavior of sol-gel derived K _{0.5} Na _{0.5} Nb _{1-x} Mn _x O ₃ nanocrystalline films with enhanced ferroelectricity. <i>Journal of Materials Chemistry C</i> , 2015, 3, 8225-8234.	2.7	33
32	Manipulations from oxygen partial pressure on the higher energy electronic transition and dielectric function of VO ₂ films during a metal-insulator transition process. <i>Journal of Materials Chemistry C</i> , 2015, 3, 5033-5040.	2.7	33
33	Superior and Reversible Lithium Storage of SnO ₂ /Graphene Composites by Silicon Doping and Carbon Sealing. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 20824-20837.	4.0	33
34	Significantly enhanced lithium storage by in situ grown CoS ₂ @MoS ₂ core-shell nanorods anchored on carbon cloth. <i>Chemical Engineering Journal</i> , 2021, 420, 127714.	6.6	33
35	Enhanced photoelectrochemical activity of vertically aligned ZnO-coated TiO ₂ nanotubes. <i>Applied Physics Letters</i> , 2014, 104, 053114.	1.5	31
36	Electronic structures and excitonic transitions in nanocrystalline iron-doped tin dioxide diluted magnetic semiconductor films: an optical spectroscopic study. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 6211.	1.3	30

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37	Temperature-dependent Raman scattering and multiple phase coexistence in relaxor ferroelectric $\text{Pb}(\text{In}_{1-x}\text{Nb}_1-x)_2\text{O}_3\text{-Pb}(\text{Mg}_{1-x}\text{Nb}_2-x)_3\text{O}_3\text{-PbTiO}_3$ single crystals. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	30
38	Structural distortion, phonon behavior and electronic transition of Aurivillius layered ferroelectric $\text{CaBi}_2\text{Nb}_2\text{W}_9\text{O}_{30}$ ceramics. <i>Journal of Alloys and Compounds</i> , 2015, 653, 168-174.	2.8	30
39	Temperature dependent phonon evolutions and optical properties of highly <i>c</i> -axis oriented CuGaO_2 semiconductor films grown by the sol-gel method. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	29
40	Probing Effective Out-of-Plane Piezoelectricity in van der Waals Layered Materials Induced by Flexoelectricity. <i>Small</i> , 2019, 15, e1903106.	5.2	29
41	Temperature and concentration dependent crystallization behavior of $\text{Ge}_2\text{Sb}_2\text{Te}_5$ phase change films: tungsten doping effects. <i>RSC Advances</i> , 2014, 4, 57218-57222.	1.7	28
42	High-capacity and long-life lithium storage boosted by pseudocapacitance in three-dimensional $\text{MnO}_x\text{-Cu-CNT/graphene}$ anodes. <i>Nanoscale</i> , 2018, 10, 2944-2954.	2.8	28
43	Composition dependence of dielectric function in ferroelectric $\text{BaCo}_x\text{Ti}_{1-x}\text{O}_3$ films grown on quartz substrates by transmittance spectra. <i>Applied Physics Letters</i> , 2008, 92, 081904.	1.5	27
44	External Electric Field Manipulations on Structural Phase Transition of Vanadium Dioxide Nanoparticles and Its Application in Field Effect Transistor. <i>Journal of Physical Chemistry C</i> , 2011, 115, 23558-23563.	1.5	26
45	Mixed-Dimensional Van der Waals Heterostructure Photodetector. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 18674-18682.	4.0	26
46	Composition Dependence of Microstructure, Phonon Modes, and Optical Properties in Rutile $\text{TiO}_2\text{:Fe}$ Nanocrystalline Films Prepared by a Nonhydrolytic Sol-Gel Route. <i>Journal of Physical Chemistry C</i> , 2010, 114, 15157-15164.	1.5	25
47	Effects from <i>A</i> -site substitution on morphotropic phase boundary and phonon modes of $(\text{Pb}_{1-x}\text{La}_x)(\text{Zr}_{0.42}\text{Sn}_{0.40}\text{Ti}_{0.18})\text{O}_3$ ceramics by temperature dependent Raman spectroscopy. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	25
48	Robust three-dimensional porous rGO aerogel anchored with ultra-fine Fe_2O_3 nanoparticles exhibit dominated pseudocapacitance behavior for superior lithium storage. <i>Journal of Alloys and Compounds</i> , 2020, 816, 152627.	2.8	25
49	Ultrabroadband Tellurium Photoelectric Detector from Visible to Millimeter Wave. <i>Advanced Science</i> , 2022, 9, e2103873.	5.6	25
50	Annealing time modulated the film microstructures and electrical properties of P-type CuO field effect transistors. <i>Applied Surface Science</i> , 2019, 481, 632-636.	3.1	24
51	Electric field and temperature-induced phase transition in Mn-doped $\text{Na}_{1/2}\text{Bi}_{1/2}\text{TiO}_3$ -5.0 at.% BaTiO_3 single crystals investigated by micro-Raman scattering. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	23
52	Temperature-dependent lattice dynamics and electronic transitions in $\text{Pb}_{0.93}\text{Zn}_{0.07}\text{TiO}_3$ single crystals. <i>Physical Review B</i> , 2015, 91, .	1.1	23
53	Phase transitions and phonon thermodynamics in giant piezoelectric Mn-doped $\text{K}_{0.5}\text{Na}_{0.5}\text{Bi}_{1-x}\text{TiO}_3$ single crystals studied by Raman scattering. <i>Physical Review B</i> , 2020, 102, .	1.1	23
54	Simultaneously achieving large energy density and high efficiency in $\text{NaNbO}_3\text{-Bi}(\text{Mg,Zr})\text{O}_3$ relaxor ferroelectric ceramics for dielectric capacitor applications. <i>Journal of Materials Chemistry A</i> , 2022, 10, 13907-13916.	5.2	23

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55	Ultraviolet-infrared dielectric functions and electronic band structures of monoclinic VO ₂ nanocrystalline film: Temperature-dependent spectral transmittance. <i>Journal of Applied Physics</i> , 2011, 110, 013504.	1.1	22
56	Abnormal temperature dependence of interband electronic transitions in relaxor-based ferroelectric (1-x)Pb(Mg _{1/3} Nb _{2/3})O ₃ -xPbTiO ₃ (x=0.24 and 0.31) single crystals. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	22
57	Spin-phonon interactions of multiferroic Bi ₄ Ti ₃ O ₁₂ -BiFeO ₃ ceramics: Low-temperature Raman scattering and infrared reflectance spectra investigations. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	22
58	Origin of Improved Photoelectrochemical Water Splitting in Mixed Perovskite Oxides. <i>Advanced Energy Materials</i> , 2018, 8, 1801972.	10.2	22
59	Inherent optical behavior and structural variation in Na _{0.5} Bi _{0.5} TiO ₃ -6%BaTiO ₃ revealed by temperature dependent Raman scattering and ultraviolet-visible transmittance. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	21
60	Efficient carbon-based planar CsPbBr ₃ perovskite solar cells with Li-doped amorphous Nb ₂ O ₅ layer. <i>Journal of Alloys and Compounds</i> , 2020, 842, 155984.	2.8	21
61	Coexistence of Ferroelectric Phases and Phonon Dynamics in Relaxor Ferroelectric Na _{0.5} Bi _{0.5} TiO ₃ Based Single Crystals. <i>Journal of the American Ceramic Society</i> , 2016, 99, 2408-2414.	1.9	20
62	The electro-optic mechanism and infrared switching dynamic of the hybrid multilayer VO ₂ /Al:ZnO heterojunctions. <i>Scientific Reports</i> , 2017, 7, 4425.	1.6	20
63	Manipulating Behaviors from Heavy Tungsten Doping on Interband Electronic Transition and Orbital Structure Variation of Vanadium Dioxide Films. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 30548-30557.	4.0	20
64	Transition-Metal Substitution-Induced Lattice Strain and Electrical Polarity Reversal in Monolayer WS ₂ . <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 18650-18659.	4.0	20
65	Intrinsic evolutions of dielectric function and electronic transition in tungsten doping Ge ₂ Sb ₂ Te ₅ phase change films discovered by ellipsometry at elevated temperatures. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	19
66	Exploring lattice symmetry evolution with discontinuous phase transition by Raman scattering criteria: The single-crystalline $\text{InTe/In}_2\text{Se}_3$ heterostructure. <i>Physical Review B</i> , 2019, 100, .		
67	Ferroelectric and dipole control of band alignment in the two dimensional $\text{InTe/In}_2\text{Se}_3$ heterostructure. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 055703.	0.7	19
68	Enhanced Crystallization Behaviors of Silicon-Doped Sb ₂ Te Films: Optical Evidences. <i>Scientific Reports</i> , 2016, 6, 33639.	1.6	17
69	Free-anchored Nb ₂ O ₅ @graphene networks for ultrafast-stable lithium storage. <i>Nanotechnology</i> , 2018, 29, 185401.	1.3	17
70	Decoding Phases of Matter by Machine-Learning Raman Spectroscopy. <i>Physical Review Applied</i> , 2019, 12, .	1.5	17
71	Enhanced photovoltaic response of lead-free ferroelectric solar cells based on (K,Bi)(Nb,Yb)O ₃ films. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 3691-3701.	1.3	17
72	Optically Modulated HfS ₂ -Based Synapses for Artificial Vision Systems. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 50132-50140.	4.0	17

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73	Applications of Nickel-Based Electrocatalysts for Hydrogen Evolution Reaction. <i>Advanced Energy and Sustainability Research</i> , 2022, 3, .	2.8	17
74	Electronic properties of nanocrystalline LaNiO ₃ and La _{0.5} Sr _{0.5} CoO ₃ conductive films grown on silicon substrates determined by infrared to ultraviolet reflectance spectra. <i>Applied Physics Letters</i> , 2009, 94, 221104.	1.5	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. <i>Dalton Transactions</i> , 2011, 40, 7967.	1.6	16
76	Abnormal electronic transition variations of lanthanum-modified lead zirconate stannate titanate ceramics near morphotropic phase boundary: A spectroscopic evidence. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	16
77	Fabrication of Cu ₂ ZnSnS ₄ absorbers by sulfurization of Sn-rich precursors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012, 209, 1493-1497.	0.8	16
78	Enhanced Fröhlich interaction of semiconductor cuprous oxide films determined by temperature-dependent Raman scattering and spectral transmittance. <i>Journal of Raman Spectroscopy</i> , 2013, 44, 142-146.	1.2	16
79	Low-temperature sintering and electrical properties of Sr ₂ Nb ₂ O ₇ piezoceramics by CuO addition. <i>Journal of the American Ceramic Society</i> , 2017, 100, 2397-2401.	1.9	16
80	Blue luminescent amorphous carbon nanoparticles synthesized by microplasma processing of folic acid. <i>Plasma Processes and Polymers</i> , 2018, 15, 1700088.	1.6	16
81	Annealing effects on sulfur vacancies and electronic transport of MoS ₂ films grown by pulsed-laser deposition. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	16
82	Temperature and pressure manipulation of magnetic ordering and phonon dynamics with phase transition in multiferroic $GdFeO_3$: Evidence from Raman scattering. <i>Physical Review B</i> , 2020, 102, .	1.1	16
83	Flexo-photoelectronic effect in n-type/p-type two-dimensional semiconductors and a deriving light-stimulated artificial synapse. <i>Materials Horizons</i> , 2021, 8, 1985-1997.	6.4	16
84	Effects of LaNiO ₃ bottom electrode on structural and dielectric properties of CaCu ₃ Ti ₄ O ₁₂ films fabricated by sol-gel method. <i>Applied Physics Letters</i> , 2008, 92, 042901.	1.5	15
85	Temperature-dependent dielectric functions and interband critical points of relaxor lead hafnate-modified PbSc _{1/2} Ta _{1/2} O ₃ ferroelectric ceramics by spectroscopic ellipsometry. <i>Applied Physics Letters</i> , 2013, 102, 151908.	1.5	15
86	Temperature Dependence of Phonon Modes, Optical Constants, and Optical Band Gap in Two-Dimensional ReS ₂ Films. <i>Journal of Physical Chemistry C</i> , 2018, 122, 29464-29469.	1.5	15
87	Composition Dependence of Optical Properties and Band Structures in p-Type Ni-Doped CuO Films: Spectroscopic Experiment and First-Principles Calculation. <i>Journal of Physical Chemistry C</i> , 2019, 123, 27165-27171.	1.5	15
88	Two-dimensional mesoporous sensing materials. <i>Chinese Chemical Letters</i> , 2020, 31, 521-524.	4.8	15
89	New Pressure Stabilization Structure in Two-Dimensional PtSe ₂ . <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 7342-7349.	2.1	15
90	2D Transition Metal Dichalcogenide with Increased Entropy for Piezoelectric Electronics. <i>Advanced Materials</i> , 2022, 34, e2201630.	11.1	15

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91	Electronic transitions of the transparent delafossite-type $\text{CuGa}_{1-x}\text{Cr}_x\text{O}_2$ system: first-principles calculations and temperature-dependent spectral experiments. <i>Journal of Materials Chemistry C</i> , 2017, 5, 183-191.	2.7	14
92	Doping effect on the phase transition temperature in ferroelectric $\text{SrBi}_2\text{Nd}_x\text{Nb}_2\text{O}_9$ layered-structured ceramics: a micro-Raman scattering study. <i>Journal of Raman Spectroscopy</i> , 2012, 43, 583-587.	1.2	13
93	Relationship between negative thermal expansion and lattice dynamics in a tetragonal $\text{PbTiO}_3\text{-}\hat{\text{Bi}}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3$ perovskite single crystal. <i>RSC Advances</i> , 2016, 6, 3159-3164.	1.7	13
94	Spectral assignments in the infrared absorption region and anomalous thermal hysteresis in the interband electronic transition of vanadium dioxide films. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 6239-6246.	1.3	13
95	Three-dimensional porous $\text{Co}_3\text{O}_4\text{-}\hat{\text{CoO@GO}}$ composite combined with N-doped carbon for superior lithium storage. <i>Nanotechnology</i> , 2019, 30, 425404.	1.3	13
96	Ferroelectric-Modulated MoS_2 Field-Effect Transistors as Multilevel Nonvolatile Memory. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 44902-44911.	4.0	13
97	Sandwiched CdS/Au/ZnO Nanorods with Enhanced Ultraviolet and Visible Photochemical and Photoelectrochemical Properties via Semiconductor and Metal Cosensitizing. <i>Journal of Physical Chemistry C</i> , 2020, 124, 10941-10950.	1.5	13
98	High Quality P-i-n -Type Mg-Doped $\text{Ga}_2\text{O}_3\text{-}\hat{\text{Al}}$ Films for Solar-Blind Photodetectors. <i>IEEE Electron Device Letters</i> , 2022, 43, 580-583.	2.2	13
99	Structure evolution mechanism of Na_xWO_3 . <i>Physical Review B</i> , 2017, 96, .	1.1	12
100	Enhanced exciton emission behavior and tunable band gap of ternary $\text{W}_x\text{Se}_{1-x}\text{O}_2$ monolayer: temperature dependent optical evidence and first-principles calculations. <i>Nanoscale</i> , 2018, 10, 11553-11563.	2.8	12
101	N conversion of charge carrier types and high photoresponsive performance of composition modulated ternary alloy $\text{W}(\text{S}_x\text{Se}_{1-x})_2$ field-effect transistors. <i>Nanoscale</i> , 2020, 12, 15304-15317.	2.8	12
102	Phase diagram with an antiferroelectric/ferroelectric phase boundary in AgNbO_3 energy-storage ceramics by lattice dynamics and electronic transitions. <i>Physical Review B</i> , 2021, 104, .	1.1	12
103	Phonon mode and phase transition behaviors of $(1-x)\text{PbSc}_{1/2}\text{Ta}_{1/2}\text{O}_3\text{-}x\text{PbHfO}_3$ relaxor ferroelectric ceramics determined by temperature-dependent Raman spectra. <i>Applied Physics Letters</i> , 2011, 99, 041902.	1.5	11
104	Temperature dependent phonon Raman scattering of Heusler alloy $\text{Co}_2\text{Mn}_x\text{Fe}_{1-x}\text{Al}$ /GaAs films grown by molecular-beam epitaxy. <i>RSC Advances</i> , 2012, 2, 9899.	1.7	11
105	Metallic attenuated total reflection infrared hollow fibers for robust optical transmission systems. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	11
106	Evaluation of lattice dynamics, infrared optical properties and visible emissions of hexagonal GeO_2 films prepared by liquid phase deposition. <i>Journal of Materials Chemistry C</i> , 2017, 5, 12792-12799.	2.7	11
107	Phonon behaviors and dielectric functions in $\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$ based ceramics by Raman scattering and optical ellipsometry. <i>Journal of the American Ceramic Society</i> , 2018, 102, 2791.	1.9	11
108	Facile fabrication of 3D porous MnO@GS/CNT architecture as advanced anode materials for high-performance lithium-ion battery. <i>Nanotechnology</i> , 2018, 29, 315403.	1.3	11

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109	Controllable fabrication of Bi ₂ O ₃ nanoparticles by atomic layer deposition on TiO ₂ films and application in photodegradation. <i>Solar Energy Materials and Solar Cells</i> , 2020, 204, 110218.	3.0	11
110	Strong charge-density-wave order of large-area 2D metallic VSe ₂ nanosheets discovered by temperature-dependent Raman spectra. <i>Applied Physics Letters</i> , 2020, 116, 033102.	1.5	11
111	CuO: Synthesis in a Highly Excited Oxygen-Copper Plasma and Decoration of ZnO Nanorods for Enhanced Photocatalysis. <i>Journal of Physical Chemistry C</i> , 2021, 125, 9119-9128.	1.5	11
112	Improved electric behaviors of the Pt/Bi _{1-x} La _x Fe _{0.92} Mn _{0.08} O ₃ /n ⁺ -Si heterostructure for nonvolatile ferroelectric random-access memory. <i>Journal of Materials Chemistry C</i> , 2013, 1, 6252.	2.7	10
113	Intrinsic relationship between electronic structures and phase transition of SrBi _{2-x} Nd _x Nb ₂ O ₉ ceramics from ultraviolet ellipsometry at elevated temperatures. <i>Journal of Applied Physics</i> , 2014, 115, 054107.	1.1	10
114	Effects of deposition methods and processing techniques on band gap, interband electronic transitions, and optical absorption in perovskite CH ₃ NH ₃ PbI ₃ films. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	10
115	Full three-dimensional morphology evolution of amorphous thin films for atomic layer deposition. <i>AIP Advances</i> , 2018, 8, .	0.6	10
116	A novel composite of SnO nanoparticles and SiO ₂ @N-doped carbon nanofibers with durable lifespan for diffusion-controlled lithium storage. <i>Journal of Alloys and Compounds</i> , 2022, 897, 162703.	2.8	10
117	Annealing behaviors of structural, interfacial and optical properties of HfO ₂ thin films prepared by plasma assisted reactive pulsed laser deposition. <i>Journal of Materials Research</i> , 2010, 25, 680-686.	1.2	9
118	Diversity of electronic transitions and photoluminescence properties in nanocrystalline Mn/Fe-doped tin dioxide semiconductor films: An effect from oxygen pressure. <i>Journal of Applied Physics</i> , 2011, 110, 123502.	1.1	9
119	Temperature dependent photoluminescence properties of needle-like ZnO nanostructures deposited on carbon nanotubes. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 105, 463-468.	1.1	9
120	Electronic transitions and dielectric functions of relaxor ferroelectric Pb(In _{1-x} Nb _{1-x/2})O ₃ -Pb(Mg _{1-x} Nb _{2x/3})O ₃ -PbTiO ₃ single crystals: Temperature dependent spectroscopic study. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	9
121	Lattice Dynamics, Dielectric Constants, and Phase Diagram of Bismuth Layered Ferroelectric Bi ₃ Ti _{1-x} W _x NbO ₉ . <i>Ceramics. Journal of the American Ceramic Society</i> , 2016, 99, 3610-3615.	1.9	9
122	<i>In Situ</i> Exploration of Thermal-Induced Domain Evolution with Phase Transition in LiNbO ₃ -Modified K _{0.5} Na _{0.5} NbO ₃ Single Crystal. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14322-14329.	1.5	9
123	Interlayer coupling and the phase transition mechanism of stacked MoS ₂ /TaS ₂ heterostructures discovered using temperature dependent Raman and photoluminescence spectroscopy. <i>RSC Advances</i> , 2018, 8, 21968-21974.	1.7	9
124	Probing electromechanical behaviors by datacube piezoresponse force microscopy in ambient and aqueous environments. <i>Nanotechnology</i> , 2019, 30, 235701.	1.3	9
125	Influence of CsPbBr ₃ /TiO ₂ interfaces deposited with magnetron sputtering and spin-coating methods on the open voltage deficit and efficiency of all-inorganic CsPbBr ₃ planar solar cells. <i>Journal of Alloys and Compounds</i> , 2021, 860, 157900.	2.8	9
126	ZnS Covering of ZnO Nanorods for Enhancing UV Emission from ZnO. <i>Journal of Physical Chemistry C</i> , 2021, 125, 13732-13740.	1.5	9

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127	Strain and electric field tunable electronic and optical properties in antimonene/C3N van der Waals heterostructure. <i>Solid State Sciences</i> , 2021, 122, 106771.	1.5	9
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130	Temperature dependent Raman scattering and far-infrared reflectance spectra of MgO modified Pb _{0.99} (Zr _{0.95} Ti _{0.05}) _{0.98} Nb _{0.02} O ₃ ceramics: A composition effect. <i>Journal of Applied Physics</i> , 2014, 116, 093513.	1.1	8
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138	High Conductance Margin for Efficient Neuromorphic Computing Enabled by Stacking Nonvolatile van der Waals Transistors. <i>Physical Review Applied</i> , 2021, 16, .	1.5	8
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