

Energy gapâ€™refractive index relations in semiconduc

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Citation Report

#	ARTICLE	IF	CITATIONS
2	Band parameters for AlAs, InAs and their ternary mixed crystals. Physica Scripta, 2009, 79, 015701.	2.5	55
3	On the properties and stability of thermally evaporated Ge ¹⁰⁰ As ¹⁰⁰ Se thin films. Applied Physics A: Materials Science and Processing, 2009, 96, 615-625.	2.3	76
4	Structural, electronic, thermodynamic and optical properties of SrS ¹⁰⁰ xOx mixed crystals. Physica B: Condensed Matter, 2009, 404, 4100-4105.	2.7	10
5	Ab initio investigations of calcium chalcogenide alloys. Journal of Alloys and Compounds, 2009, 485, 642-647.	5.5	17
6	Quantum computation of photoelastic properties of ionic crystals. Journal of Materials Science, 2010, 45, 136-138.	3.7	0
7	The effect of zinc concentration upon optical and dielectric properties of Cd ¹⁰⁰ xZnxSe. Physica B: Condensed Matter, 2010, 405, 2272-2276.	2.7	75
8	Correlation between structural and opto-electronic properties of a-Si ¹⁰⁰ xCx:H films deposited by plasma enhanced chemical vapour deposition. Thin Solid Films, 2010, 518, 5871-5874.	1.8	10
9	Structural, electronic, thermodynamic and optical properties of alkaline earth oxides MgO, SrO and their alloys. Physica Scripta, 2010, 82, 045605.	2.5	24
10	First-principles calculations of structural, electronic and optical properties of CdxZn ¹⁰⁰ xS alloys. Journal of Alloys and Compounds, 2010, 507, 356-363.	5.5	82
11	Density functional study of CdS ¹⁰⁰ xSex and CdS ¹⁰⁰ xTex alloys. Computational Materials Science, 2010, 48, 206-211.	3.0	31
12	Electric field assisted processing and characterization of AlSb nanocrystals. Current Applied Physics, 2011, 11, 1031-1034.	2.4	4
13	The relationship between refractive index-energy gap and the film thickness effect on the characteristic parameters of CdSe thin films. Optics Communications, 2011, 284, 2307-2311.	2.1	125
14	Investigated optical and elastic properties of Porous silicon: Theoretical study. Materials & Design, 2011, 32, 4088-4093.	5.1	18
15	The effect of Fe ³⁺ doping in Potassium Hydrogen Phthalate single crystals on structural and optical properties. Physica B: Condensed Matter, 2011, 406, 985-991.	2.7	32
16	Growth and characterization of 2-Methylimidazolium d-tartrate single crystal. Journal of Crystal Growth, 2011, 318, 768-773.	1.5	18
17	Quantum cascade laser wavelength tuning due to temperature-dependent index of refraction. , 2012, , .		0
18	Investigation of the properties of ferromagnetic ZnO:Cr ₂ O ₃ nanocomposites. Materials Science in Semiconductor Processing, 2012, 15, 326-330.	4.0	13
19	Theoretical prediction of structural, electronic and optical properties of quaternary alloy Zn ¹⁰⁰ xBe ¹⁰⁰ xSySe ¹⁰⁰ y. Chinese Physics B, 2012, 21, 036102.	1.4	17

#	ARTICLE	IF	CITATIONS
20	Zinc concentration effect on structural, optical and electrical properties of Cd _{1-x} Zn _x Se thin films. Materials Research Bulletin, 2012, 47, 3390-3396.	5.2	20
21	Determination of the Temperature Dependence of the Band Gap Energy of Semiconductors from Transmission Spectra. Journal of Electronic Materials, 2012, 41, 2857-2866.	2.2	12
22	Nanomembrane Quantum-Light-Emitting Diodes Integrated onto Piezoelectric Actuators. Advanced Materials, 2012, 24, 2668-2672.	21.0	111
23	The effect of copper concentration on structural, optical and dielectric properties of Cu _{1-x} Zn _x S thin films. Optics Communications, 2012, 285, 1215-1220.	2.1	38
24	Growth and characterization of Ba(Cd _{1/3} Ta _{2/3})O ₃ thin films. Thin Solid Films, 2012, 520, 6153-6157.	1.8	6
25	Ab initio study of structural, electronic and optical properties of Be-doped CdS, CdSe and CdTe compounds. Physica B: Condensed Matter, 2012, 407, 943-952.	2.7	47
26	Optical characteristics of ZnTe _{1-x} O _x alloys from first-principles calculations. Journal of Luminescence, 2013, 135, 243-247.	3.1	49
27	Optical properties of vanadium oxides-an analysis. Journal of Materials Science, 2013, 48, 6341-6351.	3.7	88
28	Incorporation effect of Y ₂ O ₃ on the structure and optical properties of HfO ₂ thin films. Applied Surface Science, 2013, 271, 248-252.	6.1	29
29	The dependence of photosensitivity on composition for thin films of Ge _x As _y Se _{1-x-y} chalcogenide glasses. Applied Physics A: Materials Science and Processing, 2013, 113, 575-581.	2.3	52
30	A first-principles study on the structural, elastic, electronic, optical, lattice dynamical, and thermodynamic properties of zinc-blende CdX (X= S, Se, and Te). Journal of Alloys and Compounds, 2013, 579, 583-593.	5.5	46
31	Electronic structure and related properties for quasi-binary (GaP) _{1-x} (ZnSe) _x crystals. Journal of Structural Chemistry, 2013, 54, 1004-1011.	1.0	1
32	Optical properties of nanocrystal-silicon thin films on silicon nanopillar arrays after thermal annealing. Applied Surface Science, 2013, 265, 324-328.	6.1	5
33	Transition metal oxide alloys as potential solar energy conversion materials. Journal of Materials Chemistry A, 2013, 1, 2474.	10.3	63
34	Photocatalytic hydrogen production under visible-light irradiation on (CuAg) _{0.15} In _{0.3} Zn _{1.4} S ₂ synthesized by precipitation and calcination. Chinese Journal of Catalysis, 2013, 34, 1926-1935.	14.0	22
35	Electronic band structure and derived properties of AlAs _x Sb _{1-x} alloys. Superlattices and Microstructures, 2013, 59, 144-154.	3.1	14
36	Tuning Molecular Self-Assembly on Bulk Insulator Surfaces by Anchoring of the Organic Building Blocks. Advanced Materials, 2013, 25, 3948-3956.	21.0	66
38	Study on the Optoelectronic Properties of UV Luminescent Polymer: ZnO Nanoparticles Dispersed PANI. Journal of Materials, 2013, 2013, 1-7.	0.1	2

#	ARTICLE	IF	CITATIONS
39	Maximizing the Dielectric Response of Molecular Thin Films <i>via</i> Quantum Chemical Design. ACS Nano, 2014, 8, 12587-12600.	14.6	23
40	First principle investigations of the optical properties of Zn _{1-x} Mg _x S, Zn _{1-x} Mg _x Se and Zn _{1-x} Mg _x Te ternary alloys. International Journal of Modern Physics B, 2014, 28, 1450221.	2.0	2
41	First-Principles Calculations of Structural, Electronic, Optical, and Thermodynamic Properties of CdS, CdTe and Their Ternary Alloys CdS _{1-x} Te _x (0.0 ≤ x ≤ 1.0). Acta Physica Polonica A, 2014, 125, 1110-1117.	0.5	19
42	Tungsten polyoxometalate molecules as active nodes for dynamic carrier exchange in hybrid molecular/semiconductor capacitors. Journal of Applied Physics, 2014, 116, 143703.	2.5	13
43	Theoretical investigation of band gap and optical properties of ZnO 1- <i>x</i> Te <i>x</i> alloys (<i>x</i> = 0, 0.25, 0.5, 0.75) Tj ETQg 0.0 0 rgBTj/Overlock	3.0	25
44	Laser-induced damage thresholds of bulk and coating optical materials at 1030nm, 500fs. Applied Optics, 2014, 53, A186.	1.8	108
45	First-principles study of structural, electronic and optical properties of Zn _{1-x} Mg _x O ternary alloys using modified Becke-Johnson potential. Materials Science in Semiconductor Processing, 2014, 18, 114-121.	4.0	12
46	Growth and characterization of epitaxial Ba(Co,Zn) _{1/3} Nb _{2/3} O ₃ thin films. Journal of Crystal Growth, 2014, 387, 81-85.	1.5	2
47	Thickness effect on the structural and optical constants of stibnite thin films prepared by sulfidation annealing of antimony films. Optik, 2014, 125, 2295-2301.	2.9	28
48	First principles calculations of structural, electronic and optical properties of Zn _{1-x} BexSeyTe _{1-y} quaternary alloys. Computational Materials Science, 2014, 87, 202-208.	3.0	1
49	Temperature and pressure effect on GaN waveguide at 428.71 terahertz frequency for sensing application. Optik, 2015, 126, 4685-4687.	2.9	25
50	Structural, spectral and electrical properties of green synthesized ZnS nanoparticles using Elaeocarpus floribundus leaf extract. Journal of Materials Science: Materials in Electronics, 2015, 26, 5783-5791.	2.2	18
51	Solution processable broadband transparent mixed metal oxide nanofilm optical coatings via substrate diffusion doping. Nanoscale, 2015, 7, 20227-20237.	5.6	11
52	Refractive Index and Electronic Polarizability of Ternary Chalcopyrite Semiconductors. Chinese Physics Letters, 2015, 32, 127701.	3.3	15
53	Concentration and temperature dependence of the energy gap in some binary and alloy semiconductors. Infrared Physics and Technology, 2015, 69, 222-227.	2.9	9
54	Effects of Al content on physical properties of ZnS thin films prepared by chemical bath deposition. Journal of Materials Science: Materials in Electronics, 2015, 26, 8854-8862.	2.2	12
55	Energy gaps, charge distribution and optical properties of Al _x In _{1-x} Sb ternary alloys. Infrared Physics and Technology, 2015, 71, 396-401.	2.9	13
56	Using different chemical methods for deposition of copper selenide thin films and comparison of their characterization. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 150, 111-119.	3.9	13

#	ARTICLE	IF	CITATIONS
57	Refractive indices of semiconductors from energy gaps. Optical Materials, 2015, 46, 240-246.	3.6	259
58	Hybrid Germanium Iodide Perovskite Semiconductors: Active Lone Pairs, Structural Distortions, Direct and Indirect Energy Gaps, and Strong Nonlinear Optical Properties. Journal of the American Chemical Society, 2015, 137, 6804-6819.	13.7	710
59	Positive and negative phototunability of chalcogenide (AMTIR-1) microdisk resonator. Optics Express, 2015, 23, 8681.	3.4	21
60	Formation of bismuth oxide nanostructures by reactive plasma assisted thermal evaporation. Thin Solid Films, 2015, 594, 192-196.	1.8	19
61	Extraction of the optical parameters of sol-gel processed $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$ thin film for optoelectronic applications. Journal of Materials Science: Materials in Electronics, 2015, 26, 7837-7843.	2.2	2
62	Opto-Electrical Characteristics of Poly(vinyl alcohol)/Cesium Zincate Nanodielectrics. Journal of Physical Chemistry C, 2015, 119, 20244-20255.	3.1	48
63	Growth, mechanical, dielectric, thermal and optical studies of a nonlinear optical crystal: l-Histidinium dipicrate dihydrate. Materials Chemistry and Physics, 2015, 151, 5-13.	4.0	40
64	Selenium alloying of indium sulfide: Ab-initio study of structural, electronic and optical features. Materials Science in Semiconductor Processing, 2015, 31, 56-67.	4.0	3
65	Novel CuInGaTe Structures for High Efficiency Photo-electrochemical Solar Cells. International Journal of Electrochemical Science, 2016, 11, 4337-4351.	1.3	15
66	Reaching $<100\%$ output intensity temperature stability with single-color light-emitting diodes. Applied Optics, 2016, 55, 9060.	2.1	1
67	Indium-Free Inverted Organic Solar Cells Using Niobium-Doped Titanium Oxide with Integrated Dual Function of Transparent Electrode and Electron Transport Layer. Advanced Electronic Materials, 2016, 2, 1500341.	5.1	8
68	Full-potential calculations of structural and optoelectronic properties of cubic indium gallium arsenide semiconductor alloys. Optik, 2016, 127, 9280-9294.	2.9	27
69	Optoelectronic response and excitonic properties of monolayer MoS_2 . Journal of Applied Physics, 2016, 120, .	2.5	34
70	ALD grown nanostructured ZnO thin films: Effect of substrate temperature on thickness and energy band gap. Journal of King Saud University - Science, 2016, 28, 347-354.	3.5	53
71	Substrate temperature dependence of structural, morphological and optical properties of $\text{Sn}_4\text{Sb}_6\text{S}_{13}$ thin films deposited by vacuum thermal evaporation. Materials Research Bulletin, 2016, 79, 52-62.	5.2	17
72	Proposal and Analysis of a Silicon MMI Coupler-Based Electronically Controllable Photonic Switch. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 141-154.	2.9	5
73	A comparative study: On the properties of PbO-SiO_2 glass systems synthesized via different routes. Optik, 2016, 127, 10817-10824.	2.9	12
74	Simulation and analysis of the absorption enhancement in p-i-n InGaN/GaN solar cell using photonic crystal light trapping structures. Optical Engineering, 2016, 55, 107102.	1.0	3

#	ARTICLE	IF	CITATIONS
75	The influence of voltage applied between the electrodes on optical and morphological properties of the InGaN thin films grown by thermionic vacuum arc. <i>Scanning</i> , 2016, 38, 14-20.	1.5	21
76	Linear and nonlinear optical investigations of nano-scale Si-doped ZnO thin films: spectroscopic approach. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	2.3	26
77	Solid state dielectric screening versus band gap trends and implications. <i>Optical Materials</i> , 2016, 60, 181-187.	3.6	30
78	Charge compensation assisted enhancement of photoluminescence in combustion derived Li^{+} co-doped cubic ZrO_2 : Eu^{3+} nanophosphors. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 29447-29457.	2.8	50
79	First-principles investigation of the optical properties for rocksalt mixed metal oxide $\text{Mg Zn}_{1-x}\text{O}$. <i>Materials Chemistry and Physics</i> , 2016, 182, 182-189.	4.0	28
81	Light trapping in p-i-n superlattice based InGaN/GaN solar cells using photonic crystal. <i>Optical and Quantum Electronics</i> , 2016, 48, 1.	3.3	7
82	Ab initio calculations of fundamental properties of $\text{SrTe}_{1-x}\text{O}_x$ alloys. <i>Bulletin of Materials Science</i> , 2016, 39, 827-835.	1.7	5
83	Thermoelectric properties of stannite-phase CuZn_2As_4 (CZAS; A=Al, Ga and In) nanocrystals for solar energy conversion applications. <i>Philosophical Magazine</i> , 2016, 96, 2280-2299.	1.6	16
84	The modification of the characteristics of nanocrystalline ZnO thin films by variation of Ta doping content. <i>Philosophical Magazine</i> , 2016, 96, 2125-2142.	1.6	13
85	The size-dependent electronic and optical properties of InAs quantum dots. <i>Optik</i> , 2016, 127, 1167-1170.	2.9	15
86	Feedback module for evaluating optical-power stabilization methods. , 2016, , .		0
87	Investigation of structural, mechanical, electronic, optical, and dynamical properties of cubic BaLiF_3 , BaLiH_3 , and SrLiH_3 . <i>Materials Research Express</i> , 2016, 3, 036301.	1.6	25
88	Influencing the structural, microstructural and optical properties of PbS nanocrystalline thin films by Mg^{2+} doping. <i>Journal of Molecular Structure</i> , 2016, 1116, 67-71.	3.6	19
89	On the size-effect in the dielectric permittivity of solids. <i>Journal of Physics and Chemistry of Solids</i> , 2016, 91, 90-92.	4.0	8
90	Characterization of $\text{In}_{1-x}\text{Cd}_x\text{S}$, In_2S_3 and CdS thin films grown by SILAR method. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 5807-5816.	2.2	4
91	Optical properties of $\text{Cu}_2\text{ZnSn}(\text{SxSe}_{1-x})_4$ solar absorbers: Spectroscopic ellipsometry and <i>ab initio</i> calculations. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	16
92	IR spectroscopic determination of the refractive index of $\text{Ag}_{1-x}\text{Te}_x\text{Br}_{1-0.54x}\text{I}_{0.54x}$ ($0 \leq x \leq 0.05$) crystals. <i>Optics and Laser Technology</i> , 2017, 93, 18-23.	4.6	16
93	Structural, electronic, mechanical, thermal and optical properties of $\text{B}(\text{P,As})_{1-x}\text{N}_x$; ($x=0, 0.25, 0.5, 0.75$) <i>Tj ETQq1 1 0.784314 rg</i> 2017, 91, 999-1011.	1.8	10

#	ARTICLE	IF	CITATIONS
94	Analytical investigation on the electrooptical properties of graphene nanoscrolls for SPR-based sensor application. Journal of Computational Electronics, 2017, 16, 787-795.	2.5	9
95	One-step hydrothermal synthesis of rare earth/W-codoped VO ₂ nanoparticles: Reduced phase transition temperature and improved thermochromic properties. Journal of Alloys and Compounds, 2017, 711, 222-228.	5.5	66
96	First-Principles Calculations of Structural, Electronic and Optical Properties of Ternary Semiconductor Alloys ZAs _x Sb _{1-x} (Z=Al, Ga, In). Journal of Electronic Materials, 2017, 46, 4805-4814.	2.2	6
97	Solution Processable Metal Oxide Thin Film Deposition and Material Growth for Electronic and Photonic Devices. Advanced Materials Interfaces, 2017, 4, 1600610.	3.7	70
98	Pressurizing Field-Effect Transistors of Few-Layer MoS ₂ in a Diamond Anvil Cell. Nano Letters, 2017, 17, 194-199.	9.1	31
99	Facile spectroscopic approach to obtain the optoelectronic properties of few-layered graphene oxide thin films and their role in photocatalysis. New Journal of Chemistry, 2017, 41, 14217-14227.	2.8	33
100	Optical and dielectric properties of NiFe ₂ O ₄ nanoparticles under different synthesized temperature. Results in Physics, 2017, 7, 3619-3623.	4.1	34
101	ZnS nanoparticles incorporated in polyaniline composite: Preparation and optical characterization. Polymer Science - Series B, 2017, 59, 616-623.	0.8	9
102	Electronic, optical, and mechanical properties of BN, AlN, and InN with zinc-blende structure under pressure. Chinese Physics B, 2017, 26, 086103.	1.4	24
103	Al ₂ O ₃ -Y ₂ O ₃ ultrathin multilayer stacks grown by atomic layer deposition as perspective for optical waveguides applications. Optical Materials, 2017, 72, 788-794.	3.6	13
104	Lattice Vibration and Polaron Properties of InSb Under Pressure. Crystal Research and Technology, 2017, 52, 1700018.	1.3	4
105	Size dependent properties of one dimensional CdSe micro/nanostructures. Physica B: Condensed Matter, 2017, 521, 381-388.	2.7	11
106	Fabrication of polymer blend composites based on [PVA-PVP] (1-x):(Ag ₂ S) _x (0.01 ≤ x ≤ 0.03) with small optical band gaps: Structural and optical properties. Materials Science in Semiconductor Processing, 2017, 71, 197-203.	4.0	126
107	All-dielectric nanophotonics: the quest for better materials and fabrication techniques. Optica, 2017, 4, 814.	9.3	328
108	Influence of the bilayer thickness on the optical properties of Al ₂ O ₃ -Y ₂ O ₃ dielectric nanolaminate films grown by thermal atomic layer deposition. Materials Research Bulletin, 2017, 87, 14-19.	5.2	6
109	Band structure and optical constants of GaAs _{1-x} N _x . Optik, 2017, 131, 317-322.	2.9	11
110	Refractive index dispersion of AgCl _{1-x} Br _x (0 ≤ x ≤ 1) and Ag _{1-x} Tl _x Br _{1-x} (0 ≤ x ≤ 0.05). Optical Materials, 2017, 64, 40-46.	3.6	13
111	Optical properties of Ga _x In _{1-x} As _y P _{1-y} /InP quaternary semiconductor alloys. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
112	Morphological and Optical Characteristics of Chitosan(1 ^x):Cuox (4 ^x x ¹²) Based Polymer Nano-Composites: Optical Dielectric Loss as an Alternative Method for Tauc's Model. Nanomaterials, 2017, 7, 444.	4.1	93
113	Synthesis of Polymer Nanocomposites Based on [Methyl Cellulose](1 ^x):(CuS)x (0.02 M ^x x ^{0.08} M) with Desired Optical Band Gaps. Polymers, 2017, 9, 194.	4.5	77
114	Energy gaps, valence and conduction charge densities and optical properties of GaAs1 ^x Px. International Journal of Modern Physics B, 2018, 32, 1850125.	2.0	1
115	Energy gaps and refractive index of lattice-matched and mismatched In _x Al _{1-x} Sb _{1-y} quaternaries. Optik, 2018, 159, 143-149.	2.9	0
116	Optical functions and critical points of dilute bismide alloys studied by spectroscopic ellipsometry. Journal of Applied Physics, 2018, 123, .	2.5	13
117	Theoretical study on the electronic and optical properties of bulk and surface (001) In _x Ga _{1-x} As. Physica B: Condensed Matter, 2018, 537, 68-76.	2.7	6
118	Physics-informed machine learning for inorganic scintillator discovery. Journal of Chemical Physics, 2018, 148, 241729.	3.0	28
119	Conductive scanning probe microscopy of the semicontinuous gold film and its SERS enhancement toward two-step photo-induced charge transfer and effect of the supportive layer. Applied Surface Science, 2018, 441, 364-371.	6.1	10
120	Structural, electronic, optical, thermodynamic and elastic properties of the zinc-blende Al _x In _{1-x} N ternary alloys: A first principles calculations. Journal of Physics and Chemistry of Solids, 2018, 119, 36-49.	4.0	10
121	Novel Control of the Synthesis and Band Gap of Zinc Aluminate (ZnAl ₂ O ₄) by Using a DC/RF Sputtering Technique. Silicon, 2018, 10, 1217-1223.	3.3	3
122	First-Principles Study of Pressure Dependence of Optical Spectra of MnS. Journal of Superconductivity and Novel Magnetism, 2018, 31, 1643-1647.	1.8	11
123	High dose gamma ray exposure effect on the properties of CdSe nanowires. Radiation Physics and Chemistry, 2018, 144, 405-412.	2.8	11
124	Effect of Cesium Aluminate Nanofiller on Optical Properties of Polyvinyl Pyrrolidone Nanocomposite Films. Polymer-Plastics Technology and Engineering, 2018, 57, 1188-1196.	1.9	16
125	Temperature dependence of the refractive index in ZnSe _{1-x} Sx. Optik, 2018, 155, 292-296.	2.9	0
126	Energy gap variation due to Al content in SmFe _{1-x} Al _x O ₃ and its application in optics. Micro and Nano Letters, 2018, 13, 1516-1519.	1.3	2
127	Analysis of Sustainable Materials for Radiative Cooling Potential of Building Surfaces. Sustainability, 2018, 10, 3049.	3.2	9
128	Influence of composition on structural properties and optical parameters of thermally evaporated Ge _{10-x} Se ₆₀ Te ₃₀ In _x (0 ^x x ⁶) thin films. Ferroelectrics, 2018, 531, 72-83.	1.6	16
129	Optical characteristics of iron oxide thin films prepared by spray pyrolysis technique at different substrate temperatures. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	116

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130	Enhanced conduction in CdSe nanowires on 200 keV phosphorous negative ion implantation. Materials Research Bulletin, 2018, 108, 242-249.	5.2	5
131	Optical, vibrational and fiber optic gas-sensing properties of hematite microparticles. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	11
132	Analysis on linear and nonlinear optical properties of an efficient semi-organic crystal: Thiourea borate. Optics and Laser Technology, 2018, 107, 428-434.	4.6	17
133	Influence of Ag doping on the structural, optical, morphological and conductivity characteristics of ZnO nanorods. Optik, 2018, 172, 940-952.	2.9	21
134	Effects of temperature and redshift on the refractive index of semiconductors. Journal of Applied Physics, 2018, 124, 035703.	2.5	4
135	Insulator-metal transition in dense fluid deuterium. Science, 2018, 361, 677-682.	12.6	108
136	Band Structure, Charge Distribution and Optical Properties of $\text{AlP}_x\text{Sb}_{1-x}$ Ternary Semiconductor Alloys. Materials Research, 2018, 21, .	1.3	3
137	A DFT study of electro-optical properties of kesterite $\text{Ag}_2\text{CdSnX}_4$ for photovoltaic applications. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 103, 171-179.	2.7	8
138	Correlating the nanoparticle size dependent refractive index of ZnO optical spacer layer and the efficiency of hybrid solar cell through optical modelling. Thin Solid Films, 2018, 660, 558-563.	1.8	10
139	Optical Properties of $\text{Cu}_{2-x}\text{ZnSn}(\text{S}_{1-x}\text{Se}_x)_4$ by First Principles Calculations. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700945.	1.8	4
140	Spectroscopic analysis of lead borate systems. AIP Conference Proceedings, 2018, , .	0.4	0
141	Nonlinear optical characterization of copper oxide nanoellipsoids. Scientific Reports, 2019, 9, 11414.	3.3	57
142	Antireflection coating application of zinc sulfide thin films by nebulizer spray pyrolysis technique. AIP Conference Proceedings, 2019, , .	0.4	4
143	Relationships among optical and structural characteristics of ABSO_4 crystals. Optical Materials, 2019, 95, 109221.	3.6	14
144	Investigation on Elastic, Magnetic, Optical and Electrical Impedance Properties of Dysprosium Doped Nickel Ferrite Nanocrystals. Journal of Nanoscience and Nanotechnology, 2019, 19, 8020-8035.	0.9	13
145	Electronic band structure, thermodynamics and optical characteristics of $\text{BeO}_{1-x}\text{A}_x$ ($\text{A} = \text{S, Se, Te}$) alloys: Insights from ab initio study. Chemical Physics, 2019, 526, 110414.	1.9	39
146	Synthesis lead sulphide thin films from tartaric acid chemical bath: Study the role of film thickness on the structural, optical and electrical properties. Thin Solid Films, 2019, 692, 137600.	1.8	9
147	The Role of Au Doping on the Structural and Optical Properties of Cu_{2-x}O Films. Journal of Nano Research, 2019, 58, 49-67.	0.8	6

#	ARTICLE	IF	CITATIONS
148	Experimental and theoretical studies of CuInS ₂ thin films for photovoltaic applications. Journal of Materials Science: Materials in Electronics, 2019, 30, 21096-21105.	2.2	7
149	Structure–Function Correlations in Sputter Deposited Gold/Fluorocarbon Multilayers for Tuning Optical Response. Nanomaterials, 2019, 9, 1249.	4.1	12
150	From Green Remediation to Polymer Hybrid Fabrication with Improved Optical Band Gaps. International Journal of Molecular Sciences, 2019, 20, 3910.	4.1	85
151	Vanadium Oxides: Synthesis, Properties, and Applications. , 2019, , 127-218.		8
152	Other Miscellaneous Semiconductors and Related Binary, Ternary, and Quaternary Compounds. , 2019, , 465-545.		0
153	Fundamental properties of scandium chalcogenides and their alloys: DFT study. Indian Journal of Physics, 2019, 93, 1129-1135.	1.8	3
154	Pseudopotential Study of CdTe Quantum Dots: Electronic and Optical Properties. Materials Research, 2019, 22, .	1.3	7
155	Aggregation-induced heterogeneities in the emission of upconverting nanoparticles at the submicron scale unfolded by hyperspectral microscopy. Nanoscale Advances, 2019, 1, 2537-2545.	4.6	14
156	The influence of Ar pressure on the structure and optical properties of non-hydrogenated a-Si thin films grown by rf magnetron sputtering onto room-temperature glass substrates. Journal of Non-Crystalline Solids, 2019, 517, 32-43.	3.1	22
157	Photoluminescence studies of novel quaternary pyrochlore NaYSnWO ₇ : Eu ³⁺ red-emitting phosphors. Journal of Materials Science: Materials in Electronics, 2019, 30, 8855-8863.	2.2	1
158	Complex dielectric transformation of UV-vis diffuse reflectance spectra for estimating optical band-gap energies and materials classification. Analyst, The, 2019, 144, 3005-3012.	3.5	44
159	Electronic and optical properties of layered van der Waals heterostructure based on MS ₂ (M = Mo, W) monolayers. Materials Research Express, 2019, 6, 065060.	1.6	13
160	An investigation of modifications induced by silver ion beam in selenium nanowires. Radiation Physics and Chemistry, 2019, 159, 181-189.	2.8	2
161	Linear /nonlinear optical susceptibility spectroscopic constants of polyaniline@graphene oxide nanocomposite thin films. Synthetic Metals, 2019, 251, 30-39.	3.9	10
162	Structural and Optical Characteristics of PVA:C-Dot Composites: Tuning the Absorption of Ultra Violet (UV) Region. Nanomaterials, 2019, 9, 216.	4.1	108
163	High-Temperature Upconverted Single-Mode Lasing in 3D Fully Inorganic Perovskite Microcubic Cavity. ACS Photonics, 2019, 6, 793-801.	6.6	35
164	Temperature dependence of the optical and lattice vibration properties in gallium arsenide. Optik, 2019, 176, 366-371.	2.9	12
165	Influence of low energy (keV) negative Li ion implantation on properties of electrochemically induced scaffold-based growth of PbSe nanowires. Journal of Materials Science: Materials in Electronics, 2019, 30, 2192-2212.	2.2	9

#	ARTICLE	IF	CITATIONS
166	Novel solid polymer electrolyte based on PMMA:CH ₃ COOLi effect of salt concentration on optical and conductivity studies. Polymer Bulletin, 2019, 76, 5463-5481.	3.3	32
167	Structural and optical characteristics, and bacterial decolonization studies on non-reactive RF sputtered Cu@ZnO@ graphene based nanoparticles thin films. Journal of Materials Science, 2019, 54, 6515-6529.	3.7	16
168	Phase transition, mechanical stability and optical response of MnSe: Pressure effect. Physica B: Condensed Matter, 2019, 553, 6-10.	2.7	4
169	A noticeable effect of thickness on third order nonlinear properties of CBD grown CdS thin films investigated by Z-scan measurements. Optik, 2019, 181, 146-155.	2.9	9
170	Structural, optical and piezoelectric investigation on brucinium bromide hydrate non linear optical single crystal for optical parametric oscillators, high-power laser, piezo-sensors and transducers applications. Journal of Molecular Structure, 2019, 1180, 512-522.	3.6	12
171	A study on solution deposited CuSCN thin films: Structural, electrochemical, optical properties. Arabian Journal of Chemistry, 2020, 13, 346-356.	4.9	29
172	Phase transformation and modifications in high-k ZrO ₂ nanocrystalline thin films by low energy Kr ⁵⁺ ion beam irradiation. Materials Chemistry and Physics, 2020, 240, 122127.	4.0	17
173	Optical properties and chemical bonding of 3C-SiC under high-pressure. Optik, 2020, 202, 163613.	2.9	4
174	Optical response and magnetic moment of MoS ₂ material. Optik, 2020, 208, 164080.	2.9	18
175	On the structural, electronic, optical and thermoelectric properties of CdIn ₂ Se ₄ ordered-vacancy compound. Journal of Solid State Chemistry, 2020, 282, 121078.	2.9	2
176	Synthesis and Characterization of a Novel Erbium Doped Poly(vinyl alcohol) Films for Multifunctional Optical Materials. Journal of Inorganic and Organometallic Polymers and Materials, 2020, 30, 2418-2429.	3.7	29
177	Synthesis and characterization of La ³⁺ ions incorporated (PVA/PVP) polymer composite films for optoelectronics devices. Journal of Materials Science: Materials in Electronics, 2020, 31, 2557-2566.	2.2	37
178	Steps Toward the Band Gap Identification in Polystyrene Based Solid Polymer Nanocomposites Integrated with Tin Titanate Nanoparticles. Polymers, 2020, 12, 2320.	4.5	44
179	Design Strategy of Quantum Dot Thin-Film Solar Cells. Small, 2020, 16, e2002460.	10.0	27
180	Structural, linear and non linear optical, electrical, piezoelectric and thermal investigation on new semi-organic single crystal for microelectronics and high power laser applications: A brucinium di-hydrogen borate hydrate. Optical Materials, 2020, 109, 110261.	3.6	11
181	Structural investigation and optical enhancement characterization of nanostructured Ga-doped @CdO/FTO films for photodiode applications. Optical Materials, 2020, 110, 110458.	3.6	12
182	Structural parameters and optical spectra of Zn _{1-x} CoxO ternary alloys with zinc-blende, rocksalt and wurtzite phases. Optik, 2020, 224, 165732.	2.9	3
183	Optical constants and dispersion energy parameters of Zn-doped TiO ₂ thin films prepared by spray pyrolysis technique. Surfaces and Interfaces, 2020, 21, 100725.	3.0	12

#	ARTICLE	IF	CITATIONS
184	Temperature dependent characterizations of chemically deposited (Cd _x Zn _{1-x})S nanocrystalline films for solar cell applications. Optical Materials, 2020, 108, 110385.	3.6	6
185	Optical and dielectric properties of lead perovskite and iodoplumbate complexes: an <i>ab initio</i> study. Physical Chemistry Chemical Physics, 2020, 22, 18423-18434.	2.8	13
186	Electronic properties, optical spectra and magnetisation of MnAs material under compression. Philosophical Magazine, 2020, 100, 2972-2985.	1.6	0
187	Tailoring optical and electrical properties of ternary Pb _{1-x} CoxS thin films synthesized from a combination of two complexing agents. Indian Journal of Physics, 2020, 95, 1763.	1.8	6
188	Tea from the drinking to the synthesis of metal complexes and fabrication of PVA based polymer composites with controlled optical band gap. Scientific Reports, 2020, 10, 18108.	3.3	38
189	A Comprehensive Review on Optical Properties of Polymer Electrolytes and Composites. Materials, 2020, 13, 3675.	2.9	85
190	Sn ²⁺ W Co-doping Improves Thermochromic Performance of VO ₂ Films for Smart Windows. ACS Applied Energy Materials, 2020, 3, 9972-9979.	5.1	30
191	Structural properties, linear, and non-linear optical parameters of ternary Se ₈₀ Te ₂₀ In chalcogenide glass systems. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2022, 61, 203-209.	1.9	20
192	Precipitator concentration-dependent opto-structural properties of MgO nanoparticles fabricated using natural brine. SN Applied Sciences, 2020, 2, 1.	2.9	10
193	Probing the structural, electronic, mechanical strength and optical properties of tantalum-based oxide perovskites ATaO ₃ (A = Rb, Fr) for optoelectronic applications: First-principles investigations. Optik, 2020, 219, 165027.	2.9	16
194	P-type In ³⁺ -doped Cu ₁₂ Sb ₄ S ₁₃ thin films deposited by spray pyrolysis method: Investigation of structural, optical, electrical, and electrocatalytic properties. Applied Surface Science, 2020, 527, 146835.	6.1	16
195	Optical Properties and Critical Points of PbSe Nanostructured Thin Films. Semiconductors, 2020, 54, 630-633.	0.5	0
196	Real-space light-reflection mapping of atomically thin WSe ₂ flakes revealing the gradient local strain. Materials Research Express, 2020, 7, 035904.	1.6	1
197	Light Out-Coupling Management in Perovskite LEDs—What Can We Learn from the Past?. Advanced Functional Materials, 2020, 30, 2002570.	14.9	52
198	First-principles study of rocksalt Mg _x Zn _{1-x} O: band structure and optical spectra. Philosophical Magazine, 2020, 100, 1620-1635.	1.6	11
199	Sn dopants improve the visible transmittance of VO ₂ films achieving excellent thermochromic performance for smart window. Solar Energy Materials and Solar Cells, 2020, 209, 110443.	6.2	50
200	First principles insight into the structural, electronic, optical and thermodynamic properties of CsPb ₂ Br ₅ compound. Chemical Physics, 2020, 533, 110704.	1.9	7
201	propnet: A Knowledge Graph for Materials Science. Matter, 2020, 2, 464-480.	10.0	34

#	ARTICLE	IF	CITATIONS
202	Effect of pH treatment on the structural and optical properties of Sn ₆ Sb ₁₀ S ₂₁ thin films facilely synthesized using a spin coating method. Optical Materials, 2020, 105, 109917.	3.6	10
203	Investigation of optical properties of Bi ₁₂ GeO ₂₀ sillenite crystals by spectroscopic ellipsometry and Raman spectroscopy. Ceramics International, 2020, 46, 12905-12910.	4.8	14
204	Probing volatile liquid through an electrical sensor with up gradation to a breathalyzer for drunken drivers. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	6
205	Highly Precise Determination of Structural and Optical Parameters of an Innovative (PVA-VOCl) for Flexible Polymer-Semiconductor Devices. Macromolecular Research, 2020, 28, 805-812.	2.4	1
206	Energy Gap-Refractive Index Relations in Perovskites. Materials, 2020, 13, 1917.	2.9	36
207	A holistic approach to optical characterizations of vacuum deposited Cu ₂ ZnSnS ₄ thin film coatings for solar absorbing layers. Journal of Alloys and Compounds, 2021, 859, 157830.	5.5	8
208	The path towards efficient wide band gap thin-film kesterite solar cells with transparent back contact for viable tandem application. Solar Energy Materials and Solar Cells, 2021, 219, 110824.	6.2	17
209	Effect of gamma irradiation on structural, morphological and optical properties of thermal spray pyrolysis deposited CuO thin film. Ceramics International, 2021, 47, 3626-3633.	4.8	20
210	Impact of nickel substitution on structure, magneto-optical, electrical and acoustical properties of cobalt ferrite nanoparticles. Journal of Alloys and Compounds, 2021, 857, 157517.	5.5	44
211	Influence of Fe ³⁺ ions doping on TiO ₂ thin films: Defect generation, d-d transition and band gap tuning for optoelectronic device applications. Physica B: Condensed Matter, 2021, 604, 412618.	2.7	23
212	Synthesis, characterization, refractive index-bandgap relations, and optical nonlinearity parameters of CuI/PVOH nanocomposites. Optics and Laser Technology, 2021, 136, 106736.	4.6	9
213	First principle approach to substitutional effect of europium (Eu ²⁺) on electronic and optical parameters of strontium pyroniobate for low temperature applications. Journal of Alloys and Compounds, 2021, 854, 157115.	5.5	5
214	Piezoelectric Contributions to Optical Parametric Amplification of Acoustical Phonons in Magnetized Doped III-V Semiconductors. Iranian Journal of Science and Technology, Transaction A: Science, 2021, 45, 373-382.	1.5	5
215	Structural and elastic properties of binary semiconductors from energy gaps. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	2
216	Study of optoelectronic and thermoelectric spectra of Tl(Nd/Gd) ₂ S ₂ . Journal of Materials Science: Materials in Electronics, 2021, 32, 727-744.	2.2	1
217	A hybrid broadband metalens operating at ultraviolet frequencies. Scientific Reports, 2021, 11, 2303.	3.3	14
218	Lead-free halide double perovskites: Toward stable and sustainable optoelectronic devices. Materials Today, 2021, 49, 123-144.	14.2	57
219	Detailed characterization of the Ti-O based thin films obtained by cathodic arc evaporation. Materials Protection, 2021, 62, 41-50.	0.9	0

#	ARTICLE	IF	CITATIONS
220	Growth, spectral, optical, electrical and computational analysis of sodium oxalate single crystals. Heliyon, 2021, 7, e06527.	3.2	3
221	Optical spectra and thermal properties of double perovskite Ba ₂ LuTaO ₆ material. Optik, 2021, 229, 166272.	2.9	6
222	A Study on MoS ₂ , Nanolayer Coated Etched Fiber Bragg Grating Strain Sensor. IEEE Sensors Journal, 2021, 21, 9171-9178.	4.7	7
223	Performance and photoresponse characterizations of pyrimidine quinolone carboxylate derivatives films-based heterojunction devices. Optik, 2021, 231, 166426.	2.9	5
224	Synthesis, characterization and optical absorption studies of Na[Fe(CN) ₄ (C ₃ H ₄ N ₂)NO]·2H ₂ O crystals. Bulletin of Materials Science, 2021, 44, 1.	1.7	0
225	Modeling of size and shape dependent band gap, dielectric constant and phonon frequency of semiconductor nanosolids. Chinese Journal of Physics, 2021, 70, 26-36.	3.9	18
226	Investigation of changes in structural properties of polycrystalline In _{0.6628} Ga _{0.3372} N thin film. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	4
227	Gamma-ray induced modifications on CdS nanorod mesh: Structural, optical, and electrical properties. Radiation Physics and Chemistry, 2021, 182, 109353.	2.8	3
228	Reversibly Tailoring Optical Constants of Monolayer Transition Metal Dichalcogenide MoS ₂ Films: Impact of Dopant-Induced Screening from Chemical Adsorbates and Mild Film Degradation. ACS Photonics, 2021, 8, 1705-1717.	6.6	11
229	Tuning the Mode Splitting of a Semiconductor Microcavity with Uniaxial Stress. Physical Review Applied, 2021, 15, .	3.8	6
230	Refractive index of different perovskite materials. Journal of Materials Research, 2021, 36, 1773-1793.	2.6	12
231	Opto-structural characterization of Mg(OH) ₂ and MgO nanostructures synthesized through a template-free sonochemical method. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	5
232	Electrical and optical conductance behavior of InGaN thin films for various physical models towards optoelectronic applications. Emergent Materials, 0, , 1.	5.7	2
233	Third-Order Nonlinear Optical Response-Driven Upconversion Phosphors. Advanced Optical Materials, 2021, 9, 2100549.	7.3	4
234	Microstructural and optical properties of high-quality Mg-Zn oxide thin films. Materials Science in Semiconductor Processing, 2021, 127, 105690.	4.0	5
235	The Working Pressure-Dependent Physical Characteristics of InGaN/GaN/Sapphire Thin Film. Transactions on Electrical and Electronic Materials, 2021, 22, 584-592.	1.9	0
236	Bond length controlling opto-structural properties of Mn doped CuO thin films: An experimental and theoretical study. Materials Science in Semiconductor Processing, 2021, 129, 105798.	4.0	15
237	Ab initio studies of A ₂ PtH ₆ (A=K,Rb) materials for hydrogen storage purposes and optoelectronic applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 269, 115154.	3.5	6

#	ARTICLE	IF	CITATIONS
238	Optical, structure, and surface properties of ternary $\text{In}_x\text{Ga}_{1-x}\text{N}$ ($x=0.39\text{--}0.58$) film coatings for optoelectronics: in the perspective of sputter pressure. Applied Nanoscience (Switzerland), 2021, 11, 2303-2310.	3.1	0
239	Comparison of optical, electrical, and surface characteristics of InGaN thin films at non-flow and small nitrogen flow cases. Optical and Quantum Electronics, 2021, 53, 1.	3.3	0
240	Effect of Co doping in tailoring the crystallite size, surface morphology and optical band gap of CuO thin films prepared via thermal spray pyrolysis. Surfaces and Interfaces, 2021, 25, 101269.	3.0	12
241	UV-Vis absorption spectroscopic analysis of Er^{3+} ion doped oxyhalide glasses. Materials Today: Proceedings, 2021, , .	1.8	1
242	Modeling the Optical Properties of a Polyvinyl Alcohol-Based Composite Using a Particle Swarm Optimized Support Vector Regression Algorithm. Polymers, 2021, 13, 2697.	4.5	10
243	Preparation and characterization of spinel SrFe_2O_4 nanoparticles by method sol-gel. Journal of the Australian Ceramic Society, 2021, 57, 1359-1369.	1.9	4
244	Band Structure and Optical Spectra of Bulk, Tri-Layer, Bi-Layer and Monolayer CdS System: A Comparative Study. Transactions on Electrical and Electronic Materials, 2022, 23, 404-413.	1.9	4
245	Study of the effect of Fe doping on the structural and optical properties of CdSe films obtained using the electrochemical deposition method. Journal of Materials Science: Materials in Electronics, 2021, 32, 25385-25398.	2.2	3
246	Ultra-narrow, highly efficient power splitters and waveguides that exploit the TE_{01} Mie-resonant bandgap. Optics Express, 2021, 29, 32951.	3.4	6
247	Fundamental Limits to the Refractive Index of Transparent Optical Materials. Advanced Materials, 2021, 33, e2103946.	21.0	26
248	The temperature effect on the physical properties of PbS thin films produced by the chemical bath deposition (CBD) technique. Advances in Materials and Processing Technologies, 2022, 8, 3413-3424.	1.4	2
249	Nanofiber cadmium oxide thin films prepared from ethanolamine complexing agent by solution growth method. Optik, 2021, 243, 167402.	2.9	7
250	Halide double perovskite $\text{Cs}_2\text{AgInBr}_6$ for photovoltaic applications: Optical properties and stability. Optik, 2021, 243, 167198.	2.9	18
251	Correlation between the static refractive index and the optical bandgap: Review and new empirical approach. Physica B: Condensed Matter, 2021, 620, 413246.	2.7	24
252	Rare earth metals (Ce and Nd) induced modifications on structural, morphological, and photoluminescence properties of CuO nanoparticles and antibacterial application. Journal of Molecular Structure, 2021, 1244, 131207.	3.6	22
253	Enhanced static and dynamic magnetic properties of PEG-400 coated CoFe_2O_4 ($0.7 < \text{mml:math>T_j</math> ETQq1 1 0.784314 rg8T jOve$) nanoferrites. Journal of Alloys and Compounds, 2021, 887, 161418.	5.5	23
254	Improved optical absorption by local surface plasmon resonance of silver nanoparticles in nanocolumnar CdTe thin films. Indian Journal of Physics, 2022, 96, 257-265.	1.8	3
255	Design, fabrication and optical characterizations of pyrimidine fused quinolone carboxylate moiety for photodiode applications. Optik, 2020, 216, 164882.	2.9	32

#	ARTICLE	IF	CITATIONS
256	Thermal stability of magnetron sputtering Ge ¹ “Ga ¹ “S films*. Chinese Physics B, 2020, 29, 087803.	1.4	8
257	The electrical, elemental, optical, and surface properties of Si-doped ZnO thin films prepared by thermionic vacuum arc. Materials Research Express, 2017, 4, 096404.	1.6	21
258	Design and fabrication of InGaN/GaN superlattice-based solar cell using photonic crystal structure. Journal of Nanophotonics, 2018, 12, 1.	1.0	11
259	Temperature sensor based on multi-layer MoS ₂ coated etched fiber Bragg grating. Applied Optics, 2019, 58, 535.	1.8	22
260	Optical materials for maximal nanophotonic response [Invited]. Optical Materials Express, 2020, 10, 1561.	3.0	14
261	Effect of Size and Shape on Refractive Index, Dielectric Constant and Band Gap of Semiconducting Nanowire. Nanoscience and Nanotechnology - Asia, 2020, 10, 279-285.	0.7	2
262	Novel ethanol sensing via clad modified fiber with SnO ₂ :CuO with wireless adaptability. Applied Nanoscience (Switzerland), 2021, 11, 2617-2623.	3.1	2
263	Thermo-Optically Designed Scalable Photonic Films with High Thermal Conductivity for Subambient and Above-Ambient Radiative Cooling. Advanced Functional Materials, 2022, 32, 2109542.	14.9	91
264	Phase transition, band structure, optical spectra and magnetic moment of MnO magnetic material upon compression. European Physical Journal B, 2021, 94, 1.	1.5	1
266	Determination of CdS _x Se _{1-x} thick films optical properties from reflection spectra. Przegląd Elektrotechniczny, 2016, 1, 90-92.	0.2	1
267	Design of materials for IR detectors using high Z elements for high energy radiation environment. , 2019, , .		1
268	Impact of argon ion implantation on CdS nanorod mesh. Materials Letters, 2022, 307, 131082.	2.6	1
269	Structural, thermal and optical studies of Eu ³⁺ ion doped Ge ₂₂ As ₂₀ Se ₅₈ glass. Materials Research Express, 2023, 10, 035201.	1.6	1
270	Optical and X-Ray Investigation of Indium Oxide Films on Sapphire Substrates. Journal of Applied Spectroscopy, 2021, 88, 975-979.	0.7	0
271	The effect of ultrasonic wave amplitude on the physical properties of zinc oxide (ZnO) deposited by ultrasonic spray method. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2022, 275, 115525.	3.5	6
272	Study on graphene-like monolayer ZnS _{1-x} O _x : structural and optoelectronic properties. Theoretical Chemistry Accounts, 2021, 140, 1.	1.4	3
273	First-principles investigation of structural, electronic and optical properties of quasi-one-dimensional barium cadmium chalcogenides Ba ₂ CdX ₃ (X = S, Se, Te) using HSE06 and GGA-PBE functionals. Journal of Physics and Chemistry of Solids, 2022, 161, 110488.	4.0	19
274	Effect of low energy Ag ⁺ ION implantation ON ZnO nanorods for enhanced visible light absorption-structural and optical analysis. Optical Materials, 2021, 122, 111757.	3.6	2

#	ARTICLE	IF	CITATION
275	Two-Dimensional MoS ₂ Nanosheet-Functionalized Optical Microfiber for Room-Temperature Volatile Organic Compound Detection. ACS Applied Nano Materials, 2021, 4, 13440-13449.	5.0	10
276	Optical properties of the AgBr–AgI system crystals. Optics and Laser Technology, 2022, 149, 107825.	4.6	15
277	Experimental investigation of linear and third-order nonlinear optical properties of pure CuO thin film using femtosecond laser pulses. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 508.	2.1	10
278	Evolution of crystal structure properties of In _{0.4} Ga _{0.6} N thin-film under varying powers. Chinese Journal of Physics, 2022, 75, 206-214.	3.9	0
279	Band gap tuning and p to n-type transition in Mn-doped CuO nanostructured thin films. Journal of Semiconductors, 2022, 43, 012801.	3.7	12
280	Tuning the optical properties through bandgap engineering in Si-doped YAuPb: ab initio study. Journal of Computational Electronics, 2022, 21, 119-127.	2.5	5
281	Annealing assisted enhancement in photo response of PV deposited CdS thin films. Optics and Laser Technology, 2022, 149, 107868.	4.6	5
282	DFT Investigation of the Structural and Optoelectronic Properties of Alkali Metal Hydrides MH (M=Li, Tl) Over a Wide Range of Pressure. Journal of Superconductivity and Novel Magnetism, 2022, 29, 10784314.	1.9	0
283	Absorption Performance of Doped TiO ₂ -Based Perovskite Solar Cell using FDTD Simulation. Modelling and Simulation in Engineering, 2022, 2022, 1-8.	0.7	4
284	Sound Velocity, Electronic, Optical, and Mechanical Properties for Nano Semiconductor Materials (CdTe, ZnTe) under the Influence of Pressure. ECS Journal of Solid State Science and Technology, 2022, 11, 023013.	1.8	2
285	Optical Properties of S_{Mo_2} , S_{Se_2} , S_{Cu_2} , S_{Zn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , 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S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , 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S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} , S_{Sb_2} , S_{Te_2} , S_{As_2} , S_{V_2} , S_{Cr_2} , S_{Mn_2} , S_{Fe_2} , S_{Co_2} , S_{Ni_2} , S_{Cu_2} , S_{Zn_2} , S_{Ag_2} , S_{Au_2} , S_{Hg_2} , S_{Tl_2} , S_{Pb_2} , S_{Bi_2} ,		

#	ARTICLE	IF	CITATIONS
293	Green synthesis of ZnS nanoparticles using allium sativum l. extract and study of their structural, optical and electrical properties. , 2022, 19, 203-216.		2
294	Impact of Au nanoparticles on the thermophysical parameters of Fe ₃ O ₄ nanoparticles for seawater desalination. Optical Materials, 2022, 128, 112456.	3.6	10
295	Influence of KI salt concentration on the hydroxypropyl methylcellulose films: Optical study. Optical Materials, 2022, 129, 112474.	3.6	7
296	Synthesis and optical studies of group 2-6 ternary semiconductor. AIP Conference Proceedings, 2022, , .	0.4	0
297	Low cost novel PEO based nano-composite for semiconductor and He-Ne lasers beam attenuation: Structural and optical properties. Optical Materials, 2022, 129, 112502.	3.6	9
298	Strained Cs ₂ AgInCl ₆ double perovskite material: band structure, optical spectra and mechanical stability. Physica Scripta, 2022, 97, 085801.	2.5	3
299	Ground-state properties of p-type delafossite transparent conducting oxides 2H-CuMO ₂ (M=Al, Sc and) Tj ETQq0 0,0rgBT /Oylock 10	1.9	0
300	Modelling and investigation of the electrical properties of CIGS/n-Si heterojunction solar cells. Optical Materials, 2022, 131, 112738.	3.6	5
301	Synthesis of gallium nitride nanostructure using pulsed laser ablation in liquid for photoelectric detector. Materials Science in Semiconductor Processing, 2022, 150, 106911.	4.0	10
302	Response of mechanical and optoelectronic properties for InP _x As _{1-x} /InAs system to composition. Journal of the Korean Physical Society, 0, , .	0.7	0
303	Nickel ferrite magnetic nanoparticles: evidence for superparamagnetism in smaller size particles. Journal of the Australian Ceramic Society, 2022, 58, 1455-1480.	1.9	3
304	Effect of silica matrix on structural and optical properties of cobalt ferrite nanoparticles. Results in Surfaces and Interfaces, 2022, 8, 100081.	2.4	3
305	Optical Properties of Synthesized Hexagonal CdTe Nanoparticles Having Hexagonal Phase: Density Functional Theory-Supported Calculation of Bandgap and Density of States. Physica Status Solidi (B): Basic Research, 2023, 260, .	1.5	2
306	A high-throughput ab-initio study of diverse glasses: Accuracy of the atomic structure and refractive index. Computational Materials Science, 2022, 214, 111765.	3.0	2
307	Synthesis, characterization, adsorption study, quantum mechanics, monte carlo and molecular dynamics of lead based polymeric compound towards mopping of aqueous methyl red dye. Results in Chemistry, 2022, 4, 100499.	2.0	3
308	A Novel Correction Method Toward Extraction of Reflectance and Linear Refractive Index of Some Borosilicate Glasses Doped with BaTiO ₃ . Journal of Electronic Materials, 2022, 51, 6347-6355.	2.2	7
309	The effect of Ag plasmonic nanoparticles on the efficiency of CZTS solar cell: an experimental investigation and numerical modelling. Indian Journal of Physics, 2023, 97, 779-796.	1.8	9
310	Synthesis and characterization <sc>gâ€C₃N₄</sc>-doped <sc>PMMA</sc> polymeric nanocomposites films for electronic and optoelectronic applications. Journal of Applied Polymer Science, 2022, 139, .	2.6	5

#	ARTICLE	IF	CITATIONS
311	ENERGY BAND GAP AND THE REFRACTIVE INDEX FOR POLYANILINE THIN FILMS OF POLYANILINE IN THIN FILMS ON POLYETHYLENE SURFACE. Proceedings of the Shevchenko Scientific Society Series Ðhemical Sciences, 2022, 2022, 26-42.	0.1	0
312	Theoretical prediction of doping iron ions effect on the optoelectronic and magnetic cobalt-based perovskite (Co _{1-x} Fe _x ScO ₃). Materials Research Express, 2022, 9, 106511.	1.6	2
313	Effect of indium doping on the optoelectronic properties of ZnSe films. Thin Solid Films, 2022, 760, 139492.	1.8	1
314	Investigation of Spectroscopic and Optoelectronic Properties of Phthalocyanine Molecules. Russian Journal of General Chemistry, 2022, 92, 1827-1838.	0.8	6
315	Elucidation of Strain-Dependent, Zinc Oxide Nanorod Response for Nanorod-Guided Fluorescence Intensity. Nanomaterials, 2022, 12, 3558.	4.1	1
316	Photoelectrochemical oxidation of nonoxidative methane into the value-added product over FRET-induced ZnO/ Ag@Ag ₄ V ₂ O ₇ donor-acceptor heterojunction. International Journal of Hydrogen Energy, 2023, 48, 586-599.	7.1	2
317	Structural, electronic and optical properties of the wide band gap semiconductors KGaQ ₂ (Q = S, Se) and of AGaTe ₂ (A = K, Cs). Revista Mexicana De F�sica, 2022, 68, .	0.4	0
318	Investigation of raman spectrum, structural, morphological, and optical features of Fe ₂ O ₃ and Fe ₂ O ₃ /reduced graphene oxide hybrid nanocomposites. Physica Scripta, 2022, 97, 125807.	2.5	4
319	Remark on the correlation between the refractive index and the optical band gap in some crystalline solids. Materials Chemistry and Physics, 2023, 293, 126949.	4.0	5
320	Effect of Li Doping on Cu ₂ SnS ₃ /�Si Heterojunction Solar Cells: Experiments and Simulation. Crystal Research and Technology, 2023, 58, .	1.3	0
321	Appreciably optimization of PVA/PVP nanocomposite blend for enhanced optoelectronics properties and multifunctional applications. Physica B: Condensed Matter, 2023, 650, 414586.	2.7	9
322	Topological insulator-based nonlinear optical effects and functional devices. Journal of Nonlinear Optical Physics and Materials, 0, , .	1.8	1
323	Investigation of key physical properties of new La@PbS filled Poly (vinyl and pyrrolidone) nanocomposite films for opto-electronics. Physica Scripta, 2023, 98, 025815.	2.5	1
324	Linear and nonlinear optical properties of Al ₂ O ₃ /Y ₂ O ₃ nanolaminates fabricated by atomic layer deposition. Optics and Laser Technology, 2023, 160, 109063.	4.6	1
325	Electronic and optical properties of lead�free double perovskites A ₂ BCl ₆ (A�=�Rb, Cs; B�=�Si, Ge, Sn) for solar cell applications: A systematic computational study. Journal of Physical Organic Chemistry, 2023, 36, .	0.9	3
326	Estimation of structural and optical properties of transparent PS/ZnO nanocomposite foils for UV shielding and photonic applications. Modern Physics Letters B, 2022, 36, .	1.9	1
327	Effect of Co dopant on structural, optical, and magnetic properties of CeO ₂ quantum dots. Journal of the Australian Ceramic Society, 2023, 59, 459-480.	1.9	2
328	Multifunctional praseodymium-doped composite silica glasses for UV shielding and photonic applications. Journal Physics D: Applied Physics, 2023, 56, 195301.	2.8	10

#	ARTICLE	IF	CITATIONS
329	Enhanced photovoltaic effects of microwave-assisted polyol-synthesized Cu ₂ (Pd/Zn)SnS ₄ kesterite nanoparticles. Journal of Science: Advanced Materials and Devices, 2023, 8, 100553.	3.1	0
330	Dualistic influences of Pr ³⁺ ions on the optical and radiation shielding characteristics of alumina bismuth – Sodium phosphate glasses. Radiation Physics and Chemistry, 2023, 207, 110856.	2.8	2
331	Spray-pyrolyzed Cd-substituted kesterite thin-films for photovoltaic applications: Post annealing conditions and property studies. Materials Chemistry and Physics, 2023, 301, 127594.	4.0	0
332	Investigating the Influence of Cu-Doped BaFe ₁₂ O ₁₉ on Physical and Optical Behavior of Its Nanocomposites with CoZnFe ₂ O ₄ . Journal of Electronic Materials, 2023, 52, 2312-2328.	2.2	1
333	Variation in the Optical Properties of PEO-Based Composites via a Green Metal Complex: Macroscopic Measurements to Explain Microscopic Quantum Transport from the Valence Band to the Conduction Band. Polymers, 2023, 15, 771.	4.5	7
334	Refractive Index-Adaptive Nanoporous Chiral Photonic Crystal Film for Chemical Detection Visualized via Selective Reflection. Small, 2023, 19, .	10.0	5
335	In-situ synthesis of PbS nanocomposites films in PEOX-PVA: Interaction effect of parent polymer matrix on structural and optical properties. Optical Materials, 2023, 138, 113680.	3.6	1
336	Influence of Mn doping on electrical properties of TiO ₂ /Si heterojunction diode. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2023, 78, 563-578.	1.5	0
337	The optical constants of amorphous silicon nanostructures. AIP Conference Proceedings, 2023, , .	0.4	0
338	The optoelectronic application of <sc>CsSn</sc> upon substitution with Pb: A <sc>DFT</sc> approach. International Journal of Quantum Chemistry, 2023, 123, .	2.0	1
339	Surface magneto-optics in yttrium iron garnets. Optical Materials Express, 2023, 13, 1663.	3.0	1
340	First-principles calculations to investigate structural, electronic, and optical properties of zinc-blende Cd _x Mg _(1-x) Te _y S _(1-y) matched to CdX (X= S, Te) for Predicting critical thickness and corrective Term's effect. Solid State Communications, 2023, 368, 115189.	1.9	0
341	A computational study of double perovskites A ₂ BI ₆ (A=Cs, K, Rb; B=Pt, Sn) invoking density functional theory. Journal of Physical Organic Chemistry, 2023, 36, .	1.9	2
342	Nano cristobalite embedded Er ³⁺ doped multi-functional silica phosphate composite glasses for optoelectronic applications. Ceramics International, 2023, 49, 25848-25867.	4.8	7
343	A computational study of ZnFeX ₂ (X = S, Se, Te) Nano-clusters having photovoltaic applications. Materials Science in Semiconductor Processing, 2023, 164, 107608.	4.0	1
344	Structural, mechanical, electronic and optical properties of a new quaternary SrFZnAs compound: A first-principles insight. Computational Condensed Matter, 2023, 36, e00822.	2.1	1
345	A computational study of CuCrX ₂ (X = S, Se, Te) for intermediate band solar cell: Conceptual density functional theory approach. Journal of Molecular Graphics and Modelling, 2023, 124, 108534.	2.4	1
346	The Role of Annealing Treatment on Crystallographic, Optical, and Electrical Features of Bi ₂ O ₃ Thin Films Prepared Using Reactive Plasma Sputtering Technology. Journal of Nanotechnology, 2023, 2023, 1-8.	3.4	1

#	ARTICLE	IF	CITATIONS
347	On the Optical Properties and Structure of In ₂ O ₃ Films Deposited onto Al ₂ O ₃ (012) Substrates by dc-Magnetron Sputtering. Journal of Surface Investigation, 2023, 17, 562-567.	0.5	0
348	DFT and TD-DFT calculations for electronic, magnetic, and optical characteristics of the 3d transition metal complexes for hexaazabipyH ₂ . Computational and Theoretical Chemistry, 2023, 1226, 114215.	2.5	0
349	Multifunctional BaTi _{0.98} Mo _{0.02} O ₃ (M = V, Co, Mo) compositions: High dye-photodegradation and relative permittivity characteristics. Journal of Solid State Chemistry, 2023, 326, 124208.	2.9	2
350	Ionic liquids: a new generation of efficient polyvinyl chloride thermal stabilizers. , 2024, 10, 12-19.		1
351	Nonlinear optical response of I^{\pm} -terpinolene and I^2 -phellandrene chromophores: An octupolar gas-to-solvent enhancement able to retain light conduction. Optik, 2023, 291, 171199.	2.9	0
353	Simple and Easy Control-Synthesis of Pure I^{\pm} -Bi ₂ O ₃ and Bi ₂ O ₂ CO ₃ : Morphological, Optical and Solar Photon-Energy Photocatalytic Studies. Chemistry Africa, 0, , .	2.4	0
355	Tuning Novel NaLaS ₂ (I^{\pm} (Se or Te)) ₂ Alloys as Light-Absorbing Materials by Dopant-Induced Crystallographic Phase and Electronic Structure Transitions. Journal of Physical Chemistry C, 2023, 127, 17532-17544.	3.1	1
356	Two-photon absorption in colloidal semiconductor nanocrystals: a review. Journal of Physics Condensed Matter, 0, , .	1.8	0
357	Ab initio investigations on the structural and optical properties of sol-gel synthesized bismuth telluride nanoparticles. Physica Scripta, 2023, 98, 105960.	2.5	0
358	Investigation on ammonia-free scalable cobalt-doped hexagonal boron nitride for environmental remediation. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	0
359	AB-INITIO study of electronic, mechanical, optical and thermoelectric properties of KGeCl ₃ for photovoltaic application. Heliyon, 2023, 9, e19808.	3.2	2
360	Deeply subwavelength integrated excitonic van der Waals nanophotonics. Optica, 2023, 10, 1345.	9.3	3
361	Optical Properties of ZnO/Alum Composites as Catalysts with Rapid Degradation for Methylene Blue. Arabian Journal for Science and Engineering, 0, , .	3.0	0
362	Study of TI-based perovskite materials TlX ₃ (Z = Ge, Sn, Bi, Sb; X = Cl, Br, I) for application in scintillators: DFT and TD-DFT approach. Chemical Physics Impact, 2023, 7, 100344.	3.5	1
363	Optoelectronic Properties of Benzimidazobenzophenanthroline Thin Film. Russian Microelectronics, 2023, 52, 325-336.	0.5	0
364	Tb- and Eu-doped yttrium oxyselenides as novel absorber layers for superstrate thin-film photovoltaics: improved spectral optical absorption and green-red phosphor activation. Nanoscale, 0, , .	5.6	0
365	Tunable Mie resonance in complex-shaped gadolinium niobate. Nanotechnology, 0, , .	2.6	0
366	Theoretical and computational exploration of electronic structure, optical properties, open circuit voltage, and toxicity of perovskites solar Cell:(Cs ₂ SiX ₆ , X = Cl, Br, and I). , 2023, 4, 100084.		3

#	ARTICLE	IF	CITATIONS
367	Prediction and tuning of the optical energy gap and refractive index of amorphous titania-alumina thin films prepared by atomic layer deposition using adaptive neuro-fuzzy inference system model. European Physical Journal Plus, 2023, 138, .	2.6	0
368	Enhanced luminescence efficiency in Eu-doped GaN superlattice structures revealed by terahertz emission spectroscopy. Communications Materials, 2023, 4, .	6.9	0
369	Impact of the Hexagonal Phase on Multiphoton Absorption Properties of Mixed Cation Halide Perovskite: $\text{FA}_{0.8}\text{MA}_{0.2}\text{PbI}_3$. Advanced Optical Materials, 2024, 12, .	7.3	0
370	Computational study of the structural, optoelectronic and thermoelectric properties of scandium-based ternary chalcogenides XScSe_2 ($\text{X}=\text{Li, Rb}$) for applications in photovoltaic cell. Journal of Computational Electronics, 2024, 23, 82-93.	2.5	0
371	Energy-Gap-Refractive Index Relations in Semiconductors Using Wemple-DiDomenico Model to Unify Moss, Ravindra, and Herve-Vandamme Relationships. Solids, 2023, 4, 316-326.	2.4	2
372	DFT study of RhTiP half Heusler semiconductor: Revealing its mechanical, optoelectronic, and thermoelectric properties. Physica B: Condensed Matter, 2024, 672, 415452.	2.7	2
373	Effect of Nickel doping on the Structural, Optical, and electrical properties of titanium dioxide thin films for the application of sensing devices. Results in Optics, 2023, 13, 100579.	2.0	0
374	Effect of Nd:YAG pulsed laser on the antibacterial activity and physical properties of newly synthesized composites, $\text{CdO/Co}_3\text{O}_4$ and $\text{Ag/CdO/Co}_3\text{O}_4$. Physica Scripta, 2024, 99, 015903.	2.5	0
375	Numerical simulation of highly efficient $\text{Cs}_2\text{AgInBr}_6$ -based double perovskite solar cell using SCAPS 1-D. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2024, 299, 117041.	3.5	1
376	A brief review on optical properties of polymer Composites: Insights into Light-Matter interaction from classical to quantum transport point of view. Results in Physics, 2024, 56, 107239.	4.1	2
377	Effect of Annealing Temperature on the Structure and Optical Properties of ZnO Thin Films. Journal of Physics Condensed Matter, 0, , .	1.8	0
379	An Ab-initio study on spin gapless semiconducting in novel quaternary heusler alloys RhCoVZ ($\text{Z}=\text{Al, In}$) Tj ETQq1 1 0.784314 rgBT /Over Materials Today Communications, 2024, 38, 107827.	1.9	0
380	Structural, Optical, and Magnetic Properties of Pure and Ni-Fe -Codoped Zinc Oxide Nanoparticles Synthesized by a Sol-Gel Autocombustion Method. ACS Omega, 0, , .	3.5	0
381	Numerical analysis of the thin film solar cell modelled based on In doped CdS semiconductor. International Journal of Pure and Applied Sciences, 0, , .	0.5	0
382	Insight into the structural, elastic, and optoelectronic properties of XPbO_3 ($\text{X}=\text{Cs, Rb}$) compounds employing density functional theory. Physica B: Condensed Matter, 2024, 676, 415647.	2.7	0
383	A Review on Reconfigurable Metalenses Revolutionizing Flat Optics. Advanced Optical Materials, 0, , .	7.3	0
384	Detailed investigations on stability and optoelectronic characteristics of the 1T-PdS_2 monolayer. Physica Scripta, 2024, 99, 025945.	2.5	0
385	Study of electrical conductance and dielectric properties of vanadium doped cobalt ferrites for high frequency applications. Inorganic Chemistry Communication, 2024, 162, 111687.	3.9	0

#	ARTICLE	IF	CITATIONS
386	Band gap analysis in MOF materials: Distinguishing direct and indirect transitions using UV-vis spectroscopy. Applied Materials Today, 2024, 37, 102094.	4.3	0
387	Strain-Modulated and Nanorod-Waveguided Fluorescence in Single Zinc Oxide Nanorod-Based Immunodetection. Biosensors, 2024, 14, 85.	4.7	0
388	Structural and optical investigations of RE ³⁺ : Yb, Er, Sm, Nd, Ce-doped multi-functional silica glasses for photonic applications. Journal Physics D: Applied Physics, 2024, 57, 205101.	2.8	0
389	Energy Gaps, Optical Transitions, and Exciton Properties of ZnSe at High Pressures. ECS Journal of Solid State Science and Technology, 2024, 13, 024001.	1.8	0
390	Enhanced Opto-Electronic Properties of Bi:CuO/n-Si Heterojunctions for Photodetector Applications. Acta Physica Polonica A, 2024, 145, 3-15.	0.5	0
391	Optical and X-Ray Studies of Indium Oxide Films Deposited by DC Magnetron Sputtering. Acta Physica Polonica A, 2024, 145, 67-70.	0.5	0
392	TiO ₂ /PDA Multilayer Nanocomposites with Exceptionally Sharp Large-Scale Interfaces and Nitrogen Doping Gradient. ACS Applied Materials & Interfaces, 2024, 16, 10774-10784.	8.0	0
393	Effect of strain on the electronic structure and optical spectra of two-dimensional monolayer GaN. Journal of Physics and Chemistry of Solids, 2024, 190, 111993.	4.0	0
394	Bandgap Engineering and Enhancing Optoelectronic Performance of a Lead-Free Double Perovskite Cs ₂ AgBiBr ₆ Solar Cell via Al Doping. ACS Omega, 2024, 9, 18202-18211.	3.5	0
395	Analyzing the physical properties of perovskite oxides CeBO ₃ (B=Be, Mg) for optoelectronic and thermoelectric applications. Modern Physics Letters B, 0, , .	1.9	0