

Rajesh Punia

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8256895/publications.pdf>

Version: 2024-02-01

104
papers

2,458
citations

172457

29
h-index

233421

45
g-index

104
all docs

104
docs citations

104
times ranked

1535
citing authors

#	ARTICLE	IF	CITATIONS
1	Bismuth modified physical, structural and optical properties of mid-IR transparent zinc boro-tellurite glasses. <i>Journal of Alloys and Compounds</i> , 2014, 587, 66-73.	5.5	145
2	Nanostructured Polyaniline/Graphene/Fe ₂ O ₃ Composites Hydrogel as a High-Performance Flexible Supercapacitor Electrode Material. <i>ACS Applied Energy Materials</i> , 2020, 3, 6434-6446.	5.1	113
3	Structural and optical properties of barium titanate modified bismuth borate glasses. <i>Solid State Sciences</i> , 2014, 37, 64-71.	3.2	110
4	Physical, structural and optical characterization of silicate modified bismuth-borate-tellurite glasses. <i>Journal of Molecular Structure</i> , 2017, 1127, 636-644.	3.6	101
5	Temperature and frequency dependent conductivity of bismuth zinc vanadate semiconducting glassy system. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	88
6	Effect of Bi ₂ O ₃ on structural, optical, and other physical properties of semiconducting zinc vanadate glasses. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	77
7	Structural and dielectric properties of substituted barium titanate ceramics for capacitor applications. <i>Ceramics International</i> , 2015, 41, 13425-13432.	4.8	77
8	Advancement in valorization technologies to improve utilization of bio-based waste in bioeconomy context. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 131, 109965.	16.4	63
9	Study of vibrational spectroscopy, linear and non-linear optical properties of Sm ³⁺ ions doped BaO–ZnO–B ₂ O ₃ glasses. <i>Solid State Sciences</i> , 2015, 45, 15-22.	3.2	58
10	Effect of doping of Nd ³⁺ ions in BaO–TeO ₂ –B ₂ O ₃ glasses: A vibrational and optical study. <i>Journal of Molecular Structure</i> , 2015, 1088, 147-154.	3.6	55
11	Dielectric and impedance studies of La and Zn co-doped complex perovskite CaCu ₃ Ti ₄ O ₁₂ ceramic. <i>Ceramics International</i> , 2018, 44, 23125-23136.	4.8	55
12	Realization of warm white light and energy transfer studies of Dy ³⁺ /Eu ³⁺ co-doped Li ₂ O–PbO–Al ₂ O ₃ –B ₂ O ₃ glasses for lighting applications. <i>Journal of Luminescence</i> , 2020, 222, 117166.	3.1	52
13	Effect of BaTiO ₃ on the structural and optical properties of lithium borate glasses. <i>Ceramics International</i> , 2015, 41, 10957-10965.	4.8	49
14	Titanium induced structural modifications in bismuth silicate glasses. <i>Journal of Molecular Structure</i> , 2014, 1063, 77-82.	3.6	48
15	Judd-Ofelt itemization and influence of energy transfer on Sm ³⁺ ions activated B ₂ O ₃ –ZnF ₂ –SrO–SiO ₂ glasses for orange-red emitting devices. <i>Journal of Luminescence</i> , 2021, 229, 117651.	3.1	47
16	Augmenting the photoluminescence efficiency via enhanced energy-relocation of new white-emanating BaYAlZn ₃ O ₇ :Dy ³⁺ nano-crystalline phosphors for WLEDs. <i>Journal of Alloys and Compounds</i> , 2021, 879, 160371.	5.5	47
17	Temperature and frequency dependent conductivity and electric modulus formulation of manganese modified bismuth silicate glasses. <i>Journal of Non-Crystalline Solids</i> , 2015, 423-424, 1-8.	3.1	46
18	Physical, structural and optical characterizations of borate modified bismuth–silicate–tellurite glasses. <i>Journal of Molecular Structure</i> , 2015, 1097, 37-44.	3.6	46

#	ARTICLE	IF	CITATIONS
19	Conduction mechanism in bismuth silicate glasses containing titanium. <i>Physica B: Condensed Matter</i> , 2014, 452, 102-107.	2.7	45
20	A study on the structural and photocatalytic degradation of ciprofloxacin using (70B 2 O 3 â€“29Bi 2 O) Tj ETQq0,0,0 rgBT /Overlock 1	3.1	44
21	Structural properties and electrical transport characteristics of modified lithium borate glass ceramics. <i>Journal of Alloys and Compounds</i> , 2017, 696, 529-537.	5.5	43
22	Dielectric relaxation and conduction mechanism of complex perovskite Ca _{0.90} Sr _{0.10} Cu ₃ Ti _{3.95} Zn _{0.05} O ₁₂ ceramic. <i>Ceramics International</i> , 2018, 44, 5996-6001.	4.8	42
23	Effect of replacement of Bi ₂ O ₃ by Li ₂ O on structural, thermal, optical and other physical properties of zinc borate glasses. <i>Journal of Molecular Structure</i> , 2020, 1219, 128589.	3.6	41
24	Hopping conduction in bismuth modified zinc vanadate glasses: An applicability of Mott's model. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	40
25	Iron modified structural and optical spectral properties of bismuth silicate glasses. <i>Physica B: Condensed Matter</i> , 2014, 450, 39-44.	2.7	40
26	Concentration dependence of intensity parameters and radiative properties of Sm ³⁺ ions doped in BaOâ€“ZnOâ€“B ₂ O ₃ glasses. <i>Journal of Alloys and Compounds</i> , 2016, 676, 521-526.	5.5	35
27	In situ decoration of silver nanoparticles on single-walled carbon nanotubes by microwave irradiation for enhanced and durable anti-bacterial finishing on cotton fabric. <i>Ceramics International</i> , 2019, 45, 1011-1019.	4.8	33
28	Probing into multifunctional deep orange-red emitting Sm ³⁺ -activated zincate based nanomaterials for wLED applications. <i>Chemical Physics Letters</i> , 2021, 777, 138743.	2.6	33
29	One pot synthesis and electromagnetic interference shielding behavior of reduced graphene oxide nanocomposites decorated with Ni _{0.5} Co _{0.5} Fe ₂ O ₄ nanoparticles. <i>Journal of Alloys and Compounds</i> , 2021, 887, 161472.	5.5	32
30	Structural, optical, thermal and other physical properties of Bi ₂ O ₃ modified Lithium Zinc Silicate glasses. <i>Journal of Molecular Structure</i> , 2021, 1234, 130160.	3.6	30
31	Generation of cost-effective conventional-combustion derived novel green-luminous BaLa ₂ ZnO ₅ :Er ³⁺ nanomaterials for high quality illumination in WLEDs and solar-cells. <i>Chemical Physics Letters</i> , 2021, 777, 138752.	2.6	30
32	Determination of valence and conduction band offsets in Zn _{0.98} Fe _{0.02} O/ZnO hetero-junction thin films grown in oxygen environment by pulsed laser deposition technique: A study of efficient UV photodetectors. <i>Journal of Alloys and Compounds</i> , 2018, 768, 978-990.	5.5	29
33	Structural and other physical properties of lithium doped bismuth zinc vanadate semiconducting glassy system. <i>Journal of Molecular Structure</i> , 2015, 1079, 189-193.	3.6	28
34	Judd-Ofelt Parameterization and Luminescence Characterization of Dy ³⁺ Doped Oxyfluoride Lithium Zinc Borosilicate Glasses for Lasers and w-LEDs. <i>Journal of Non-Crystalline Solids</i> , 2020, 544, 120187.	3.1	28
35	Resonant and Non-resonant Nonlinear Optical Properties of Er ³⁺ modified BaO-ZnO-B ₂ O ₃ Glasses at 532 and 1550 nm. <i>Journal of Non-Crystalline Solids</i> , 2020, 541, 120155.	3.1	27
36	Correlation between multifunctional properties of lead free Iron doped BCT perovskite ceramics. <i>Ceramics International</i> , 2020, 46, 17495-17507.	4.8	26

#	ARTICLE	IF	CITATIONS
37	Study of structural, dielectric, ferroelectric and magnetic properties of vanadium doped BCT ceramics. <i>Ceramics International</i> , 2019, 45, 20368-20378.	4.8	25
38	Crystal configuration, luminescence dynamics and facile combustion-fabrication of high-brightness YAG:Sm ³⁺ nanomaterials towards competent illuminating appliances, especially WLEDs and solar-cells. <i>Chemical Physics Letters</i> , 2021, 779, 138831.	2.6	25
39	Manganese modified structural and optical properties of bismuth silicate glasses. <i>Journal of Molecular Structure</i> , 2015, 1089, 32-37.	3.6	23
40	Electronic transport and relaxation studies in bismuth modified zinc boro-tellurite glasses. <i>Solid State Sciences</i> , 2015, 48, 230-236.	3.2	23
41	Enhancement in magnetic, piezoelectric and ferroelectric properties on substitution of titanium by iron in barium calcium titanate ceramics. <i>Ceramics International</i> , 2016, 42, 12167-12171.	4.8	22
42	Luminescence tuning and structural analysis of new BaYAlZn ₃ O ₇ :Sm ³⁺ nanomaterials with excellent performance for advanced optoelectronic appliances. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 15930-15943.	2.2	21
43	Electrical conductivity and modulus formulation in zinc modified bismuth boro-tellurite glasses. <i>Indian Journal of Physics</i> , 2016, 90, 1033-1040.	1.8	19
44	Temperature and frequency dependent conductivity of lithium doped bismuth zinc vanadate semiconducting glassy system. <i>Indian Journal of Physics</i> , 2014, 88, 1169-1173.	1.8	17
45	Structural, optical, electrical, and magnetic properties of Zn _{0.7} Mn _x Ni _{0.3} O nanoparticles synthesized by sol-gel technique. <i>Cogent Physics</i> , 2015, 2, 1055623.	0.7	16
46	X-ray photoelectron spectroscopy investigations of band offsets in Ga _{0.02} Zn _{0.98} O/ZnO heterojunction for UV photodetectors. <i>Journal of Applied Physics</i> , 2017, 122, .	2.5	16
47	Role of charge compensation mechanism and defect dipoles on properties of Mn doped BCT ceramics. <i>Ceramics International</i> , 2021, 47, 11491-11505.	4.8	16
48	Physical, structural and optical characterization of Dy ³⁺ doped ZnF ₂ -WO ₂ -B ₂ O ₃ -TeO ₂ glasses for opto-communication applications. <i>Optical Materials</i> , 2021, 114, 110937.	3.6	16
49	Structural and dielectric properties of Ca _{0.95} Nd _{0.05} Cu ₃ Ti _{3.95} Zr _{0.05} O ₁₂ ceramics. <i>Ferroelectrics</i> , 2017, 516, 156-166.		
50	An approach for correlating electrically heterogeneous structure to enhanced dielectric properties of Sr and Zn co-substituted CaCu ₃ Ti ₄ O ₁₂ ceramics. <i>Journal of Alloys and Compounds</i> , 2018, 769, 1102-1112.	5.5	15
51	DC Conduction and Electric Modulus Formulation of Lithium Doped Bismuth Zinc Vanadate Semiconducting Glassy System. <i>Journal of the American Ceramic Society</i> , 2015, 98, 2776-2783.	3.8	14
52	Conductivity and modulus formulation in lithium modified bismuth zinc borate glasses. <i>Solid State Sciences</i> , 2016, 55, 98-105.	3.2	14
53	Study of all-optical switching properties of zinc phthalocyanine thin film by pump-probe technique. <i>Optics and Laser Technology</i> , 2017, 95, 100-104.	4.6	13
54	Influence of hydrostatic pressure and spin orbit interaction on optical properties in quantum wire. <i>Physica B: Condensed Matter</i> , 2019, 552, 202-208.	2.7	13

#	ARTICLE	IF	CITATIONS
55	New Ba ₂ YAlO ₅ :Dy ³⁺ nanomaterials for WLEDs: Propellant combustion synthesis and photometric features for enhanced emission of cool-white light under NUV excitation. <i>Chemical Physics Letters</i> , 2021, 781, 138985.	2.6	13
56	Structural, thermal, optical and luminescence properties of Dy ³⁺ ions doped Zinc Potassium Alumino Borate glasses for optoelectronics applications. <i>Journal of Non-Crystalline Solids</i> , 2022, 588, 121613.	3.1	13
57	Structural and Physical Properties of ZnO Modified Bismuth Silicate Glasses. <i>ISRN Spectroscopy</i> , 2012, 2012, 1-5.	0.9	12
58	Structural investigation and giant dielectric response of CaCu ₃ Ti ₄ O ₁₂ ceramic by Nd/Zr co-doping for energy storage applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 10825-10833.	2.2	12
59	Near unity green emission with radiative and non-radiative itemization into novel energy-efficient Sr ₆ Al ₄ Y ₂ O ₁₅ :Er ³⁺ nanomaterials for WLEDs. <i>Chemical Physics Letters</i> , 2021, 781, 139013.	2.6	11
60	Enhanced visible green and 1.5 μ m radiative emission of Er ³⁺ ions in Li ₂ O-PbO-Al ₂ O ₃ -B ₂ O ₃ glasses for photonic applications. <i>Journal of Rare Earths</i> , 2021, 39, 520-525.	4.8	10
61	Optimizing the highly efficient cool-white luminescence via modulating Dy ³⁺ ion into novel Sr ₆ Al ₄ Y ₂ O ₁₅ nanocrystals for white LEDs. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 23486-23499.	2.2	10
62	Ecofriendly synthesis and white light-emitting properties of BaLa ₂ ZnO ₅ :Dy ³⁺ nanomaterials for lighting application in NUV-WLEDs and solar cells. <i>Chemical Physics Letters</i> , 2022, 792, 139399.	2.6	10
63	ZnCl ₂ Modified Physical and Optical Properties of Barium Tellurite Glasses. <i>Transactions of the Indian Ceramic Society</i> , 2013, 72, 206-210.	1.0	9
64	Study of energy storage and electrocaloric behavior of lead-free Fe-doped BCT ceramics. <i>Ferroelectrics</i> , 2020, 569, 136-147.	0.6	9
65	Spectral characteristics of Tb ³⁺ doped ZnF ₂ •K ₂ O•Al ₂ O ₃ •B ₂ O ₃ glasses for epoxy free tricolor w-LEDs and visible green laser applications. <i>Journal of Luminescence</i> , 2022, 244, 118676.	3.1	9
66	Impact of Triple Roll Milling Processing Parameters on Fluidic/Rheological and Electrical Properties of Aqueous Graphene Ink. <i>Advanced Engineering Materials</i> , 2020, 22, 1901187.	3.5	8
67	Zinc chloride modified electronic transport and relaxation studies in barium-tellurite glasses. <i>Electronic Materials Letters</i> , 2017, 13, 412-419.	2.2	8
68	Design of Bright-Green Radiating Er ³⁺ -Singly Activated Zincate-Based Nanomaterials for High-Performance Optoelectronic Devices. <i>Journal of Electronic Materials</i> , 2022, 51, 391-402.	2.2	8
69	Fabrication of n-TiO ₂ /p-Si Photo-Diodes for Self-Powered Fast Ultraviolet Photodetectors. <i>Silicon</i> , 2022, 14, 11891-11901.	3.3	8
70	Fe ₂ O ₃ Modified Physical, Structural and Optical Properties of Bismuth Silicate Glasses. <i>Journal of Materials</i> , 2013, 2013, 1-5.	0.1	7
71	Study of vibrational spectroscopy, linear and nonlinear optical properties of borate-modified tellurium•silica•bismuthate glasses. <i>Indian Journal of Physics</i> , 2020, 94, 1643-1652.	1.8	7
72	Understanding the electrode polarization in bismuth zinc vanadate semiconducting glasses from dielectric spectroscopy: A new insight on electrode polarization effect. <i>Journal of Non-Crystalline Solids</i> , 2021, 574, 121174.	3.1	7

#	ARTICLE	IF	CITATIONS
73	Formation of non-alloyed Ti/Al/Ni/Au low-resistance ohmic contacts on reactively ion-etched n-type GaN by surface treatment for GaN light-emitting diodes applications. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	6
74	Physical, Optical and Structural Properties of $x\text{Li}_2\text{O}-(50-x)\text{Bi}_2\text{O}_3-10\text{ZnO}-40\text{B}_2\text{O}_3$ Glasses. Transactions of the Indian Ceramic Society, 2012, 71, 225-228.	1.0	5
75	Effect of ZnO on the physical and optical properties of tellurite base glasses. , 2013, , .		5
76	Physical, optical and structural properties of $x\text{Na}_2\text{O}^{(50-x)}\text{Bi}_2\text{O}_3-10\text{ZnO}^{(40-x)}\text{B}_2\text{O}_3$ glasses. AIP Conference Proceedings, 2013, , .	0.4	5
77	Optical Characterization of Zinc Modified Bismuth Silicate Glasses. International Journal of Optics, 2015, 2015, 1-9.	1.4	5
78	Thermal and structural properties of zinc modified tellurite based glasses. AIP Conference Proceedings, 2016, , .	0.4	4
79	Synthesis and structural characterization of light-weight ferrite-reduced graphene oxide composite. AIP Conference Proceedings, 2019, , .	0.4	4
80	Effect of Fe_2O_3 on the physical and structural properties of bismuth silicate glasses. , 2013, , .		3
81	Opto-Electronic and Crystallographic Analysis of Orangish-Red Radiating $\text{Ba}_2\text{YAlO}_5:\text{Sm}^{3+}$ Nanomaterials for Potential wLED Applications. Journal of Electronic Materials, 2021, 50, 6964-6973.	2.2	3
82	Effect of microwave-assisted sintering on dielectric properties of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ ceramic. AIP Conference Proceedings, 2016, , .	0.4	2
83	Structural characterization of ZnCl_2 modified tellurite based glasses. AIP Conference Proceedings, 2016, , .	0.4	2
84	Dosimetric studies of cadmium free alloy used in compensator based intensity modulated radiotherapy. Radiation Physics and Chemistry, 2017, 139, 184-189.	2.8	2
85	Coating of multi-walled carbon nanotubes on cotton fabric via conventional dyeing for enhanced electrical and mechanical properties. AIP Conference Proceedings, 2019, , .	0.4	2
86	Non-linear optical properties of SiO_2 modified $\text{Bi}_2\text{O}_3\text{-TeO}_2\text{-B}_2\text{O}_3$ glass system. AIP Conference Proceedings, 2019, , .	0.4	2
87	Excellent photoelectrical properties of ZnO thin film based on ZnO/epoxy-resin ink for UV-light detectors. AIP Conference Proceedings, 2019, , .	0.4	2
88	Synthesis of graphene from activated carbon at liquid nitrogen temperature and its detailed structural analysis. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	2
89	Effect of scattering and differential attenuation on beam profile in the presence of high-density intensity modifying compensator. Journal of Cancer Research and Therapeutics, 2019, 15, 110.	0.9	2
90	Low-Cost Combustion Synthesis, Spectroscopic and Optoelectronic Analysis of Novel $\text{Ba}_2\text{YAlO}_5:\text{Er}^{3+}$ Nanomaterials for Competent Illumination Applications. Transactions of the Indian Ceramic Society, 2021, 80, 234-241.	1.0	2

#	ARTICLE	IF	CITATIONS
91	Optical second order nonlinearity in ultraviolet poled chalcogenide thin films. Journal of Optics (India), 2015, 44, 417-422.	1.7	1
92	Effect of Diamagnetic Ion Substitution on Structural and Magnetic Properties of Nd ³⁺ Modified Solid Solutions. Integrated Ferroelectrics, 2019, 203, 176-182.	0.7	1
93	Investigation on Multiferroic Properties and Conduction Mechanism in Cobalt Doped Bi _{0.9} Nd _{0.1} FeO ₃ Solid Solutions. Transactions of the Indian Ceramic Society, 2021, 80, 142-149.	1.0	1
94	Physical and structural properties of Nd ³⁺ doped BaO-ZnO-B ₂ O ₃ glasses. , 2013, , .		0
95	Optical properties of Bi _{0.1} Zn _{0.45} VO _{3.1} thin films using UV-VIS-NIR spectroscopy. , 2013, , .		0
96	Characterization and optical properties of Fe ₂ O ₃ -PbO-B ₂ O ₃ glasses. AIP Conference Proceedings, 2016, , .	0.4	0
97	Linear and nonlinear optical characterization of neodymium doped barium-zinc-borate glasses. AIP Conference Proceedings, 2019, , .	0.4	0
98	Judd-Ofelt intensity parameters of Nd ³⁺ ions doped in BaO-ZnO-B ₂ O ₃ glasses. AIP Conference Proceedings, 2019, , .	0.4	0
99	Effects on electrical and optical properties of InGaN/GaN MQWs light-emitting diodes using Ni/ITO transparent p-contacts on p-GaN. Journal of Optics (India), 2019, 48, 240-245.	1.7	0
100	InGaN/GaN Multiple Quantum Well Blue Light Emitting Diodes with Transparent Ni/ITO and Pt/ITO p-Type Contacts. Springer Proceedings in Physics, 2019, , 1005-1012.	0.2	0
101	Highly Reflective Low Resistance Pt/Ag/Ni/Au Based Ohmic Contacts on p-GaN. Springer Proceedings in Physics, 2019, , 1095-1101.	0.2	0
102	Electrical and optical properties of InGaN/GaN MQWs light-emitting diodes with Ni/Au/ITO transparent p-contacts. Indian Journal of Physics, 2020, 94, 183-187.	1.8	0
103	Validation of intensity-modulated radiotherapy commissioning as per recommendations in test plans of the American Association of Physicists in Medicine task group 119 report. Radiation Protection and Environment, 2016, 39, 138.	0.2	0
104	Study of Dosimetric Properties of Flattening Filter Free Photon Beam Passing through Cadmium Free Compensator Alloy. Journal of Biomedical Physics and Engineering, 2019, 9, 647-652.	0.9	0