# Fouran Singh

### List of Publications by Citations

Source: https://exaly.com/author-pdf/5347554/fouran-singh-publications-by-citations.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

356 papers

6,284 citations

40 h-index

58 g-index

369 ext. papers

7,086 ext. citations

**2.6** avg, IF

**6.13** L-index

#	Paper	IF	Citations
356	X-ray diffraction analysis by Williamson-Hall, Halder-Wagner and size-strain plot methods of CdSe nanoparticles- a comparative study. <i>Materials Chemistry and Physics</i> , <b>2020</b> , 239, 122021	4.4	255
355	Structure and photoluminescence studies on ZnS:Mn nanoparticles. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 656-660	2.5	173
354	On the properties of indium doped ZnO thin films. Semiconductor Science and Technology, 2005, 20, 12	0-1 <i>2</i> 6	131
353	Synthesis and characterization of ZnO thin film grown by electron beam evaporation. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 123105	2.5	107
352	Irradiation induced modification of structural and optical properties of potassium sodium niobate thin films. <i>Applied Physics A: Materials Science and Processing</i> , <b>2020</b> , 126, 1	2.6	106
351	Modifying the nanocrystalline characteristics Etructure, size, and surface states of copper oxide thin films by high-energy heavy-ion irradiation. <i>Journal of Applied Physics</i> , <b>2002</b> , 92, 3304-3310	2.5	99
350	Synthesis of elongated Au nanoparticles in silica matrix by ion irradiation. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 063103	3.4	98
349	Band gap widening and narrowing in Cu-doped ZnO thin films. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 680, 252-258	5.7	95
348	Effects of 160 MeV Ni12+ion irradiation on HCl doped polyaniline electrode. <i>Journal Physics D: Applied Physics,</i> <b>2006</b> , 39, 750-755	3	88
347	On the origin of photoluminescence in indium oxide octahedron structures. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 171907	3.4	85
346	SHI induced modification of ZnO thin film: Optical and structural studies. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 136-140	1.2	83
345	Effect of fluorine doping on structural, electrical and optical properties of ZnO thin films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2005</b> , 117, 307-312	3.1	81
344	Ion tracks in silica for engineering the embedded nanoparticles. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2010</b> , 268, 3027-3034	1.2	72
343	Controlled growth of gold nanoparticles induced by ion irradiation: An in situ x-ray diffraction study. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 073110	3.4	71
342	Modifications of ZnO thin films under dense electronic excitation. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 013509	2.5	68
341	Effect of Br+6 ions on the structural, morphological and luminescent properties of ZnO/Si thin films. <i>Applied Surface Science</i> , <b>2013</b> , 279, 472-478	6.7	63
340	Study of optical band gap and carbonaceous clusters in swift heavy ion irradiated polymers with UVIV is spectroscopy. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2008</b> , 266, 1788-1792	1.2	62

### (2007-2007)

339	Photoluminescence studies of ZnO/porous silicon nanocomposites. <i>Journal Physics D: Applied Physics</i> , <b>2007</b> , 40, 3090-3093	3	57	
338	Synthesis of confined electrically conducting carbon nanowires by heavy ion irradiation of fullerene thin film. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 014308	2.5	57	
337	Effect of substrate temperature on the physical properties of copper nitride films by r.f. reactive sputtering. <i>Surface and Coatings Technology</i> , <b>2001</b> , 142-144, 1034-1039	4.4	56	
336	Enhanced room temperature ferromagnetism and green photoluminescence in Cu doped ZnO thin film synthesised by neutral beam sputtering. <i>Scientific Reports</i> , <b>2019</b> , 9, 6675	4.9	52	
335	Structure and magnetic properties of ZnO films doped with Co, Ni or Mn synthesized by pulsed laser deposition under low and high oxygen partial pressures. <i>Thin Solid Films</i> , <b>2008</b> , 517, 916-922	2.2	52	
334	Softening of phonons by lattice defects and structural strain in heavy ion irradiated nanocrystalline zinc oxide films. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 083520	2.5	51	
333	Electronic excitation induced tuning of surface plasmon resonance of Ag nanoparticles in fullerene C70matrix. <i>Journal Physics D: Applied Physics</i> , <b>2009</b> , 42, 155103	3	51	
332	Swift heavy ion induced structural and optical modifications in LiF thin film. <i>Journal Physics D: Applied Physics</i> , <b>2005</b> , 38, 637-641	3	50	
331	Highly selective and reversible NO gas sensor using vertically aligned MoS flake networks. <i>Nanotechnology</i> , <b>2018</b> , 29, 464001	3.4	50	
330	100MeV Si8+ ion induced luminescence and thermoluminescence of nanocrystalline Mg2SiO4:Eu3+. <i>Journal of Luminescence</i> , <b>2012</b> , 132, 3093-3097	3.8	48	
329	Thermoluminescence and photoluminescence characteristics of nanocrystalline LiNaSO4llEu phosphor. <i>Journal Physics D: Applied Physics</i> , <b>2003</b> , 36, 2400-2406	3	46	
328	Defect-induced photoluminescence from gallium-doped zinc oxide thin films: influence of doping and energetic ion irradiation. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 15019-15029	3.6	44	
327	Thermoluminescence studies in swift heavy ion irradiated aluminum oxide. <i>Radiation Measurements</i> , <b>2008</b> , 43, S651-S655	1.5	44	
326	Ferromagnetism induced by heavy-ion irradiation in fullerene films. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	44	
325	Highly transparent and conducting boron doped zinc oxide films for window of Dye Sensitized Solar Cell applications. <i>Journal of Alloys and Compounds</i> , <b>2012</b> , 544, 120-124	5.7	43	
324	White light emission from chemically synthesized ZnOporous silicon nanocomposite. <i>Journal Physics D: Applied Physics</i> , <b>2009</b> , 42, 062002	3	43	
323	Single phase formation of Co-implanted ZnO thin films by swift heavy ion irradiation: Optical studies. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 113708	2.5	43	
322	Size effect on electronic sputtering of LiF thin films. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 083510	2.5	42	

321	Study of 160MeV Ni12+ ion irradiation effects on electrodeposited polypyrrole films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2005</b> , 240, 871-880	1.2	42
320	Growth kinetics of ZnO nanocrystallites: Structural, optical and photoluminescence properties tuned by thermal annealing. <i>Current Applied Physics</i> , <b>2011</b> , 11, 624-630	2.6	41
319	Synthesis and characterizations of silver-fullerene C70 nanocomposite. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 103114	3.4	41
318	Nucleation and growth of Ag clusters in silicate glasses under ion irradiation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2004</b> , 215, 373-384	1.2	41
317	Properties of nanocrystalline ZnS:Mn. Journal of Crystal Growth, 2004, 268, 585-589	1.6	40
316	Nanotwinning in CdS quantum dots. <i>Physica B: Condensed Matter</i> , <b>2012</b> , 407, 3347-3351	2.8	39
315	Synthesis characterization and luminescence studies of gamma irradiated nanocrystalline yttrium oxide. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2016</b> , 154, 220-231	4.4	38
314	Purification/annealing of graphene with 100-MeV Ag ion irradiation. <i>Nanoscale Research Letters</i> , <b>2014</b> , 9, 126	5	38
313	Effects of 160MeV Ni12+ ion irradiation on polypyrrole conducting polymer electrode materials for all polymer redox supercapacitor. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2005</b> , 240, 834-	84 <sup>1</sup> 1 <sup>2</sup>	38
312	Engineering of nanocrystalline cadmium sulfide thin films by using swift heavy ions. <i>Journal Physics D: Applied Physics</i> , <b>2007</b> , 40, 4850-4854	3	37
311	Micro-Raman study on the softening and stiffening of phonons in rutile titanium dioxide film: Competing effects of structural defects, crystallite size, and lattice strain. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 143504	2.5	35
310	Origin of swift heavy ion induced stress in textured ZnO thin films: An in situ X-ray diffraction study. <i>Solid State Communications</i> , <b>2010</b> , 150, 1751-1754	1.6	34
309	Investigations on the in vitro bioactivity of swift heavy oxygen ion irradiated hydroxyapatite. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2009</b> , 20 Suppl 1, S271-5	4.5	32
308	A comparative study of the effect of O+7ion beam on polypyrrole and CR-39 (DOP) polymers. <i>Journal Physics D: Applied Physics</i> , <b>2008</b> , 41, 115411	3	32
307	Effect of swift heavy ion irradiation on dielectrics properties of polymer composite films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2007</b> , 137, 85-92	3.1	32
306	Ionoluminescence studies of combustion synthesized Dy3+ doped nano crystalline forsterite. <i>Current Applied Physics</i> , <b>2011</b> , 11, 1274-1277	2.6	31
305	Shape deformation of embedded metal nanoparticles by swift heavy ion irradiation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2009</b> , 267, 936-940	1.2	31
304	Structural, optical, electrical and positron annihilation studies of CdS:Fe system. <i>Journal of Alloys and Compounds</i> , <b>2008</b> , 454, 97-101	5.7	31

# (2006-2008)

303	Thermal and ion induced annealing of nanocrystalline ZnO thin film deposited by atom beam sputtering. <i>Journal Physics D: Applied Physics</i> , <b>2008</b> , 41, 045305	3	31	
302	Effect of ion beam irradiation on metal particle doped polymer composites. <i>Bulletin of Materials Science</i> , <b>2011</b> , 34, 81-88	1.7	30	
301	Effect Of Swift Heavy Ion On Structural And Optical Properties Of Undoped And Doped Nanocrystalline Zinc Oxide Films. <i>Advanced Materials Letters</i> , <b>2013</b> , 4, 423-427	2.4	30	
300	Giant enhancement of the n-type conductivity in single phase p-type ZnO:N thin films by intentionally created defect clusters and pairs. <i>Solid State Communications</i> , <b>2015</b> , 218, 20-24	1.6	29	
299	A comparative study of ion-induced damages in C60 and C70 fullerenes. <i>Radiation Effects and Defects in Solids</i> , <b>2009</b> , 164, 38-48	0.9	29	
298	Setup for in situ x-ray diffraction study of swift heavy ion irradiated materials. <i>Review of Scientific Instruments</i> , <b>2007</b> , 78, 113901	1.7	28	
297	Thermo, Iono and photoluminescence properties of 100 MeV Si7+ ions bombarded CaSiO3:Eu3+ nanophosphor. <i>Journal of Luminescence</i> , <b>2012</b> , 132, 2065-2071	3.8	27	
296	Photoluminescence and Raman studies in swift heavy ion irradiated polycrystalline aluminum oxide. <i>Bulletin of Materials Science</i> , <b>2009</b> , 32, 515-519	1.7	27	
295	Effects of swift heavy ions irradiation on polypyrrole thin films. <i>Radiation Effects and Defects in Solids</i> , <b>2008</b> , 163, 139-147	0.9	26	
294	SHI induced enhancement in green emission from nanocrystalline CdS thin films for photonic applications. <i>Journal of Luminescence</i> , <b>2014</b> , 147, 184-189	3.8	25	
293	Electronic excitations induced modifications of structural and optical properties of ZnOporous silicon nanocomposites. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2009</b> , 267, 2399-2402	1.2	25	
292	Influence of grain size on electronic sputtering of LiF thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2007</b> , 256, 328-332	1.2	25	
291	Study of effects of Mn2+ in CdS nanocrystals. <i>Physica B: Condensed Matter</i> , <b>2007</b> , 400, 70-76	2.8	25	
290	Ion irradiation induced surface modification studies of polymers using SPM. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2005</b> , 236, 186-194	1.2	25	
289	Micro-Raman and electronic structure study on kinetics of electronic excitations induced monoclinic-to-tetragonal phase transition in zirconium oxide films. <i>RSC Advances</i> , <b>2016</b> , 6, 104425-1044	3 <sup>27</sup>	24	
288	Synthesis characterization and luminescence studies of 100MeV Si8+ ion irradiated sol gel derived nanocrystalline Y2O3. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2014</b> , 329, 40-47	1.2	24	
287	Modifications of polycarbonate induced by swift heavy ions. <i>Materials Science &amp; Description A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 457, 195-198	5.3	24	
286	Study of Li3+ion irradiation effects in P(VDFHFP) based gel polymer electrolytes for application in Li-ion battery. <i>Journal Physics D: Applied Physics</i> , <b>2006</b> , 39, 4208-4214	3	24	

285	Characterizations of pulsed laser deposited SiC thin films. <i>Journal of Non-Crystalline Solids</i> , <b>2007</b> , 353, 4660-4665	3.9	24
284	Growth of ZnO nanocrystals in silica by rf co-sputter deposition and post-annealing. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 91-94	1.2	24
283	Color center formation in sapphire by swift heavy ion irradiation. <i>Radiation Measurements</i> , <b>2003</b> , 36, 72	3 <u>-17.</u> 9.7	24
282	Influence of electronic excitations on structural, optical and electrical properties of undoped and antimony doped tin oxide thin films. <i>Thin Solid Films</i> , <b>2016</b> , 616, 34-42	2.2	24
281	Thermoluminescence of solgel derived Y2O3:Nd3+ nanophosphor exposed to 100MeV Si8+ ions and gamma rays. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 637, 564-573	5.7	23
280	Swift heavy ion induced modification in dielectric and microhardness properties of polymer composites. <i>Polymer Degradation and Stability</i> , <b>2008</b> , 93, 1088-1093	4.7	23
279	Synthesis of buried SiC using an energetic ion beam. <i>Journal Physics D: Applied Physics</i> , <b>2006</b> , 39, 3969-3	973	23
278	Photoluminescence study of swift heavy ion (SHI) induced defect centers in sapphire. <i>Journal of Nuclear Materials</i> , <b>2006</b> , 353, 190-192	3.3	23
277	Effect of Annealing on the Surface Morphology, Optical and and Structural Properties of Nanodimensional Tungsten Oxide Prepared by Coprecipitation Technique. <i>Journal of Electronic Materials</i> , <b>2019</b> , 48, 1174-1183	1.9	23
276	Electronic structure modification and Fermi level shifting in niobium-doped anatase titanium dioxide thin films: a comparative study of NEXAFS, work function and stiffening of phonons. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 3618-27	3.6	22
275	Giant UV-sensitivity of ion beam irradiated nanocrystalline CdS thin films. RSC Advances, 2016, 6, 3642-	36 <u>4</u> 9	22
274	Improved Photoelectrochemical Response of Titanium Dioxide Irradiated with 120 MeV Ag9+ Ions. Journal of Physical Chemistry C, <b>2010</b> , 114, 622-626	3.8	22
273	Modifications of structural, optical and electrical properties of nanocrystalline bismuth sulphide by using swift heavy ions. <i>Current Applied Physics</i> , <b>2009</b> , 9, 374-379	2.6	22
272	Swift heavy ion induced structural modification of atom beam sputtered ZnO thin film. <i>Surface and Coatings Technology</i> , <b>2009</b> , 203, 2427-2431	4.4	22
271	Swift heavy ion irradiation induced modifications in sapphire. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2003</b> , 212, 179-183	1.2	22
270	Controlled growth of silicon nanocrystallites in silicon oxide matrix using 150MeV Ag ion irradiation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2005</b> , 239, 185-190	1.2	22
269	Composition dependent Fermi level shifting of Au decorated MoS2 nanosheets. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 013103	3.4	22
268	Band gap engineering and low temperature transport phenomenon in highly conducting antimony doped tin oxide thin films. <i>Ceramics International</i> , <b>2016</b> , 42, 5932-5941	5.1	21

# (2016-2015)

267	Defect controlled ferromagnetism in xenon ion irradiated zinc oxide. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2015</b> , 385, 318-325	2.8	21
266	Modification of optical and electrical properties of zinc oxide-coated porous silicon nanostructures induced by swift heavy ion. <i>Nanoscale Research Letters</i> , <b>2012</b> , 7, 366	5	21
265	Structural, iono and thermoluminescence properties of heavy ion (100 MeV Si7+) bombarded Zn2SiO4:Sm3+ nanophosphor. <i>Journal of Luminescence</i> , <b>2013</b> , 143, 409-417	3.8	21
264	Swift heavy ion irradiation of ZnO nanoparticles embedded in silica: Radiation-induced deoxidation and shape elongation. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 203106	3.4	21
263	Perpendicular magnetization of FePt particles in silica induced by swift heavy ion irradiation. <i>Journal Physics D: Applied Physics</i> , <b>2009</b> , 42, 025005	3	21
262	Ion beam induced interface mixing of Ni on PTFE bilayer system studied by quadrupole mass analysis and electron spectroscopy for chemical analysis. <i>Vacuum</i> , <b>2010</b> , 84, 1275-1279	3.7	21
261	Structural damage studies in conducting indium-tin oxide (ITO) thin films induced by Au8+ swift heavy ions (SHI) irradiation. <i>Vacuum</i> , <b>2007</b> , 82, 39-44	3.7	21
260	Photoluminescence properties of SHI induced F2 and F3+ color centers in nano-granular LiF thin films. <i>Journal of Luminescence</i> , <b>2007</b> , 127, 302-306	3.8	21
259	Effect of swift heavy ion irradiation on hydrothermally synthesized hydroxyapatite ceramics. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2008</b> , 266, 911-917	1.2	21
258	Swift heavy ion irradiation induced modifications in structural, microstructural, electrical and magnetic properties of Mn doped SnO 2 thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2017</b> , 400, 37-57	1.2	20
257	Ion beam induced amorphization and bond breaking in Zn2SiO4:Eu3+ nanocrystalline phosphor. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2012</b> , 90, 18-21	4.4	20
256	Influence of mesoporous substrate morphology on the structural, optical and electrical properties of RF sputtered ZnO layer deposited over porous silicon nanostructure. <i>Applied Surface Science</i> , <b>2012</b> , 258, 2283-2288	6.7	20
255	Ionic conduction in 70 MeV C5+ ion-irradiated P(VDFHFP)[PC+DEC)[liCF3SO3 gel polymer electrolyte system. <i>Solid State Ionics</i> , <b>2005</b> , 176, 1585-1590	3.3	20
254	Luminescence properties of 100 MeV swift Si7+ ions irradiated nanocrystalline zirconium oxide. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 647, 921-926	5.7	19
253	Development of WO3-PEDOT: PSS hybrid nanocomposites based devices for liquefied petroleum gas (LPG) sensor. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2019</b> , 30, 13593-13603	2.1	19
252	Synthesis of nanocrystalline ∃ Zn2SiO4 at ZnOporous silicon interface: Phase transition study. <i>Solid State Communications</i> , <b>2011</b> , 151, 701-703	1.6	19
251	Synthesis and luminescence properties of manganese-doped ZnS nanocrystals. <i>Solid-State Electronics</i> , <b>2007</b> , 51, 81-84	1.7	19
250	Thermoluminescence studies of Dirradiated Al2O3:Ce3+ phosphor. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2016</b> , 379, 146-151	1.2	19

249	Correlation between surface phonon mode and luminescence in nanocrystalline CdS thin films: An effect of ion beam irradiation. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 043517	2.5	18
248	Swift heavy ion induced structural, optical and luminescence modification in NaSrBO3:Dy3+phosphor. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 6404-6412	4.3	18
247	Thermoluminescence properties of 100 MeV Si7+ swift heavy ions and UV irradiated CdSiO3:Ce3+ nanophosphor. <i>Journal of Luminescence</i> , <b>2013</b> , 134, 358-368	3.8	18
246	Disorder induced semiconductor to metal transition and modifications of grain boundaries in nanocrystalline zinc oxide thin film. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 073101	2.5	18
245	Study of the damage produced in K[CS(NH2)2]4Br [A non-linear optical single crystal by swift heavy ion irradiation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2007</b> , 256, 675-682	1.2	18
244	Pulsed laser deposition of SiC thin films at medium substrate temperatures. <i>Thin Solid Films</i> , <b>2008</b> , 516, 6083-6087	2.2	18
243	Li3+ ion irradiation effects on ionic conduction in P(VDFHFP)[PC+DEC)[LiClO4 gel polymer electrolyte system. <i>Solid State Ionics</i> , <b>2006</b> , 177, 2575-2579	3.3	18
242	Swift heavy ion induced photoluminescence studies in Aluminum oxide. <i>Radiation Effects and Defects in Solids</i> , <b>2007</b> , 162, 325-332	0.9	18
241	Infrared studies of swift heavy ion irradiated C60 thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 221-224	1.2	18
240	Low temperature resistivity study of nanostructured polypyrrole films under electronic excitations. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2010</b> , 268, 62-66	1.2	17
239	Optical activation of Eu3+ions by Ag nanoparticles in ion exchanged silica-gel films. <i>Journal Physics D: Applied Physics</i> , <b>2006</b> , 39, 2955-2958	3	17
238	Effect of swift heavy ions of silver and oxygen on GaN. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 145-148	1.2	17
237	Ion beam modification of porous silicon using high energy Au+7 ions and its impact on photoluminescence spectra. <i>Journal of Luminescence</i> , <b>2004</b> , 106, 21-29	3.8	17
236	Photoluminescence studies in swift heavy ion bombarded mullite. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2003</b> , 211, 545-548	1.2	17
235	Modification of chitosan-based biodegradable polymer by irradiation with MeV ions for electrolyte applications. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2017</b> , 225, 150-159	3.1	16
234	Effect of intense laser and energetic ion irradiation on Raman modes of Multiwalled Carbon Nanotubes. <i>Thin Solid Films</i> , <b>2009</b> , 517, 4322-4324	2.2	16
233	AFM and photoluminescence studies of swift heavy ion induced nanostructured aluminum oxide thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2008</b> , 266, 1049-1054	1.2	16
232	Effects of swift heavy ion irradiation and thermal annealing on nearly immiscible W/Ni multilayer structure. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 074310	2.5	16

### (2009-2017)

231	Thermoluminescence studies of solid-state reaction derived and Dirradiated SrGd 2 O 4 : Eu 3+ phosphor. <i>Materials Research Bulletin</i> , <b>2017</b> , 93, 318-324	5.1	15	
230	Synthesis, thermoluminescence and defect centres in Eu3+doped Y2O3nanophosphor for gamma dosimetry applications. <i>Materials Research Express</i> , <b>2017</b> , 4, 115033	1.7	15	
229	Swift heavy ion interaction with silverBilica nanocomposites: an experimental surface plasmon resonance study. <i>Journal Physics D: Applied Physics</i> , <b>2011</b> , 44, 325101	3	15	
228	Ionoluminescence and photoluminescence studies of Ag8+ ion irradiated kyanite. <i>Journal of Luminescence</i> , <b>2008</b> , 128, 7-10	3.8	15	
227	Gigantic irradiation effect of 100 MeV Au8+ swift heavy ions on the copper sulfide thin films with different chemical compositions. <i>Radiation Effects and Defects in Solids</i> , <b>2007</b> , 162, 77-85	0.9	15	
226	Ionic conduction in 70-MeV C5+-ion-irradiated poly(vinylidenefluoride-co-hexafluoropropylene)-based gel polymer electrolytes. <i>Journal of Applied Physics</i> , <b>2005</b> , 98, 043514	2.5	15	
225	Ion beam induced luminescence studies of sol gel derived Y2O3:Dy3+ nanophosphors. <i>Journal of Luminescence</i> , <b>2016</b> , 169, 627-634	3.8	14	
224	Bimetallic Implanted Plasmonic Photoanodes for TiO Sensitized Third Generation Solar Cells. <i>Scientific Reports</i> , <b>2020</b> , 10, 7657	4.9	14	
223	Nanostructuring and wettability of ion treated Au thin films. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 1853	<b>102</b> 15	14	
222	Luminescence and defect studies of YAlO3:Dy3+, Sm3+ single crystals exposed to 100 MeV Si7+ ion beam. <i>Journal of Luminescence</i> , <b>2012</b> , 132, 2679-2683	3.8	14	
221	Swift heavy ion induced modification in polyimide films. <i>Surface and Coatings Technology</i> , <b>2007</b> , 201, 8308-8311	4.4	14	
220	Modification of polymer composite films using 120MeV Ni10+ ions. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2008</b> , 266, 1775-1779	1.2	14	
219	Photoluminescence studies on RF plasma-polymerized thin films. <i>Synthetic Metals</i> , <b>2005</b> , 155, 311-315	3.6	14	
218	Nanostructure formation on zinc oxide film by ion bombardment. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 78-80	1.2	14	
217	Smoothing, roughening and sputtering: the complex evolution of immiscible Fe/Bi bilayer system. Journal Physics D: Applied Physics, 2008, 41, 215306	3	14	
216	Correlations of charge neutrality level with electronic structure and p-d hybridization. <i>Scientific Reports</i> , <b>2017</b> , 7, 40843	4.9	13	
215	Determination of the chemical states of impurities in natural kyanite by the ionoluminescence technique. <i>Philosophical Magazine</i> , <b>2009</b> , 89, 995-1004	1.6	13	
214	Synthesis of silica: Metals nanocomposites and modification of their structure by swift heavy ion irradiation. <i>Surface and Coatings Technology</i> , <b>2009</b> , 203, 2432-2435	4.4	13	

213	Structural and spectroscopic modifications of nanocrystalline zinc oxide films induced by swift heavy ions. <i>Vacuum</i> , <b>2011</b> , 86, 87-90	3.7	13
212	Optical and dielectric properties of 55 MeV carbon beam-irradiated polycarbonate films. <i>Radiation Effects and Defects in Solids</i> , <b>2012</b> , 167, 131-140	0.9	13
211	Study of modifications in Lexan polycarbonate induced by swift O6+ ion irradiation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2010</b> , 268, 1813-1817	1.2	13
210	Thermal degradation and ageing behavior of microcomposites of natural rubber, carboxylated styrene butadiene rubber latices, and their blends. <i>Journal of Applied Polymer Science</i> , <b>2007</b> , 105, 341-3	5 <sup>2.9</sup>	13
209	Carrier transport mechanism of highly-sensitive niobium doped titanium dioxide/p-Si heterojunction photodiode under illuminations by solar simulated light. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 214502	2.5	13
208	Synthesis and thermoluminescence studies of ⊡irradiated Dy3+ doped SrGd2O4 phosphor. <i>Materials Research Bulletin</i> , <b>2017</b> , 94, 113-121	5.1	12
207	Ion beam engineering in WO3-PEDOT: PSS hybrid nanocomposite thin films for gas sensing measurement at room temperature. <i>Inorganic Chemistry Communication</i> , <b>2020</b> , 119, 108000	3.1	12
206	Luminescence studies of 100 MeV Si8+ ion irradiated nanocrystalline Y2O3. <i>Radiation Measurements</i> , <b>2014</b> , 71, 518-523	1.5	12
205	Luminescence studies on swift heavy ion irradiated nanocrystalline aluminum oxide. <i>Journal of Luminescence</i> , <b>2011</b> , 131, 764-767	3.8	12
204	Ion Beam Modification of Polymethyl methacrylate (PMMA) Polymer Matrix Filled with Organometallic Complex. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , <b>2008</b> , 45, 265	- <del>27</del> 0	12
203	Studies of swift heavy ion induced colour centres in LIF thin films deposited on silica substrates. Journal Physics D: Applied Physics, <b>2006</b> , 39, 2935-2940	3	12
202	Fabrication of carbon nanostructures (nanodots, nanowires) by energetic ion irradiation. <i>Journal Physics D: Applied Physics</i> , <b>2007</b> , 40, 2083-2088	3	12
201	Investigation of the precipitation kinetics and changes of magnetic anisotropy of iron particles in ion-irradiated silica gel films by means of electron-spin resonance. <i>Journal of Applied Physics</i> , <b>2005</b> , 98, 023908	2.5	12
200	Ag ion implanted TiO2 photoanodes for fabrication of highly efficient and economical plasmonic dye sensitized solar cells. <i>Chemical Physics Letters</i> , <b>2020</b> , 740, 137070	2.5	12
199	Enhancement in luminescence properties of ZrO2:Dy3+ under 100 MeV swift Ni7+ ion irradiation. <i>RSC Advances</i> , <b>2016</b> , 6, 55240-55247	3.7	12
198	Swift heavy ion irradiated SnO2 thin film sensor for efficient detection of SO2 gas. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2016</b> , 379, 219-223	1.2	12
197	n-ZnO/p-Si heterojunction nanodiodes based sensor for monitoring UV radiation. <i>Sensors and Actuators A: Physical</i> , <b>2018</b> , 279, 351-360	3.9	12
196	Swift heavy ion induced structural, iono and photoluminescence properties of ECaSiOtDy[]+ nanophosphor. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2012</b> , 93, 300-5	4.4	11

195	Mechanism of thermoluminescence in high energy carbon ion irradiated Tb3+doped Al2O3phosphor for carbon ion beam dosimetry. <i>Materials Research Express</i> , <b>2017</b> , 4, 095023	1.7	11
194	Cathodoluminescence and photoluminescence of swift ion irradiation modified zinc oxide-porous silicon nanocomposite. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2012</b> , 177, 1476-1481	3.1	11
193	Study of classical thermo-mechanical equations in ultrafast thermo-elastic domain: electronic sputtering from metaldielectric nanocomposites. <i>Journal Physics D: Applied Physics</i> , <b>2013</b> , 46, 325305	3	11
192	Thermally stimulated luminescence studies in combustion synthesized polycrystalline aluminum oxide. <i>Bulletin of Materials Science</i> , <b>2008</b> , 31, 669-672	1.7	11
191	Damage creation in swift heavy ion-irradiated calcite single crystals: Raman and infrared study. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, <b>2008</b> , 71, 1070-3	4.4	11
190	Ion beam-induced luminescence and photoluminescence of 100 MeV Si8+ ion irradiated kyanite single crystals. <i>Solid State Communications</i> , <b>2008</b> , 147, 377-380	1.6	11
189	Positron lifetime studies of the dose dependence of nanohole free volumes in ion-irradiated conducting poly-(ethylene-oxide)Balt polymers. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2008</b> , 266, 1783-1787	1.2	11
188	Photoluminescence studies of carbon clusters formed by irradiation of Si-based polymer. <i>Radiation Measurements</i> , <b>2005</b> , 40, 785-788	1.5	11
187	Photoluminescence, thermoluminescence glow curve and emission characteristics of YO:Er nanophosphor. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2018</b> , 189, 349-3.	5 <del>∮</del> ·4	11
186	High energy (150 MeV) Fe11+ ion beam induced modifications of physico-chemical and photoluminescence properties of high-k dielectric nanocrystalline zirconium oxide thin films. <i>Ceramics International</i> , <b>2019</b> , 45, 18887-18898	5.1	10
185	Luminescence properties of BaMgAl10O17: Mn2+ nanophosphors. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 799, 556-562	5.7	10
184	Structural and electrochemical characterization of carbon ion beam irradiated reduced graphene oxide and its application in voltammetric determination of norepinephrine. <i>RSC Advances</i> , <b>2015</b> , 5, 8750	) <del>4</del> :75	1 <sup>70</sup>
183	Growth of highly transparent CdxZn1🛭O (CZO) thin films: Structural and optical studies. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 650, 311-317	5.7	10
182	Improved optical properties of ion beam irradiated (K,Na)NbO3 thin films. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 823, 153794	5.7	10
181	TL/OSL properties of beta irradiated Al2O3:Tm3+ phosphor synthesized by microwave combustion method. <i>Materials Research Bulletin</i> , <b>2018</b> , 104, 236-243	5.1	10
180	Influence of thermal annealing and ion irradiation on zinc silicate phases in nanocomposite ZnOBiOx thin films. <i>Applied Surface Science</i> , <b>2014</b> , 317, 1075-1079	6.7	10
179	Swift heavy ions induced nano-grain fragmentation in fluoride thin films. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 695, 83-90	5.7	10
178	Enhancement of LPG sensing properties in nanocrystalline zinc oxide thin film by high electronic excitation. <i>Sensors and Actuators B: Chemical</i> , <b>2011</b> , 160, 1050-1055	8.5	10

177	Thickness dependent effect of swift heavy ion irradiation in W/Ni superlattice multilayers. <i>Journal Physics D: Applied Physics</i> , <b>2009</b> , 42, 145414	3	10
176	Effects of an oxygen-ion beam (O+7, 100 MeV) and 🛘 irradiation on polypyrrole films. <i>Journal of Applied Polymer Science</i> , <b>2010</b> , 115, 2502-2507	2.9	10
175	Effect of swift heavy ion irradiation on bare and coated ZnS quantum dots. <i>Materials Research Bulletin</i> , <b>2008</b> , 43, 3495-3505	5.1	10
174	Structural studies of Ge nanocrystals embedded in SiO2 matrix. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2007</b> , 264, 249-253	1.2	10
173	Effects of oxygen ion implantation in spray-pyrolyzed ZnO thin films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2006</b> , 203, 860-867	1.6	10
172	Swift heavy ion induced optical modifications in LiF thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 183-186	1.2	10
171	Swift heavy ion induced phase transformation and thermoluminescence properties of zirconium oxide. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2016</b> , 379, 131-135	1.2	10
170	Multifunctional hybrid diode: Study of photoresponse, high responsivity, and charge injection mechanisms. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 174503	2.5	10
169	Reversible phase transformation phenomenon in titanium dioxide films: Evidence beyond interface-nucleation and dissolution-precipitation kinetics. <i>Acta Materialia</i> , <b>2018</b> , 146, 253-264	8.4	9
168	Effect of ion beam irradiation on dielectric properties of BaTiO3 thin film using surface plasmon resonance. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 4055-4060	4.3	9
167	Swift heavy ion irradiation induced phase transformation in undoped and niobium doped titanium dioxide composite thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2016</b> , 379, 224-229	1.2	9
166	Dosimetric properties of ZrO2 and ZrO2:Sm3+ exposed to beta rays. <i>Ceramics International</i> , <b>2018</b> , 44, 18871-18877	5.1	9
165	Study of phase transformation induced by electronic excitation in pure and yttrium doped ZrO2 thin films. <i>Materials Research Express</i> , <b>2017</b> , 4, 096401	1.7	9
164	Anomalous behavior of B1g mode in highly transparent anatase nano-crystalline Nb-doped Titanium Dioxide (NTO) thin films. <i>AIP Advances</i> , <b>2015</b> , 5, 127212	1.5	9
163	Investigation of swift heavy ion-induced mixing in metal/polymer systems. <i>Radiation Effects and Defects in Solids</i> , <b>2011</b> , 166, 682-688	0.9	9
162	Interaction of oxygen (O+7) ion beam on polyaniline thin films. <i>Indian Journal of Physics</i> , <b>2009</b> , 83, 943-9	<b>4</b> 74	9
161	Photoluminescence studies of 100 MeV Ni8+ ion irradiated Al2O3 single crystals. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2009</b> , 73, 637-41	4.4	9
160	Optical absorption and thermoluminescence studies in 100MeV swift heavy ion irradiated CaF2 crystals. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2011</b> , 269, 185-188	1.2	9

### (2006-2008)

159	Conducting carbon nanopatterns (nanowire) by energetic ion irradiation. <i>Journal Physics D: Applied Physics</i> , <b>2008</b> , 41, 095304	3	9
158	Studies on high electronic energy deposition in transparent conducting indium tin oxide thin films. <i>Journal Physics D: Applied Physics</i> , <b>2008</b> , 41, 035308	3	9
157	Synthesis of GaN phase by ion implantation. <i>Applied Surface Science</i> , <b>2007</b> , 253, 5317-5319	6.7	9
156	Electrical transport study of structural phase transitions in C60 films and the effect of swift heavy ion irradiation. <i>Solid State Communications</i> , <b>2006</b> , 138, 448-451	1.6	9
155	Optical absorption and photoluminescence studies on thin films and bulk crystals of LiF under swift heavy ion irradiation. <i>Radiation Measurements</i> , <b>2003</b> , 36, 675-679	1.5	9
154	Precipitation of C, Si and metals nanoparticles in silicon-based gels induced by swift heavy ion irradiation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2005</b> , 236, 73-80	1.2	9
153	Ion beam induced cubic to monoclinic phase transformation of nanocrystalline yttria. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2016</b> , 379, 73-77	1.2	9
152	Evidence of luminescence modification with structure of zirconia phases. <i>Journal of Luminescence</i> , <b>2017</b> , 192, 173-179	3.8	8
151	The influence of Ag9+ ion irradiation on the structural, optical and luminescence properties of Sm3+ doped NaSrBO3: Stability of color emission. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2015</b> , 351, 27-34	1.2	8
150	Effect of swift heavy ion irradiation on structural and opto-electrical properties of bi-layer CdS <b>B</b> i2S3 thin films prepared by solution growth technique at room temperature. <i>Radiation Physics and Chemistry</i> , <b>2015</b> , 106, 193-198	2.5	8
149	High temperature-mediated rocksalt to wurtzite phase transformation in cadmium oxide nanosheets and its theoretical evidence. <i>Nanoscale</i> , <b>2019</b> , 11, 14802-14819	7.7	8
148	Effect of swift heavy ion irradiation on lead sulfide quantum dots embedded in polyvinyl alcohol. <i>Radiation Effects and Defects in Solids</i> , <b>2013</b> , 168, 498-503	0.9	8
147	High efficiency hybrid solid state blended dyes sensitized solar cell based on zinc oxide nanostructures. <i>Journal of Renewable and Sustainable Energy</i> , <b>2013</b> , 5, 033134	2.5	8
146	Ion beam modification of nickel dimethylglyoxime dispersed polymer films. <i>Surface and Coatings Technology</i> , <b>2007</b> , 201, 8225-8229	4-4	8
145	Scanning probe microscopy, luminescence and third harmonic generation studies of elongated CdS:Mn nanostructures developed by energetic oxygen-ion-impact. <i>EPJ Applied Physics</i> , <b>2006</b> , 35, 29-36	1.1	8
144	Photoluminescence and UVIIis studies of pre- and post-irradiated sapphire with 200MeV Ag8+ ions. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 187-189	1.2	8
143	Changes in volume fraction and magnetostriction of iron nanoparticles in silica under swift heavy ion irradiation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 245, 214-218	1.2	8
142	Ion beam modification and analysis of organometallics dispersed polymer films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 235-238	1.2	8

141	Influence of ion bombardment on the photoluminescence response of embedded CdS nanoparticles. <i>Open Physics</i> , <b>2006</b> , 4,	1.3	8
140	Raman scattering from irradiated nanocrystalline zinc oxide thin films: Perspective view on effects of energy loss, ion fluence, and ion flux. <i>Vacuum</i> , <b>2020</b> , 181, 109598	3.7	8
139	Ion beam assisted fortification of photoconduction and photosensitivity. <i>Sensors and Actuators A: Physical</i> , <b>2018</b> , 279, 343-350	3.9	8
138	Evolution of symmetry forbidden and silent Raman modes of cadmium doped zinc oxide films activated by swift heavy ion irradiation. <i>Physica B: Condensed Matter</i> , <b>2019</b> , 570, 13-18	2.8	7
137	Study of valence band tailing effect induced by electronic excitations in nanocrystalline cadmium oxide thin films. <i>Optik</i> , <b>2016</b> , 127, 2055-2058	2.5	7
136	Luminescence study of SHI irradiated nano semiconductor: Conducting polymer composite. <i>Journal of Luminescence</i> , <b>2010</b> , 130, 326-330	3.8	7
135	Ion beam induced modifications in electron beam evaporated aluminum oxide thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2008</b> , 266, 1475-1479	1.2	7
134	Precipitation of semiconducting carbon nanoparticles in ion irradiated gels. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 23-26	1.2	7
133	Properties of 80-MeV oxygen ion irradiated ZnS:Mn nanoparticles and exploitation in nanophotonics. <i>Journal of Nanoparticle Research</i> , <b>2006</b> , 8, 645-652	2.3	7
132	Ionoluminescence and photoluminescence in swift heavy ion-irradiated Al2SiO5. <i>Radiation Measurements</i> , <b>2003</b> , 36, 643-646	1.5	7
131	Effect of Swift Heavy Ions on Pulsed Laser Deposited Ag Doped CdS Nanocrystalline Thin Films. <i>Advanced Science Letters</i> , <b>2014</b> , 20, 977-983	0.1	7
130	Swift heavy ion-irradiation effects on microstructure, surface morphology and optical properties of PbS thin films. <i>Applied Physics A: Materials Science and Processing</i> , <b>2016</b> , 122, 1	2.6	7
129	Thermoluminescence response in 60Co gamma rays, 100 MeV Si8+ and 150 MeV Au9+ irradiated Y2O3:Ho3+ nanophosphor. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 778, 554-565	5.7	7
128	Electronic excitation induced anomalous band gap enhancement in NixCd1-xO thin films. <i>Vacuum</i> , <b>2017</b> , 146, 287-296	3.7	6
127	In Situ Study of Radiation Stability and Associated Conduction Mechanisms of Nb-Doped TiO2/p-Si Heterojunction Diode Under Swift Heavy Ion Irradiation. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 1475-1481	2.9	6
126	Structure and crystal field analysis using ionoluminescence of Al2O3: Tm3+ phosphor. <i>Journal of Luminescence</i> , <b>2019</b> , 214, 116553	3.8	6
125	Structural and electronic-structure investigations of defects in Cu-ion-implanted SnO2 thin films. <i>Vacuum</i> , <b>2020</b> , 179, 109481	3.7	6
124	Effect of ion irradiation on the optical properties of Ag-doped Ge2Sb2Te5 (GST) thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2020</b> , 467, 40-43	1.2	6

123	Modification of photosensing property of CdS <b>B</b> i2S3 bi-layer by thermal annealing and swift heavy ion irradiation. <i>Materials Chemistry and Physics</i> , <b>2016</b> , 169, 6-12	4.4	6
122	Structural investigation of low energy ion irradiated Al2O3. <i>Ceramics International</i> , <b>2019</b> , 45, 20346-203	5531	6
121	Fabrication of plasmonic dye-sensitized solar cells using ion-implanted photoanodes <i>RSC Advances</i> , <b>2019</b> , 9, 20375-20384	3.7	6
120	Investigation of Au9+ swift heavy ion irradiation on CdS/CuInSe2 thin films. <i>Radiation Physics and Chemistry</i> , <b>2013</b> , 91, 81-88	2.5	6
119	Raman and infrared study of 100MeV swift Ag8+ heavy ion irradiation effects in CaSO4I2H2O single crystals. <i>Journal of Alloys and Compounds</i> , <b>2009</b> , 482, 308-312	5.7	6
118	Synthesis and characterization of embedded SiC phase. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2007</b> , 254, 78-82	1.2	6
117	Effect of swift heavy ion irradiation on the physical properties of CuIn(S0.4Se0.6)2 alloy thin films prepared by solution growth technique. <i>Radiation Physics and Chemistry</i> , <b>2008</b> , 77, 794-798	2.5	6
116	X-ray photoelectron and X-ray Auger electron spectroscopy studies of heavy ion irradiated C60 films. <i>Applied Surface Science</i> , <b>2008</b> , 254, 7280-7284	6.7	6
115	Studies on the high electronic energy deposition in polyaniline thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2008</b> , 266, 2002-2008	1.2	6
114	Spectroscopic studies of swift heavy ion irradiated nanophase mullite. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 31-33	1.2	6
113	Thermoluminescence studies of Si+8 ion irradiated kyanite. <i>Radiation Measurements</i> , <b>2003</b> , 36, 653-655	1.5	6
112	Influence Of Zn Concentration On The Size And Optical Properties Of ZnO nanocrystals In Silica Matrix Grown By RF Co-sputter Deposition. <i>Advanced Materials Letters</i> , <b>2013</b> , 4, 343-346	2.4	6
111	Ion beam induced optical and surface modification in plasmonic nanostructures. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2016</b> , 379, 42-47	1.2	6
110	Ion beam modification of structural and optical properties of GeO2 thin films deposited at various substrate temperatures using pulsed laser deposition. <i>Applied Physics A: Materials Science and Processing</i> , <b>2017</b> , 123, 1	2.6	5
109	Photoluminescence and thermoluminescence studies of 100 MeV Si8+ ion irradiated Y2O3:Dy3+ nanophosphor. <i>Journal of Luminescence</i> , <b>2019</b> , 209, 179-187	3.8	5
108	Conductivity and dielectric behavior of PEO-PAM-NaCF3SO3 blend electrolyte system irradiated with swift heavy O6+ion beam. <i>Radiation Physics and Chemistry</i> , <b>2019</b> , 161, 87-94	2.5	5
107	Effect of swift heavy ion on structural and optical properties of highly transparent zinc oxide films. Journal of Sol-Gel Science and Technology, <b>2015</b> , 76, 608-613	2.3	5
106	Photoluminescence, thermoluminescence and defect centres in Y2O3 and Y2O3:Tb3+ under 100 MeV swift Ni8+ ion beam irradiation. <i>Materials Research Bulletin</i> , <b>2018</b> , 102, 62-69	5.1	5

105	SHI induced modification in structural, optical, dielectric and thermal properties of poly ethylene oxide films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2016</b> , 379, 156-161	1.2	5
104	Micro-Raman investigations on zirconium oxide film during swift heavy ion irradiation to study crystalline-to-crystalline phase transformation kinetics by cascade overlap model. <i>Journal of Applied Physics</i> , <b>2019</b> , 126, 025901	2.5	5
103	Thermoluminescence studies of Dirradiated nanocrystalline Y3Al5O12. <i>Radiation Effects and Defects in Solids</i> , <b>2014</b> , 169, 696-705	0.9	5
102	In situ X-ray diffraction study of the growth of silver nanoparticles embedded in silica film by ion irradiation: The effect of volume fraction. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2013</b> , 311, 5-9	1.2	5
101	100 MeV Ag ions irradiation effects on the optical properties of Ag0.10(Ge0.20Se0.80)0.90thin films. <i>Journal Physics D: Applied Physics</i> , <b>2010</b> , 43, 095302	3	5
100	Swift heavy ion irradiation induced phase transformation in calcite single crystals. <i>Solid State Communications</i> , <b>2009</b> , 149, 1905-1908	1.6	5
99	Synthesis of ZnO nanostructures using different metal catalyst: morphology and photoluminescence characteristics. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2010</b> , 10, 2933-7	1.3	5
98	Ionic conduction studies in Li3+ ion irradiated P(VDFHFP)[PC+DEC)[IICF3SO3 gel polymer electrolyte. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 230-234	1.2	5
97	A versatile multifaceted resistive switching memory activated by light and ion irradiation in poly (3-octylthiophene)-zinc oxide hybrids. <i>Organic Electronics</i> , <b>2020</b> , 87, 105932	3.5	5
96	Tuning of defects induced visible photoluminescence by swift heavy ion irradiation and thermal annealing in zinc oxide films. <i>Radiation Physics and Chemistry</i> , <b>2021</b> , 183, 109400	2.5	5
95	Refractive index dispersion of swift heavy ion irradiated BFO thin films using Surface Plasmon Resonance technique. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2016</b> , 379, 126-130	1.2	5
94	Potential application of carbon nanotube core as nanocontainer and nanoreactor for the encapsulated nanomaterial. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2016</b> , 379, 181-187	1.2	5
93	120 MeV Ni10+ swift heavy ions irradiation on CdSe nanocrystals induces cubic to hexagonal phase transformation - A study of microstructural modification. <i>Materials Science in Semiconductor Processing</i> , <b>2020</b> , 114, 105079	4.3	5
92	Comparative studies on thermoluminescence glow curves of calcium oxide nanophosphor irradiated with various ionizing radiations. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 735, 1949-1954	5.7	5
91	High energy (MeV) ion beam induced modifications in Al2O3-ZnO multilayers thin films grown by ALD and enhancement in photoluminescence, optical and structural properties. <i>Vacuum</i> , <b>2021</b> , 192, 110	4375	5
90	Photoluminescence and reflectivity studies of high energy light ions irradiated polymethyl methacrylate films. <i>Optical Materials</i> , <b>2017</b> , 73, 550-554	3.3	4
89	Ion irradiation-induced, localized sp2 to sp3 hybridized carbon transformation in walls of multiwalled carbon nanotubes. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2017</b> , 412, 115-122	1.2	4
88	Effects of high-energy ion-beam irradiation on structural and optical properties of (Mg0.95Co0.05)TiO3 thin films. <i>Radiation Effects and Defects in Solids</i> , <b>2018</b> , 173, 128-137	0.9	4

# (2009-2016)

87	Effect of 100 MeV swift Si8+ ions on structural and thermoluminescence properties of Y2O3:Dy3+nanophosphor. <i>Radiation Effects and Defects in Solids</i> , <b>2016</b> , 171, 408-420	0.9	4	
86	Photo-induced inter-chain and interfacial charge transfer in Cu <b>Z</b> nO/ poly (3-octylthiophene) hybrid nanocomposites. <i>Optical Materials</i> , <b>2019</b> , 94, 316-321	3.3	4	
85	Damage creation in Lithium Fluoride thin films induced by swift heavy ions. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2014</b> , 332, 134-137	1.2	4	
84	Influence of 100 MeV Au+ 8 ion on photovoltaic response of BiFeO3/BaTiO3 multilayer structures. <i>Materials and Design</i> , <b>2017</b> , 114, 345-354	8.1	4	
83	Heavy ion induced luminescence studies of YAlO3:Tb3+, Tm3+single crystals. <i>Materials Research Express</i> , <b>2014</b> , 1, 015908	1.7	4	
82	Thermo-luminescence kinetic parameters of Dirradiated Sr4Al14O25:Eu2+, Dy3+ phosphors. <i>Radiation Effects and Defects in Solids</i> , <b>2013</b> , 168, 1022-1029	0.9	4	
81	120 MeV Ag9+ Ions Induced Ionoluminescence of SrS:Ce <b>2011</b> ,		4	
80	Magnetic force microscopy of nano-size magnetic domain ordering in heavy ion irradiated fullerene films. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2007</b> , 7, 2201-5	1.3	4	
79	Modifications of electronic transport behaviour of 250MeV Ag ion irradiated La0.75Ca0.25MnO3 thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 110-114	1.2	4	
78	SHI Induced Thermoluminescence Properties Of sol-gel Derived Y2O3:Er3+ Nanophosphor. <i>Advanced Materials Letters</i> , <b>2015</b> , 6, 342-347	2.4	4	
77	Electronic excitation induced modification in fullerene C70 thin films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2016</b> , 379, 188-194	1.2	4	
76	Tuning the properties of Fe-BTC metal-organic frameworks (MOFs) by swift heavy ion (SHI) irradiation. <i>Radiation Effects and Defects in Solids</i> , <b>2021</b> , 176, 274-283	0.9	4	
75	Influence of thermal annealing and radiation enhanced diffusion processes on surface plasmon resonance of gold implanted dielectric matrices. <i>Radiation Physics and Chemistry</i> , <b>2018</b> , 144, 141-148	2.5	4	
74	Effects of MeV ions on physicochemical and dielectric properties of chitosan/PEO polymeric blend. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2019</b> , 447, 68-78	1.2	3	
73	Microstructural analysis of SHI irradiated CdS nanocrystals- utilizing first principles method. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 824, 153968	5.7	3	
72	Decomposition mechanism of indium oxide nanoparticles sandwiched between zinc oxide layers by energetic ions. <i>Ceramics International</i> , <b>2016</b> , 42, 2846-2853	5.1	3	
71	Effects of 200 MeV silver ion irradiation on the optical properties of gallium phosphide. <i>Radiation Effects and Defects in Solids</i> , <b>2013</b> , 168, 564-570	0.9	3	
70	SHI induced surface modifications of immiscible Fe/Bi bilayer system. <i>Surface and Coatings Technology</i> , <b>2009</b> , 203, 2399-2402	4.4	3	

69	Positron annihilation lifetime and Doppler broadening study in 50MeV Li3+ ion irradiated polystyrene films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2010</b> , 268, 1809-1812	1.2	3
68	Study of C6+ (80 MeV) ion induced effects on CdS:Mn system. <i>Journal of Alloys and Compounds</i> , <b>2008</b> , 459, 118-122	5.7	3
67	An investigation on the variations in properties of Ni+ irradiated ZnO thin films. <i>Radiation Effects and Defects in Solids</i> , <b>2008</b> , 163, 635-644	0.9	3
66	Swift heavy ion induced effects in LiF thin films. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2007</b> , 4, 1075-1078		3
65	Oxygen intake in ion irradiated fullerene films. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2008</b> , 266, 1709-1712	1.2	3
64	Dependence of hydrogen released on the charge state of incident ions. <i>Radiation Effects and Defects in Solids</i> , <b>2006</b> , 161, 331-338	0.9	3
63	Photoluminescence and atomic force microscopic studies on pre- and post-irradiated ruby with Ni6+ ion. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2004</b> , 222, 533-537	1.2	3
62	Irradiation of large area Mylar membrane and characterization of nuclear track filter. <i>Bulletin of Materials Science</i> , <b>2004</b> , 27, 417-420	1.7	3
61	Radiation stability and reliability of CuZnO/P3OT hybrid heterostructures under swift heavy ion irradiations. <i>Materials Science in Semiconductor Processing</i> , <b>2020</b> , 108, 104885	4.3	3
60	Modulation of radiative defects in MgAl2O4 nanocrystals probed using NMR, ESR, and PL spectroscopies. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 125111	2.5	3
59	Swift heavy ion irradiation induced negative differential resistance and transport of charge carriers in conducting polymer-metal oxide hybrids. <i>Radiation Physics and Chemistry</i> , <b>2021</b> , 179, 109211	2.5	3
58	Detailed optical analysis of 100 MeV Ni7+ ion irradiated WO3 thin films using Surface Plasmon Resonance. <i>Radiation Physics and Chemistry</i> , <b>2018</b> , 153, 51-57	2.5	3
57	Down and upconversion photoluminescence of ZrO2:Er3+ phosphor irradiated with 120 MeV gold ions. <i>Materials Research Express</i> , <b>2020</b> , 7, 064006	1.7	2
56	Control and materials characterization System for 6T Superconducting Cryogen Free Magnet Facility at IUAC, New Delhi. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 171, 012138	0.4	2
55	Stiffening of phonons with enhanced hybridization and structural phase transformation upon Pr-doping in BiFeO3. <i>Physica B: Condensed Matter</i> , <b>2019</b> , 571, 247-251	2.8	2
54	Ionoluminescence studies of natural kyanite mineral from different parts of Indian origin.  Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2012, 86, 15-9	4.4	2
53	The role of ion irradiation in activating silent Raman modes via tuning in plasmonic behaviour and surface disorder of Au/ZnO/Pt NFG system. <i>Europhysics Letters</i> , <b>2017</b> , 119, 66002	1.6	2
52	Helium exchange gas based variable temperature insert for cryogen-free magnet system. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2017</b> , 171, 012092	0.4	2

# (2018-2015)

51	Effects of passage of 200 MeV Ag9+ ions in indium phosphide at different depths. <i>Radiation Effects and Defects in Solids</i> , <b>2015</b> , 170, 690-695	0.9	2
50	White and UV Emission from Swift Ion Irradiation Modified Zinc Oxide-Porous Silicon Nanocomposite through Cathodoluminescence Spectroscopy. <i>Physics Procedia</i> , <b>2012</b> , 29, 12-17		2
49	Modifications induced by O+8 ion beam to Lexan polycarbonate. <i>Radiation Effects and Defects in Solids</i> , <b>2013</b> , 168, 594-600	0.9	2
48	The effect of SHI irradiation on structural, thermal and dielectric properties of a silver nanoparticle-embedded polystyrene matrix. <i>Radiation Effects and Defects in Solids</i> , <b>2011</b> , 166, 585-591	0.9	2
47	Luminescence studies in swift heavy ion irradiated aluminum silicates. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2006</b> , 244, 153-156	1.2	2
46	Thermal Annealing Induced Anomalous Band Gap Modifications in Nanocrystalline Antimony Doped Tin Oxide Thin Films. <i>Advanced Science Letters</i> , <b>2014</b> , 20, 1410-1413	0.1	2
45	Study Of Chemically Synthesized SHI Irradiated CdS Nanostructured Films. <i>Advanced Materials Letters</i> , <b>2015</b> , 6, 354-358	2.4	2
44	150 KeV Cullon- implantation in SrVO3 thin films: A study of Cu induced defect states. <i>Vacuum</i> , <b>2020</b> , 181, 109655	3.7	2
43	Annealing Effects on Gas Sensing Response of Ga-Doped ZnO Thin Films. ACS Omega, 2021, 6, 11660-11	668	2
42	Swift heavy ion induced structural phase generation and enhanced luminescence from CdS based nanocomposites. <i>Surface and Coatings Technology</i> , <b>2016</b> , 306, 305-308	4.4	2
41	Effect of swift heavy ions irradiation on physicochemical and dielectric properties of chitosan and chitosan-Ag nanocomposites. <i>Radiation Physics and Chemistry</i> , <b>2021</b> , 181, 109288	2.5	2
40	TL/OSL properties of beta irradiated Al2O3 Nanophosphor synthesized by microwave combustion method <b>2017</b> ,		1
39	Virtual gap states induced modifications in charge neutrality level in cadmium oxide thin films. <i>Materials Research Express</i> , <b>2017</b> , 4, 045901	1.7	1
38	Effect of annealing on luminescence of ZrO2 irradiated with 100[MeV Si7+ ions. <i>Optical Materials</i> , <b>2020</b> , 107, 109984	3.3	1
37	Structural phase transformation and modification of optical absorption of SHI induced nanostructured CdS films. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2018</b> , 29, 582-588	2.1	1
36	Europium activated gadolinium sulfide nanoparticles. <i>RSC Advances</i> , <b>2016</b> , 6, 108523-108529	3.7	1
35	Thermoluminescence properties of 100 MeV Si7+ ion-irradiated Al2O3. <i>Radiation Effects and Defects in Solids</i> , <b>2018</b> , 173, 504-509	0.9	1
34	Facile Synthesis of Semiconducting Ultrathin Layer of Molybdenum Disulfide. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2018</b> , 18, 614-622	1.3	1

33	Studies on Ag8+ and Li4+ ions irradiated LAHCl single crystals. <i>Materials Chemistry and Physics</i> , <b>2013</b> , 137, 937-940	4.4	1
32	Photoluminescence studies of gamma irradiated Y2O3:Eu3+ nanophosphor <b>2017</b> ,		1
31	100 MeV swift Si7+ ion induced thermoluminescence studies of nanocrystalline erbium doped ZrO2 <b>2015</b> ,		1
30	Ion Beam Induced Modification of Metal Nanoparticles Dispersed Polymeric Films. <i>Integrated Ferroelectrics</i> , <b>2010</b> , 117, 97-103	0.8	1
29	o-Ps lifetime, free volume and Doppler broadening spectroscopy (DBS) studies of 50 MeV Li3+ ion irradiated polystyrene. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 2435-2437		1
28	Photoluminescence and atomic force microscopy studies on pre- and post-irradiated ruby with Fe3+ ion. <i>Radiation Effects and Defects in Solids</i> , <b>2004</b> , 159, 315-320	0.9	1
27	Band gap engineering of cadmium selenide nanocrystals using 120 MeV Ag7+ swift heavy ions, alongside theoretical evidence through PBE+U analysis. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 836, 155535	5.7	1
26	Effect of Swift Heavy Ion Irradiation on the Structural and Optical Properties of CdO Thin Films. <i>Springer Proceedings in Physics</i> , <b>2017</b> , 199-203	0.2	1
25	Conductivity studies of blend polymer electrolyte system irradiated with swift heavy O6+ ion beam <b>2018</b> ,		1
24	Signature of strong localization and crossover conduction processes in doped ZnO thin films: synergetic effect of doping fraction and dense electronic excitations. <i>Journal of Physics Condensed Matter</i> , <b>2021</b> , 33,	1.8	1
23	Influence of swift heavy ion irradiation on sensing properties of nickel-(NRs-Ni3HHTP2) metal-organic framework. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2021</b> , 32, 18657-18668	2.1	1
22	Interface modification of Fe/Cr/Al magnetic multilayer by swift heavy ion irradiation. <i>Surfaces and Interfaces</i> , <b>2021</b> , 26, 101431	4.1	1
21	Some Structural Modifications At The Nanometric Scale Induced By Swift Heavy Ion Irradiation. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , <b>2009</b> , 145-151	0.2	1
20	Influence of high dose gamma radiation on optical, physico-chemical and surface morphology properties of nanocrystalline ZrO2 thin films. <i>Optical Materials</i> , <b>2022</b> , 126, 112125	3.3	1
19	Effect of swift heavy ion irradiation on sputter deposited SiO2/Co/Pt/SiO2 multilayers. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2012</b> , 280, 123-130	1.2	O
18	Electrical characterization of 100 MeV heavy ion irradiated Au/p-Cu1.4S Schottky barrier diodes. <i>Radiation Effects and Defects in Solids</i> , <b>2009</b> , 164, 31-37	0.9	O
17	Defects engineering and enhancement in optical and structural properties of 2D-MoS2 thin films by high energy ion beam irradiation. <i>Materials Chemistry and Physics</i> , <b>2022</b> , 276, 125422	4.4	0
16	A comparative study on gamma and carbon ion irradiations induced modification in structural and electrical properties of PVA/H3PO4/SiO2 nanocomposite polymer electrolyte. <i>Radiation Physics and Chemistry</i> , <b>2022</b> , 192, 109916	2.5	O

#### LIST OF PUBLICATIONS

15	Semiconductor-to-metal transition in nanocomposites of wide bandgap oxide semiconductors. Journal of Alloys and Compounds, <b>2022</b> , 894, 162392	5.7	О
14	Tuning the optical constants and thermal properties of CdS nanocrystals by SHI irradiation: A blended analysis through DFT+U and TS model. <i>Materials Science in Semiconductor Processing</i> , <b>2022</b> , 138, 106278	4.3	O
13	Probing the defects and trap distribution in MgAl2O4 nanocrystals through electron spin resonance and thermoluminescence. <i>Journal Physics D: Applied Physics</i> , <b>2021</b> , 54, 335303	3	0
12	Photoluminescence Quenching and Photo-Induced Charge Transfer Processes in Poly(3-octylthiophene) Polymer Based Hybrid Nano-composites by Ion Irradiation for Possible Optoelectronic Applications. <i>Journal of Electronic Materials</i> , <b>2021</b> , 50, 85-99	1.9	O
11	Design of an RMS based Steady State Detector for a Cryogenic Temperature Control Process and Automation of Temperature vs Material Property Characterizations. <i>IFAC-PapersOnLine</i> , <b>2018</b> , 51, 407-4	127	O
10	Influence of swift heavy ion irradiations on temperature dependent phononic behavior of epitaxial LaNiO3 thin film. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 015301	2.5	O
9	Radiation hardness of Ge{2}Sb{2}Te{5} thin films to 80 MeV Si ion irradiation. <i>Radiation Effects and Defects in Solids</i> ,1-10	0.9	0
8	Investigation of radiation damage using thermal spike model for SHI irradiation on Al2O3. <i>Radiation Effects and Defects in Solids</i> ,1-18	0.9	O
7	Plasmonic Engineering of TiO2 Photoanodes for Dye-Sensitized Solar Cells: A Review. <i>Journal of Electronic Materials</i> ,	1.9	0
6	Structural and Optical Studies of Sol-Gel Deposited Nanostructured ZnO Thin Films: Annealing Effect. <i>Environmental Science and Engineering</i> , <b>2014</b> , 709-712	0.2	
5	Study of structure and optical luminescence of C+6 (80 MeV) ion irradiated CdS: Fe system. <i>Indian Journal of Physics</i> , <b>2009</b> , 83, 1659-1665	1.4	
4	Li3+ ion irradiation effects on polyamide nylon6,6 studied by positron annihilation lifetime and Doppler broadening spectroscopy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 2442-2444		
3	Nano-engineering by MeV Ion Beams. <i>Materials Research Society Symposia Proceedings</i> , <b>2007</b> , 1027, 1		
2	Impact of defects on the structural and electrical transport properties of Sb2Te3 thin films by SHI irradiation. <i>Materials Letters: X</i> , <b>2021</b> , 12, 100113	0.5	
1	Impact of high energy ion irradiation on structural, morphological, optical and photoluminescence properties of MgTiO3 thin films. <i>Journal of Luminescence</i> , <b>2022</b> , 119051	3.8	