

Devesh Avasthi

List of Publications by Year in descending order

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498
papers

9,853
citations

46918

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98622

67
g-index

500
all docs

500
docs citations

500
times ranked

8221
citing authors

#	ARTICLE	IF	CITATIONS
1	ZnO tetrapods and activated carbon based hybrid composite: Adsorbents for enhanced decontamination of hexavalent chromium from aqueous solution. <i>Chemical Engineering Journal</i> , 2019, 358, 540-551.	6.6	170
2	Au@ZnO: A tunable localized surface plasmonic nanocomposite. <i>Applied Physics Letters</i> , 2008, 92, 043107.	1.5	153
3	On the properties of indium doped ZnO thin films. <i>Semiconductor Science and Technology</i> , 2005, 20, 120-126.	1.0	144
4	Synthesis of metal-polymer nanocomposite for optical applications. <i>Nanotechnology</i> , 2007, 18, 125604.	1.3	141
5	Deposition of thin films of different oxides of copper by RF reactive sputtering and their characterization. <i>Vacuum</i> , 2000, 57, 377-385.	1.6	119
6	Synthesis and characterization of ZnO thin film grown by electron beam evaporation. <i>Journal of Applied Physics</i> , 2006, 99, 123105.	1.1	118
7	Crystal growth behaviour in Au-ZnO nanocomposite under different annealing environments and photoswitchability. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	117
8	Modifying the nanocrystalline characteristics structure, size, and surface states of copper oxide thin films by high-energy heavy-ion irradiation. <i>Journal of Applied Physics</i> , 2002, 92, 3304-3310.	1.1	111
9	Synthesis of elongated Au nanoparticles in silica matrix by ion irradiation. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	105
10	Swift Heavy Ions for Materials Engineering and Nanostructuring. <i>Springer Series in Materials Science</i> , 2011, , .	0.4	102
11	Effects of 160 MeV Ni ¹²⁺ ion irradiation on HCl doped polyaniline electrode. <i>Journal Physics D: Applied Physics</i> , 2006, 39, 750-755.	1.3	95
12	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> , 2005, 117, 307-312.	1.7	91
13	Synthesis of gold-silicon core-shell nanoparticles with tunable localized surface plasmon resonance. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	87
14	Fabrication of chemiresistive gas sensors based on multistep reduced graphene oxide for low parts per million monitoring of sulfur dioxide at room temperature. <i>Sensors and Actuators B: Chemical</i> , 2017, 242, 461-468.	4.0	86
15	Enhanced room temperature ferromagnetism and green photoluminescence in Cu doped ZnO thin film synthesised by neutral beam sputtering. <i>Scientific Reports</i> , 2019, 9, 6675.	1.6	86
16	Atom beam sputtered Ag-TiO ₂ plasmonic nanocomposite thin films for photocatalytic applications. <i>Applied Surface Science</i> , 2017, 411, 347-354.	3.1	82
17	Controlled growth of gold nanoparticles induced by ion irradiation: An in situ x-ray diffraction study. <i>Applied Physics Letters</i> , 2007, 90, 073110.	1.5	79
18	Facile synthesis of Au-ZnO plasmonic nanohybrids for highly efficient photocatalytic degradation of methylene blue. <i>Optical Materials</i> , 2017, 64, 47-52.	1.7	77

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19	Test of the hypothesis of transient molten state diffusion for swift-heavy-ion induced mixing. <i>Physical Review B</i> , 2005, 71, .	1.1	76
20	Modifications of ZnO thin films under dense electronic excitation. <i>Journal of Applied Physics</i> , 2005, 97, 013509.	1.1	75
21	Formation of Self-organized Silver Nanocup-Type Structures and Their Plasmonic Absorption. <i>Plasmonics</i> , 2013, 8, 811-815.	1.8	75
22	Effect of heavy ion irradiation on the electrical and optical properties of amorphous chalcogenide thin films. <i>Journal Physics D: Applied Physics</i> , 2002, 35, 477-479.	1.3	74
23	Large electronically mediated sputtering in gold films. <i>Physical Review B</i> , 2001, 64, .	1.1	73
24	Structural evolution of TiO ₂ nanocrystalline thin films by thermal annealing and swift heavy ion irradiation. <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	72
25	Effects of swift heavy ion irradiation on structural, optical and photocatalytic properties of ZnO@CuO nanocomposites prepared by carbothermal evaporation method. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 928-937.	1.5	67
26	Radiation-Resistant Behavior of Poly(vinylidene fluoride)/Layered Silicate Nanocomposites. <i>ACS Applied Materials & Interfaces</i> , 2009, 1, 311-318.	4.0	64
27	Swift heavy ion induced modification of C ₆₀ thin films. <i>Journal of Applied Physics</i> , 2003, 94, 326-333.	1.1	63
28	Synthesis of confined electrically conducting carbon nanowires by heavy ion irradiation of fullerene thin film. <i>Journal of Applied Physics</i> , 2007, 101, 014308.	1.1	61
29	Studies on the optical band gap and cluster size of the polyaniline thin films irradiated with swift heavy Si ions. <i>Vacuum</i> , 2007, 82, 56-60.	1.6	61
30	Gold@silica nanocomposites for the detection of human ovarian cancer cells: a preliminary study. <i>Nanotechnology</i> , 2007, 18, 345606.	1.3	59
31	Solar light assisted degradation of dyes and adsorption of heavy metal ions from water by CuO@ZnO tetrapodal hybrid nanocomposite. <i>Materials Today Chemistry</i> , 2020, 17, 100336.	1.7	58
32	Synthesis and characterization of Ni-doped ZnO: A transparent magnetic semiconductor. <i>Journal of Magnetism and Magnetic Materials</i> , 2008, 320, 3347-3351.	1.0	57
33	Formation of self-affine nanostructures on ZnO surfaces by swift heavy ions. <i>Journal of Applied Physics</i> , 2008, 104, 024304.	1.1	56
34	Electronic excitation induced tuning of surface plasmon resonance of Ag nanoparticles in fullerene C ₇₀ matrix. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 155103.	1.3	55
35	Hydrogen induced lattice expansion and crystallinity degradation in palladium nanoparticles: Effect of hydrogen concentration, pressure, and temperature. <i>Journal of Applied Physics</i> , 2009, 106, .	1.1	55
36	Damaged carbon nanotubes get healed by ion irradiation. <i>Journal of Applied Physics</i> , 2010, 108, .	1.1	55

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37	Study of ZnO and Ni-doped ZnO synthesized by atom beam sputtering technique. Applied Physics A: Materials Science and Processing, 2008, 90, 765-769.	1.1	54
38	Swift heavy ion induced structural and optical modifications in LiF thin film. Journal Physics D: Applied Physics, 2005, 38, 637-641.	1.3	53
39	Optical, chemical and structural modification of oxygen irradiated PET. Radiation Measurements, 2010, 45, 850-855.	0.7	53
40	Ordering of fullerene and carbon nanotube thin films under energetic ion impact. Applied Physics Letters, 2008, 92, .	1.5	52
41	In vitro studies on radiosensitization effect of glucose capped gold nanoparticles in photon and ion irradiation of HeLa cells. Nuclear Instruments & Methods in Physics Research B, 2013, 301, 7-11.	0.6	52
42	Ferromagnetism induced by heavy-ion irradiation in fullerene films. Physical Review B, 2006, 74, .	1.1	50
43	Structural modifications in pyrochlores caused by ions in the electronic stopping regime. Journal of Nuclear Materials, 2008, 380, 93-98.	1.3	50
44	Dual control on structure and magnetic properties of Mg ferrite: Role of swift heavy ion irradiation. Journal of Magnetism and Magnetic Materials, 2019, 471, 521-528.	1.0	50
45	Synthesis of Au nanoparticles at the surface and embedded in carbonaceous matrix by 150 keV Ar ion irradiation. Journal Physics D: Applied Physics, 2011, 44, 125302.	1.3	49
46	Effect of grain size and microstructure on radiation stability of CeO ₂ : an extensive study. Physical Chemistry Chemical Physics, 2014, 16, 27065-27073.	1.3	49
47	Recrystallization in polyvinylidene fluoride upon low fluence swift heavy ion impact. Applied Physics Letters, 2001, 78, 4136-4138.	1.5	48
48	Size effect on electronic sputtering of LiF thin films. Journal of Applied Physics, 2007, 102, .	1.1	47
49	Swift heavy ion induced surface modification for tailoring coercivity in Fe-Ni based amorphous thin films. Journal of Applied Physics, 2009, 105, .	1.1	47
50	Synthesis and Characterization of Ag-Polymer Nanocomposites. Journal of Nanoscience and Nanotechnology, 2010, 10, 2833-2837.	0.9	47
51	Microstructural modifications in diamond-like carbon thin films caused by high energy ion irradiation. Thin Solid Films, 1995, 258, 123-127.	0.8	46
52	Surface roughness and power spectral density study of SHI irradiated ultra-thin gold films. Applied Surface Science, 2009, 256, 558-561.	3.1	46
53	Blue-Shifted SPR of Au Nanoparticles with Ordering of Carbon by Dense Ionization and Thermal Treatment. Plasmonics, 2013, 8, 295-305.	1.8	46
54	Purification/annealing of graphene with 100-MeV Ag ion irradiation. Nanoscale Research Letters, 2014, 9, 126.	3.1	46

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55	Zinc Oxide Tetrapods Based Biohybrid Interface for Voltammetric Sensing of <i>Helicobacter pylori</i> . ACS Applied Materials & Interfaces, 2018, 10, 30631-30639.	4.0	45
56	Study of hydrogen in DLC film by ERDA with 58Ni ions. Vacuum, 1995, 46, 633-636.	1.6	43
57	Enhancement of band gap and photoconductivity in gamma indium selenide due to swift heavy ion irradiation. Journal of Applied Physics, 2008, 103, .	1.1	42
58	Synthesis and characterizations of silver-fullerene C70 nanocomposite. Applied Physics Letters, 2008, 93, .	1.5	42
59	RF-plasma polymerization and characterization of polyaniline. European Polymer Journal, 2009, 45, 2873-2877.	2.6	41
60	Poly(Vinylidene fluoride-co-hexafluoro propylene)/Layered Silicate Nanocomposites: The Effect of Swift Heavy Ion. Journal of Physical Chemistry B, 2009, 113, 11632-11641.	1.2	41
61	Electronic excitation induced controlled modifications of semiconductor-to-metal transition in epitaxial VO ₂ thin films. Journal of Materials Research, 2011, 26, 2901-2906.	1.2	41
62	Enhancement of wettability and antibiotic loading/release of hydroxyapatite thin film modified by 100MeV Ag ⁷⁺ ion irradiation. Materials Chemistry and Physics, 2012, 134, 464-477.	2.0	41
63	Surface modification of polyethylene terephthalate by plasma treatment. Radiation Measurements, 2005, 40, 746-749.	0.7	40
64	Microstructural and plasmonic modifications in Ag@TiO ₂ and Au@TiO ₂ nanocomposites through ion beam irradiation. Beilstein Journal of Nanotechnology, 2014, 5, 1419-1431.	1.5	40
65	Electrocatalytic biofuel cell based on highly efficient metal-polymer nano-architected bioelectrodes. Nano Energy, 2017, 39, 601-607.	8.2	40
66	Hydrogen in chemical vapour deposited diamond films. Vacuum, 1996, 47, 1259-1264.	1.6	39
67	Transient enhanced diffusion of oxygen in Fe mediated by large electronic excitation. Physical Review B, 2003, 68, .	1.1	39
68	Defect dependent ferromagnetism in MgO doped with Ni and Co. Applied Physics Letters, 2008, 93, .	1.5	39
69	Radiation stability of graphene under extreme conditions. Applied Physics Letters, 2014, 105, .	1.5	39
70	Synthesis and Characterization of Gold Nanorings. Journal of Nanoscience and Nanotechnology, 2007, 7, 1878-1881.	0.9	38
71	Synthesis of Plasmonic Nanocomposites for Diverse Applications. Journal of Nanoscience and Nanotechnology, 2010, 10, 2705-2712.	0.9	38
72	Ion beam irradiation-induced tuning of SPR of Au nanoparticles in fullerene C70 matrix: dependence of energy loss. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	38

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73	Efficient oil removal from wastewater based on polymer coated superhydrophobic tetrapodal magnetic nanocomposite adsorbent. <i>Applied Materials Today</i> , 2019, 17, 130-141.	2.3	38
74	Effect of 100 MeV Nickel Ions on Silica Coated ZnS Quantum Dots. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2008, 3, 180-183.	0.1	38
75	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> , 2007, 137, 85-92.	1.7	37
76	Role of electron energy loss in modification of C60 thin films by swift heavy ions. <i>Journal of Applied Physics</i> , 2008, 104, .	1.1	37
77	Green luminescence of ZnS and ZnS:Cu quantum dots embedded in zeolite matrix. <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	37
78	Surface-enhanced Raman scattering and fluorescence emission of gold nanoparticle-multiwalled carbon nanotube hybrids. <i>Journal of Raman Spectroscopy</i> , 2013, 44, 12-20.	1.2	37
79	Dissociation kinetics of molecular hydrogen in a microwave plasma and its influence on the hydrogen content in diamond films. <i>Solid State Communications</i> , 1996, 98, 879-883.	0.9	36
80	Formation and characterization of carbon nanowires. <i>Journal of Applied Physics</i> , 2007, 102, .	1.1	36
81	Effect of ion beam irradiation on metal particle doped polymer composites. <i>Bulletin of Materials Science</i> , 2011, 34, 81-88.	0.8	36
82	Ion irradiation studies of silver/amorphous carbon nanocomposite thin film. <i>Surface and Coatings Technology</i> , 2013, 229, 50-54.	2.2	36
83	Probing the temperature effects in the radiation stability of Nd ₂ Zr ₂ O ₇ pyrochlore under swift ion irradiation. <i>Materialia</i> , 2019, 6, 100317.	1.3	36
84	Study of chain scission versus crosslinking in MeV ion-irradiated polycarbonate using dielectric constant measurements and UV spectroscopy. <i>Radiation Measurements</i> , 2004, 38, 197-203.	0.7	35
85	Plasmonic, Low-Frequency Raman, and Nonlinear Optical-Limiting Studies in Copper-Silica Nanocomposites. <i>Plasmonics</i> , 2012, 7, 25-31.	1.8	35
86	Radiation stability of Gd ₂ Zr ₂ O ₇ : Effect of stoichiometry and structure. <i>Ceramics International</i> , 2016, 42, 103-109.	2.3	35
87	Effect of heavy-ion irradiation on dielectric constant and electrical conductivity of doped and undoped nonlinear substance. <i>Bulletin of Materials Science</i> , 1997, 20, 1069-1077.	0.8	34
88	Setup for in situ x-ray diffraction study of swift heavy ion irradiated materials. <i>Review of Scientific Instruments</i> , 2007, 78, 113901.	0.6	34
89	Structural, optical, electrical and positron annihilation studies of CdS:Fe system. <i>Journal of Alloys and Compounds</i> , 2008, 454, 97-101.	2.8	34
90	Thermal and ion induced annealing of nanocrystalline ZnO thin film deposited by atom beam sputtering. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 045305.	1.3	34

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91	A comparative study of the effect of O ⁺⁷ ion beam on polypyrrole and CR-39 (DOP) polymers. Journal Physics D: Applied Physics, 2008, 41, 115411.	1.3	34
92	Swift heavy ion induced structural changes in CdS thin films possessing different microstructures: A comparative study. Journal of Applied Physics, 2009, 106, 023508.	1.1	34
93	A comparative study of ion-induced damages in C60 and C70 fullerenes. Radiation Effects and Defects in Solids, 2009, 164, 38-48.	0.4	34
94	Enhanced photoelectrochemical response of plasmonic Au embedded BiVO ₄ /Fe ₂ O ₃ heterojunction. Physical Chemistry Chemical Physics, 2017, 19, 15039-15049.	1.3	34
95	Effects and uses of ion beams with diamond, DLC and fullerene films. Vacuum, 1996, 47, 1249-1258.	1.6	32
96	Effect of heavy ion irradiation on C60. Solid State Communications, 1999, 111, 55-60.	0.9	32
97	Engineering of hydrophilic and plasmonic properties of Ag thin film by atom beam irradiation. Applied Surface Science, 2011, 258, 1464-1469.	3.1	32
98	Shape elongation of Zn nanoparticles in silica irradiated with swift heavy ions of different species and energies: scaling law and some insights on the elongation mechanism. Nanotechnology, 2014, 25, 435301.	1.3	32
99	Effect of 160 MeV Ni ¹²⁺ ion irradiation on PbS quantum dots. Journal of Luminescence, 2005, 114, 95-100.	1.5	31
100	Effects of swift heavy ions irradiation on polypyrrole thin films. Radiation Effects and Defects in Solids, 2008, 163, 139-147.	0.4	31
101	Study of thermal annealing induced plasmonic bleaching in Ag:TiO ₂ nanocomposite thin films. Scripta Materialia, 2015, 105, 46-49.	2.6	31
102	Modified structural and photoelectrochemical properties of 170 MeV Au ¹³⁺ irradiated hematite. Thin Solid Films, 2005, 492, 332-336.	0.8	30
103	Swift heavy ion induced formation of nanocolumns of C clusters in a Si based polymer. Nanotechnology, 2006, 17, 2518-2522.	1.3	30
104	200 MeV silver ion irradiation induced structural modification in YBa ₂ Cu ₃ O _{7-δ} thin films at 89 K: An in situ x-ray diffraction study. Journal of Applied Physics, 2009, 106, 053912.	1.1	30
105	A study on the formation of Ag nanoparticles on the surface and catcher by ion beam irradiation of Ag thin films. Journal Physics D: Applied Physics, 2012, 45, 445304.	1.3	30
106	Spontaneous formation of superconducting NiBi ₃ phase in Ni-Bi bilayer films. Journal of Applied Physics, 2015, 117, .	1.1	30
107	Engineering of electronic properties of single layer graphene by swift heavy ion irradiation. Journal of Applied Physics, 2018, 123, .	1.1	30
108	Effect of high energy ion irradiation on electrical and optical properties of para-hydroxy acetophenone. Journal of Applied Physics, 1997, 81, 7526-7528.	1.1	29

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109	Hydrogen loss under heavy ion irradiation in polymers. <i>Radiation Effects and Defects in Solids</i> , 1999, 147, 199-209.	0.4	29
110	Synthesis, characterizations, and thermal induced structural transformation of silver-fullerene C60 nanocomposite thin films for applications in optical devices. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	29
111	Mesoporous polyaniline nanofiber decorated graphene micro-flowers for enzyme-less cholesterol biosensors. <i>Nanotechnology</i> , 2016, 27, 345101.	1.3	29
112	Swift heavy ion-induced dissolution of gold nanoparticles in silica matrix. <i>Radiation Effects and Defects in Solids</i> , 2007, 162, 207-213.	0.4	28
113	Resistance switching properties of planner Ag/Li:NiO/Ag structures induced by swift heavy ion irradiation. <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	28
114	Experimental investigations of semi-crystalline plasma polymerized polypyrrole for surface coating. <i>Progress in Organic Coatings</i> , 2010, 69, 396-401.	1.9	28
115	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> , 2010, 84, 1275-1279.	1.6	28
116	Enhancement of ferromagnetism in Pd nanoparticle by swift heavy ion irradiation. <i>Applied Physics Letters</i> , 2010, 96, 053103.	1.5	28
117	Ion-irradiation-induced ferromagnetism in undoped ZnO thin films. <i>Acta Materialia</i> , 2013, 61, 2763-2768.	3.8	28
118	Plasmonic layer enhanced photoelectrochemical response of Fe2O3 photoanodes. <i>Journal of Power Sources</i> , 2016, 315, 152-160.	4.0	28
119	Synthesis and characterizations of Au-C60 nanocomposite. <i>Journal of Alloys and Compounds</i> , 2017, 696, 9-15.	2.8	28
120	Effect of high energy ion irradiation on electrical and optical properties of organic nonlinear optical crystals. <i>Vacuum</i> , 1997, 48, 991-994.	1.6	27
121	The effect of swift heavy ion irradiation on perpendicular magnetic anisotropy in Fe-Tb multilayers. <i>Journal of Physics Condensed Matter</i> , 1998, 10, 9669-9680.	0.7	27
122	Formation of Au _{0.6} Ge _{0.4} alloy induced by Au-ion irradiation of Au/Ge bilayer. <i>Journal of Applied Physics</i> , 2003, 93, 903-906.	1.1	27
123	Study of Li ³⁺ -ion irradiation effects in P(VDFâ€“HFP) based gel polymer electrolytes for application in Li-ion battery. <i>Journal Physics D: Applied Physics</i> , 2006, 39, 4208-4214.	1.3	27
124	Modifications of polycarbonate induced by swift heavy ions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 457, 195-198.	2.6	27
125	Study of effects of Mn ²⁺ in CdS nanocrystals. <i>Physica B: Condensed Matter</i> , 2007, 400, 70-76.	1.3	27
126	Surface Plasmon Resonance of Ag Nanoparticles Embedded in Partially Oxidized Amorphous Si Matrix. <i>Journal of Nanoscience and Nanotechnology</i> , 2008, 8, 4285-4289.	0.9	27

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127	A poly(vinylidene fluoride-co-hexafluoro propylene) nanohybrid membrane using swift heavy ion irradiation for fuel cell applications. <i>Journal of Materials Chemistry A</i> , 2015, 3, 10413-10424.	5.2	27
128	Ion track diameter in fullerene C70 thin film using Raman active vibrational modes of C70 molecule. <i>Vacuum</i> , 2016, 123, 35-41.	1.6	27
129	Etched ion track polymer membranes for sustained drug delivery. <i>Radiation Measurements</i> , 2003, 36, 585-589.	0.7	26
130	Effect of 100 MeV swift heavy ions [silver (Ag ⁸⁺)] on morphological and electrical properties of polypyrrole. <i>Journal of Applied Physics</i> , 2009, 106, .	1.1	26
131	Evolution and tailoring of plasmonic properties in Ag:ZrO ₂ nanocomposite films by swift heavy ion irradiation. <i>Journal of Applied Physics</i> , 2011, 109, 044311-044311-6.	1.1	26
132	Ion beam-induced shaping of Ni nanoparticles embedded in a silica matrix: from spherical to prolate shape. <i>Nanoscale Research Letters</i> , 2011, 6, 155.	3.1	26
133	Enhancement of thermoelectric power of PbTe:Ag nanocomposite thin films. <i>RSC Advances</i> , 2015, 5, 25887-25895.	1.7	26
134	Nanofilter for hydrogen purification. <i>International Journal of Hydrogen Energy</i> , 2003, 28, 1015-1018.	3.8	25
135	Ionic conduction in 70 MeV C ⁵⁺ ion-irradiated P(VDF- <i>t</i> HFP)- <i>g</i> (PC+DEC)-LiCF ₃ SO ₃ gel polymer electrolyte system. <i>Solid State Ionics</i> , 2005, 176, 1585-1590.	1.3	25
136	Growth of Au nanostructures by annealing electron beam evaporated thin films. <i>Journal of Optics</i> , 2007, 9, S410-S414.	1.5	25
137	Characterization of Nanocomposite Polymeric Membrane. <i>Journal of Polymer Research</i> , 2007, 13, 357-360.	1.2	25
138	Conducting nano-channels in an induced piezoelectric polymeric matrix using swift heavy ions and subsequent functionalization. <i>Journal of Materials Chemistry</i> , 2012, 22, 3955.	6.7	25
139	Study of electronic sputtering of CaF ₂ thin films. <i>Applied Surface Science</i> , 2014, 289, 77-80.	3.1	25
140	Radiative capture cross-sections of isotopes of Gd, Sm and V between 1 and 3 MeV. <i>Annals of Nuclear Energy</i> , 1984, 11, 173-176.	0.9	24
141	Adhesion enhancement of diamond coatings on WC tools by high energy ion irradiation. <i>Thin Solid Films</i> , 1998, 323, 163-169.	0.8	24
142	Influence of ion-irradiation on the free volume controlled diffusion process in polycarbonate—a positron lifetime study. <i>Polymer</i> , 2002, 43, 2819-2826.	1.8	24
143	Effect of Si ion irradiation on polycrystalline CdS thin film grown from novel photochemical deposition technique. <i>Physica B: Condensed Matter</i> , 2005, 355, 222-230.	1.3	24
144	Synthesis of Au nanoparticles in partially oxidized Si matrix by atom beam sputtering. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 7063-7068.	1.3	24

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145	Modifications of structural, optical and electrical properties of nanocrystalline bismuth sulphide by using swift heavy ions. <i>Current Applied Physics</i> , 2009, 9, 374-379.	1.1	24
146	Swift heavy ion induced structural modification of atom beam sputtered ZnO thin film. <i>Surface and Coatings Technology</i> , 2009, 203, 2427-2431.	2.2	24
147	A study on the effect of low energy ion beam irradiation on Au/TiO ₂ system for its application in photoelectrochemical splitting of water. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2016, 379, 255-261.	0.6	24
148	Surface functionalization of epitaxial graphene on SiC by ion irradiation for gas sensing application. <i>Applied Surface Science</i> , 2017, 403, 707-716.	3.1	24
149	Photoluminescence properties of SHI induced F ₂ and F ₃₊ color centers in nano-granular LiF thin films. <i>Journal of Luminescence</i> , 2007, 127, 302-306.	1.5	23
150	Swift Heavy Ion Induced Ordering and Piezoelectric \hat{I}^2 -phase in Poly(vinylidene fluoride). <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 1398-1401.	4.0	23
151	Enhancement of photoluminescence in Er-doped Ag-SiO ₂ nanocomposite thin films: A post annealing study. <i>Vacuum</i> , 2011, 85, 806-809.	1.6	23
152	Swift heavy ion irradiation of ZnO nanoparticles embedded in silica: Radiation-induced deoxidation and shape elongation. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	23
153	Robust water repellent ZnO nanorod array by Swift Heavy Ion Irradiation: Effect of Electronic Excitation Induced Local Chemical State Modification. <i>Scientific Reports</i> , 2017, 7, 3251.	1.6	23
154	Enhancement of thermoelectric power of PbTe thin films by Ag ion implantation. <i>Journal of Applied Physics</i> , 2017, 121, .	1.1	23
155	Evidence of Ion-Beam-Induced Annealing in Graphene Oxide Films Using in Situ X-Ray Diffraction and Spectroscopy Techniques. <i>Journal of Physical Chemistry C</i> , 2018, 122, 9632-9640.	1.5	23
156	Gas permeation study of Ti-coated, track-etched polymeric membranes. <i>Vacuum</i> , 2006, 81, 389-393.	1.6	22
157	Structural damage studies in conducting indium-tin oxide (ITO) thin films induced by Au ⁸⁺ swift heavy ions (SHI) irradiation. <i>Vacuum</i> , 2007, 82, 39-44.	1.6	22
158	Hydrogen profiling and the stoichiometry of an a-SiN _x : H film. <i>Vacuum</i> , 1995, 46, 265-267.	1.6	21
159	Study of gas permeation for asymmetric track-etched polymer blends. <i>International Journal of Hydrogen Energy</i> , 2006, 31, 1266-1270.	3.8	21
160	Axial buckling and compressive behavior of nickel-encapsulated multiwalled carbon nanotubes. <i>Physical Review B</i> , 2007, 76, .	1.1	21
161	Synthesis and luminescence properties of manganese-doped ZnS nanocrystals. <i>Solid-State Electronics</i> , 2007, 51, 81-84.	0.8	21
162	Room temperature ferrimagnetism and low temperature disorder effects in zinc ferrite thin films. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 385, 265-271.	1.0	21

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163	Phase evolution and electrical properties of Co-Sb alloys fabricated from Co/Sb bilayers by thermal annealing and ion beam mixing. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 24427-24437.	1.3	21
164	Ion induced crystallization and grain growth of hafnium oxide nano-particles in thin-films deposited by radio frequency magnetron sputtering. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 505301.	1.3	21
165	High energy heavy ion induced changes in the photoluminescence and chemical composition of porous silicon. <i>Thin Solid Films</i> , 1996, 289, 95-98.	0.8	20
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