

Diana Nesheva

List of Publications by Year in descending order

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94
papers

1,206
citations

471509

17
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97
all docs

97
docs citations

97
times ranked

999
citing authors

#	ARTICLE	IF	CITATIONS
1	Raman scattering and photoluminescence from Si nanoparticles in annealed SiO _x thin films. Journal of Applied Physics, 2002, 92, 4678-4683.	2.5	182
2	Size-Dependent Properties of Sonochemically Synthesized Three-Dimensional Arrays of Close-Packed Semiconducting AgBiS ₂ Quantum Dots. Chemistry of Materials, 2008, 20, 2551-2565.	6.7	77
3	Preparation and characterization of amorphous SeTe/CdSe superlattices and their constituent thin layers. Thin Solid Films, 1992, 213, 230-234.	1.8	46
4	Composition, structure and annealing-induced phase separation in SiO _x films produced by thermal evaporation of SiO in vacuum. Vacuum, 2002, 68, 1-9.	3.5	46
5	Photoconductivity and Relaxation Dynamics in Sonochemically Synthesized Assemblies of AgBiS ₂ Quantum Dots. Journal of Physical Chemistry C, 2011, 115, 37-46.	3.1	46
6	Rheological, electrical, and microwave properties of polymers with nanosized carbon particles. Journal of Applied Polymer Science, 2004, 92, 2220-2227.	2.6	44
7	Raman Scattering from ZnSe Nanolayers. Acta Physica Polonica A, 2009, 116, 75-77.	0.5	39
8	Photoluminescence of CdSe nanocrystals embedded in a SiO _x thin film matrix. Journal of Luminescence, 1999, 82, 233-240.	3.1	28
9	Resonant Raman scattering and photoluminescence in SiO _x /CdSe multiple quantum wells. Physical Review B, 1998, 58, 7913-7920.	3.2	25
10	Nanocrystals of CdSe in thin film matrix. Semiconductor Science and Technology, 1997, 12, 1319-1322.	2.0	24
11	On the structural stability of amorphous Se/CdSe multilayers: a Raman study. Journal of Non-Crystalline Solids, 1998, 224, 283-290.	3.1	24
12	Experimental studies on the defect states at the interface between nanocrystalline CdSe and amorphous SiO _x . Journal of Physics Condensed Matter, 2000, 12, 751-759.	1.8	24
13	Composition and temperature dependence of the low-frequency Raman scattering in Ge-As-S glasses. Journal of Non-Crystalline Solids, 2004, 347, 187-196.	3.1	22
14	Formation of CdSe nanoclusters in SiO _x thin films. Solid State Communications, 2000, 114, 511-514.	1.9	21
15	Absorption and transport properties of Si rich oxide layers annealed at various temperatures. Semiconductor Science and Technology, 2008, 23, 045015.	2.0	21
16	Microstructural characterization of thin SiO _x films obtained by physical vapor deposition. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 174, 132-136.	3.5	21
17	Memory effect in MIS structures with amorphous silicon nanoparticles embedded in ultra thin matrix. Journal of Physics and Chemistry of Solids, 2007, 68, 725-728.	4.0	20
18	Thin and superthin photoconductive CdSe films deposited at room substrate temperature. Journal of Materials Science, 1993, 28, 2183-2186.	3.7	19

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19	Nanoparticle layers of CdSe buried in oxide and chalcogenide thin film matrices. <i>Vacuum</i> , 2002, 65, 109-113.	3.5	18
20	Surface modification and chemical sensitivity of sol gel deposited nanocrystalline ZnO films. <i>Materials Chemistry and Physics</i> , 2018, 209, 165-171.	4.0	18
21	Gas sensitive ZnO thin films with desired (002) or (100) orientation obtained by ultrasonic spray pyrolysis. <i>Materials Chemistry and Physics</i> , 2014, 148, 712-719.	4.0	17
22	Stability of amorphous Se/Se ₁₀₀ multilayers: A Raman study. <i>Journal of Applied Physics</i> , 1999, 86, 4964-4970.	2.5	16
23	Band and subband absorption of Se/CdSe amorphous multilayers. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1994, 70, 205-213.	0.6	14
24	Room temperature photoluminescence from amorphous silicon nanoparticles in SiO _x thin films. <i>Journal of Luminescence</i> , 2007, 126, 497-502.	3.1	14
25	Bi ₂ SiO ₂₀ monocrystals doped with transition metals. <i>Journal of Physics and Chemistry of Solids</i> , 1995, 56, 241-250.	4.0	13
26	Crystal structure and spectral photosensitivity of thermally evaporated Zn _x Cd _{1-x} Se thin films. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 415305.	2.8	13
27	Influence of 20 MeV electron irradiation on the optical properties and phase composition of SiO _x thin films. <i>Journal of Applied Physics</i> , 2018, 123, 195303.	2.5	12
28	Photoconductivity and recombination in amorphous Se/CdSe multilayers. <i>Thin Solid Films</i> , 1996, 280, 51-55.	1.8	11
29	Exciton related resonant Raman scattering from CdSe quantum dots in an amorphous GeS ₂ thin film matrix. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 8221-8232.	1.8	11
30	Composition and structure of Zn _x Cd _{1-x} Se single layers prepared by thermal evaporation of ZnSe and CdSe. <i>Journal of Physics: Conference Series</i> , 2010, 253, 012035.	0.4	11
31	Photoconductivity of amorphous CdS films. <i>Journal of Non-Crystalline Solids</i> , 1982, 51, 381-388.	3.1	10
32	Characterization of amorphous selenium sublayers in chalcogenide superlattices by Raman scattering. <i>Solid State Communications</i> , 1992, 82, 959-962.	1.9	10
33	Small-angle X-ray diffraction studies on interface sharpness of amorphous Se/CdSe superlattices. <i>Journal of Non-Crystalline Solids</i> , 1995, 191, 205-208.	3.1	10
34	Metal-Oxide-Semiconductor Structures Containing Silicon Nanocrystals for Application in Radiation Dosimeters. <i>Sensor Letters</i> , 2012, 10, 833-837.	0.4	10
35	Stepwise optical absorption in amorphous SeTe/CdSe superlattices. <i>Superlattices and Microstructures</i> , 1992, 11, 439-443.	3.1	9
36	Traps and recombination centers in pure and Co-doped Bi ₂ SiO ₂₀ crystals. <i>Journal of Physics and Chemistry of Solids</i> , 1993, 54, 857-862.	4.0	9

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37	Some properties of Bi ₁₂ SiO ₂₀ :Fe doped crystals. Journal of Physics and Chemistry of Solids, 1994, 55, 889-894.	4.0	9
38	LiNbO ₃ /optical waveguides formed in a new proton source. Journal of Lightwave Technology, 2002, 20, 71-77.	4.6	9
39	Photorefectance study of multilayer structures of nanocrystalline CdSe in insulator matrix. Thin Solid Films, 2006, 495, 338-342.	1.8	9
40	Compositional Dependences of Some Optical and Electrical Properties of the Ge _x As _{40-x} Se ₆₀ System. Physica Status Solidi A, 1999, 172, 149-154.	1.7	8
41	MOS structures containing silicon nanoparticles for memory device applications. Journal of Physics: Conference Series, 2008, 113, 012034.	0.4	8
42	Photoluminescence from SiO ₂ layers containing amorphous silicon nanoparticles. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 746-751.	1.8	8
43	Characterization of SiO ₂ /SiO _x nanocomposite layers by comparative analysis of computer simulated and experimental infra-red transmission spectra. Thin Solid Films, 2012, 520, 2085-2091.	1.8	8
44	Application of Metal-Oxide-Semiconductor structures containing silicon nanocrystals in radiation dosimetry. Open Physics, 2015, 13, .	1.7	8
45	Properties of laser-beam sputtered CdS thin films. Journal of Materials Science Letters, 1985, 4, 442-444.	0.5	7
46	Electrophotographic photoreceptors including selenium-based multilayers. Semiconductor Science and Technology, 1997, 12, 595-599.	2.0	7
47	Formation of Si Nanocrystals in Thin SiO ₂ Films for Memory Device Applications. Materials Science Forum, 2010, 644, 101-104.	0.3	7
48	Structural, compositional and electrical characterization of Si-rich SiO _x layers suitable for application in light sensors. Materials Science in Semiconductor Processing, 2015, 37, 229-234.	4.0	7
49	UV Sensitivity of MOS Structures with Silicon Nanoclusters. Sensors, 2019, 19, 2277.	3.8	7
50	Studies of low-energy optical absorption and gap state density of a-CdS by the constant photocurrent method. Physica Status Solidi A, 1984, 82, 243-248.	1.7	6
51	Thin film semiconductor nanomaterials and nanostructures prepared by physical vapour deposition: An atomic force microscopy study. Journal of Physics and Chemistry of Solids, 2007, 68, 675-680.	4.0	6
52	Effect of oxygen to argon ratio on the properties of thin SiO _x films deposited by r.f. sputtering. Journal of Materials Science: Materials in Electronics, 2010, 21, 481-485.	2.2	6
53	Optical properties of selenium and tellurium films deposited in vacuum on vibrating substrates. Surface and Coatings Technology, 2016, 307, 542-546.	4.8	6
54	Changes in the photosensitivity and dark conductivity of CdS single crystals after illumination at high temperature. Journal of Physics and Chemistry of Solids, 1984, 45, 201-206.	4.0	5

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55	Properties of amorphous CdS-crystalline Si junctions. Solid-State Electronics, 1987, 30, 173-176.	1.4	5
56	Influence of crystallization on electrical and optical properties of Te ^x -Se ^{1-x} -Sn and Te ^x -Se ^{1-x} -Sn ^{1-x} -O films. Journal of Non-Crystalline Solids, 1993, 160, 105-110.	3.1	5
57	Title is missing!. Journal of Materials Science: Materials in Electronics, 2003, 14, 799-800.	2.2	5
58	Infrared and Photoluminescence Study of Rapidly Thermally Annealed SiO _x Thin Films. Materials Science Forum, 2007, 555, 309-314.	0.3	5
59	Radiation Dosimeter Based on Metal-Oxide-Semiconductor Structures Containing Silicon Nanocrystals. Key Engineering Materials, 0, 495, 120-123.	0.4	5
60	Phase characterization and ethanol adsorption in TiO ₂ nanotubes anodically grown on Ti6Al4V alloy substrates. Journal of Alloys and Compounds, 2019, 798, 394-402.	5.5	5
61	Modification of surface morphology and lattice order in nanocrystalline ZnO thin films prepared by spin-coating sol-gel method. Journal of Sol-Gel Science and Technology, 2021, 100, 55-67.	2.4	5
62	NANOCRYSTALLINE AND AMORPHOUS THIN FILM SYSTEMS INCLUDING LOW-DIMENSIONAL CHALCOGENIDE MATERIALS. , 2001, , 239-279.		5
63	Characterization of ZnSe Nanolayers by Spectroscopic Ellipsometry. Acta Physica Polonica A, 2009, 116, 708-711.	0.5	5
64	Computational analysis of thermally stimulated currents in Bi ₁₂ TiO ₂₀ single crystals. Journal of Applied Physics, 2006, 100, 053704.	2.5	4
65	TEM and Spectroscopic Ellipsometry studies of multilayer gate dielectrics containing crystalline and amorphous Si nanoclusters. Physica E: Low-Dimensional Systems and Nanostructures, 2013, 51, 111-114.	2.7	4
66	Effect of the composition and annealing on the electron transport in Zn _x Cd _{1-x} Se nanocrystalline films. Journal of Alloys and Compounds, 2014, 586, 650-655.	5.5	4
67	Interface and structural disorder changes in Se/CdSe multilayers. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1995, 72, 67-73.	0.6	3
68	Thermal stability of amorphous multilayers. Solid State Communications, 1997, 103, 431-434.	1.9	3
69	Charge transport in CdSe nanocrystalline sublayers of SiO _x /CdSe multilayers and composite SiO _x -CdSe thin films. Journal of Physics Condensed Matter, 2000, 12, 3967-3974.	1.8	3
70	Study of modified solid surfaces by nanostructured CdSe in SiO _x thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 1070-1074.	0.8	3
71	Selective photosensitivity of metal-oxide-semiconductor structures with SiO _x layer annealed at high temperature. Journal of Materials Science: Materials in Electronics, 2020, 31, 17412-17421.	2.2	3
72	Influence of annealing on photoinduced phenomena in CdS. Journal Physics D: Applied Physics, 1985, 18, 677-683.	2.8	2

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73	Photovoltaic and Electroluminescent Properties of Stainetched Porous Silicon Based Heterojunctions. Materials Research Society Symposia Proceedings, 1995, 405, 167.	0.1	2
74	Thickness Dependent Photocrystallization in Se/Se ₇₀ Te ₃₀ Amorphous Multilayers. Physica Status Solidi A, 1999, 176, R3-R4.	1.7	2
75	Defect states in CdSe nanocrystalline layers. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 1081-1087.	1.8	2
76	Dependence of photoluminescence from a-Si nanoparticles on the annealing time and exciting wavelength. Journal of Luminescence, 2007, 126, 7-13.	3.1	2
77	Modulated photoconductivity study of nanocrystalline CdSe films. Journal of Non-Crystalline Solids, 2008, 354, 2744-2747.	3.1	2
78	Temperature Dependence of the Photoluminescence from Ensembles of Amorphous Silicon Nanoparticles with Various Average Sizes. Journal of Nanoscience and Nanotechnology, 2011, 11, 959-965.	0.9	2
79	Raman scattering characterization of ZnSe/Zn _{0.6} Cd _{0.4} Se multilayers prepared by thermal vacuum evaporation. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 949-952.	1.8	2
80	Changes in composite nc-Si-SiO ₂ thin films caused by 20 MeV electron irradiation. Nuclear Instruments & Methods in Physics Research B, 2019, 458, 159-163.	1.4	2
81	Room temperature sensitivity of ZnSe nanolayers to ethanol vapours. Journal of Physics: Conference Series, 2019, 1186, 012023.	0.4	2
82	Influence of fast neutron irradiation on the phase composition and optical properties of homogeneous SiO _x and composite Si/SiO _x thin films. Journal of Materials Science, 2021, 56, 3197-3209.	3.7	2
83	Optical spectra of doped Bi ₁₂ TiO ₂₀ crystals. Journal of Physics Condensed Matter, 1994, 6, 11167-11175.	1.8	1
84	MOS Structures Containing Si Nanocrystals for Applications in UV Dosimeters. Key Engineering Materials, 0, 605, 380-383.	0.4	1
85	Effect of infrared laser irradiation on electrical conductivity and ethanol sensitivity of sol-gel ZnO thin films. Journal of Physics: Conference Series, 2021, 1762, 012037.	0.4	1
86	SPM electrical characterization of Ti/Al based ohmic contacts for sub-micron devices. , 2010, , .		0
87	Electrical Characterization of MOS Structures with Silicon Nanocrystals Suitable for X-Ray Detection. Key Engineering Materials, 0, 543, 150-153.	0.4	0
88	Effects of the preparation conditions and furnace annealing on the structure and morphology of Zn _{0.8} Cd _{0.2} Se thin films. , 2013, , .		0
89	Long term ageing changes in structure and morphology of nanocrystalline Zn _x Cd _{1-x} Se thin films. , 2015, , .		0
90	Raman Study of Compositional Variations in Zn _x Cd _{1-x} Se Films Prepared by Thermal Vacuum Evaporation. Journal of Nanoscience and Nanotechnology, 2016, 16, 8513-8518.	0.9	0

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91	Resistive switching behavior of SiO _x layers with Si nanoparticles. Journal of Physics: Conference Series, 2017, 794, 012018.	0.4	0
92	Properties of ZnSe nanocrystalline thin films prepared by thermal evaporation. Journal of Physics: Conference Series, 2021, 1762, 012036.	0.4	0
93	Raman Scattering from Low-Dimensional Semiconductors. , 2005, , 317-322.		0
94	Size-Dependent Absorption and Defect States in CdSe Nanocrystals in Various Multilayer Structures. Journal of Nanoscience and Nanotechnology, 2002, 2, 645-652.	0.9	0