Diana Nesheva

List of Publications by Year in descending order

94 papers	1,206 citations	471509 17 h-index	454955 30 g-index
97 all docs	97 docs citations	97 times ranked	999 citing authors

#	Article	IF	Citations
1	Influence of fast neutron irradiation on the phase composition and optical properties of homogeneous SiOx and composite Siâ€“SiOx thin films. Journal of Materials Science, 2021, 56, 3197-3209.	3.7	2
2	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
3	Properties of ZnSe nanocrystalline thin films prepared by thermal evaporation. Journal of Physics: Conference Series, 2021, 1762, 012036.	0.4	0
4	Modification of surface morphology and lattice order in nanocrystalline ZnO thin films prepared by spin-coating solâ€“gel method. Journal of Sol-Gel Science and Technology, 2021, 100, 55-67.	2.4	5
5	Selective photosensitivity of metalâ€“oxideâ€“semiconductor structures with SiOx layer annealed at high temperature. Journal of Materials Science: Materials in Electronics, 2020, 31, 17412-17421.	2.2	3
6	UV Sensitivity of MOS Structures with Silicon Nanoclusters. Sensors, 2019, 19, 2277.	3.8	7
7	Changes in composite nc-Si-SiO2 thin films caused by 20â€¯MeV electron irradiation. Nuclear Instruments & Methods in Physics Research B, 2019, 458, 159-163.	1.4	2
8	Phase characterization and ethanol adsorption in TiO2 nanotubes anodically grown on Ti6Al4V alloy substrates. Journal of Alloys and Compounds, 2019, 798, 394-402.	5.5	5
9	Room temperature sensitivity of ZnSe nanolayers to ethanol vapours. Journal of Physics: Conference Series, 2019, 1186, 012023.	0.4	2
10	Surface modification and chemical sensitivity of sol gel deposited nanocrystalline ZnO films. Materials Chemistry and Physics, 2018, 209, 165-171.	4.0	18
11	Influence of 20â€‰MeV electron irradiation on the optical properties and phase composition of SiOx thin films. Journal of Applied Physics, 2018, 123, 195303.	2.5	12
12	Resistive switching behavior of SiOxlayers with Si nanoparticles. Journal of Physics: Conference Series, 2017, 794, 012018.	0.4	0
13	â€œCymaticsâ€•of selenium and tellurium films deposited in vacuum on vibrating substrates. Surface and Coatings Technology, 2016, 307, 542-546.	4.8	6
14	Raman Study of Compositional Variations in ZnxCd1â^'xSe Films Prepared by Thermal Vacuum Evaporation. Journal of Nanoscience and Nanotechnology, 2016, 16, 8513-8518.	0.9	0
15	Long term ageing changes in structure and morphology of nanocrystalline ZnxCd1â^'xSe thin films. , 2015, , .		0
16	Application of Metal-Oxide-Semiconductor structures containing silicon nanocrystals in radiation dosimetry. Open Physics, 2015, 13, .	1.7	8
17	Structural, compositional and electrical characterization of Si-rich SiOx layers suitable for application in light sensors. Materials Science in Semiconductor Processing, 2015, 37, 229-234.	4.0	7
18	Effect of the composition and annealing on the electron transport in ZnxCd1â^'xSe nanocrystalline films. Journal of Alloys and Compounds, 2014, 586, 650-655.	5.5	4

#	Article	IF	Citations
19	Gas sensitive ZnO thin films with desired (002) or (100) orientation obtained by ultrasonic spray pyrolysis. Materials Chemistry and Physics, 2014, 148, 712-719.	4.0	17
20	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
21	Effects of the preparation conditions and furnace annealing on the structure and morphology of Zn<inf>0.8</inf>Cd<inf>0.2</inf>Se thin films. , 2013, , .		0
22	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
23	Photoluminescence from SiO_x layers containing amorphous silicon nanoparticles. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 746-751.	1.8	8
24	Characterization of Siâ€“SiOx nanocomposite layers by comparative analysis of computer simulated and experimental infra-red transmission spectra. Thin Solid Films, 2012, 520, 2085-2091.	1.8	8
25	Metal-Oxide-Semiconductor Structures Containing Silicon Nanocrystals for Application in Radiation Dosimeters. Sensor Letters, 2012, 10, 833-837.	0.4	10
26	Photoconductivity and Relaxation Dynamics in Sonochemically Synthesized Assemblies of AgBiS₂ Quantum Dots. Journal of Physical Chemistry C, 2011, 115, 37-46.	3.1	46
27	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
28	Crystal structure and spectral photosensitivity of thermally evaporated ZnxCd1âˆ’xSe thin films. Journal Physics D: Applied Physics, 2011, 44, 415305.	2.8	13
29	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
30	Microstructural characterization of thin SiOx films obtained by physical vapor deposition. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 174, 132-136.	3.5	21
31	Formation of Si Nanocrystals in Thin SiO₂ Films for Memory Device Applications. Materials Science Forum, 2010, 644, 101-104.	0.3	7
32	SPM electrical characterization of Ti/Al â€” Based ohmic contacts for sub-micron devices. , 2010, , .		0
33	Composition and structure of Zn_xCd_{1âˆ’x}Se single layers prepared by thermal evaporation of ZnSe and CdSe. Journal of Physics: Conference Series, 2010, 253, 012035.	0.4	11
34	Characterization of ZnSe Nanolayers by Spectroscopic Ellipsometry. Acta Physica Polonica A, 2009, 116, 708-711.	0.5	5
35	Raman Scattering from ZnSe Nanolayers. Acta Physica Polonica A, 2009, 116, 75-77.	0.5	39
36	Modulated photoconductivity study of nanocrystalline CdSe films. Journal of Non-Crystalline Solids, 2008, 354, 2744-2747.	3.1	2

#	Article	IF	Citations
37	Size-Dependent Properties of Sonochemically Synthesized Three-Dimensional Arrays of Close-Packed Semiconducting AgBiS₂ Quantum Dots. Chemistry of Materials, 2008, 20, 2551-2565.	6.7	77
38	Absorption and transport properties of Si rich oxide layers annealed at various temperatures. Semiconductor Science and Technology, 2008, 23, 045015.	2.0	21
39	MOS structures containing silicon nanoparticles for memory device applications. Journal of Physics: Conference Series, 2008, 113, 012034.	0.4	8
40	Infrared and Photoluminescence Study of Rapidly Thermally Annealed SiO_x Thin Films. Materials Science Forum, 2007, 555, 309-314.	0.3	5
41	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
42	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
43	Dependence of photoluminescence from a-Si nanoparticles on the annealing time and exciting wavelength. Journal of Luminescence, 2007, 126, 7-13.	3.1	2
44	Room temperature photoluminescence from amorphous silicon nanoparticles in SiOx thin films. Journal of Luminescence, 2007, 126, 497-502.	3.1	14
45	Photoreflectance study of multilayer structures of nanocrystalline CdSe in insulator matrix. Thin Solid Films, 2006, 495, 338-342.	1.8	9
46	Computational analysis of thermally stimulated currents in Bi12TiO20 single crystals. Journal of Applied Physics, 2006, 100, 053704.	2.5	4
47	Defect states in CdSe nanocrystalline layers. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 1081-1087.	1.8	2
48	Raman Scattering from Low-Dimensional Semiconductors. , 2005, , 317-322.		0
49	Exciton related resonant Raman scattering from CdSe quantum dots in an amorphous GeS2thin film matrix. Journal of Physics Condensed Matter, 2004, 16, 8221-8232.	1.8	11
50	Rheological, electrical, and microwave properties of polymers with nanosized carbon particles. Journal of Applied Polymer Science, 2004, 92, 2220-2227.	2.6	44
51	Composition and temperature dependence of the low-frequency Raman scattering in Geâ€“Asâ€“S glasses. Journal of Non-Crystalline Solids, 2004, 347, 187-196.	3.1	22
52	Title is missing!. Journal of Materials Science: Materials in Electronics, 2003, 14, 799-800.	2.2	5
53	Study of modified solid surfaces by nanostructured CdSe in SiOxthin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 1070-1074.	0.8	3
54	LiNbO/sub 3/ optical waveguides formed in a new proton source. Journal of Lightwave Technology, 2002, 20, 71-77.	4.6	9

#	Article	IF	Citations
55	Raman scattering and photoluminescence from Si nanoparticles in annealed SiOx thin films. Journal of Applied Physics, 2002, 92, 4678-4683.	2.5	182
56	Nanoparticle layers of CdSe buried in oxide and chalcogenide thin film matrices. Vacuum, 2002, 65, 109-113.	3.5	18
57	Composition, structure and annealing-induced phase separation in SiOx films produced by thermal evaporation of SiO in vacuum. Vacuum, 2002, 68, 1-9.	3.5	46
58	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
59	NANOCRYSTALLINE AND AMORPHOUS THIN FILM SYSTEMS INCLUDING LOW-DIMENSIONAL CHALCOGENIDE MATERIALS. , 2001, , 239-279.		5
60	Formation of CdSe nanoclusters in SiOx thin films. Solid State Communications, 2000, 114, 511-514.	1.9	21
61	Charge transport in CdSe nanocrystalline sublayers of SiOx/CdSe multilayers and composite SiOx-CdSe thin films. Journal of Physics Condensed Matter, 2000, 12, 3967-3974.	1.8	3
62	Experimental studies on the defect states at the interface between nanocrystalline CdSe and amorphous SiOx. Journal of Physics Condensed Matter, 2000, 12, 751-759.	1.8	24
63	Stability of amorphous Se/Se100â^'xTex multilayers: A Raman study. Journal of Applied Physics, 1999, 86, 4964-4970.	2.5	16
64	Photoluminescence of CdSe nanocrystals embedded in a SiOx thin film matrix. Journal of Luminescence, 1999, 82, 233-240.	3.1	28
65	Compositional Dependences of Some Optical and Electrical Properties of the GexAs40â€"xSe60 System. Physica Status Solidi A, 1999, 172, 149-154.	1.7	8
66	Thickness Dependent Photocrystallization in Se/Se70Te30 Amorphous Multilayers. Physica Status Solidi A, 1999, 176, R3-R4.	1.7	2
67	On the structural stability of amorphous Se/CdSe multilayers: a Raman study. Journal of Non-Crystalline Solids, 1998, 224, 283-290.	3.1	24
68	Resonant Raman scattering and photoluminescence inSiOx/CdSemultiple quantum wells. Physical Review B, 1998, 58, 7913-7920.	3.2	25
69	Electrophotographic photoreceptors including selenium-based multilayers. Semiconductor Science and Technology, 1997, 12, 595-599.	2.0	7
70	Nanocrystals of CdSe in thin film matrix. Semiconductor Science and Technology, 1997, 12, 1319-1322.	2.0	24
71	Thermal stability of amorphous multilayers. Solid State Communications, 1997, 103, 431-434.	1.9	3
72	Photoconductivity and recombination in amorphous Se/CdSe multilayers. Thin Solid Films, 1996, 280, 51-55.	1.8	11

#	Article	IF	Citations
73	B12SiO20 monocrystals doped with transition metals. Journal of Physics and Chemistry of Solids, 1995, 56, 241-250.	4.0	13
74	Photovoltaic and Electroluminescent Properties of Stainetched Porous Silicon Based Heterojunctions. Materials Research Society Symposia Proceedings, 1995, 405, 167.	0.1	2
75	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
76	Small-angle X-ray diffraction studies on interface sharpness of amorphous Se/CdSe superlattices. Journal of Non-Crystalline Solids, 1995, 191, 205-208.	3.1	10
77	Band and subband absorption of Se/CdSe amorphous multilayers. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1994, 70, 205-213.	0.6	14
78	Optical spectra of doped Bi12TiO20crystals. Journal of Physics Condensed Matter, 1994, 6, 11167-11175.	1.8	1
79	Some properties of Bi12SiO20:Fe doped crystals. Journal of Physics and Chemistry of Solids, 1994, 55, 889-894.	4.0	9
80	Thin and superthin photoconductive CdSe films deposited at room substrate temperature. Journal of Materials Science, 1993, 28, 2183-2186.	3.7	19
81	Traps and recombination centers in pure and Co-doped Bi12SiO20 crystals. Journal of Physics and Chemistry of Solids, 1993, 54, 857-862.	4.0	9
82	Influence of crystallization on electrical and optical properties of Teî—¸Seî—¸Sn and Teî—¸Seî—¸Snî—¸O films. Journal of Non-Crystalline Solids, 1993, 160, 105-110.	3.1	5
83	Characterization of amorphous selenium sublayers in chalcogenide superlattices by Raman scattering. Solid State Communications, 1992, 82, 959-962.	1.9	10
84	Preparation and characterization of amorphous SeTe/CdSe superlattices and their constituent thin layers. Thin Solid Films, 1992, 213, 230-234.	1.8	46
85	Stepwise optical absorption in amorphous SeTe/CdSe superlattices. Superlattices and Microstructures, 1992, 11, 439-443.	3.1	9
86	Properties of amorphous CdS-crystalline Si junctions. Solid-State Electronics, 1987, 30, 173-176.	1.4	5
87	Properties of laser-beam sputtered CdS thin films. Journal of Materials Science Letters, 1985, 4, 442-444.	0.5	7
88	Influence of annealing on photoinduced phenomena in CdS. Journal Physics D: Applied Physics, 1985, 18, 677-683.	2.8	2
89	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
90	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

#	Article	IF	Citations
91	Photoconductivity of amorphous CdS films. Journal of Non-Crystalline Solids, 1982, 51, 381-388.	3.1	10
92	Radiation Dosimeter Based on Metal-Oxide-Semiconductor Structures Containing Silicon Nanocrystals. Key Engineering Materials, 0, 495, 120-123.	0.4	5
93	Electrical Characterization of MOS Structures with Silicon Nanocrystals Suitable for X-Ray Detection. Key Engineering Materials, 0, 543, 150-153.	0.4	0
94	MOS Structures Containing Si Nanocrystals for Applications in UV Dosimeters. Key Engineering Materials, 0, 605, 380-383.	0.4	1