Nicola Nedev

List of Publications by Year
in descending order

78	648	623734 14	677142 22
papers	citations	h-index	g-index

79	79	79	814
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structural and optical properties of Î²-Ga2O3 thin films grown by plasma-assisted molecular beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, .	1.2	46
2	IR and Raman absorption spectroscopic studies of APCVD, LPCVD and PECVD thin SiN films. Vacuum, 2002, 69, 301-305.	3.5	44
3	Enhanced antifungal activity by disinfected titanium dioxide nanotubes via reduced nano-adhesion bonds. Materials Science and Engineering C, 2017, 76, 59-65.	7.3	37
4	Performances of hafnium oxide produced by radio frequency sputtering for gate dielectric application. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 109, 89-93.	3.5	36
5	Refractive index and bandgap variation in Al2O3-ZnO ultrathin multilayers prepared by atomic layer deposition. Journal of Alloys and Compounds, 2017, 691, 308-315.	5.5	32
6	Radiation dosimeter based on floating gate MOS transistor. Radiation Effects and Defects in Solids, 1991, 116, 155-158.	1.2	28
7	Synthesis of high purity nickel oxide by a modified sol-gel method. Ceramics International, 2019, 45, 11403-11407.	4.8	27
8	Absorption and transport properties of Si rich oxide layers annealed at various temperatures. Semiconductor Science and Technology, 2008, 23, 045015.	2.0	21
9	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
10	Characterization of silicon carbide thin films prepared by VHF-PECVD technology. Journal of Non-Crystalline Solids, 2004, 338-340, 530-533.	3.1	20
11	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
12	Disinfection of titanium dioxide nanotubes using super-oxidized water decrease bacterial viability without disrupting osteoblast behavior. Materials Science and Engineering C, 2016, 60, 239-245.	7.3	19
13	Structural, Optical, and Electrical Characterization of Î²-Ga₂O₃ Thin Films Grown by Plasma-Assisted Molecular Beam Epitaxy Suitable for UV Sensing. Advances in Materials Science and Engineering, 2018, 2018, 1-6.	1.8	18
14	Synthesis, Characterization, and In Situ Antifungal and Cytotoxicity Evaluation of Ascorbic Acid-Capped Copper Nanoparticles. Journal of Nanomaterials, 2019, 2019, 1-10.	2.7	18
15	Controlled antifungal behavior on Ti6Al4V nanostructured by chemical nanopatterning. Materials Science and Engineering C, 2019, 96, 677-683.	7.3	17
16	Structural and electrical characterization of multilayer Al2O3/ZnO nanolaminates grown by atomic layer deposition. Materials Science in Semiconductor Processing, 2017, 71, 290-295.	4.0	14
17	Al2O3-Y2O3 ultrathin multilayer stacks grown by atomic layer deposition as perspective for optical waveguides applications. Optical Materials, 2017, 72, 788-794.	3.6	13
18	Carrier transport in a position sensitive detector based on an ITO/a-Si:H/Pd structure. Sensors and Actuators A: Physical, 2001, 93, 48-51.	4.1	12

#	Article	IF	Citations
19	A position sensitive detector based on an ITO - Si structure. Journal of Physics Condensed Matter, 1997, 9, 4995-5001.	1.8	10
20	Gold, copper and gold/copper bimetallic nanoparticles obtained by focused ion beam sputter deposition and rapid thermal annealing. Vacuum, 2018, 157, 166-172.	3.5	10
21	Metal-Oxide-Semiconductor Structures Containing Silicon Nanocrystals for Application in Radiation Dosimeters. Sensor Letters, 2012, 10, 833-837.	0.4	10
22	A neutron detector based on an ITO/p-Si structure. Vacuum, 2000, 58, 308-314.	3.5	8
23	MOS structures containing silicon nanoparticles for memory device applications. Journal of Physics: Conference Series, 2008, 113, 012034.	0.4	8
24	The Promotion of Antibacterial Effects of Ti6Al4V Alloy Modified with TiO₂Nanotubes Using a Superoxidized Solution. Journal of Nanomaterials, 2015, 2015, 1-9.	2.7	8
25	Application of Metal-Oxide-Semiconductor structures containing silicon nanocrystals in radiation dosimetry. Open Physics, 2015, 13, .	1.7	8
26	Properties of Al2O3 Thin Films Grown by PE-ALD at Low Temperature Using H2O and O2 Plasma Oxidants. Coatings, 2021, 11, 1266.	2.6	8
27	Formation of Si Nanocrystals in Thin SiO₂ Films for Memory Device Applications. Materials Science Forum, 2010, 644, 101-104.	0.3	7
28	Spectroscopic studies of SiO_xfilms irradiated with high energy electrons. Journal of Physics: Conference Series, 2014, 558, 012045.	0.4	7
29	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
30	High energy electron-beam irradiation effects in Si-SiO_xstructures. Journal of Physics: Conference Series, 2016, 682, 012012.	0.4	7
31	UV Sensitivity of MOS Structures with Silicon Nanoclusters. Sensors, 2019, 19, 2277.	3.8	7
32	The Influence of Defect Surface Layers on the Capacitive Properties of MOS Structures. Physica Status Solidi A, 1983, 77, 699-707.	1.7	6
33	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
34	Influence of the bilayer thickness on the optical properties of Al 2 O 3 -Y 2 O 3 dielectric nanolaminate films grown by thermal atomic layer deposition. Materials Research Bulletin, 2017, 87, 14-19.	5.2	6
35	A magnetosensitive dual-emitter dual-base transistor. Sensors and Actuators A: Physical, 1990, 24, 197-202.	4.1	5
36	Radiation Dosimeter Based on Metal-Oxide-Semiconductor Structures Containing Silicon Nanocrystals. Key Engineering Materials, 0, 495, 120-123.	0.4	5

#	Article	IF	Citations
37	Study of SiO${}_{{{x}}}$ (1 < x lt; 2) Thin-Film Optical Waveguides. Journal of Lightwave Technology, 2016, 34, 4926-4932.	4.6	5
38	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
39	Growth of ZnO thin films at low temperature by plasma-enhanced atomic layer deposition using H2O and O2 plasma oxidants. Journal of Materials Science: Materials in Electronics, 2021, 32, 20274-20283.	2.2	5
40	Ultrahigh purity beta gallium oxide microstructures. Ceramics International, 2022, 48, 25322-25325.	4.8	5
41	Three-dimensional modelling of galvanomagnetic effects in lateral magnetotransistor structure. Sensors and Actuators A: Physical, 1992, 30, 105-107.	4.1	4
42	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
43	Synthesis of Carbon Nanofibers with Maghemite via a Modified Sol-Gel Technique. Journal of Nanomaterials, 2017, 2017, 1-10.	2.7	4
44	AC EL STRUCTURES RED LIGHT EMISSION AND THEIR OPTOGALVANIC ANALOGUE. Spectroscopy Letters, 1997, 30, 1155-1163.	1.0	3
45	Memory effect in MOS structures containing amorphous or crystalline silicon nanoparticles. , 2008, , .		3
46	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
47	Electric discharge synthesis of nickel nanoparticles with virtual instrument control. Instrumentation Science and Technology, 2021, 49, 499-508.	1.8	3
48	Effect of oxidation temperature on the properties of NiOx layers for application in optical sensors. Thin Solid Films, 2021, 734, 138849.	1.8	3
49	Lateral magnetotransistor with enhanced emitter injection modulation. Sensors and Actuators A: Physical, 1992, 35, 113-119.	4.1	2
50	The effect of molecular structure on intramolecular anharmonic vibrational mixing and IVR. Journal of Molecular Structure, 1992, 266, 247-254.	3.6	2
51	Modelling the operation of an a-Si:H based position sensitive detector. Journal of Physics Condensed Matter, 1998, 10, 5515-5524.	1.8	2
52	Failure analysis method to study solder wicking phenomena in modern microelectronic devices. Journal of Materials Science: Materials in Electronics, 2014, 25, 609-617.	2.2	2
53	Thin SiO 2 /a-Si:H/SiO 2 multilayer insulators obtained by electron cyclotron resonance chemical vapor deposition at room temperature for possible application in non-volatile memories. Thin Solid Films, 2017, 628, 96-100.	1.8	2
54	Investigation of resistive switching in SiO2 layers with Si nanocrystals. Journal of Physics: Conference Series, 2019, 1186, 012022.	0.4	2

#	Article	IF	Citations
55	UV Dosimeters Based on Metal-Oxide-Semiconductor Structures Containing Si Nanocrystals. Sensor Letters, 2015, 13, 561-564.	0.4	2
56	Bias-stress instabilities in low-temperature thin-film transistors made of Al2O3 and ZnO films deposited by PEALD. Microelectronic Engineering, 2022, , 111788.	2.4	2
57	Sensitivity of the a-Si:H/c-Si structure to alcohol vapors. Sensors and Actuators B: Chemical, 2002, 82, 180-185.	7.8	1
58	Effect of Thermal Annealing on the Electrical Properties of Thin ZrO2 Layers. ECS Transactions, 2008, 13, 179-185.	0.5	1
59	Visible Light Sensor Based on Metal-Oxide-Semiconductor Structure. Key Engineering Materials, 2014, 605, 384-387.	0.4	1
60	Electrical Characterization of Interface Defects in MOS Structures Containing Silicon Nanoclusters. Advanced Materials Research, 2014, 976, 129-132.	0.3	1
61	MOS Structures Containing Si Nanocrystals for Applications in UV Dosimeters. Key Engineering Materials, 0, 605, 380-383.	0.4	1
62	Data mining to predict the average outer diameter of vertically aligned TiO2 nanotubes. Computational Materials Science, 2019, 162, 82-87.	3.0	1
63	Machine learning for predicting the average length of vertically aligned TiO2 nanotubes. AIP Advances, 2020, 10, 075116.	1.3	1
64	Improved Phosphate Conversion Coating of Steel for Corrosion Protection. Innovations in Corrosion and Materials Science, 2016, 6, 49-54.	0.2	1
65	HfO2:Y2O3 ultrathin nanolaminate structures grown by ALD: Bilayer thickness and annealing temperature effects on optical properties. Ceramics International, 2022, 48, 17564-17575.	4.8	1
66	Investigation of the magnetosensitivity of a dual-emitter dual-base structure in oscillator mode of operation. Sensors and Actuators A: Physical, 1993, 39, 19-23.	4.1	0
67	Two-dimensional modelling of a lateral magnetotransistor. Sensors and Actuators A: Physical, 1994, 45, 195-201.	4.1	0
68	The permittivity in a magnetic field of thin SiOx layers containing Fe and Ni. Vacuum, 1996, 47, 1105-1106.	3.5	0
69	Influence of the Rapid Thermal Annealing on the Properties of Thin a-Si Films. Materials Science Forum, 2004, 455-456, 108-111.	0.3	0
70	Sputtering Preparation of Silicon Nitride Thin Films for Gate Dielectric Applications. Materials Science Forum, 2004, 455-456, 69-72.	0.3	0
71	Comparative Study of SiNx and BNx Nanolayers Prepared by Different Chemical Vapor Deposition Methods. ECS Transactions, 2009, 25, 845-851.	0.5	0
72	Electrical characterization of MOS structures with self-organized three-layer gate dielectric containing Si nanocrystals. Journal of Physics: Conference Series, 2010, 253, 012034.	0.4	0

#	Article	IF	Citations
73	Influence of Thermal Annealing on the Properties of Sputtered Si Rich Silicon Oxide Films. Solid State Phenomena, 0, 159, 101-104.	0.3	0
74	Electrical Characterization of MOS Structures with Silicon Nanocrystals Suitable for X-Ray Detection. Key Engineering Materials, 0, 543, 150-153.	0.4	0
75	Resistive switching behavior of SiOxlayers with Si nanoparticles. Journal of Physics: Conference Series, 2017, 794, 012018.	0.4	0
76	Application of Metal-Oxide-Semiconductor Structures for Visible and Near UV Light Sensing. Sensor Letters, 2015, 13, 556-560.	0.4	0
77	DEVELOPMENT OF A MULTILAYER COMPOSITE MATERIAL USING GRAPHENE OXIDE-COATED MILLED GLASS FIBER AS A MATRIX REINFORCEMENT AGENT. Composites: Mechanics, Computations, Applications, 2020, 11, 227-238.	0.3	0
78	Inner diameter measurement of aligned $$hbox {TiO}_2$$ nanotubes by computational image analysis. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	0