Nadiia Korsunska

List of Publications by Year in Descending Order

133 papers	1,150 citations	16 h-index	28 g-index
146 ext. papers	1,226 ext. citations	2.7 avg, IF	3.65 L-index

#	Paper	IF	Citations
133	Thermally Stimulated Evolution of Optical and Structural Properties of Germanium-Doped Alumina Films. *ECS Transactions*, **2020**, 97, 81-90	1	2
132	Optical, structural and electrical characterization of pure ZnO films grown on p-type Si substrates by radiofrequency magnetron sputtering in different atmospheres. *Semiconductor Science and Technology*, **2020**, 35, 095034	1.8	3
131	Redistribution of Tb and Eu ions in ZnO films grown on different substrates under thermal annealing and its impact on Tb-Eu energy transfer. *Applied Surface Science*, **2020**, 528, 146913	6.7	5
130	The mechanism of formation of interface barriers in ZnO:Mn ceramics. *SN Applied Sciences*, **2020**, 2, 1	1.8	5
129	New Paramagnetic Center in Cu-Doped Y-Stabilized ZrO2. *ECS Journal of Solid State Science and Technology*, **2020**, 9, 033002	2	
128	COPROX reactions on copper Y2O3-ZrO2 catalysts prepared by a single step co-precipitation technique. *Applied Catalysis B: Environmental*, **2020**, 278, 119258	21.8	12
127	Effect of plasmon–phonon interaction on the infrared reflection spectra of MgxZn1-xO/Al2O3 structures. *Journal of Materials Science: Materials in Electronics*, **2020**, 31, 7539-7546	2.1	1
126	Phonon-Polariton Excitations in MgZnO/6H-SiC Structures. *Ukrainian Journal of Physics*, **2020**, 65, 162	0.4	0
125	Mn Distribution in ZnO:Mn Ceramics: Influence of Sintering Process and Thermal Annealing. *ECS Journal of Solid State Science and Technology*, **2020**, 9, 103001	2	0
124	Spectroscopic characterization of phase transformation in Ge-rich Al2O3 films grown by magnetron co-sputtering. *Materials Letters*, **2020**, 277, 128306	3.3	1
123	Transformations in the photoluminescent, electrical and structural properties of Tb3+ and Eu3+ co-doped ZnO films under high-temperature annealing. *Journal of Luminescence*, **2020**, 217, 116739	3.8	5
122	Grains, grain boundaries and total ionic conductivity of 10Sc1CeSZ and 8YSZ solid electrolytes affected by crystalline structure and dopant content. *Materials Today: Proceedings*, **2019**, 6, 79-85	1.4	4
121	Investigation of undoped and Tb-doped ZnO films on Al2O3 substrate by infrared reflection method. *Thin Solid Films*, **2019**, 673, 136-140	2.2	7
120	Photoluminescence, conductivity and structural study of terbium doped ZnO films grown on different substrates. *Materials Science in Semiconductor Processing*, **2019**, 94, 51-56	4.3	9
119	The peculiarities of light absorption and light emission in Cu-doped Y-stabilized ZrO2 nanopowders. *Applied Nanoscience (Switzerland)*, **2019**, 9, 965-973	3.3	1
118	Optical and Electrical Properties of Tb:ZnO/SiO2 Structure in the Infrared Spectral Interval. *Ukrainian Journal of Physics*, **2019**, 64, 434	0.4	4
117	The peculiarities of structural and optical properties of HfO2-based films co-doped with silicon and erbium. *Applied Surface Science*, **2019**, 471, 521-527	6.7	5

116	Competition of the self-activated and Mn-related luminescence in ZnS single crystals. *Solid State Communications*, **2018**, 274, 31-35	1.6	1
115	Peculiarities of Thermally Activated Migration of Subvalent Impurities in Cu-Doped Y-Stabilized ZrO2 Nanopowders Produced From Zr Oxychlorides. *Frontiers in Materials*, **2018**, 5,	4	4
114	New insight on the interaction of self-activated and Mn-related emission centers in ZnS. *Semiconductor Science and Technology*, **2017**, 32, 025006	1.8	6
113	Thermo-stimulated evolution of crystalline structure and dopant distribution in Cu-doped Y-stabilized ZrO2 nanopowders. *Materials Research Express*, **2017**, 4, 035024	1.7	8
112	Structural and optical properties of ZnS:Mn micro-powders, synthesized from the charge with a different Zn/S ratio. *Journal of Materials Science: Materials in Electronics*, **2017**, 28, 8569-8578	2.1	6
111	Impurity-Governed Modification of Optical and Structural Properties of ZrO-Based Composites Doped with Cu and Y. *Nanoscale Research Letters*, **2017**, 12, 157	5	8
110	Effect of Cooling Rate on Dopant Spatial Localization and Phase Transformation in Cu-Doped Y-Stabilized ZrO 2 Nanopowders. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2017**, 14, 1700183		2
109	Mechanisms of the degradation of Schottky-barrier photodiodes based on ZnS single crystals. *Semiconductors*, **2016**, 50, 112-119	0.7	2
108	Silicon nanocrystals embedded in oxide films grown by magnetron sputtering. *AIMS Materials Science*, **2016**, 3, 538-561	1.9	3
107	Graded ZnS/ZnSxO1□ heterostructures produced by oxidative photolysis of zinc sulfide: Structure, optical properties and photocatalytic evolution of molecular hydrogen. *Journal of Photochemistry and Photobiology A: Chemistry*, **2016**, 329, 213-220	4.7	7
106	Formation of Cu-related emission centers under thermal doping of ZnS powders with CuCl and CuCl2. *Journal of Luminescence*, **2015**, 165, 94-98	3.8	4
105	Structural and Optical Characterization of ZrO2 and Y2O3-ZrO2 Nanopowders **2015**, 59-67		3
104	Effect of Cu- and Y-Codoping on Structural and Luminescent Properties of Zirconia Based Nanopowders. *ECS Transactions*, **2015**, 66, 313-319	1	3
103	Structural and Luminescent Properties of (Y,Cu)-Codoped Zirconia Nanopowders. *ECS Journal of Solid State Science and Technology*, **2015**, 4, N103-N110	2	8
102	Photoluminescence and structural properties of CdSe quantum dot□gelatin composite films. *Physica B: Condensed Matter*, **2014**, 453, 86-91	2.8	2
101	Nanostructured Y-doped ZrO2 powder: peculiarities of light emission under electron beam excitation. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 1417-1422		8
100	Structure and light emission of Si-rich Al2O3 and Si-rich-SiO2 nanocomposites. *Microelectronic Engineering*, **2014**, 125, 62-67	2.5	3
99	Role of paramagnetic defects in light emission processes in Y-doped ZrO2nanopowders. *Materials Research Express*, **2014**, 1, 045011	1.7	10

98	Correlation between luminescent characteristics and phase composition of ZnS:Cu powder prepared by self-propagating high temperature synthesis. *Journal of Luminescence*, **2014**, 145, 970-975	3.8	4
97	Micro-Raman and micro-photoluminescence study of bio-conjugated core–shell CdSe/ZnS nanocrystals. *Physica B: Condensed Matter*, **2014**, 453, 75-80	2.8	1
96	About the origin of center responsible for Cu-related blue emission band in ZnS:Cu. *Journal of Luminescence*, **2014**, 145, 71-73	3.8	8
95	Si-rich Al2O3 films grown by RF magnetron sputtering: structural and photoluminescence properties versus annealing treatment. *Nanoscale Research Letters*, **2013**, 8, 273	5	9
94	Enhancement of the photoluminescence in CdSe quantum dot–polyvinyl alcohol composite by light irradiation. *Applied Surface Science*, **2013**, 281, 118-122	6.7	19
93	The influence of annealing on structural and photoluminescence properties of silicon-rich Al2O3 films prepared by co-sputtering. *Physica E: Low-Dimensional Systems and Nanostructures*, **2013**, 51, 115-119	3	10
92	The mechanism of the photoluminescence changes in bio-conjugated CdSe/ZnS quantum dots. *Applied Surface Science*, **2013**, 281, 79-83	6.7	5
91	Features of ZnS-powder doping with a Mn impurity during synthesis and subsequent annealing. *Semiconductors*, **2013**, 47, 713-720	0.7	6
90	Comparative Investigation of Structural and Optical Properties of Si-Rich Oxide Films Fabricated by Magnetron Sputtering. *Advanced Materials Research*, **2013**, 854, 117-124	0.5	1
89	Effects of Bio-conjugation and Annealing on the Photoluminescence and Raman Spectra of CdSe/ZnS Quantum Dots. *Materials Research Society Symposia Proceedings*, **2013**, 1534, A113-A119		
88	Photoinduced Photoluminescence Enhancement in CdSe Quantum Dot–Polyvinyl Alcohol Composites. *Materials Research Society Symposia Proceedings*, **2013**, 1534, A145-A150		
87	Photoluminescence and Structural Properties of CdSe Quantum Dot-Polymer Composite Films. *Materials Research Society Symposia Proceedings*, **2013**, 1617, 171-177		
86	Micro-Photoluminescence Study of Bio-conjugated CdSe/ZnS Nanocrystals. *Materials Research Society Symposia Proceedings*, **2013**, 1617, 157-162		
85	Interrelation between Light Emitting and Structural Properties of Si Nanoclusters Embedded in SiO2 and Al2O3 Hosts. *Materials Research Society Symposia Proceedings*, **2013**, 1617, 75-80		1
84	The effect of bio-conjugation on aging of the photoluminescence in CdSeTeZnS core–shell quantum dots. *Superlattices and Microstructures*, **2012**, 51, 353-362	2.8	10
83	Study of thermal stability of CdSe/ZnSe quantum dot heterostructures. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 1768-1771		2
82	Structural transformations in ZnS:Cu in the course of thermal annealing. *Semiconductors*, **2012**, 46, 188-192	0.7	2
81	Modification by thermal annealing of the luminescent characteristics of CdSe quantum dots in gelatin films. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 1779-1782		4

80	Structure and Optical Properties of Magnetron-Sputtered SiOx Layers with Silicon Nanoparticles. *Defect and Diffusion Forum*, **2010**, 303-304, 7-19	0.7	
79	The nature of emission of porous silicon produced by chemical etching. *Semiconductors*, **2010**, 44, 79-83	0.7	9
78	Study of the layer-substrate interface in nc-Si-SiO2-p-Si structures with silicon quantum dots by the method of temperature dependences of photovoltage. *Semiconductors*, **2010**, 44, 1187-1191	0.7	
77	The peculiarities of Si/SiO2 interfaces in the Si–SiO2 systems with Si nanocrystals. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 174, 97-101	3.1	2
76	Peculiarities of the thermal activation of carriers in CdSe/ZnSe QD structures. *Journal of Materials Science: Materials in Electronics*, **2009**, 20, 102-106	2.1	1
75	Structural and luminescent characteristics of macro porous silicon. *Journal of Materials Science: Materials in Electronics*, **2009**, 20, 226-229	2.1	4
74	Si-rich-SiO2 layers with high excess silicon content: Light emission and structural properties. *Physics Procedia*, **2009**, 2, 147-159		1
73	The structure of Si–SiO2 layers with high excess Si content prepared by magnetron sputtering. *Thin Solid Films*, **2009**, 517, 5468-5473	2.2	8
72	Scanning photoluminescent spectroscopy of bioconjugated quantum dots. *Superlattices and Microstructures*, **2009**, 45, 240-248	2.8	11
71	Structural and light emission properties of silicon-based nanostructures with high excess silicon content. *Physica E: Low-Dimensional Systems and Nanostructures*, **2009**, 41, 1015-1018	3	5
70	Effect of conjugation with biomolecules on photoluminescence and structural characteristics of CdSe/ZnS quantum dots. *Semiconductors*, **2009**, 43, 775-781	0.7	6
69	Structure and Optical Properties of Magnetron Sputtered SiOx Layers with Silicon Nanoparticles. *Defect and Diffusion Forum*, **2008**, 272, 87-98	0.7	3
68	Biologically Engineered Quantum Dots for Biomedical Applications. *Materials Research Society Symposia Proceedings*, **2008**, 1095, 80501		
67	Spectroscopic behavior of bioconjugated quantum dots. *Semiconductor Science and Technology*, **2008**, 23, 075045	1.8	10
66	Effect of CdTe monolayer insertion on CdZnTe/ZnTe quantum well characteristics. *Microelectronics Journal*, **2008**, 39, 418-422	1.8	4
65	A new type of structural defects in CdZnSe/ZnSe heterostructures. *Microelectronics Journal*, **2008**, 39, 589-593	1.8	8
64	Depth redistribution of components of SiOx layers prepared by magnetron sputtering in the process of their decomposition. *Thin Solid Films*, **2007**, 515, 6749-6753	2.2	8
63	Investigation of defect structure of InGaNAsSb/GaAs quantum wells. *Materials Science and Engineering C*, **2007**, 27, 1038-1042	8.3	2

62	Growth peculiarities of silicon nanoparticles in an oxide matrix prepared by magnetron sputtering. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2007**, 4, 3061-3065		4
61	Modification of the photoluminescence characteristics of CdZnTe/ZnTe QWs by CdTe monolayer film insertion. *Physica Status Solidi (B): Basic Research*, **2007**, 244, 1700-1705	1.3	7
60	Effect of Various Treatments on Light Emission Properties of Si-Rich-SiOx Structures. *Solid State Phenomena*, **2007**, 131-133, 65-70	0.4	1
59	Thermal activation of excitons in asymmetric InAs dots-in-a-well InxGa1−xAs□GaAs structures. *Journal of Applied Physics*, **2007**, 101, 024323	2.5	71
58	Effect of growth temperature on the luminescent and structural properties of InGaAsSbN/GaAs quantum wells for 1.3 □m telecom application. *Thin Solid Films*, **2006**, 515, 786-789	2.2	3
57	The effect of oxidation on the efficiency and spectrum of photoluminescence of porous silicon. *Semiconductors*, **2006**, 40, 598-604	0.7	10
56	Investigation of aging process of Si□SiOx structures with silicon quantum dots. *Journal of Applied Physics*, **2005**, 98, 113515	2.5	8
55	Raman scattering characterization of macro- and nanoporous silicon. *Applied Surface Science*, **2005**, 243, 30-35	6.7	13
54	Radiative channel competition in silicon nanocrystallites. *Journal of Luminescence*, **2005**, 115, 117-121	3.8	24
53	Study of strain relaxation in CdSe/ZnSe nanostructures. *Journal of Crystal Growth*, **2005**, 275, e2281-e2287	1.6	3
52	Temperature activated 1.2 eV photoluminescence in semi-insulating SiC wafers. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2005**, 2, 1892-1896		
51	Defect and nano-crystallite photoluminescence in Si-SiOx systems. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2005**, 2, 2990-2993		2
50	Stability of Emission Properties of Silicon Nanostructures. *Solid State Phenomena*, **2005**, 108-109, 59-64	0.4	3
49	Reversible and non-reversible photo-enhanced luminescence in CdSe/ZnS quantum dots. *Semiconductor Science and Technology*, **2005**, 20, 876-881	1.8	50
48	Role of Cation Vacancy-Related Defects in Self-Assembling of CdSe Quantum Dots. *Defect and Diffusion Forum*, **2004**, 230-232, 55-66	0.7	1
47	High-temperature photoluminescence spectroscopy in p-type SiC. *Semiconductor Science and Technology*, **2004**, 19, 833-838	1.8	14
46	Effect of structural imperfections on luminescence of ZnCdSe/ZnSe quantum wells. *Journal of Alloys and Compounds*, **2004**, 371, 202-205	5.7	
45	Luminescence and EPR studies of defects in Si-SiO2films. *EPJ Applied Physics*, **2004**, 27, 285-287	1.1	11

44	Investigation of intrinsic defects and their distribution in CdSe/ZnSe quantum dot structures. *Materials Science and Engineering C*, **2003**, 23, 715-719	8.3	1
43	Redistribution of mobile point defects in CdS crystals under ultrasound treatment. *Physica B: Condensed Matter*, **2003**, 340-342, 258-262	2.8	6
42	Nature of visible luminescence of co-sputtered Si–SiOx systems. *Physica B: Condensed Matter*, **2003**, 340-342, 1119-1123	2.8	11
41	Mechanism of photoexcitation of oxide-related emission bands in Si–SiO2 systems. *Materials Science and Engineering C*, **2003**, 23, 691-696	8.3	9
40	Nature of visible luminescence and its excitation in Si–SiOx systems. *Journal of Luminescence*, **2003**, 102-103, 705-711	3.8	43
39	Anti-Stokes photoluminescence and structural defects in CdSe/ZnSe nanostructures. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2003**, 101, 255-258	3.1	4
38	Investigation of inhomogeneous broadening of CdSe/ZnSe nanoisland photoluminescence band by resonant excitation methods. *Physica E: Low-Dimensional Systems and Nanostructures*, **2003**, 17, 93-94	3	2
37	The influence of defect drift in external electric field on green luminescence of ZnO single crystals. *Journal of Luminescence*, **2003**, 102-103, 733-736	3.8	116
36	Some Peculiarities of Impurity Diffusion in CdS Crystals. *Physica Status Solidi (B): Basic Research*, **2002**, 229, 269-273	1.3	5
35	The interrelation of surface relief of porous silicon with specific features of Raman spectra. *Semiconductors*, **2002**, 36, 558-563	0.7	4
34	Optical investigations of the influence of point defects on quantum dots in CdSe/ZnSe heterostructures. *Journal of Physics Condensed Matter*, **2002**, 14, 13375-13380	1.8	8
33	USXES AND OPTICAL PHENOMENA IN Si LOW-DIMENSIONAL STRUCTURES DEPENDENT ON MORPHOLOGY AND SILICON OXIDE COMPOSITION ON Si SURFACE. *Surface Review and Letters*, **2002**, 09, 1047-1052	1.1	10
32	Influence of Different Atmospheres on the Life Time of Porous Silicon Light-Emitting Devices. *Materials Research Society Symposia Proceedings*, **2002**, 737, 665		
31	Ballistic effect in red photoluminescence of Si wires. *Physical Review B*, **2002**, 65,	3.3	37
30	Defect-related luminescence of Si/SiO2layers. *Journal of Physics Condensed Matter*, **2002**, 14, 13217-13221	1.8	25
29	The role of oxidation on porous silicon photoluminescence and its excitation. *Thin Solid Films*, **2001**, 381, 88-93	2.2	46
28	Investigation of lattice defects by means of their drift under electric field. *Physica B: Condensed Matter*, **2001**, 308-310, 967-970	2.8	5
27	Optical characterization of CdZnTe/ZnTe heterostructures modified by electron or X-ray irradiation. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2001**, 80, 193-196	3.1	2

26	Ultrasound Stimulated Defect Reactions in Semiconductors. *Solid State Phenomena*, **2001**, 85-86, 317-336	0.4	8
25	Lateral and depth inhomogeneities in Zn-based heterostructures grown on GaAs by MBE. *Thin Solid Films*, **2000**, 367, 184-188	2.2	2
24	Effect of adsorption and desorption processes on photoluminescence excitation spectra of porous silicon. *Applied Surface Science*, **2000**, 166, 349-353	6.7	7
23	Emission associated with extended defects in epitaxial ZnTe/GaAs layers and multilayer structures. *Semiconductors*, **2000**, 34, 11-16	0.7	
22	Features of the long-term photo emf relaxation in a heteroepitaxial ZnSe-GaAs structure. *Technical Physics Letters*, **2000**, 26, 190-192	0.7	
21	Three approaches to surface substance role investigation in porous silicon photoluminescence and its excitation. *Journal of Physics and Chemistry of Solids*, **2000**, 61, 937-941	3.9	29
20	Complex nature of the red photoluminescence band and peculiarities of its excitation in porous silicon. *Applied Surface Science*, **2000**, 167, 197-204	6.7	25
19	Suboxide-related centre as the source of the intense red luminescence of porous Si. *Microelectronic Engineering*, **2000**, 51-52, 485-493	2.5	16
18	OH-related emitting centers in interface layer of porous silicon. *Physica B: Condensed Matter*, **1999**, 273-274, 955-958	2.8	28
17	Two ways of porous Si photoluminescence excitation. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1998**, 51, 162-165	3.1	10
16	Two sources of excitation of photoluminescence of porous silicon. *Semiconductors*, **1997**, 31, 773-776	0.7	8
15	Photoluminescence and EPR studies of porous silicon. *Journal of Luminescence*, **1997**, 72-74, 400-402	3.8	10
14	Large CdS single crystals with a high optical strength. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1995**, 34, 12-17	3.1	8
13	Excitation mechanism of porous silicon luminescence: the role of sensitizers. *Thin Solid Films*, **1995**, 255, 185-187	2.2	4
12	Transformation of excitonic and DA luminescence spectra of GaP:N light-emitting structures on the introduction of dislocations. *Semiconductor Science and Technology*, **1992**, 7, 385-390	1.8	0
11	Generation of metastable shallow donors induced by cooling in hexagonal II-VI semiconductors. *Semiconductor Science and Technology*, **1992**, 7, 92-96	1.8	
10	The influence of carrier trapping on defect reaction activation energy in semiconductors (pseudo-effect of recombination enhanced diffusion). *Journal of Physics and Chemistry of Solids*, **1992**, 53, 469-474	3.9	3
9	Laser-Induced Defect Formation in ZnxCd1−xSe Solid Solutions and Its Influence on Electrophysical Properties. *Physica Status Solidi A*, **1991**, 125, 127-132		3

8	Transformation of exciton and donor-acceptor luminescence spectra of p+-layers of gallium phosphide light-emitting structures on introduction of dislocations. *Journal of Applied Spectroscopy* , **1990**, 53, 1161-1166	0.7	
7	Point defect formation in IIⅣI semiconductors at pulsed laser irradiation. *Journal of Crystal Growth*, **1990**, 101, 285-288	1.6	4
6	Influence of annealing on photoinduced phenomena in CdS. *Journal Physics D: Applied Physics*, **1985**, 18, 677-683	3	2
5	The recharge-enhanced transformations of donor-acceptor pairs and clusters in CdS. *Journal of Physics and Chemistry of Solids*, **1982**, 43, 475-479	3.9	35
4	Alteration of the luminescence spectra of sintered layers of CdS:Cu:Cl due to photostimulated processes. *Journal of Applied Spectroscopy*, **1981**, 35, 1101-1103	0.7	
3	Photosensitivity degradation mechanism in CdS:Cu single crystals. *Physica Status Solidi A*, **1980**, 60, 565-572		40
2	Electrodiffusion of shallow donors in CdS crystals. *Journal of Physics C: Solid State Physics*, **1980**, 13, 2975-2978		29
1	Some peculiarities of thermostimulated conductivity and optical quenching of the photocurrent in crystals with the auger excitation of recombination centres. *Physica Status Solidi A*, **1978**, 50, 767-770		2