Dmitry A Zatsepin

List of Publications by Year
in descending order

80 papers	1,093 citations	430754 18 h-index	501076 28 g-index
82 all docs	82 docs citations	82 times ranked	1443 citing authors

#	Article	IF	Citations
1	Photoemission study of the metal-insulator transition inCuIr2S4. Physical Review B, 1997, 55, R15979-R15982.	1.1	88
2	Electronic structure, charge transfer, and intrinsic luminescence of gadolinium oxide nanoparticles: Experiment and theory. Applied Surface Science, 2018, 436, 697-707.	3.1	63
3	Atomic structure, electronic states, and optical properties of epitaxially grown Î²-Ga2O3 layers. Superlattices and Microstructures, 2018, 120, 90-100.	1.4	60
4	Valence states of copper ions and electronic structure ofLiCu2O2. Physical Review B, 1998, 57, 4377-4381.	1.1	48
5	XPS and DFT study of pulsed Bi-implantation of bulk and thin-films of ZnOâ€"The role of oxygen imperfections. Applied Surface Science, 2016, 387, 1093-1099.	3.1	41
6	Sn-loss effect in a Sn-implanted a-SiO2 host-matrix after thermal annealing: A combined XPS, PL, and DFT study. Applied Surface Science, 2016, 367, 320-326.	3.1	35
7	XPS-and-DFT analyses of the Pb 4f â€" Zn 3s and Pb 5d â€" O 2s overlapped ambiguity contributions to the final electronic structure of bulk and thin-film Pb-modulated zincite. Applied Surface Science, 2017, 405, 129-136.	3.1	30
8	Electronic structure of magnetic moleculesV15:â€,â€LSDA+U calculations, x-ray emissions, and photoelectron spectra. Physical Review B, 2003, 67, .	1.1	29
9	Electronic structure ofSr2RuO4: X-ray fluorescence emission study. Physical Review B, 1998, 57, 1558-1562.	1.1	28
10	XPS and DFT study of Sn incorporation into ZnO and TiO₂host matrices by pulsed ion implantation. Physica Status Solidi (B): Basic Research, 2015, 252, 1890-1896.	0.7	28
11	Soft electronic structure modulation of surface (thin-film) and bulk (ceramics) morphologies of TiO 2 -host by Pb-implantation: XPS-and-DFT characterization. Applied Surface Science, 2017, 400, 110-117.	3.1	28
12	The MRO-accompanied modes of Re-implantation into SiO2-host matrix: XPS and DFT based scenarios. Journal of Alloys and Compounds, 2017, 728, 759-766.	2.8	28
13	XPS analysis and valence band structure of a lowâ€dimensional SiO₂/Si system after Si⁺ ion implantation. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1658-1661.	0.8	27
14	Study of the Structural Characteristics of 3d Metals Cr, Mn, Fe, Co, Ni, and Cu Implanted in ZnO and TiO₂â€"Experiment and Theory. Journal of Physical Chemistry C, 2014, 118, 28143-28151.	1.5	26
15	Functionalization of graphene and few-layer graphene films in an hydrofluoric acid aqueous solution. Nanotechnologies in Russia, 2014, 9, 51-59.	0.7	24
16	Bi-doped silica glass: A combined XPS â€" DFT study of electronic structure and pleomorphic imperfections. Journal of Alloys and Compounds, 2020, 829, 154459.	2.8	23
17	Mechanism for interfacial adhesion strength of an ion beam mixed Cu/polyimide with a thin buffer layer. Applied Physics Letters, 1999, 74, 522-524.	1.5	22
18	Electronic structure and photoluminescence properties of Zn-ion implanted silica glass before and after thermal annealing. Journal of Non-Crystalline Solids, 2016, 432, 183-188.	1.5	20

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19	Octahedral conversion of a-SiO₂ host matrix by pulsed ion implantation. Physica Status Solidi (B): Basic Research, 2015, 252, 2185-2190.	0.7	19
20	Predicting the band gap of ternary oxides containing 3<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>d</mml:mi><mml:mn>10</mml:mn></mml:msup></mml:math>and 3<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>d</mml:mi><mml:mn>0</mml:mn></mml:msup></mml:math>metals. Physical Review B, 2012, 86, .	1.1	18
21	X-ray emission spectra and electronic structure of CuIr2S4 and CuIr2Se4. Solid State Communications, 1998, 108, 235-239.	0.9	17
22	Electronic band gap reduction and intense luminescence in Co and Mn ion-implanted SiO2. Journal of Applied Physics, 2014, 115, .	1.1	16
23	Interaction of Cu3dand O2pstates inMg1â^'xCuxOsolid solutions with NaCl structure:â€ƒX-ray photoelectron and x-ray emission study. Physical Review B, 2000, 62, 4922-4926.	1.1	15
24	An intrinsic luminescence in binary lead silicate glasses. Optical Materials, 2012, 34, 807-811.	1.7	15
25	Local Structure of Fe Impurity Atoms in ZnO: Bulk versus Surface. Journal of Physical Chemistry C, 2014, 118, 5336-5345.	1.5	15
26	Soft-x-ray-emission study of the influence ofLi+-doping, irradiation, and plastic deformation on CuO. Physical Review B, 1999, 59, 211-214.	1.1	14
27	Electronic structure of FeCr2S4and Fe0.5Cu0.5Cr2S4. Journal of Physics Condensed Matter, 2000, 12, 5411-5421.	0.7	14
28	Phase transformations in CuO caused by bombardment by He+ ions and by the action of spherical shock waves. Physics of the Solid State, 2002, 44, 1380-1387.	0.2	14
29	Structural defects and electronic structure of N-ion implanted TiO 2 : Bulk versus thin film. Applied Surface Science, 2015, 355, 984-988.	3.1	13
30	Pleomorphic structural imperfections caused by pulsed Bi-implantation in the bulk and thin-film morphologies of TiO2. Applied Surface Science, 2016, 379, 223-229.	3.1	13
31	Room temperature p-orbital magnetism in carbon chains and the role of group IV, V, VI, and VII dopants. Nanoscale, 2018, 10, 11186-11195.	2.8	13
32	Luminescence of modified nonbridging oxygen hole centers in silica and alkali silicate glasses. Glass Physics and Chemistry, 2008, 34, 709-715.	0.2	12
33	The formation of Tiâ€“O tetrahedra and band gap reduction in SiO2 via pulsed ion implantation. Journal of Applied Physics, 2013, 113, 103704.	1.1	12
34	Bulk In2O3 crystals grown by chemical vapour transport: a combination of XPS and DFT studies. Journal of Materials Science: Materials in Electronics, 2019, 30, 18753-18758.	1.1	12
35	Soft Xâ€ray emission spectroscopy of lowâ€dimensional SiO₂/Si interfaces after Si⁺ ion implantation and ion beam mixing. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 743-747.	0.8	11
36	Local atomic configurations, energy structure, and optical properties of implantation defects in Gd-doped silica glass: An XPS, PL, and DFT study. Journal of Alloys and Compounds, 2019, 796, 77-85.	2.8	10

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37	Electronic Structure and Optical Absorption in Gdâ€implanted Silica Glasses. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800522.	0.8	10
38	Effect of long-term storage on the electronic structure of semiconducting silicon wafers implanted by rhenium ions. Journal of Materials Science, 2021, 56, 2103-2112.	1.7	10
39	Nonthermal decomposition of nitrous oxide in a high-current pulsed discharge. Plasma Physics Reports, 2003, 29, 517-527.	0.3	9
40	Iron Nanoparticles in Amorphous SiO[sub 2]: X-ray Emission and Absorption Spectra. Physics of the Solid State, 2005, 47, 754.	0.2	9
41	Structural defects induced by Fe-ion implantation in TiO2. Journal of Applied Physics, 2014, 115, .	1.1	9
42	Structural and electron-optical properties of transparent nanocrystalline MgAl2O4 spinel implanted with copper ions. Journal of Alloys and Compounds, 2020, 834, 154993.	2.8	9
43	Ion-beam induced quasi-dynamic continual disorder in Bi-implanted Hongan silica glass. Journal of Non-Crystalline Solids, 2021, 563, 120818.	1.5	8
44	Quality assessment of GaN epitaxial films: Acidification scenarios based on XPS-and-DFT combined study. Applied Surface Science, 2021, 563, 150308.	3.1	8
45	Formation of Ge0 and GeO nanoclusters in Ge+-implanted SiO2/Si thin-film heterostructures under rapid thermal annealing. Applied Surface Science, 2015, 349, 780-784.	3.1	7
46	Pb+ implanted SiO2 probed by soft x-ray emission and absorption spectroscopy. Journal of Non-Crystalline Solids, 2011, 357, 3381-3384.	1.5	6
47	Electronic Properties of Carbyne Chains: Experiment and Theory. Journal of Physical Chemistry C, 2021, 125, 8268-8273.	1.5	6
48	VALENCE BAND SPECTRA OF BaCo1â^'xNixS2. Journal of Physics and Chemistry of Solids, 1998, 59, 1459-1467.	1.9	5
49	Sulphur Precipitation in Annealed Sulphur-Doped Nickel Studied by Fluorescent X-ray Emission. Materials Transactions, JIM, 1998, 39, 570-573.	0.9	5
50	X-ray emission study of the electronic structure of nanocrystalline Al2O3. Physics of the Solid State, 2004, 46, 2134-2138.	0.2	5
51	Vibrational structure of electronic states in alkali-silicate glasses. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 2912-2915.	0.8	5
52	Ion irradiation induced reduction of Fe3+to Fe2+and Fe0in triethoxysilane films. Journal of Physics Condensed Matter, 2005, 17, 7023-7028.	0.7	5
53	Energy band structure and X-ray spectra of phenakite Be2SiO4. Physics of the Solid State, 2008, 50, 615-620.	0.2	5
54	Stationary and nonstationary absorption in lead silicate glasses with short-range order inversion. Optical Materials, 2011, 33, 601-606.	1.7	5

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55	Enhanced clustering tendency of Cu-impurities with a number of oxygen vacancies in heavy carbon-loaded TiO2 - the bulk and surface morphologies. Solid State Sciences, 2017, 71, 130-138.	1.5	5
56	Quasi-Dynamic Approach in Structural Disorder Analysis: An Ion-Beam-Irradiated Silica. Journal of Physical Chemistry C, 2019, 123, 29324-29330.	1.5	5
57	Ion-beam synthesis of copper nanoparticles in transparent ceramics of aluminum-magnesium spinel. Vacuum, 2020, 175, 109243.	1.6	5
58	X-ray emission study of ion beam mixed Cu/Al films on polyimide. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 593-596.	0.9	4
59	The effect of high iron-ion implantation doses on the X-ray emission spectra of silicon. Physics of the Solid State, 2006, 48, 218-223.	0.2	4
60	Effect of high doses on the Si L 2,3 x-ray emission spectra of silicon implanted with iron ions under steady-state conditions. Physics of the Solid State, 2007, 49, 75-81.	0.2	4
61	X-ray emission and photoluminescence spectroscopy of nanostructured silica with implanted copper ions. Physics of the Solid State, 2008, 50, 2322-2326.	0.2	4
62	Interplay of ballistic and chemical effects in the formation of structural defects for Sn and Pb implanted silica. Journal of Non-Crystalline Solids, 2012, 358, 3187-3192.	1.5	4
63	Excitation energy dependence of SL2,3 X-ray fluorescent emission of BaNiS2 near the S 2p threshold. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 235, 191-194.	0.9	3
64	Structural ordering in a silica glass matrix under Mn ion implantation. Journal of Physics Condensed Matter, 2012, 24, 185402.	0.7	3
65	Luminescence of intrinsic localized states in alkali silicate glasses excited by pulsed electron beam. Journal of Surface Investigation, 2014, 8, 726-733.	0.1	3
66	Plasma Synthesis and XPS Attestation of Thin-Film Carbon Coatings with Predetermined sp-Hybridization. Physics of Atomic Nuclei, 2018, 81, 1660-1663.	0.1	3
67	Pulsed Cathodoluminescence and Vibrational Structure of Localized Electronic States in Alkali Silicate Glasses. Glass Physics and Chemistry, 2004, 30, 400-405.	0.2	2
68	Electronic Structure and Magnetic Properties of Iron Doped TiO₂ (Rutile): XPS Measurements and CPA Calculations. Solid State Phenomena, 2014, 215, 28-34.	0.3	2
69	Photoelectron spectra and chemical bonding in chained carbon nanocomposites. AIP Conference Proceedings, 2018, , .	0.3	2
70	Energy band gaps and excited states in Si QD/SiO_x/R_{yâ€Š}O_z (Râ€‰â€‰=â€‰â€‰Si, Al, Zr) suboxide superlattices. Journal of Physics Condensed Matter, 2019, 31, 415301.	1.7	2
71	Intrinsic Defectâ€Assisted UVâ€“Visible Energy Conversion in Gd 2 O 3 :Er Nanoparticles. Physica Status Solidi (B): Basic Research, 2019, 256, 1800356.	0.7	2
72	Local Environment of Fluorine Atoms in Sr[sub 2]Ca[sub n][sub â€“ 1]Cu[sub n]O[sub 2][sub n][sub + Î´]F[sub 2 Â±][sub y] (n = 2, 3) High-Temperature Superconductors Grown under High Pressure. Physics of the Solid State, 2005, 47, 1211.	0.2	1

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73	Pulsed cathodoluminescence of two-alkali sodium potassium silicate glasses. Glass Physics and Chemistry, 2006, 32, 28-32.	0.2	1
74	Formation of the buffer layer of silicon suboxides SiO x in the Si/SiO2 low-dimensional heterosystem after Si+ ion implantation: Si L 2, 3 X-ray emission spectra. Physics of the Solid State, 2009, 51, 2241-2246.	0.2	1
75	Electronic structure of the Si-C-N amorphous films. Physics of the Solid State, 2011, 53, 1806-1810.	0.2	1
76	Formation of Mn-oxide clusters in Mn+-implanted SiO2 probed by soft X-ray emission and absorption spectroscopy. Vacuum, 2012, 86, 1615-1617.	1.6	1
77	Modification of MgAl2O4 Electron-Optic Properties by Pulsed Ion Beam. Physics of Atomic Nuclei, 2019, 82, 1558-1564.	0.1	1
78	Specific features of steady-state implantation of crystalline silicon with a molecular oxygen-nitrogen beam: Si L 2, 3 x-ray emission spectra. Physics of the Solid State, 2008, 50, 146-151.	0.2	0
79	Si+ ion implantation in silica and ion beam mixing in SiO2/Si interfaces. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1398-1402.	0.8	0
80	Evidence of random distribution of carbon impurities in oxygen sites of zinc oxide. Physica B: Condensed Matter, 2018, 545, 172-175.	1.3	0