

Dmitry A Zatsepin

List of Publications by Year in descending order

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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	Effect of long-term storage on the electronic structure of semiconducting silicon wafers implanted by rhenium ions. <i>Journal of Materials Science</i> , 2021, 56, 2103-2112.	1.7	10
2	Electronic Properties of Carbyne Chains: Experiment and Theory. <i>Journal of Physical Chemistry C</i> , 2021, 125, 8268-8273.	1.5	6
3	Ion-beam induced quasi-dynamic continual disorder in Bi-implanted Hongan silica glass. <i>Journal of Non-Crystalline Solids</i> , 2021, 563, 120818.	1.5	8
4	Quality assessment of GaN epitaxial films: Acidification scenarios based on XPS-and-DFT combined study. <i>Applied Surface Science</i> , 2021, 563, 150308.	3.1	8
5	Bi-doped silica glass: A combined XPS & DFT study of electronic structure and pleomorphic imperfections. <i>Journal of Alloys and Compounds</i> , 2020, 829, 154459.	2.8	23
6	Ion-beam synthesis of copper nanoparticles in transparent ceramics of aluminum-magnesium spinel. <i>Vacuum</i> , 2020, 175, 109243.	1.6	5
7	Structural and electron-optical properties of transparent nanocrystalline MgAl ₂ O ₄ spinel implanted with copper ions. <i>Journal of Alloys and Compounds</i> , 2020, 834, 154993.	2.8	9
8	Energy band gaps and excited states in Si QD/SiO ₂ /SiO ₂ /SiO ₂ (R ₂ O ₃) ₂ (R=Si, Al, Zr) suboxide superlattices. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 415301.	2.7	2
9	Quasi-Dynamic Approach in Structural Disorder Analysis: An Ion-Beam-Irradiated Silica. <i>Journal of Physical Chemistry C</i> , 2019, 123, 29324-29330.	1.5	5
10	Bulk In ₂ O ₃ crystals grown by chemical vapour transport: a combination of XPS and DFT studies. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 18753-18758.	1.1	12
11	Intrinsic Defect-Assisted UV-Visible Energy Conversion in Gd ₂ O ₃ :Er Nanoparticles. <i>Physica Status Solidi (B): Basic Research</i> , 2019, 256, 1800356.	0.7	2
12	Local atomic configurations, energy structure, and optical properties of implantation defects in Gd-doped silica glass: An XPS, PL, and DFT study. <i>Journal of Alloys and Compounds</i> , 2019, 796, 77-85.	2.8	10
13	Modification of MgAl ₂ O ₄ Electron-Optic Properties by Pulsed Ion Beam. <i>Physics of Atomic Nuclei</i> , 2019, 82, 1558-1564.	0.1	1
14	Electronic Structure and Optical Absorption in Gd-Implanted Silica Glasses. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1800522.	0.8	10
15	Electronic structure, charge transfer, and intrinsic luminescence of gadolinium oxide nanoparticles: Experiment and theory. <i>Applied Surface Science</i> , 2018, 436, 697-707.	3.1	63
16	Plasma Synthesis and XPS Attestation of Thin-Film Carbon Coatings with Predetermined sp-Hybridization. <i>Physics of Atomic Nuclei</i> , 2018, 81, 1660-1663.	0.1	3
17	Photoelectron spectra and chemical bonding in chained carbon nanocomposites. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	2
18	Room temperature p-orbital magnetism in carbon chains and the role of group IV, V, VI, and VII dopants. <i>Nanoscale</i> , 2018, 10, 11186-11195.	2.8	13

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19	Atomic structure, electronic states, and optical properties of epitaxially grown \hat{I}^2 -Ga ₂ O ₃ layers. Superlattices and Microstructures, 2018, 120, 90-100.	1.4	60
20	Evidence of random distribution of carbon impurities in oxygen sites of zinc oxide. Physica B: Condensed Matter, 2018, 545, 172-175.	1.3	0
21	XPS-and-DFT analyses of the Pb 4f $\hat{a}^{\prime\prime}$ Zn 3s and Pb 5d $\hat{a}^{\prime\prime}$ 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
22	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
23	The MRO-accompanied modes of Re-implantation into SiO ₂ -host matrix: XPS and DFT based scenarios. Journal of Alloys and Compounds, 2017, 728, 759-766.	2.8	28
24	Enhanced clustering tendency of Cu-impurities with a number of oxygen vacancies in heavy carbon-loaded TiO ₂ - the bulk and surface morphologies. Solid State Sciences, 2017, 71, 130-138.	1.5	5
25	Pleomorphic structural imperfections caused by pulsed Bi-implantation in the bulk and thin-film morphologies of TiO ₂ . Applied Surface Science, 2016, 379, 223-229.	3.1	13
26	XPS and DFT study of pulsed Bi-implantation of bulk and thin-films of ZnO $\hat{a}^{\prime\prime}$ The role of oxygen imperfections. Applied Surface Science, 2016, 387, 1093-1099.	3.1	41
27	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
28	Sn-loss effect in a Sn-implanted a-SiO ₂ host-matrix after thermal annealing: A combined XPS, PL, and DFT study. Applied Surface Science, 2016, 367, 320-326.	3.1	35
29	Octahedral conversion of a-SiO ₂ host matrix by pulsed ion implantation. Physica Status Solidi (B): Basic Research, 2015, 252, 2185-2190.	0.7	19
30	XPS and DFT study of Sn incorporation into ZnO and TiO ₂ host matrices by pulsed ion implantation. Physica Status Solidi (B): Basic Research, 2015, 252, 1890-1896.	0.7	28
31	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
32	Formation of GeO and GeO nanoclusters in Ge ⁺ -implanted SiO ₂ /Si thin-film heterostructures under rapid thermal annealing. Applied Surface Science, 2015, 349, 780-784.	3.1	7
33	Structural defects induced by Fe-ion implantation in TiO ₂ . Journal of Applied Physics, 2014, 115, .	1.1	9
34	Electronic band gap reduction and intense luminescence in Co and Mn ion-implanted SiO ₂ . Journal of Applied Physics, 2014, 115, .	1.1	16
35	Functionalization of graphene and few-layer graphene films in an hydrofluoric acid aqueous solution. Nanotechnologies in Russia, 2014, 9, 51-59.	0.7	24
36	Study of the Structural Characteristics of 3d Metals Cr, Mn, Fe, Co, Ni, and Cu Implanted in ZnO and TiO ₂ $\hat{a}^{\prime\prime}$ Experiment and Theory. Journal of Physical Chemistry C, 2014, 118, 28143-28151.	1.5	26

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37	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
38	Local Structure of Fe Impurity Atoms in ZnO: Bulk versus Surface. Journal of Physical Chemistry C, 2014, 118, 5336-5345.	1.5	15
39	Electronic Structure and Magnetic Properties of Iron Doped TiO ₂ (Rutile): XPS Measurements and CPA Calculations. Solid State Phenomena, 2014, 215, 28-34.	0.3	2
40	The formation of Ti ⁴⁺ O tetrahedra and band gap reduction in SiO ₂ via pulsed ion implantation. Journal of Applied Physics, 2013, 113, 103704.	1.1	12
41	Formation of Mn-oxide clusters in Mn ⁺ -implanted SiO ₂ probed by soft X-ray emission and absorption spectroscopy. Vacuum, 2012, 86, 1615-1617.	1.6	1
42	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
43	Structural ordering in a silica glass matrix under Mn ion implantation. Journal of Physics Condensed Matter, 2012, 24, 185402.	0.7	3
44	Predicting the band gap of ternary oxides containing 3 ^d and 3 ^d metals. Physical Review B, 2012, 86, .	1.1	18
45	An intrinsic luminescence in binary lead silicate glasses. Optical Materials, 2012, 34, 807-811.	1.7	15
46	Pb ⁺ implanted SiO ₂ probed by soft x-ray emission and absorption spectroscopy. Journal of Non-Crystalline Solids, 2011, 357, 3381-3384.	1.5	6
47	Electronic structure of the Si-C-N amorphous films. Physics of the Solid State, 2011, 53, 1806-1810.	0.2	1
48	XPS analysis and valence band structure of a low-dimensional SiO ₂ /Si system after Si ⁺ ion implantation. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1658-1661.	0.8	27
49	Si ⁺ ion implantation in silica and ion beam mixing in SiO ₂ /Si interfaces. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1398-1402.	0.8	0
50	Stationary and nonstationary absorption in lead silicate glasses with short-range order inversion. Optical Materials, 2011, 33, 601-606.	1.7	5
51	Soft X-ray emission spectroscopy of low-dimensional SiO ₂ /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
52	Formation of the buffer layer of silicon suboxides SiO _x in the Si/SiO ₂ 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
53	Luminescence of modified nonbridging oxygen hole centers in silica and alkali silicate glasses. Glass Physics and Chemistry, 2008, 34, 709-715.	0.2	12
54	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

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55	Energy band structure and X-ray spectra of phenakite Be ₂ SiO ₄ . Physics of the Solid State, 2008, 50, 615-620.	0.2	5
56	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
57	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
58	Pulsed cathodoluminescence of two-alkali sodium potassium silicate glasses. Glass Physics and Chemistry, 2006, 32, 28-32.	0.2	1
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	Iron Nanoparticles in Amorphous SiO ₂ : X-ray Emission and Absorption Spectra. Physics of the Solid State, 2005, 47, 754.	0.2	9
61	Local Environment of Fluorine Atoms in Sr ₂ Ca _n [¹ Cu _n O ₂] _n [⁺ F ₂] _y (n = 2, 3) High-Temperature Superconductors Grown under High Pressure. Physics of the Solid State, 2005, 47, 1211.	0.2	1
62	Ion irradiation induced reduction of Fe ³⁺ to Fe ²⁺ and Fe ⁰ in triethoxysilane films. Journal of Physics Condensed Matter, 2005, 17, 7023-7028.	0.7	5
63	X-ray emission study of the electronic structure of nanocrystalline Al ₂ O ₃ . Physics of the Solid State, 2004, 46, 2134-2138.	0.2	5
64	Pulsed Cathodoluminescence and Vibrational Structure of Localized Electronic States in Alkali Silicate Glasses. Glass Physics and Chemistry, 2004, 30, 400-405.	0.2	2
65	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
66	Nonthermal decomposition of nitrous oxide in a high-current pulsed discharge. Plasma Physics Reports, 2003, 29, 517-527.	0.3	9
67	Electronic structure of magnetic molecules V ₁₅ : $\hat{\epsilon}$, LSDA+U calculations, x-ray emissions, and photoelectron spectra. Physical Review B, 2003, 67, .	1.1	29
68	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
69	Interaction of Cu ₃ d and O ₂ p states in Mg _{1-x} Cu _x O solid solutions with NaCl structure: $\hat{\epsilon}$ X-ray photoelectron and x-ray emission study. Physical Review B, 2000, 62, 4922-4926.	1.1	15
70	Electronic structure of FeCr ₂ S ₄ and Fe _{0.5} Cu _{0.5} Cr ₂ S ₄ . Journal of Physics Condensed Matter, 2000, 12, 5411-5421.	0.7	14
71	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
72	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

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73	Soft-x-ray-emission study of the influence of Li ⁺ -doping, irradiation, and plastic deformation on CuO. Physical Review B, 1999, 59, 211-214.	1.1	14
74	VALENCE BAND SPECTRA OF BaCo _{1-x} Ni _x S ₂ . Journal of Physics and Chemistry of Solids, 1998, 59, 1459-1467.	1.9	5
75	X-ray emission spectra and electronic structure of Cu _{1.2} S ₄ and Cu _{1.2} Se ₄ . Solid State Communications, 1998, 108, 235-239.	0.9	17
76	Electronic structure of Sr ₂ RuO ₄ : X-ray fluorescence emission study. Physical Review B, 1998, 57, 1558-1562.	1.1	28
77	Valence states of copper ions and electronic structure of LiCu ₂ O ₂ . Physical Review B, 1998, 57, 4377-4381.	1.1	48
78	Sulphur Precipitation in Annealed Sulphur-Doped Nickel Studied by Fluorescent X-ray Emission. Materials Transactions, JIM, 1998, 39, 570-573.	0.9	5
79	Photoemission study of the metal-insulator transition in Cu _{1.2} S ₄ . Physical Review B, 1997, 55, R15979-R15982.	1.1	88
80	Excitation energy dependence of SL _{2,3} X-ray fluorescent emission of BaNiS ₂ near the S 2p threshold. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 235, 191-194.	0.9	3