Andriy Kovalskiy

List of Publications by Year
in descending order

74 papers	1,170 citations	304743 22 h-index	434195 31 g-index
74 all docs	74 docs citations	74 times ranked	838 citing authors

#	Article	IF	Citations
1	Structure of Se-rich As-Se glasses by high-resolution x-ray photoelectron spectroscopy. Physical Review B, 2007, 76, .	3.2	81
2	Chalcogenide glass e-beam and photoresists for ultrathin grayscale patterning. Journal of Micro/Nanolithography, MEMS, and MOEMS, 2009, 8, 043012.	0.9	58
3	Structural model of homogeneous Asâ€“S glasses derived from Raman spectroscopy and high-resolution XPS. Philosophical Magazine, 2010, 90, 4489-4501.	1.6	52
4	In Situ Measurements of X-Ray-Induced Silver Diffusion into a Ge30Se70Thin Film. Journal of the American Ceramic Society, 2008, 91, 760-765.	3.8	49
5	Oxygen incorporation into GST phase-change memory matrix. Applied Surface Science, 2015, 332, 533-541.	6.1	47
6	Development of chalcogenide glass photoresists for gray scale lithography. Journal of Non-Crystalline Solids, 2006, 352, 589-594.	3.1	42
7	Structural paradigm of Se-rich Geâ€“Se glasses by high-resolution x-ray photoelectron spectroscopy. Journal of Applied Physics, 2009, 105, 103704.	2.5	42
8	An XPS study of the early stages of silver photodiffusion in Ag/a-As2S3 films. Journal of Non-Crystalline Solids, 2006, 352, 562-566.	3.1	36
9	Mechanism of the dissolution of Asâ€“S chalcogenide glass in n-butylamine and its influence on the structure of spin coated layers. Journal of Non-Crystalline Solids, 2015, 426, 125-131.	3.1	32
10	Thermoelectrical degradation processes in NTC thermistors for in-rush current protection of electronic circuits. Microelectronics Reliability, 2001, 41, 773-777.	1.7	31
11	Fabrication of nano-gratings in arsenic sulphide films. Journal of Non-Crystalline Solids, 2007, 353, 1427-1430.	3.1	30
12	Radiation-induced changes of amorphous As₂S₃physical properties. Radiation Effects and Defects in Solids, 1995, 133, 1-4.	1.2	27
13	Long-term physical ageing in Asâ€“Se glasses with short chalcogen chains. Journal of Physics Condensed Matter, 2008, 20, 245101.	1.8	27
14	Coordination defects in bismuth-modified arsenic selenide glasses: High-resolution x-ray photoelectron spectroscopy measurements. Physical Review B, 2008, 77, .	3.2	26
15	Effect of gamma-irradiation on the optical properties of GexAs40âˆ’xS60 glasses. Physica B: Condensed Matter, 1999, 271, 242-247.	2.7	24
16	A Study of Reversible Î³-Induced Structural Transformations in Vitreous Ge23.5Sb11.8S64.7by High-Resolution X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry B, 2006, 110, 22930-22934.	2.6	24
17	Technological modification of spinel-based CuxNi1â€“xâ€“yCo2yMn2â€“yO4 ceramics. Journal of the European Ceramic Society, 2001, 21, 2067-2070.	5.7	23
18	Comparative study of electron- and photo-induced structural transformations on the surface of As35S65 amorphous thin films. Thin Solid Films, 2008, 516, 7511-7518.	1.8	23

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19	Evolution of chemical structure during silver photodiffusion into chalcogenide glass thin films. Journal of Non-Crystalline Solids, 2009, 355, 1924-1929.	3.1	23
20	Topology and chemical order in As Ge Se1â^'2 glasses: A high-resolution X-ray photoelectron spectroscopy study. Journal of Non-Crystalline Solids, 2011, 357, 3454-3460.	3.1	23
21	Temperature-dependent structural relaxation in As40Se60 glass. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 3032-3036.	2.1	23
22	Reversible radiation effects in vitreous As2S3. I. changes of physical properties. Physica Status Solidi A, 1994, 144, 277-283.	1.7	22
23	IR impurity absorption in Sb2S3â€"GeS2(Ge2S3) chalcogenide glasses. Infrared Physics and Technology, 2000, 41, 41-45.	2.9	22
24	Structure of SbxGe40-xSe60 glasses around 2.67 average coordination number. Journal of Non-Crystalline Solids, 2012, 358, 163-167.	3.1	22
25	In search of energy landscape for network glasses. Applied Physics Letters, 2011, 98, .	3.3	21
26	Short-range order evolution in S-rich Geâ€"S glasses by X-ray photoelectron spectroscopy. Journal of Non-Crystalline Solids, 2011, 357, 1797-1803.	3.1	18
27	Effect of the interface glass on electrical performance of screen printed Ag thick-film contacts of Si solar cells. Thin Solid Films, 2010, 518, e111-e113.	1.8	17
28	Threshold restoration effects in Î³-irradiated chalcogenide glasses. Journal of Non-Crystalline Solids, 2005, 351, 993-997.	3.1	16
29	Chemical order in GexAsySe1-x-y glasses probed by high resolution X-ray photoelectron spectroscopy. Journal of Applied Physics, 2014, 115, .	2.5	15
30	Nanostructurization effects in PVP-stabilized tetra-arsenic tetra-sulfide As4S4 nanocomposites. Materials Chemistry and Physics, 2017, 186, 251-260.	4.0	15
31	Role of local structure in the phase change of Geâ€"Te films. Chemical Physics Letters, 2012, 534, 58-61.	2.6	14
32	Chemical order in Ga or Sb modified germanium sulfide glasses around stoichiometry: High-resolution XPS and Raman studies. Journal of Non-Crystalline Solids, 2018, 499, 237-244.	3.1	14
33	Medium range order and structural relaxation in Asâ€"Se network glasses through FSDP analysis. Materials Chemistry and Physics, 2015, 153, 432-442.	4.0	13
34	Phenomenology of Î³-irradiation-induced changes in optical properties of chalcogenide semiconductor glasses: A case study of binary arsenic sulfides. Journal of Non-Crystalline Solids, 2018, 498, 315-322.	3.1	13
35	Effect of Co 60 Î³-irradiation on the optical properties of Asâ€"Geâ€"S glasses. Journal of Non-Crystalline Solids, 2003, 326-327, 130-134.	3.1	12
36	On the mechanism of gray scale patterning of Ag-containing As2S3 thin films. Journal of Physics and Chemistry of Solids, 2007, 68, 920-925.	4.0	12

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37	Structural organization of As-rich selenide glasses. Solid State Communications, 2013, 165, 22-26.	1.9	11
38	Structural features of spin-coated thin films of binary AsSâˆ’ chalcogenide glass system. Thin Solid Films, 2015, 589, 642-648.	1.8	11
39	Structural origin of electrical conductivity of copper lithium metaphosphate glasses. Journal of Non-Crystalline Solids, 2016, 447, 91-97.	3.1	11
40	Structural origin of surface transformations in arsenic sulfide thin films upon UV-irradiation. Applied Surface Science, 2017, 394, 604-612.	6.1	10
41	Thermal modification of ceramic composites based on manganese-containing cube spinels. Materials Letters, 1996, 29, 195-198.	2.6	9
42	On the problem of relaxation for radiation-induced optical effects in some ternary chalcogenide glasses. Radiation Effects and Defects in Solids, 2001, 153, 211-219.	1.2	9
43	Nanovolume positron traps in glassy-like As2Se3. Journal of Non-Crystalline Solids, 2005, 351, 1077-1081.	3.1	9
44	Combined high-resolution XPS and EXAFS study of Ag photodissolution in a-As2S3 thin film. Journal of Non-Crystalline Solids, 2010, 356, 2332-2336.	3.1	9
45	Investigation of interdiffusion in Sb/As2S3 nano-layered structures by high-resolution X-ray photoelectron spectroscopy. Thin Solid Films, 2011, 519, 3437-3442.	1.8	9
46	Direct investigation of silver photodissolution dynamics and reversibility in arsenic trisulphide thin films by atomic force microscopy. Nanotechnology, 2013, 24, 125706.	2.6	8
47	Intrinsic phase separation in low-temperature quenched arsenic trisulfide glass. Journal of Non-Crystalline Solids, 2015, 430, 16-20.	3.1	8
48	Valence band structure of binary chalcogenide vitreous semiconductors by high-resolution XPS. Semiconductors, 2011, 45, 423-426.	0.5	7
49	Wavelength Dependence of Photostructural Transformations in As2S3 Thin Films. Physics Procedia, 2013, 44, 75-81.	1.2	7
50	Application of Positron Annihilation Lifetime Technique for Î³-Irradiation Stresses Study in Chalcogenide Vitreous Semiconductors. Advanced Engineering Materials, 2002, 4, 571-574.	3.5	6
51	Chalcogenide glass thin film resists for grayscale lithography. Proceedings of SPIE, 2009, , .	0.8	6
52	<title>Gamma irradiation effect on the optical properties of GexSb40-xS60 chalcogenide glasses</title>. , 2001, , .		5
53	Electronic and atomic structure of amorphous thin films with high-resolution XPS: Examples of applications & limitations. Journal of Non-Crystalline Solids, 2013, 377, 155-158.	3.1	5
54	Parameterization of photobleaching and photodarkening in-situ kinetics in thermally deposited GeSe2 thin films. Thin Solid Films, 2021, 726, 138659.	1.8	5

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55	Milling-driven nanonization of As S100- alloys from second glass-forming region: The case of lower-crystalline arsenicals (56<x<66). Journal of Non-Crystalline Solids, 2020, 549, 120339.	3.1	4
56	Milling-driven nanonization of As S100- alloys from second glass-forming region: The case of higher-crystalline arsenicals (51<x<56). Journal of Non-Crystalline Solids, 2020, 539, 120086.	3.1	4
57	A nanoscale characterisation of extended defects in glassy-like As2Se3 semiconductors with PAL technique. Physica B: Condensed Matter, 2003, 340-342, 960-964.	2.7	3
58	Positron lifetime study of native vacancy-like defects in chalcogenide glasses. Radiation Physics and Chemistry, 2003, 68, 557-559.	2.8	3
59	Interpretation of Radiation-Induced Phenomena in Chalcogenide Glasses of Geâ€“Sbâ€“S System Using Free Volume and Covalent Chemical Bonds Concepts. Solid State Phenomena, 2003, 90-91, 241-246.	0.3	3
60	On the instability effects in radiation-sensitive chalcogenide glasses. Radiation Measurements, 2007, 42, 941-943.	1.4	3
61	Chalcogenide glass resists for lithography. , 2014, , 562-596.		3
62	The Structure of Gaï£¿Sbï£¿Se Glasses by Highâ€Resolution Xâ€Ray Photoelectron Spectroscopy. Physica Status Solidi (B): Basic Research, 2021, 258, 2100074.	1.5	3
63	Fabrication of freestanding SWCNT networks for fast microbolometric focal plane array sensor. Proceedings of SPIE, 2010, , .	0.8	2
64	Study of As50Se50 Thin Film Dissolution Kinetics in Amine based Solutions. Physics Procedia, 2013, 44, 114-119.	1.2	2
65	<title>IR optical properties of Sb2S3-GeS2(Ge2S3) chalcogenide glasses and effect of gamma irradiation</title>. , 2001, , .		1
66	Compositional Trends of Radiation-Induced Effects in Ternary Systems of Chalcogenide Glasses. Radiation Effects and Defects in Solids, 2003, 158, 391-397.	1.2	1
67	Radiation-induced defects in chalcogenide glasses characterized by combined optical spectroscopy, XPS and PALS methods. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1147-1150.	0.8	1
68	Replacing Lab Report Grading by Online Lab Quizzes. Physics Teacher, 2020, 58, 55-57.	0.3	1
69	On the paradigm of physical aging in stoichiometric As2Se3 glass as illusory manifestation of anti-aging ability in optimally-constrained covalent networks. Coordination Chemistry Reviews, 2021, 449, 214211.	18.8	1
70	Modified Positron Annihilation Model for Glassy-Like As2Se3. Acta Physica Polonica A, 2005, 107, 832-836.	0.5	1
71	Coordination positron-trapping centers in vitreous chalcogenide semiconductors. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 795-798.	0.8	0
72	<title>Phenomenological model of radiation-induced optical effects in Sb<formula><inf><roman>2</roman></inf></formula>S<formula><inf><roman>3</roman></inf></formula>-GeS<formula><inf><roma chalcogenide glasses</title>. , 2003, , .		0

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73	Photoresponse of inorganic-organic thin film composites based on chalcogenide glasses. AIP Conference Proceedings, 2018, , .	0.4	0
74	Remedial insight on ageing of glass through the study of ancient manâ€made artefacts. Archaeometry, 2021, 63, 312-326.	1.3	0