

Sergei Vlassov

List of Publications by Year in descending order

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1248
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#	ARTICLE	IF	CITATIONS
1	Kinking in Semiconductor Nanowires: A Review. <i>Crystal Growth and Design</i> , 2022, 22, 871-892.	1.4	6
2	Unraveling the Structure and Properties of Layered and Mixed ReO_3 - WO_3 Thin Films Deposited by Reactive DC Magnetron Sputtering. <i>ACS Omega</i> , 2022, 7, 1827-1837.	1.6	3
3	Antimicrobial Activity of Commercial Photocatalytic Sanitizing Window Glass. <i>Catalysts</i> , 2022, 12, 197.	1.6	5
4	Thermal, Mechanical, and Acoustic Properties of Polydimethylsiloxane Filled with Hollow Glass Microspheres. <i>Materials</i> , 2022, 15, 1652.	1.3	8
5	CO_2 reduction to formate on an affordable bismuth metal-organic framework based catalyst. <i>Journal of CO_2 Utilization</i> , 2022, 59, 101937.	3.3	12
6	The role of Al_2O_3 interlayer in the synthesis of $\text{ZnS}/\text{Al}_2\text{O}_3/\text{MoS}_2$ core-shell nanowires. <i>Journal of Alloys and Compounds</i> , 2022, 918, 165648.	2.8	4
7	Preparation of functional Ga_2S_3 and Ga_2Se_3 shells around Ga_2O_3 nanowires via sulfurization or selenization. <i>Optical Materials</i> , 2022, 131, 112675.	1.7	1
8	Low-density PDMS foams by controlled destabilization of thixotropic emulsions. <i>Journal of Colloid and Interface Science</i> , 2022, 626, 265-275.	5.0	8
9	Application of polydimethylsiloxane in photocatalyst composite materials: A review. <i>Reactive and Functional Polymers</i> , 2021, 158, 104781.	2.0	27
10	Iron-Containing Nitrogen-Doped Carbon Nanomaterials Prepared via NaCl Template as Efficient Electrocatalysts for the Oxygen Reduction Reaction. <i>ChemElectroChem</i> , 2021, 8, 2288-2297.	1.7	7
11	Silver Nanowire-Based Catalysts for Oxygen Reduction Reaction in Alkaline Solution. <i>ChemCatChem</i> , 2021, 13, 4364-4371.	1.8	10
12	The Adhesion-Enhanced Contact Electrification and Efficiency of Triboelectric Nanogenerators. <i>Macromolecular Materials and Engineering</i> , 2020, 305, 1900638.	1.7	21
13	Fused Hybrid Linkers for Metal-Organic Framework-Derived Bifunctional Oxygen Electrocatalysts. <i>ACS Applied Energy Materials</i> , 2020, 3, 152-157.	2.5	19
14	Understanding the Conversion Process of Magnetron-Deposited Thin Films of Amorphous ReO_3 to Crystalline ReO_3 upon Thermal Annealing. <i>Crystal Growth and Design</i> , 2020, 20, 6147-6156.	1.4	3
15	Transparent ZnO -coated polydimethylsiloxane-based material for photocatalytic purification applications. <i>Journal of Coatings Technology Research</i> , 2020, 17, 573-579.	1.2	8
16	The effect of heat treatment on the morphology and mobility of Au nanoparticles. <i>Beilstein Journal of Nanotechnology</i> , 2020, 11, 61-67.	1.5	4
17	Hydrophilic polydimethylsiloxane-based sponges for dewatering applications. <i>Materials Letters</i> , 2020, 263, 127278.	1.3	7
18	Stronger Reductive Environment in Solvothermal Synthesis Leads to Improved Ga Doping Efficiency in ZnO Nanocrystals and Enhanced Plasmonic Absorption. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019, 216, 1900335.	0.8	0

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19	Sol-gel auto-combustion synthesis of Ca ₂ Fe ₂ O ₅ brownmillerite nanopowders and thin films for advanced oxidation photoelectrochemical water treatment in visible light. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 103224.	3.3	14
20	Mechanical characterisation of pentagonal gold nanowires in three different test configurations: A comparative study. <i>Micron</i> , 2019, 124, 102686.	1.1	7
21	Abrupt elastic-to-plastic transition in pentagonal nanowires under bending. <i>Beilstein Journal of Nanotechnology</i> , 2019, 10, 2468-2476.	1.5	3
22	High performance catalysts based on Fe/N co-doped carbide-derived carbon and carbon nanotube composites for oxygen reduction reaction in acid media. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 12636-12648.	3.8	38
23	Low-friction nanojoint prototype. <i>Nanotechnology</i> , 2018, 29, 195707.	1.3	1
24	Iron and Nitrogen Co-doped Carbide-Derived Carbon and Carbon Nanotube Composite Catalysts for Oxygen Reduction Reaction. <i>ChemElectroChem</i> , 2018, 5, 1827-1836.	1.7	42
25	Fast-Response Single-Nanowire Photodetector Based on ZnO/WS ₂ Core/Shell Heterostructures. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 13869-13876.	4.0	60
26	Au nanowire junction breakup through surface atom diffusion. <i>Nanotechnology</i> , 2018, 29, 015704.	1.3	27
27	Adhesion and Mechanical Properties of PDMS-Based Materials Probed with AFM: A Review. <i>Reviews on Advanced Materials Science</i> , 2018, 56, 62-78.	1.4	36
28	Tuning adhesion forces between functionalized gold colloidal nanoparticles and silicon AFM tips: role of ligands and capillary forces. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 660-670.	1.5	14
29	Formation and characterization of microcantilevers produced from ionic liquid by electron beam irradiation. <i>Journal of Molecular Liquids</i> , 2017, 229, 45-50.	2.3	3
30	A comparative study of heterostructured CuO/CuWO ₄ nanowires and thin films. <i>Journal of Crystal Growth</i> , 2017, 480, 78-84.	0.7	17
31	Enhanced flexibility and electron-beam-controlled shape recovery in alumina-coated Au and Ag core-shell nanowires. <i>Nanotechnology</i> , 2017, 28, 505707.	1.3	15
32	Mechanical properties of individual fiber segments of electrospun lignocellulose-reinforced poly(vinyl alcohol). <i>Journal of Applied Polymer Science</i> , 2017, 134, .	1.3	6
33	Synthesis and characterization of ZnO/ZnS/MoS ₂ core-shell nanowires. <i>Journal of Crystal Growth</i> , 2017, 459, 100-104.	0.7	20
34	Phosphonium-based ionic liquids mixed with stabilized oxide nanoparticles as highly promising lubricating oil additives. <i>Proceedings of the Estonian Academy of Sciences</i> , 2017, 66, 174.	0.9	4
35	Complex tribomechanical characterization of ZnO nanowires: nanomanipulations supported by FEM simulations. <i>Nanotechnology</i> , 2016, 27, 335701.	1.3	19
36	Effect of cobalt doping on the mechanical properties of ZnO nanowires. <i>Materials Characterization</i> , 2016, 121, 40-47.	1.9	8

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37	Unexpected Epitaxial Growth of a Few WS ₂ Layers on {111̄...00} Facets of ZnO Nanowires. Journal of Physical Chemistry C, 2016, 120, 21451-21459.	1.5	22
38	Structural factor in bending testing of fivefold twinned nanowires revealed by finite element analysis. Physica Scripta, 2016, 91, 115701.	1.2	4
39	Mechanical and structural characterizations of gamma- and alpha-alumina nanofibers. Materials Characterization, 2015, 107, 119-124.	1.9	25
40	Phase and structural transformations in annealed copper coatings in relation to oxide whisker growth. Applied Surface Science, 2015, 346, 423-427.	3.1	9
41	Phase transformations in icosahedral small copper particles during their annealing in different gas media. Bulletin of the Russian Academy of Sciences: Physics, 2015, 79, 1098-1100.	0.1	1
42	Elastic Properties of Oxide Nanowhiskers Prepared from Electrolytically Deposited Copper. Russian Physics Journal, 2015, 58, 843-847.	0.2	1
43	Metal nanodumbbells for nanomanipulations and tribological experiments. Physica Scripta, 2015, 90, 094007.	1.2	4
44	Plasmonic photoluminescence enhancement by silver nanowires. Physica Scripta, 2015, 90, 094008.	1.2	2
45	Mechanical characterization of TiO ₂ nanofibers produced by different electrospinning techniques. Materials Characterization, 2015, 100, 98-103.	1.9	25
46	Electron beam induced growth of silver nanowhiskers. Journal of Crystal Growth, 2015, 410, 63-68.	0.7	11
47	Mechanical properties of sol-gel derived SiO ₂ nanotubes. Beilstein Journal of Nanotechnology, 2014, 5, 1808-1814.	1.5	9
48	Shape Restoration Effect in Ag-SiO ₂ Core-Shell Nanowires. Nano Letters, 2014, 14, 5201-5205.	4.5	26
49	Some aspects of formation and tribological properties of silver nanodumbbells. Nanoscale Research Letters, 2014, 9, 186.	3.1	11
50	Elasticity and yield strength of pentagonal silver nanowires: In situ bending tests. Materials Chemistry and Physics, 2014, 143, 1026-1031.	2.0	50
51	Analysis of static friction and elastic forces in a nanowire bent on a flat surface: A comparative study. Tribology International, 2014, 72, 31-34.	3.0	15
52	Manipulation of nanoparticles of different shapes inside a scanning electron microscope. Beilstein Journal of Nanotechnology, 2014, 5, 133-140.	1.5	24
53	Real-time manipulation of ZnO nanowires on a flat surface employed for tribological measurements: Experimental methods and modeling. Physica Status Solidi (B): Basic Research, 2013, 250, 305-317.	0.7	26
54	Integrated carbon nanotube fibre-quartz tuning fork biosensor. Proceedings of the Estonian Academy of Sciences, 2012, 61, 48.	0.9	4

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55	Modeling of kinetic and static friction between an elastically bent nanowire and a flat surface. <i>Journal of Materials Research</i> , 2012, 27, 580-585.	1.2	22
56	In situ measurements of ultimate bending strength of CuO and ZnO nanowires. <i>European Physical Journal B</i> , 2012, 85, 1.	0.6	19
57	The effect of substrate roughness on the static friction of CuO nanowires. <i>Surface Science</i> , 2012, 606, 1393-1399.	0.8	23
58	Simultaneous measurement of static and kinetic friction of ZnO nanowires in situ with a scanning electron microscope. <i>Micron</i> , 2012, 43, 1140-1146.	1.1	11
59	Application of Tuning Fork Sensors for In-situ Studies of Dynamic Force Interactions Inside Scanning and Transmission Electron Microscopes. <i>Medziagotyra</i> , 2012, 18, .	0.1	1
60	Real-time measurements of sliding friction and elastic properties of ZnO nanowires inside a scanning electron microscope. <i>Solid State Communications</i> , 2011, 151, 1244-1247.	0.9	22
61	Real-time manipulation of gold nanoparticles inside a scanning electron microscope. <i>Solid State Communications</i> , 2011, 151, 688-692.	0.9	17
62	Pentagonal Nanorods and Nanoparticles with Mismatched Shell Layers. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 6136-6143.	0.9	9
63	Crystal mismatched layers in pentagonal nanorods and nanoparticles. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 288-298.	0.7	24
64	Sol-Gel Derived SnO ₂ Nanometric Fibers. <i>Materials Research Society Symposia Proceedings</i> , 2007, 1017, 111.	0.1	0