## Pavel B Sorokin

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

68 5,060 146 30 h-index g-index papers citations 6,012 6.3 157 5.75 avg, IF L-index ext. citations ext. papers

#	Paper	IF	Citations
146	Optomechanical Properties of MoSe Nanosheets as Revealed by Transmission Electron Microscopy <i>Nano Letters</i> , <b>2022</b> ,	11.5	1
145	Intermediate carbon phase. New experimental data and atomic model. <i>Diamond and Related Materials</i> , <b>2022</b> , 123, 108825	3.5	О
144	Nanostructuring of CVD graphene by high-energy heavy ions. <i>Diamond and Related Materials</i> , <b>2022</b> , 123, 108880	3.5	2
143	Insights into fullerene polymerization under the high pressure: The role of endohedral Sc dimer. <i>Carbon</i> , <b>2022</b> , 189, 37-45	10.4	0
142	Bio-inspired mineral-hydrogel hybrid coating on hydrophobic PVDF membrane boosting oil/water emulsion separation. <i>Separation and Purification Technology</i> , <b>2022</b> , 285, 120383	8.3	19
141	Quantum Transport of the 2D Surface State in a Nonsymmorphic Semimetal. <i>Nano Letters</i> , <b>2021</b> , 21, 4887-4893	11.5	5
140	Two-Dimensional Diamond-Diamane: Current State and Further Prospects. <i>Nano Letters</i> , <b>2021</b> , 21, 5475	5- <u>54.8</u> 4	23
139	Biomimetic nanoparticle-engineered superwettable membranes for efficient oil/water separation. Journal of Membrane Science, <b>2021</b> , 618, 118525	9.6	91
138	Investigation of atomically thin films: state of the art. <i>Physics-Uspekhi</i> , <b>2021</b> , 64, 28-47	2.8	1
137	Extended UV detection bandwidth: h-BN/Al powder nanocomposites photodetectors sensitive in a middle UV region due to localized surface plasmon resonance effect. <i>Europhysics Letters</i> , <b>2021</b> , 133, 28	002	1
136	Highly efficient bilateral doping of single-walled carbon nanotubes. <i>Journal of Materials Chemistry C</i> , <b>2021</b> , 9, 4514-4521	7.1	4
135	Semiconductor nanochannels in metallic carbon nanotubes by thermomechanical chirality alteration <i>Science</i> , <b>2021</b> , 374, 1616-1620	33.3	8
134	High yield production of ultrathin fibroid semiconducting nanowire of Ta2Pd3Se8. <i>Nano Research</i> , <b>2020</b> , 13, 1627-1635	10	8
133	Insights into the regularity of the formation of 2D 3d transition metal monocarbides. <i>Nanoscale</i> , <b>2020</b> , 12, 13407-13413	7.7	4
132	Stability and gas sensing properties of TaXM (X = Pd, Pt; M = S, Se) nanoribbons: a first-principles investigation. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 14651-14659	3.6	1
131	Mechanical Properties of the Interface of Al/SiC Heteroparticles and Their Composites: a Theoretical and Experimental Study. <i>Technical Physics Letters</i> , <b>2020</b> , 46, 342-345	0.7	1
130	Specific Response of the Atomic and Electronic Structure of Ta2Pd3Se8 and Ta2Pt3Se8 Nanoribbons to the Uniaxial Strain. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 7539-7543	3.8	6

129	On the Edge of Bilayered Graphene: Unexpected Atomic Geometry and Specific Electronic Properties. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 5871-5876	6.4	3
128	Young's Modulus and Tensile Strength of TiC MXene Nanosheets As Revealed by TEM Probing, AFM Nanomechanical Mapping, and Theoretical Calculations. <i>Nano Letters</i> , <b>2020</b> , 20, 5900-5908	11.5	29
127	Spintronic Devices: Graphene/Half-Metallic Heusler Alloy: A Novel Heterostructure toward High-Performance Graphene Spintronic Devices (Adv. Mater. 6/2020). <i>Advanced Materials</i> , <b>2020</b> , 32, 20	7 <del>66</del> 43	
126	Carbon at the nanoscale: Ultrastiffness and unambiguous definition of incompressibility. <i>Carbon</i> , <b>2020</b> , 160, 228-235	10.4	7
125	Adhesion of Single-Walled Carbon Nanotube Thin Films with Different Materials. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 504-509	6.4	6
124	Non-chemical fluorination of hexagonal boron nitride by high-energy ion irradiation.  Nanotechnology, <b>2020</b> , 31, 125705	3.4	2
123	Graphene/Half-Metallic Heusler Alloy: A Novel Heterostructure toward High-Performance Graphene Spintronic Devices. <i>Advanced Materials</i> , <b>2020</b> , 32, e1905734	24	9
122	Mussel-inspired structure evolution customizing membrane interface hydrophilization. <i>Journal of Membrane Science</i> , <b>2020</b> , 612, 118471	9.6	25
121	GrapheneDiamond Transformation: Nano-Thermodynamics of Chemically Induced GrapheneDiamond Transformation (Small 47/2020). <i>Small</i> , <b>2020</b> , 16, 2070256	11	1
120	Nano-Thermodynamics of Chemically Induced Graphene-Diamond Transformation. <i>Small</i> , <b>2020</b> , 16, e20	00 <u>47</u> 82	14
119	Influence of Native Defects on the Electronic and Magnetic Properties of CVD Grown MoSe2 Single Layers. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 24855-24864	3.8	9
118	Two-Dimensional CuO Inside the Supportive Bilayer Graphene Matrix. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 17459-17465	3.8	7
117	Ultrasmall diamond nanoparticles with unusual incompressibility. <i>Diamond and Related Materials</i> , <b>2019</b> , 96, 52-57	3.5	11
116	Crystallography-Derived Young's Modulus and Tensile Strength of AlN Nanowires as Revealed by in Situ Transmission Electron Microscopy. <i>Nano Letters</i> , <b>2019</b> , 19, 2084-2091	11.5	7
115	Transition Metal Chalcogenide Single Layers as an Active Platform for Single-Atom Catalysis. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 1947-1953	20.1	25
114	Nonstoichiometric Phases of Two-Dimensional Transition-Metal Dichalcogenides: From Chalcogen Vacancies to Pure Metal Membranes. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 6492-6498	6.4	12
113	Kinking effects and transport properties of coaxial BN-C nanotubes as revealed by in situ transmission electron microscopy and theoretical analysis. <i>APL Materials</i> , <b>2019</b> , 7, 101118	5.7	
112	Plasma Surface Polymerized and Biomarker Conjugated Boron Nitride Nanoparticles for Cancer-Specific Therapy: Experimental and Theoretical Study. <i>Nanomaterials</i> , <b>2019</b> , 9,	5.4	4

111	AllBN interaction in a high-strength lightweight Al/BN metal-matrix composite: Theoretical modelling and experimental verification. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 782, 875-880	5.7	7
110	Dirac Cone Spin Polarization of Graphene by Magnetic Insulator Proximity Effect Probed with Outermost Surface Spin Spectroscopy. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1800462	15.6	10
109	Compressive properties of hollow BN nanoparticles: theoretical modeling and testing using a high-resolution transmission electron microscope. <i>Nanoscale</i> , <b>2018</b> , 10, 8099-8105	7.7	5
108	Phase diagram of carbon and the factors limiting the quantity and size of natural diamonds. <i>Nanotechnology</i> , <b>2018</b> , 29, 115603	3.4	18
107	Al-based composites reinforced with AlB2, AlN and BN phases: Experimental and theoretical studies. <i>Materials and Design</i> , <b>2018</b> , 141, 88-98	8.1	47
106	Highly conductive and transparent films of HAuCl4-doped single-walled carbon nanotubes for flexible applications. <i>Carbon</i> , <b>2018</b> , 130, 448-457	10.4	52
105	BN nanoparticle/Ag hybrids with enhanced catalytic activity: theory and experiments. <i>Catalysis Science and Technology</i> , <b>2018</b> , 8, 1652-1662	5.5	14
104	Interface-induced perpendicular magnetic anisotropy of Co nanoparticles on single-layer h-BN/Pt(111). <i>Applied Physics Letters</i> , <b>2018</b> , 112, 022407	3.4	3
103	Construction of Polarized Carbon-Nickel Catalytic Surfaces for Potent, Durable, and Economic Hydrogen Evolution Reactions. <i>ACS Nano</i> , <b>2018</b> , 12, 4148-4155	16.7	97
102	Layered heterostructures based on graphene, hexagonal zinc oxide and molybdenum disulfide: Modeling of geometry and electronic properties. <i>Computational Materials Science</i> , <b>2018</b> , 142, 32-37	3.2	7
101	Chirality transitions and transport properties of individual few-walled carbon nanotubes as revealed by in situ TEM probing. <i>Ultramicroscopy</i> , <b>2018</b> , 194, 108-116	3.1	6
100	Ultrasharp h-BN Nanocones and the Origin of Their High Mechanical Stiffness and Large Dipole Moment. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 5086-5091	6.4	7
99	Phase diagram of carbon. <i>Materials Today: Proceedings</i> , <b>2018</b> , 5, 26179-26182	1.4	2
98	Pressure-Induced Transformation of Graphite and Diamond to Onions. <i>Crystals</i> , <b>2018</b> , 8, 68	2.3	19
97	Mechanical, Electrical, and Crystallographic Property Dynamics of Bent and Strained Ge/Si Core-Shell Nanowires As Revealed by in situ Transmission Electron Microscopy. <i>Nano Letters</i> , <b>2018</b> , 18, 7238-7246	11.5	9
96	Experimental and Theoretical Study of Doxorubicin Physicochemical Interaction with BN(O) Drug Delivery Nanocarriers. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 26409-26418	3.8	7
95	Bilayer graphenes with antidots: structures, properties and applications. <i>Journal of Physics: Conference Series</i> , <b>2018</b> , 1092, 012018	0.3	2
94	Spontaneous doping of the basal plane of MoS single layers through oxygen substitution under ambient conditions. <i>Nature Chemistry</i> , <b>2018</b> , 10, 1246-1251	17.6	173

Holey single-walled carbon nanotubes for ultra-fast broadband bolometers. Nanoscale, 2018, 10, 18665-7867115 93 Study of the New Two-Dimensional Compound CoC. JETP Letters, 2018, 108, 13-17 92 1.2 9 Photocatalysis with Pt-Au-ZnO and Au-ZnO Hybrids: Effect of Charge Accumulation and Discharge 32 91 4 Properties of Metal Nanoparticles. Langmuir, 2018, 34, 7334-7345 2D FeO: A New Member in 2D Metal Oxide Family. Journal of Physical Chemistry C, 2018, 122, 17389-1739, & 90 14 Nanostructuring few-layer graphene films with swift heavy ions for electronic application: tuning of 89 7.7 26 electronic and transport properties. Nanoscale, 2018, 10, 14499-14509 Theoretical Investigation of the Interfaces and Mechanisms of Induced Spin Polarization of 1D 88 Narrow Zigzag Graphene- and h-BN Nanoribbons on a SrO-Terminated LSMO(001) Surface. Journal 2.8 of Physical Chemistry A, **2017**, 121, 680-689 The direct exchange mechanism of induced spin polarization of low-dimensional Econjugated 87 carbon- and h-BN fragments at LSMO(001) MnO-terminated interfaces. Journal of Magnetism and 2.8 2 Magnetic Materials, 2017, 440, 23-29 Fullerite-based nanocomposites with ultrahigh stiffness. Theoretical investigation. Carbon, 2017, 10.4 86 13 115, 546-549 Novel hybrid C/BN two-dimensional heterostructures. Nanotechnology, 2017, 28, 085205 85 3.4 3 Estimation of graphene surface stability against the adsorption of environmental and technological 84 1.3 chemical agents. Physica Status Solidi (B): Basic Research, 2017, 254, 1600702 One-atom-thick 2D copper oxide clusters on graphene. Nanoscale, 2017, 9, 3980-3985 83 7.7 24 Diamond third-order elastic constants: ab initio calculations and experimental investigation. 82 4.3 9 Journal of Materials Science, 2017, 52, 3447-3456 Tuning of the Optical, Electronic, and Magnetic Properties of Boron Nitride Nanosheets with 81 109 24 Oxygen Doping and Functionalization. Advanced Materials, 2017, 29, 1700695 New allotropic forms of carbon based on B0 and D0 fullerenes with specific mechanical 80 1.2 characteristics. JETP Letters, 2017, 105, 419-425 Boron carbide nanoparticles for high-hardness ceramics: Crystal lattice defects after treatment in a 6 79 15 planetary ball mill. Journal of the European Ceramic Society, 2017, 37, 1349-1353 Multifunctional Superelastic Foam-Like Boron Nitride Nanotubular Cellular-Network Architectures. 78 16.7 76 ACS Nano, 2017, 11, 558-568 A key role of tensile strain and surface termination in formation and properties of La0.7Sr0.3MnO3 3.2 1 77 composites with carbon nanotubes. Computational Materials Science, 2017, 139, 125-131 Features of Electronic, Mechanical, and Electromechanical Properties of Fluorinated Diamond Films 76 3.8 21 of Nanometer Thickness. Journal of Physical Chemistry C, 2017, 121, 28484-28489

75	Direct Fabrication of Functional Ultrathin Single-Crystal Nanowires from Quasi-One-Dimensional van der Waals Crystals. <i>Nano Letters</i> , <b>2016</b> , 16, 6188-6195	11.5	24
74	Proximity-Induced Spin Polarization of Graphene in Contact with Half-Metallic Manganite. <i>ACS Nano</i> , <b>2016</b> , 10, 7532-41	16.7	36
73	The electronic structure and spin states of 2D graphene/VX (X = S, Se) heterostructures. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 33047-33052	3.6	30
72	Mechanical properties and current-carrying capacity of Al reinforced with graphene/BN nanoribbons: a computational study. <i>Nanoscale</i> , <b>2016</b> , 8, 20080-20089	7.7	14
71	Ionic Graphitization of Ultrathin Films of Ionic Compounds. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 2659-63	6.4	6
70	Prospects of Spin Catalysis on Spin-Polarized Graphene Heterostructures. <i>Australian Journal of Chemistry</i> , <b>2016</b> , 69, 753	1.2	1
69	Nanostructured BN-Mg composites: features of interface bonding and mechanical properties. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 965-9	3.6	10
68	Structural analysis and atomic simulation of Ag/BN nanoparticle hybrids obtained by Ag ion implantation. <i>Materials and Design</i> , <b>2016</b> , 98, 167-173	8.1	15
67	Effective fluorination of single-layer graphene by high-energy ion irradiation through a LiF overlayer. <i>RSC Advances</i> , <b>2016</b> , 6, 68525-68529	3.7	4
66	The unexpected stability of multiwall nanotubes under high pressure and shear deformation. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 081904	3.4	13
65	The possible formation of a magnetic FeS phase in the two-dimensional MoS matrix. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 26956-26959	3.6	1
64	Statistically Analyzed Photoresponse of Elastically Bent CdS Nanowires Probed by Light-Compatible In Situ High-Resolution TEM. <i>Nano Letters</i> , <b>2016</b> , 16, 6008-6013	11.5	24
63	Heterostructures based on graphene and MoS2 layers decorated by C60 fullerenes. <i>Nanotechnology</i> , <b>2016</b> , 27, 365201	3.4	9
62	Flexoelectricity in Carbon Nanostructures: Nanotubes, Fullerenes, and Nanocones. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 2740-4	6.4	59
61	Hole-doping of mechanically exfoliated graphene by confined hydration layers. <i>Nano Research</i> , <b>2015</b> , 8, 3020-3026	10	13
60	Line and rotational defects in boron-nitrene: Structure, energetics, and dependence on mechanical strain from first-principles calculations. <i>Physica Status Solidi (B): Basic Research</i> , <b>2015</b> , 252, 1725-1730	1.3	6
59	Enhanced electron coherence in atomically thin Nb3SiTe6. <i>Nature Physics</i> , <b>2015</b> , 11, 471-476	16.2	31
58	MoSIdecoration by Mo-atoms and the MoSIMo-graphene heterostructure: a theoretical study. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 28770-3	3.6	11

## (2013-2015)

57	Elastic properties of nanopolycrystalline diamond: The nature of ultrahigh stiffness. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 121904	3.4	12
56	Opto-mechano-electrical tripling in ZnO nanowires probed by photocurrent spectroscopy in a high-resolution transmission electron microscope. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 091103	3.4	6
55	Translation symmetry breakdown in low-dimensional lattices of pentagonal rings. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 4525-31	6.4	26
54	Bilayered semiconductor graphene nanostructures with periodically arranged hexagonal holes. <i>Nano Research</i> , <b>2015</b> , 8, 1250-1258	10	23
53	Toward the Ultra-incompressible Carbon Materials. Computational Simulation and Experimental Observation. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 2147-52	6.4	12
52	Effect of Ultrahigh Stiffness of Defective Graphene from Atomistic Point of View. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 2384-7	6.4	24
51	Converting Chemically Functionalized Few-Layer Graphene to Diamond Films: A Computational Study. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 2828-2836	3.8	34
50	Contracted interlayer distance in graphene/sapphire heterostructure. <i>Nano Research</i> , <b>2015</b> , 8, 1535-154	<b>15</b> 0	22
49	Radiation-Induced Nucleation of Diamond from Amorphous Carbon: Effect of Hydrogen. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 1924-8	6.4	17
48	Theoretical aspects of WSIhanotube chemical unzipping. <i>Nanoscale</i> , <b>2014</b> , 6, 8400-4	7.7	4
48 47	Theoretical aspects of WSIhanotube chemical unzipping. <i>Nanoscale</i> , <b>2014</b> , 6, 8400-4  Phase diagram of quasi-two-dimensional carbon, from graphene to diamond. <i>Nano Letters</i> , <b>2014</b> , 14, 676-81	7:7	115
	Phase diagram of quasi-two-dimensional carbon, from graphene to diamond. <i>Nano Letters</i> , <b>2014</b> ,		
47	Phase diagram of quasi-two-dimensional carbon, from graphene to diamond. <i>Nano Letters</i> , <b>2014</b> , 14, 676-81	11.5	115
47	Phase diagram of quasi-two-dimensional carbon, from graphene to diamond. <i>Nano Letters</i> , <b>2014</b> , 14, 676-81  Lonsdaleite Films with Nanometer Thickness. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 541-8  Spontaneous graphitization of ultrathin cubic structures: a computational study. <i>Nano Letters</i> , <b>2014</b>	11.5 6.4	115 42
47 46 45	Phase diagram of quasi-two-dimensional carbon, from graphene to diamond. <i>Nano Letters</i> , <b>2014</b> , 14, 676-81  Lonsdaleite Films with Nanometer Thickness. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 541-8  Spontaneous graphitization of ultrathin cubic structures: a computational study. <i>Nano Letters</i> , <b>2014</b> , 14, 7126-30  Graphitic Phase of NaCl. Bulk Properties and Nanoscale Stability. <i>Journal of Physical Chemistry</i>	11.5 6.4 11.5	115 42 26
47 46 45	Phase diagram of quasi-two-dimensional carbon, from graphene to diamond. <i>Nano Letters</i> , <b>2014</b> , 14, 676-81  Lonsdaleite Films with Nanometer Thickness. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 541-8  Spontaneous graphitization of ultrathin cubic structures: a computational study. <i>Nano Letters</i> , <b>2014</b> , 14, 7126-30  Graphitic Phase of NaCl. Bulk Properties and Nanoscale Stability. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 4014-9  Toward Stronger AlBN Nanotube Composite Materials: Insights into Bonding at the Al/BN	<ul><li>11.5</li><li>6.4</li><li>11.5</li><li>6.4</li></ul>	115 42 26 11
47 46 45 44 43	Phase diagram of quasi-two-dimensional carbon, from graphene to diamond. <i>Nano Letters</i> , <b>2014</b> , 14, 676-81  Lonsdaleite Films with Nanometer Thickness. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 541-8  Spontaneous graphitization of ultrathin cubic structures: a computational study. <i>Nano Letters</i> , <b>2014</b> , 14, 7126-30  Graphitic Phase of NaCl. Bulk Properties and Nanoscale Stability. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 4014-9  Toward Stronger AlBN Nanotube Composite Materials: Insights into Bonding at the Al/BN Interface from First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 26894-26901  Novel graphene-based nanostructures: physicochemical properties and applications. <i>Russian</i>	<ul><li>11.5</li><li>6.4</li><li>11.5</li><li>6.4</li><li>3.8</li></ul>	115 42 26 11 21

39	Investigation of new superhard carbon allotropes with promising electronic properties. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 183708	2.5	9
38	Graphene-based semiconductor nanostructures. <i>Physics-Uspekhi</i> , <b>2013</b> , 56, 105-122	2.8	39
37	The impact of edges and dopants on the work function of graphene nanostructures: The way to high electronic emission from pure carbon medium. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 183112	3.4	38
36	Graphene-based semiconductor nanostructures. <i>Uspekhi Fizicheskikh Nauk</i> , <b>2013</b> , 183, 113-132	0.5	15
35	Intrinsic Edge Asymmetry in Narrow Zigzag Hexagonal Heteroatomic Nanoribbons Causes their Subtle Uniform Curvature. <i>Journal of Physical Chemistry Letters</i> , <b>2012</b> , 3, 2003-2008	6.4	32
34	High hydrogen-adsorption-rate material based on graphane decorated with alkali metals. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	46
33	Strong Influence of Graphane Island Configurations on the Electronic Properties of a Mixed Graphene/Graphane Superlattice. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 20035-20039	3.8	13
32	Determination of ultrathin diamond films by Raman spectroscopy. <i>Physica Status Solidi (B): Basic Research</i> , <b>2012</b> , 249, 1550-1554	1.3	15
31	Calcium-decorated carbyne networks as hydrogen storage media. <i>Nano Letters</i> , <b>2011</b> , 11, 2660-5	11.5	85
30	Influence of Size Effect on the Electronic and Elastic Properties of Diamond Films with Nanometer Thickness. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 132-136	3.8	65
29	Patterning nanoroads and quantum dots on fluorinated graphene. Nano Research, 2011, 4, 143-152	10	109
28	Metallic beta-phase silicon nanowires: Structure and electronic properties. <i>JETP Letters</i> , <b>2010</b> , 92, 352-3	3 <u>55</u> 2	1
27	Theoretical study of atomic structure and elastic properties of branched silicon nanowires. <i>ACS Nano</i> , <b>2010</b> , 4, 2784-90	16.7	4
26	The Theoretical Study of Mechanical Properties of Graphene Membranes. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , <b>2010</b> , 18, 497-500	1.8	16
25	Theoretical study of elastic properties of SiC nanowires of different shapes. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2010</b> , 10, 4992-7	1.3	3
24	Magnesium Boride Nanotubes: Relative Stability and Atomic and Electronic Structure. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 4852-4856	3.8	7
23	Large scale growth and characterization of atomic hexagonal boron nitride layers. <i>Nano Letters</i> , <b>2010</b> , 10, 3209-15	11.5	1961
22	Nanoengineering Structures on Graphene with Adsorbed Hydrogen Lines Lournal of Physical Chemistry C, <b>2010</b> , 114, 3225-3229	3.8	48

## (2006-2010)

21	Mechanical and electronic properties of carbon nanotubegraphene compounds. <i>Physica Status Solidi (B): Basic Research</i> , <b>2010</b> , 247, 2927-2930	1.3	10
20	Diamond-like C2H nanolayer, diamane: Simulation of the structure and properties. <i>JETP Letters</i> , <b>2009</b> , 90, 134-138	1.2	121
19	New boron barrelenes and tubulenes. <i>JETP Letters</i> , <b>2008</b> , 87, 489-493	1.2	12
18	Atypical quantum confinement effect in silicon nanowires. <i>Journal of Physical Chemistry A</i> , <b>2008</b> , 112, 9955-64	2.8	11
17	Quantum dots embedded into silicon nanowires effectively partition electron confinement. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 054305	2.5	11
16	Ab initio study of hydrogen chemical adsorption on platinum surface/carbon nanotube join system. <i>Physica Status Solidi (B): Basic Research</i> , <b>2008</b> , 245, 1546-1551	1.3	7
15	Electronic superlattices and waveguides based on graphene: structures, properties and applications. <i>Physica Status Solidi (B): Basic Research</i> , <b>2008</b> , 245, 2086-2089	1.3	12
14	Density functional study of <110>-oriented thin silicon nanowires. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	26
13	Atomic and Electronic Structure of New Hollow-Based Symmetric Families of Silicon Nanoclusters. Journal of Physical Chemistry C, <b>2007</b> , 111, 18824-18830	3.8	11
12	Superlattices consisting of lineslof adsorbed hydrogen atom pairs on graphene. <i>JETP Letters</i> , <b>2007</b> , 85, 77-81	1.2	58
11	Two-dimensional semiconducting nanostructures based on single graphene sheets with lines of adsorbed hydrogen atoms. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 183103	3.4	59
10	Density-functional theory study of the electronic structure of thin SiBiO2 quantum nanodots and nanowires. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	15
9	Multiterminal Nanowire Junctions of Silicon: A Theoretical Prediction of Atomic Structure and Electronic Properties. <i>Nano Letters</i> , <b>2007</b> , 7, 2063-2067	11.5	10
8	THEORETICAL STUDY AND EXPERIMENTAL INVESTIGATION OF HYDROGEN ABSORPTION BY CARBON NANOMATERIALS <b>2007</b> , 127-132		
7	Band-gap unification of partially Si-substituted single-wall carbon nanotubes. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	10
6	Metal-semiconductor (semimetal) superlattices on a graphite sheet with vacancies. <i>JETP Letters</i> , <b>2006</b> , 84, 115-118	1.2	23
5	Silica nanotube multi-terminal junctions as a coating for carbon nanotube junctions. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	12
4	Structure and properties of BeO nanotubes. <i>Physics of the Solid State</i> , <b>2006</b> , 48, 398-401	0.8	63

3	Density and thermodynamics of hydrogen adsorbed on the surface of single-walled carbon nanotubes. <i>Physics of the Solid State</i> , <b>2006</b> , 48, 402-407	0.8	3
2	Energy and electronic properties of non-carbon nanotubes based on silicon dioxide. <i>Physics of the Solid State</i> , <b>2006</b> , 48, 2021-2027	0.8	8
1	Optimization of the calculations of the electronic structure of carbon nanotubes. <i>Physics of the Solid State</i> , <b>2005</b> , 47, 2196	0.8	3