

Pavel B Sorokin

List of Publications by Citations

Source: <https://exaly.com/author-pdf/118758/pavel-b-sorokin-publications-by-citations.pdf>
Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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

#	Paper	IF	Citations
146	Large scale growth and characterization of atomic hexagonal boron nitride layers. <i>Nano Letters</i> , 2010 , 10, 3209-15	11.5	1961
145	Spontaneous doping of the basal plane of MoS single layers through oxygen substitution under ambient conditions. <i>Nature Chemistry</i> , 2018 , 10, 1246-1251	17.6	173
144	Diamond-like C ₂ H nanolayer, diamane: Simulation of the structure and properties. <i>JETP Letters</i> , 2009 , 90, 134-138	1.2	121
143	Nanomechanical cleavage of molybdenum disulphide atomic layers. <i>Nature Communications</i> , 2014 , 5, 3631	17.4	118
142	Phase diagram of quasi-two-dimensional carbon, from graphene to diamond. <i>Nano Letters</i> , 2014 , 14, 676-81	11.5	115
141	Tuning of the Optical, Electronic, and Magnetic Properties of Boron Nitride Nanosheets with Oxygen Doping and Functionalization. <i>Advanced Materials</i> , 2017 , 29, 1700695	24	109
140	Patterning nanoroads and quantum dots on fluorinated graphene. <i>Nano Research</i> , 2011 , 4, 143-152	10	109
139	Construction of Polarized Carbon-Nickel Catalytic Surfaces for Potent, Durable, and Economic Hydrogen Evolution Reactions. <i>ACS Nano</i> , 2018 , 12, 4148-4155	16.7	97
138	Biomimetic nanoparticle-engineered superwetttable membranes for efficient oil/water separation. <i>Journal of Membrane Science</i> , 2021 , 618, 118525	9.6	91
137	Calcium-decorated carbyne networks as hydrogen storage media. <i>Nano Letters</i> , 2011 , 11, 2660-5	11.5	85
136	Multifunctional Superelastic Foam-Like Boron Nitride Nanotubular Cellular-Network Architectures. <i>ACS Nano</i> , 2017 , 11, 558-568	16.7	76
135	Influence of Size Effect on the Electronic and Elastic Properties of Diamond Films with Nanometer Thickness. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 132-136	3.8	65
134	Structure and properties of BeO nanotubes. <i>Physics of the Solid State</i> , 2006 , 48, 398-401	0.8	63
133	Flexoelectricity in Carbon Nanostructures: Nanotubes, Fullerenes, and Nanocones. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2740-4	6.4	59
132	Two-dimensional semiconducting nanostructures based on single graphene sheets with lines of adsorbed hydrogen atoms. <i>Applied Physics Letters</i> , 2007 , 91, 183103	3.4	59
131	Superlattices consisting of lines of adsorbed hydrogen atom pairs on graphene. <i>JETP Letters</i> , 2007 , 85, 77-81	1.2	58
130	Highly conductive and transparent films of HAuCl ₄ -doped single-walled carbon nanotubes for flexible applications. <i>Carbon</i> , 2018 , 130, 448-457	10.4	52

129	Nanoengineering Structures on Graphene with Adsorbed Hydrogen [lines] <i>Journal of Physical Chemistry C</i> , 2010 , 114, 3225-3229	3.8	48
128	Al-based composites reinforced with AlB ₂ , AlN and BN phases: Experimental and theoretical studies. <i>Materials and Design</i> , 2018 , 141, 88-98	8.1	47
127	High hydrogen-adsorption-rate material based on graphane decorated with alkali metals. <i>Physical Review B</i> , 2012 , 86,	3.3	46
126	Lonsdaleite Films with Nanometer Thickness. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 541-8	6.4	42
125	Graphene-based semiconductor nanostructures. <i>Physics-Uspekhi</i> , 2013 , 56, 105-122	2.8	39
124	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> , 2013 , 102, 183112	3.4	38
123	Proximity-Induced Spin Polarization of Graphene in Contact with Half-Metallic Manganite. <i>ACS Nano</i> , 2016 , 10, 7532-41	16.7	36
122	Novel graphene-based nanostructures: physicochemical properties and applications. <i>Russian Chemical Reviews</i> , 2014 , 83, 251-279	6.8	34
121	Converting Chemically Functionalized Few-Layer Graphene to Diamond Films: A Computational Study. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 2828-2836	3.8	34
120	Intrinsic Edge Asymmetry in Narrow Zigzag Hexagonal Heteroatomic Nanoribbons Causes their Subtle Uniform Curvature. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 2003-2008	6.4	32
119	Photocatalysis with Pt-Au-ZnO and Au-ZnO Hybrids: Effect of Charge Accumulation and Discharge Properties of Metal Nanoparticles. <i>Langmuir</i> , 2018 , 34, 7334-7345	4	32
118	Enhanced electron coherence in atomically thin Nb ₃ SiTe ₆ . <i>Nature Physics</i> , 2015 , 11, 471-476	16.2	31
117	The electronic structure and spin states of 2D graphene/VX (X = S, Se) heterostructures. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 33047-33052	3.6	30
116	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> , 2020 , 20, 5900-5908	11.5	29
115	Translation symmetry breakdown in low-dimensional lattices of pentagonal rings. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 4525-31	6.4	26
114	Spontaneous graphitization of ultrathin cubic structures: a computational study. <i>Nano Letters</i> , 2014 , 14, 7126-30	11.5	26
113	Density functional study of <110>-oriented thin silicon nanowires. <i>Physical Review B</i> , 2008 , 77,	3.3	26
112	Nanostructuring few-layer graphene films with swift heavy ions for electronic application: tuning of electronic and transport properties. <i>Nanoscale</i> , 2018 , 10, 14499-14509	7.7	26

111	Transition Metal Chalcogenide Single Layers as an Active Platform for Single-Atom Catalysis. <i>ACS Energy Letters</i> , 2019 , 4, 1947-1953	20.1	25
110	Mussel-inspired structure evolution customizing membrane interface hydrophilization. <i>Journal of Membrane Science</i> , 2020 , 612, 118471	9.6	25
109	One-atom-thick 2D copper oxide clusters on graphene. <i>Nanoscale</i> , 2017 , 9, 3980-3985	7.7	24
108	Direct Fabrication of Functional Ultrathin Single-Crystal Nanowires from Quasi-One-Dimensional van der Waals Crystals. <i>Nano Letters</i> , 2016 , 16, 6188-6195	11.5	24
107	Effect of Ultrahigh Stiffness of Defective Graphene from Atomistic Point of View. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2384-7	6.4	24
106	Statistically Analyzed Photoresponse of Elastically Bent CdS Nanowires Probed by Light-Compatible In Situ High-Resolution TEM. <i>Nano Letters</i> , 2016 , 16, 6008-6013	11.5	24
105	Bilayered semiconductor graphene nanostructures with periodically arranged hexagonal holes. <i>Nano Research</i> , 2015 , 8, 1250-1258	10	23
104	Metal-semiconductor (semimetal) superlattices on a graphite sheet with vacancies. <i>JETP Letters</i> , 2006 , 84, 115-118	1.2	23
103	Two-Dimensional Diamond-Diamane: Current State and Further Prospects. <i>Nano Letters</i> , 2021 , 21, 5475-5484	14.8	23
102	Contracted interlayer distance in graphene/sapphire heterostructure. <i>Nano Research</i> , 2015 , 8, 1535-1545	15.0	22
101	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> , 2014 , 118, 26894-26901	3.8	21
100	Features of Electronic, Mechanical, and Electromechanical Properties of Fluorinated Diamond Films of Nanometer Thickness. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 28484-28489	3.8	21
99	Bio-inspired mineral-hydrogel hybrid coating on hydrophobic PVDF membrane boosting oil/water emulsion separation. <i>Separation and Purification Technology</i> , 2022 , 285, 120383	8.3	19
98	Pressure-Induced Transformation of Graphite and Diamond to Onions. <i>Crystals</i> , 2018 , 8, 68	2.3	19
97	Phase diagram of carbon and the factors limiting the quantity and size of natural diamonds. <i>Nanotechnology</i> , 2018 , 29, 115603	3.4	18
96	Radiation-Induced Nucleation of Diamond from Amorphous Carbon: Effect of Hydrogen. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 1924-8	6.4	17
95	The Theoretical Study of Mechanical Properties of Graphene Membranes. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2010 , 18, 497-500	1.8	16
94	Boron carbide nanoparticles for high-hardness ceramics: Crystal lattice defects after treatment in a planetary ball mill. <i>Journal of the European Ceramic Society</i> , 2017 , 37, 1349-1353	6	15

93	Structural analysis and atomic simulation of Ag/BN nanoparticle hybrids obtained by Ag ion implantation. <i>Materials and Design</i> , 2016 , 98, 167-173	8.1	15
92	Determination of ultrathin diamond films by Raman spectroscopy. <i>Physica Status Solidi (B): Basic Research</i> , 2012 , 249, 1550-1554	1.3	15
91	Graphene-based semiconductor nanostructures. <i>Uspekhi Fizicheskikh Nauk</i> , 2013 , 183, 113-132	0.5	15
90	Density-functional theory study of the electronic structure of thin SiBiO ₂ quantum nanodots and nanowires. <i>Physical Review B</i> , 2007 , 75,	3.3	15
89	Holey single-walled carbon nanotubes for ultra-fast broadband bolometers. <i>Nanoscale</i> , 2018 , 10, 18665-18671	1.7	15
88	BN nanoparticle/Ag hybrids with enhanced catalytic activity: theory and experiments. <i>Catalysis Science and Technology</i> , 2018 , 8, 1652-1662	5.5	14
87	Mechanical properties and current-carrying capacity of Al reinforced with graphene/BN nanoribbons: a computational study. <i>Nanoscale</i> , 2016 , 8, 20080-20089	7.7	14
86	Nano-Thermodynamics of Chemically Induced Graphene-Diamond Transformation. <i>Small</i> , 2020 , 16, e2004782	4.7	14
85	2D FeO: A New Member in 2D Metal Oxide Family. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 17389-17398	3.8	14
84	Fullerite-based nanocomposites with ultrahigh stiffness. Theoretical investigation. <i>Carbon</i> , 2017 , 115, 546-549	10.4	13
83	Hole-doping of mechanically exfoliated graphene by confined hydration layers. <i>Nano Research</i> , 2015 , 8, 3020-3026	10	13
82	Strong Influence of Graphane Island Configurations on the Electronic Properties of a Mixed Graphene/Graphane Superlattice. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 20035-20039	3.8	13
81	The unexpected stability of multiwall nanotubes under high pressure and shear deformation. <i>Applied Physics Letters</i> , 2016 , 109, 081904	3.4	13
80	Elastic properties of nanopolycrystalline diamond: The nature of ultrahigh stiffness. <i>Applied Physics Letters</i> , 2015 , 107, 121904	3.4	12
79	Nonstoichiometric Phases of Two-Dimensional Transition-Metal Dichalcogenides: From Chalcogen Vacancies to Pure Metal Membranes. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 6492-6498	6.4	12
78	Toward the Ultra-incompressible Carbon Materials. Computational Simulation and Experimental Observation. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2147-52	6.4	12
77	New boron barrelenes and tubulenes. <i>JETP Letters</i> , 2008 , 87, 489-493	1.2	12
76	Electronic superlattices and waveguides based on graphene: structures, properties and applications. <i>Physica Status Solidi (B): Basic Research</i> , 2008 , 245, 2086-2089	1.3	12

75	Silica nanotube multi-terminal junctions as a coating for carbon nanotube junctions. <i>Physical Review B</i> , 2006 , 74,	3.3	12
74	Ultrasmall diamond nanoparticles with unusual incompressibility. <i>Diamond and Related Materials</i> , 2019 , 96, 52-57	3.5	11
73	MoS ₂ decoration by Mo-atoms and the MoS ₂ /Mo-graphene heterostructure: a theoretical study. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 28770-3	3.6	11
72	Graphitic Phase of NaCl. Bulk Properties and Nanoscale Stability. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 4014-9	6.4	11
71	Atypical quantum confinement effect in silicon nanowires. <i>Journal of Physical Chemistry A</i> , 2008 , 112, 9955-64	2.8	11
70	Quantum dots embedded into silicon nanowires effectively partition electron confinement. <i>Journal of Applied Physics</i> , 2008 , 104, 054305	2.5	11
69	Atomic and Electronic Structure of New Hollow-Based Symmetric Families of Silicon Nanoclusters. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 18824-18830	3.8	11
68	Dirac Cone Spin Polarization of Graphene by Magnetic Insulator Proximity Effect Probed with Outermost Surface Spin Spectroscopy. <i>Advanced Functional Materials</i> , 2018 , 28, 1800462	15.6	10
67	Nanostructured BN-Mg composites: features of interface bonding and mechanical properties. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 965-9	3.6	10
66	Mechanical and electronic properties of carbon nanotube-graphene compounds. <i>Physica Status Solidi (B): Basic Research</i> , 2010 , 247, 2927-2930	1.3	10
65	Multiterminal Nanowire Junctions of Silicon: A Theoretical Prediction of Atomic Structure and Electronic Properties. <i>Nano Letters</i> , 2007 , 7, 2063-2067	11.5	10
64	Band-gap unification of partially Si-substituted single-wall carbon nanotubes. <i>Physical Review B</i> , 2006 , 74,	3.3	10
63	Diamond's third-order elastic constants: ab initio calculations and experimental investigation. <i>Journal of Materials Science</i> , 2017 , 52, 3447-3456	4.3	9
62	Influence of Native Defects on the Electronic and Magnetic Properties of CVD Grown MoSe ₂ Single Layers. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 24855-24864	3.8	9
61	Investigation of new superhard carbon allotropes with promising electronic properties. <i>Journal of Applied Physics</i> , 2013 , 114, 183708	2.5	9
60	Graphene/Half-Metallic Heusler Alloy: A Novel Heterostructure toward High-Performance Graphene Spintronic Devices. <i>Advanced Materials</i> , 2020 , 32, e1905734	24	9
59	Heterostructures based on graphene and MoS ₂ layers decorated by C ₆₀ fullerenes. <i>Nanotechnology</i> , 2016 , 27, 365201	3.4	9
58	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> , 2018 , 18, 7238-7246	11.5	9

57	Study of the New Two-Dimensional Compound CoC. <i>JETP Letters</i> , 2018 , 108, 13-17	1.2	9
56	High yield production of ultrathin fibroid semiconducting nanowire of Ta ₂ Pd ₃ Se ₈ . <i>Nano Research</i> , 2020 , 13, 1627-1635	10	8
55	Energy and electronic properties of non-carbon nanotubes based on silicon dioxide. <i>Physics of the Solid State</i> , 2006 , 48, 2021-2027	0.8	8
54	Semiconductor nanochannels in metallic carbon nanotubes by thermomechanical chirality alteration.. <i>Science</i> , 2021 , 374, 1616-1620	33.3	8
53	Two-Dimensional CuO Inside the Supportive Bilayer Graphene Matrix. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 17459-17465	3.8	7
52	Crystallography-Derived Young's Modulus and Tensile Strength of AlN Nanowires as Revealed by in Situ Transmission Electron Microscopy. <i>Nano Letters</i> , 2019 , 19, 2084-2091	11.5	7
51	Layered heterostructures based on graphene, hexagonal zinc oxide and molybdenum disulfide: Modeling of geometry and electronic properties. <i>Computational Materials Science</i> , 2018 , 142, 32-37	3.2	7
50	Ultrasharp h-BN Nanocones and the Origin of Their High Mechanical Stiffness and Large Dipole Moment. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 5086-5091	6.4	7
49	Magnesium Boride Nanotubes: Relative Stability and Atomic and Electronic Structure. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 4852-4856	3.8	7
48	Ab initio study of hydrogen chemical adsorption on platinum surface/carbon nanotube join system. <i>Physica Status Solidi (B): Basic Research</i> , 2008 , 245, 1546-1551	1.3	7
47	Carbon at the nanoscale: Ultrastiffness and unambiguous definition of incompressibility. <i>Carbon</i> , 2020 , 160, 228-235	10.4	7
46	Al/BN interaction in a high-strength lightweight Al/BN metal-matrix composite: Theoretical modelling and experimental verification. <i>Journal of Alloys and Compounds</i> , 2019 , 782, 875-880	5.7	7
45	Experimental and Theoretical Study of Doxorubicin Physicochemical Interaction with BN(O) Drug Delivery Nanocarriers. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 26409-26418	3.8	7
44	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> , 2015 , 252, 1725-1730	1.3	6
43	Opto-mechano-electrical tripling in ZnO nanowires probed by photocurrent spectroscopy in a high-resolution transmission electron microscope. <i>Applied Physics Letters</i> , 2015 , 107, 091103	3.4	6
42	Specific Response of the Atomic and Electronic Structure of Ta ₂ Pd ₃ Se ₈ and Ta ₂ Pt ₃ Se ₈ Nanoribbons to the Uniaxial Strain. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 7539-7543	3.8	6
41	Ionic Graphitization of Ultrathin Films of Ionic Compounds. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 2659-63	6.4	6
40	Chirality transitions and transport properties of individual few-walled carbon nanotubes as revealed by in situ TEM probing. <i>Ultramicroscopy</i> , 2018 , 194, 108-116	3.1	6

39	Adhesion of Single-Walled Carbon Nanotube Thin Films with Different Materials. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 504-509	6.4	6
38	Estimation of graphene surface stability against the adsorption of environmental and technological chemical agents. <i>Physica Status Solidi (B): Basic Research</i> , 2017 , 254, 1600702	1.3	5
37	Compressive properties of hollow BN nanoparticles: theoretical modeling and testing using a high-resolution transmission electron microscope. <i>Nanoscale</i> , 2018 , 10, 8099-8105	7.7	5
36	Quantum Transport of the 2D Surface State in a Nonsymmorphic Semimetal. <i>Nano Letters</i> , 2021 , 21, 4887-4893	11.5	5
35	Insights into the regularity of the formation of 2D 3d transition metal monocarbides. <i>Nanoscale</i> , 2020 , 12, 13407-13413	7.7	4
34	Theoretical aspects of WS ₂ nanotube chemical unzipping. <i>Nanoscale</i> , 2014 , 6, 8400-4	7.7	4
33	Theoretical study of atomic structure and elastic properties of branched silicon nanowires. <i>ACS Nano</i> , 2010 , 4, 2784-90	16.7	4
32	Effective fluorination of single-layer graphene by high-energy ion irradiation through a LiF overlayer. <i>RSC Advances</i> , 2016 , 6, 68525-68529	3.7	4
31	Plasma Surface Polymerized and Biomarker Conjugated Boron Nitride Nanoparticles for Cancer-Specific Therapy: Experimental and Theoretical Study. <i>Nanomaterials</i> , 2019 , 9,	5.4	4
30	Highly efficient bilateral doping of single-walled carbon nanotubes. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 4514-4521	7.1	4
29	Novel hybrid C/BN two-dimensional heterostructures. <i>Nanotechnology</i> , 2017 , 28, 085205	3.4	3
28	New allotropic forms of carbon based on B ₀ and B ₀ Fullerenes with specific mechanical characteristics. <i>JETP Letters</i> , 2017 , 105, 419-425	1.2	3
27	On the Edge of Bilayered Graphene: Unexpected Atomic Geometry and Specific Electronic Properties. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 5871-5876	6.4	3
26	Interface-induced perpendicular magnetic anisotropy of Co nanoparticles on single-layer h-BN/Pt(111). <i>Applied Physics Letters</i> , 2018 , 112, 022407	3.4	3
25	Theoretical study of elastic properties of SiC nanowires of different shapes. <i>Journal of Nanoscience and Nanotechnology</i> , 2010 , 10, 4992-7	1.3	3
24	Density and thermodynamics of hydrogen adsorbed on the surface of single-walled carbon nanotubes. <i>Physics of the Solid State</i> , 2006 , 48, 402-407	0.8	3
23	Optimization of the calculations of the electronic structure of carbon nanotubes. <i>Physics of the Solid State</i> , 2005 , 47, 2196	0.8	3
22	The direct exchange mechanism of induced spin polarization of low-dimensional π -conjugated carbon- and h-BN fragments at LSMO(001) MnO-terminated interfaces. <i>Journal of Magnetism and Magnetic Materials</i> , 2017 , 440, 23-29	2.8	2

21	High spin polarization at the Fe/C60 interface in the Fe-doped C60 film. <i>Synthetic Metals</i> , 2013 , 173, 22-256	2.56	2
20	Nanostructuring of CVD graphene by high-energy heavy ions. <i>Diamond and Related Materials</i> , 2022 , 123, 108880	3.5	2
19	Non-chemical fluorination of hexagonal boron nitride by high-energy ion irradiation. <i>Nanotechnology</i> , 2020 , 31, 125705	3.4	2
18	Phase diagram of carbon. <i>Materials Today: Proceedings</i> , 2018 , 5, 26179-26182	1.4	2
17	Bilayer graphenes with antidots: structures, properties and applications. <i>Journal of Physics: Conference Series</i> , 2018 , 1092, 012018	0.3	2
16	Theoretical Investigation of the Interfaces and Mechanisms of Induced Spin Polarization of 1D Narrow Zigzag Graphene- and h-BN Nanoribbons on a SrO-Terminated LSMO(001) Surface. <i>Journal of Physical Chemistry A</i> , 2017 , 121, 680-689	2.8	1
15	Stability and gas sensing properties of TaXM (X = Pd, Pt; M = S, Se) nanoribbons: a first-principles investigation. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 14651-14659	3.6	1
14	Mechanical Properties of the Interface of Al/SiC Heteroparticles and Their Composites: a Theoretical and Experimental Study. <i>Technical Physics Letters</i> , 2020 , 46, 342-345	0.7	1
13	Prospects of Spin Catalysis on Spin-Polarized Graphene Heterostructures. <i>Australian Journal of Chemistry</i> , 2016 , 69, 753	1.2	1
12	A key role of tensile strain and surface termination in formation and properties of La _{0.7} Sr _{0.3} MnO ₃ composites with carbon nanotubes. <i>Computational Materials Science</i> , 2017 , 139, 125-131	3.2	1
11	Metallic beta-phase silicon nanowires: Structure and electronic properties. <i>JETP Letters</i> , 2010 , 92, 352-355	3.55	1
10	Optomechanical Properties of MoSe Nanosheets as Revealed by Transmission Electron Microscopy.. <i>Nano Letters</i> , 2022 ,	11.5	1
9	GrapheneDiamond Transformation: Nano-Thermodynamics of Chemically Induced GrapheneDiamond Transformation (Small 47/2020). <i>Small</i> , 2020 , 16, 2070256	11	1
8	The possible formation of a magnetic FeS phase in the two-dimensional MoS matrix. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 26956-26959	3.6	1
7	Investigation of atomically thin films: state of the art. <i>Physics-Uspekhi</i> , 2021 , 64, 28-47	2.8	1
6	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> , 2021 , 133, 28002	1.6	1
5	Intermediate carbon phase. New experimental data and atomic model. <i>Diamond and Related Materials</i> , 2022 , 123, 108825	3.5	0
4	Insights into fullerene polymerization under the high pressure: The role of endohedral Sc dimer. <i>Carbon</i> , 2022 , 189, 37-45	10.4	0

- 3 Kinking effects and transport properties of coaxial BN-C nanotubes as revealed by in situ transmission electron microscopy and theoretical analysis. *APL Materials*, **2019**, 7, 101118 5.7
- 2 THEORETICAL STUDY AND EXPERIMENTAL INVESTIGATION OF HYDROGEN ABSORPTION BY CARBON NANOMATERIALS **2007**, 127-132
- 1 Spintronic Devices: Graphene/Half-Metallic Heusler Alloy: A Novel Heterostructure toward High-Performance Graphene Spintronic Devices (Adv. Mater. 6/2020). *Advanced Materials*, **2020**, 32, 2070043 2.4