Vasilii I Artyukhov

List of Publications by Year
in descending order

32 papers	2,300 citations	331670 21 h-index	454955 30 g-index
34 all docs	34 docs citations	34 times ranked	3639 citing authors

#	Article	IF	Citations
1	Kinetically Determined Shapes of Grain Boundaries in Graphene. ACS Nano, 2021, 15, 4893-4900.	14.6	11
2	Flexoelectricity and Charge Separation in Carbon Nanotubes. Nano Letters, 2020, 20, 3240-3246.	9.1	32
3	Mechanochemistry of One-Dimensional Boron: Structural and Electronic Transitions. Journal of the American Chemical Society, 2017, 139, 2111-2117.	13.7	41
4	A jellium model of a catalyst particle in carbon nanotube growth. Journal of Chemical Physics, 2017, 146, 244701.	3.0	5
5	Carbon Fibers: Carbonization with Misfusion: Fundamental Limits of Carbon-Fiber Strength Revisited (Adv. Mater. 46/2016). Advanced Materials, 2016, 28, 10342-10342.	21.0	0
6	Topochemistry of Bowtie- and Star-Shaped Metal Dichalcogenide Nanoisland Formation. Nano Letters, 2016, 16, 3696-3702.	9.1	46
7	Growth of large-area aligned pentagonal graphene domains on high-index copper surfaces. Nano Research, 2016, 9, 2182-2189.	10.4	44
8	Carbonization with Misfusion: Fundamental Limits of Carbonâ€Fiber Strength Revisited. Advanced Materials, 2016, 28, 10317-10322.	21.0	35
9	Breaking of Symmetry in Graphene Growth on Metal Substrates. Physical Review Letters, 2015, 114, 115502.	7.8	68
10	Basic structural units in carbon fibers: Atomistic models and tensile behavior. Carbon, 2015, 85, 72-78.	10.3	36
11	Defect-Detriment to Graphene Strength Is Concealed by Local Probe: The Topological and Geometrical Effects. ACS Nano, 2015, 9, 401-408.	14.6	66
12	New insights into the properties and interactions of carbon chains as revealed by HRTEM and DFT analysis. Carbon, 2014, 66, 436-441.	10.3	58
13	Can xenon in water inhibit ice growth? Molecular dynamics of phase transitions in waterâ€"Xe system. Journal of Chemical Physics, 2014, 141, 034503.	3.0	13
14	Extensive Energy Landscape Sampling of Nanotube End-Caps Reveals No Chiral-Angle Bias for Their Nucleation. ACS Nano, 2014, 8, 1899-1906.	14.6	34
15	Why nanotubes grow chiral. Nature Communications, 2014, 5, 4892.	12.8	158
16	Large Hexagonal Biâ€•and Trilayer Graphene Single Crystals with Varied Interlayer Rotations. Angewandte Chemie - International Edition, 2014, 53, 1565-1569.	13.8	82
17	Mechanically Induced Metalâ€"Insulator Transition in Carbyne. Nano Letters, 2014, 14, 4224-4229.	9.1	130
18	Carbyne from First Principles: Chain of C Atoms, a Nanorod or a Nanorope. ACS Nano, 2013, 7, 10075-10082.	14.6	375

#	Article	IF	Citations
19	Pseudo Hallâ€“Petch Strength Reduction in Polycrystalline Graphene. Nano Letters, 2013, 13, 1829-1833.	9.1	172
20	Feasibility of Lithium Storage on Graphene and Its Derivatives. Journal of Physical Chemistry Letters, 2013, 4, 1737-1742.	4.6	297
21	Equilibrium at the edge and atomistic mechanisms of graphene growth. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15136-15140.	7.1	236
22	Ripping Graphene: Preferred Directions. Nano Letters, 2012, 12, 293-297.	9.1	200
23	Unfolding the Fullerene: Nanotubes, Graphene and Polyâ€Elemental Varieties by Simulations. Advanced Materials, 2012, 24, 4956-4976.	21.0	50
24	A model of single-electron transport. Calculation of the thermodynamic parameters for electron capture by the bound proton of oxyacids. Russian Journal of Physical Chemistry B, 2011, 5, 748-764.	1.3	0
25	A six degree of freedom nanomanipulator design based on carbon nanotube bundles. Nanotechnology, 2010, 21, 385304.	2.6	0
26	Structure and Layer Interaction in Carbon Monofluoride and Graphane: A Comparative Computational Study. Journal of Physical Chemistry A, 2010, 114, 5389-5396.	2.5	44
27	Theoretical Study of Two-Dimensional Silica Films. Journal of Physical Chemistry C, 2010, 114, 9678-9684.	3.1	9
28	Vacancyâ€patterned graphene: A metaâ€material for spintronics. Physica Status Solidi (B): Basic Research, 2009, 246, 2534-2539.	1.5	5
29	New phase of polymeric C₆₀: double chains via [2+2] cycloaddition. Physica Status Solidi (B): Basic Research, 2008, 245, 2022-2024.	1.5	2
30	Quantum-chemical study of methane nitrosation with NO in the presence of superelectrophiles containing the trichloromethyl cation. Doklady Physical Chemistry, 2007, 414, 132-135.	0.9	0
31	New Hollow SiO2Clusters: Structure, Energy and Electronic Characteristics. Fullerenes Nanotubes and Carbon Nanostructures, 2006, 14, 545-550.	2.1	3
32	Silica nanotube multi-terminal junctions as a coating for carbon nanotube junctions. Physical Review B, 2006, 74, .	3.2	12