

# Alexander N Chaika

## List of Publications by Citations

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152  
papers

232  
citations

9  
h-index

13  
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170  
ext. papers

288  
ext. citations

13.1  
avg, IF

2.67  
L-index

#	Paper	IF	Citations
152	Continuous wafer-scale graphene on cubic-SiC(001). <i>Nano Research</i> , <b>2013</b> , 6, 562-570	10	27
151	Large positive in-plane magnetoresistance induced by localized states at nanodomain boundaries in graphene. <i>Nature Communications</i> , <b>2017</b> , 8, 14453	17.4	23
150	Graphene on cubic-SiC. <i>Progress in Materials Science</i> , <b>2017</b> , 89, 1-30	42.2	22
149	Transport Gap Opening and High On-Off Current Ratio in Trilayer Graphene with Self-Aligned Nanodomain Boundaries. <i>ACS Nano</i> , <b>2015</b> , 9, 8967-75	16.7	18
148	Rotated domain network in graphene on cubic-SiC(001). <i>Nanotechnology</i> , <b>2014</b> , 25, 135605	3.4	12
147	Writing with atoms: Oxygen adatoms on the MoO <sub>2</sub> /Mo(110) surface. <i>Nano Research</i> , <b>2013</b> , 6, 929-937	10	12
146	Step bunching with both directions of the current: Vicinal W(110) surfaces versus atomistic-scale model. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	10
145	Atomic and Electronic Structure of a Multidomain GeTe Crystal. <i>ACS Nano</i> , <b>2020</b> ,	16.7	10
144	Layer-by-Layer Graphene Growth on SiC/Si(001). <i>ACS Nano</i> , <b>2019</b> , 13, 526-535	16.7	10
143	Graphynes: Advanced Carbon Materials with Layered Structure <b>2019</b> , 113-150		7
142	Twisted Bilayer Graphene: Low-Energy Physics, Electronic and Optical Properties <b>2019</b> , 177-231		6
141	Polymeric Nanocomposites Including Graphene Nanoplatelets <b>2019</b> , 481-515		5
140	A photochemical approach for a fast and self-limited covalent modification of surface supported graphene with photoactive dyes. <i>Nanotechnology</i> , <b>2018</b> , 29, 275705	3.4	4
139	Exfoliated Graphene-Based 2D Materials: Synthesis and Catalytic Behaviors <b>2019</b> , 529-558		4
138	Graphene and Its Derivatives as Platforms for MALDI-MS <b>2019</b> , 273-289		4
137	Three-Dimensional Graphene-Based Structures: Production Methods, Properties, and Applications <b>2019</b> , 359-387		3
136	Graphene Plasmonic: Switching Applications <b>2019</b> , 455-505		3

135	Graphene-Reinforced Advanced Composite Materials <b>2019</b> , 27-89	3
134	Fabrication and Properties of Copper/Graphene Composites <b>2019</b> , 285-322	3
133	Graphene-Based Nanomaterials in Tissue Engineering and Regenerative Medicine <b>2019</b> , 637-658	3
132	Topological Design of Graphene <b>2019</b> , 1-44	2
131	Proximity-Induced Topological Transition and Strain-Induced Charge Transfer in Graphene/MoS <sub>2</sub> Bilayer Heterostructures <b>2019</b> , 1-28	2
130	Graphene Structures: From Preparations to Applications <b>2019</b> , 323-357	2
129	Electrochemically Reduced Graphene Oxide: A Smart Material for Electrochemical Sensing <b>2019</b> , 603-629	2
128	Controlling the Electromagnetic and Electrochemical Sensing Properties of Graphene via Heteroatom Doping <b>2019</b> , 663-682	2
127	Complex Refractive Index (RI) of Graphene <b>2019</b> , 389-412	2
126	Graphene-Based Sensors: Applications in Electrochemical (Bio)sensing <b>2019</b> , 349-369	2
125	Biological, Biomedical, and Medical Applications of Graphene and Graphene-Based Materials (G-bMs) <b>2019</b> , 1-41	1
124	Graphene Oxide Multilayers Obtained from Bamboo: New Synthesis Method, Basic Properties, and Future Electronic Applications <b>2019</b> , 191-236	1
123	Nitrogen-Doped Carbon Nanostructures as Oxygen Reduction Reaction (ORR) and Oxygen Evolution Reaction (OER) Electrocatalysts in Acidic Media <b>2019</b> , 373-413	1
122	Graphene-Based Biosensors in Agro-Defense: Food Safety and Animal Health Diagnosis <b>2019</b> , 29-57	1
121	Buckling Characteristics of Bilayer Graphene Sheets Subjected to Humid Thermomechanical Loading <b>2019</b> , 433-454	1
120	Features and Prospects for Epitaxial Graphene on SiC <b>2019</b> , 153-199	1
119	Graphene-Based Electrochemical Aptasensors <b>2019</b> , 465-482	1
118	Graphene and Graphene Nanocomposite-Based Electrochemical Sensors <b>2019</b> , 631-661	1

117	Self-Organized 3D Graphene as a Robust Sensing Platform <b>2019</b> , 483-507	1
116	Graphene and Graphene Composites-Modified Electrodes Surfaces for Selective Sensing of Dopamine in the Presence of Ascorbic Acid and Uric Acid <b>2019</b> , 683-706	1
115	Graphene-Based Materials for Brain Targeting <b>2019</b> , 225-246	1
114	Modelling of Graphene Nanoribbons Antenna Based on MoM-GEC Method to Enhance Nanocommunications in Terahertz Range <b>2019</b> , 359-392	1
113	Polymer/Graphene Nanomaterials: A Platform for Current High-Tech Applications <b>2019</b> , 455-469	1
112	The Impact of Uniaxial Strain and Defect Pattern on Magnetoelectronic and Transport Properties of Graphene <b>2019</b> , 451-502	1
111	Peculiarities of Quasi-Particle Spectra in Graphene Nanostructures <b>2019</b> , 315-387	1
110	Graphene-Like ANB8 $\pi$ Compounds on Metals and Semiconductors <b>2019</b> , 549-591	1
109	Nature of Graphene, Its Chemical Structure, Composites, Synthesis, Properties, and Applications <b>2019</b> , 613-636	1
108	Linear Carbon: From 1D Carbyne to 2D Hybrid sp-sp <sup>2</sup> Nanostructures Beyond Graphene <b>2019</b> , 297-340	1
107	Atomic Structure and Electronic Properties of Few-Layer Graphene on SiC(001) <b>2019</b> , 117-151	1
106	Chemically Modified 2D Materials: Production and Applications <b>2019</b> , 373-400	1
105	Ab Initio Design of 2D and 3D Graphene-Based Nanostructure <b>2019</b> , 171-202	1
104	Graphene-Based Composite Nanostructures: Synthesis, Properties, and Applications <b>2019</b> , 203-232	1
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102	Graphene Nanomaterials in Energy and Environment Applications <b>2019</b> , 1-25	1
101	Self- and Directed-Assembly of Metallic and Nonmetallic Fluorophors: Considerations into Graphene and Graphene Oxides for Sensing and Imaging Applications <b>2019</b> , 469-505	1
100	Trends and Frontiers in Graphene-Based (Bio)sensors for Pesticides Electroanalysis <b>2019</b> , 59-98	1

99	Graphene-Based Biosensors: Design, Construction, and Validation. Toward a Nanotechnological Tool for the Rapid in-Field Detection of Food Toxicants and Environmental Pollutants <b>2019</b> , 99-116	1
98	Recent Biosensing Applications of Graphene-Based Nanomaterials <b>2019</b> , 297-348	1
97	Graphene-Based Fiber Optic Label-Free Biosensor <b>2019</b> , 371-396	1
96	Graphene-Based Nanocomposite Materials for the Design of Electrochemical Sensors and Their Applications <b>2019</b> , 535-568	0
95	High Resolution STM Imaging <b>2015</b> , 561-619	0
94	Graphene Metamaterial Electron Optics: Excitation Processes and Electro-Optical Modulation <b>2019</b> , 263-296	0
93	Electrochemical Biosensors Based on Green Synthesized Graphene and Graphene Nanocomposites <b>2019</b> , 233-296	0
92	Graphene Composites <b>2019</b> , 1-25	0
91	Graphene-Based Materials for Implants <b>2019</b> , 143-175	0
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89	Functionalization of Graphene with Molecules and/or Nanoparticles for Advanced Applications <b>2019</b> , 559-609	0
88	Label-Free Biosensors Based on Graphene: State-of-the-Art <b>2019</b> , 397-427	0
87	Surface functionalization of few-layer graphene on SiC(001) by Neutral Red dye. <i>Applied Surface Science</i> , <b>2022</b> , 585, 152542	6.7 0
86	Supramolecular Graphene-Based Systems for Drug Delivery <b>2019</b> , 443-479	
85	Graphite in Metallic Materials Growths, Structures, and Defects of Spheroidal Graphite in Ductile Iron <b>2019</b> , 1-39	
84	Adaptation and Viability of Graphene-Based Materials in Clinical Improvement <b>2019</b> , 79-98	
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82	Graphene in Bioelectronics <b>2019</b> , 253-262	

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- 78 Graphene and Graphene-Based Hybrid Composites for Advanced Rechargeable Battery Electrodes **2019**, 147-196
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- 72 Finite Element Analysis of Graphene Materials **2019**, 707-730
- 71 Quantitative Real-Time Evaluation of C/O Ratios and Stepwise Control of Deoxidization of Graphene Oxide Using Plasmonic-Based Electrochemical Spectroscopy **2019**, 731-765
- 70 Effect of Graphene Oxide Nanosheets on the Structure and Properties of Cement Composites **2019**, 43-78
- 69 Graphene-Based Synaptic Devices for Neuromorphic Applications **2019**, 99-142
- 68 Ultrashort Pulse Fiber Laser Generation Using Molybdenum Disulfide and Tungsten Disulfide Saturable Absorber **2019**, 177-197
- 67 Graphene-Modified Asphalt **2019**, 199-223
- 66 Electrochemistry of Graphene Materials **2019**, 389-419
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- 63 Printed Graphene Radio Frequency and Sensing Applications for Internet of Things **2019**, 11-46
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- 60 Sustainability, Research, and Development of Graphene for Engineering Applications **2019**, 147-190
- 59 Hydrogen Functionalized Graphene Nanostructure Material for Spintronic Application **2019**, 421-450
- 58 Wave Propagation Responses of Double-Layered Graphene Sheets in Hygrothermal Environment **2019**, 289-307
- 57 Graphene Terahertz Leaky-Wave Antennas **2019**, 309-340
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- 55 Graphene-Based Plasmonic Components for THz Applications: Planar Ring Array Devices **2019**, 393-408
- 54 Exploiting Graphene as an Efficient Catalytic Template for Organic Transformations: Synthesis, Characterization and Activity Evaluation of Graphene-Based Catalysts **2019**, 503-528
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- 42 Fractional Quantum Hall Effect in Graphene, a Topological Approach **2019**, 413-453
- 41 Theoretical Study and Numerical Modeling of Graphene's Electromagnetic Response **2019**, 507-548
- 40 Lower Dimensional Materials **2019**, 593-611
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- 27 GrapheneMetal Oxide Composite as Anode Material in Li-Ion Batteries **2019**, 323-352
- 26 Role of Reduced Graphene Oxide Nanosheet Composition with ZnO Nanostructures in Gas Sensing Properties **2019**, 395-417
- 25 Functional Graphene Oxide/Epoxy Nanocomposite Coatings with Enhanced Protection Properties **2019**, 419-442
- 24 Graphene OxidePolyacrylamide Composites: Optical and Mechanical Characterizations **2019**, 517-540
- 23 Graphitic Carbon/Graphene on Si(111) via Direct Deposition of Solid-State Carbon Atoms: Growth Mechanism and Film Characterization **2019**, 201-247
- 22 Graphene as Nanolubricant for Machining **2019**, 27-48
- 21 Graphene-Based Materials for Supercapacitors and Conductive Additives of Lithium Ion Batteries **2019**, 219-298
- 20 Graphene-Based Flexible Actuators, Sensors, and Supercapacitors **2019**, 299-337
- 19 Graphene as Catalyst Support for the Reactions in Fuel Cells **2019**, 339-372
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