### Mark H Rummeli

#### List of Publications by Citations

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#	Paper	IF	Citations
306	Applications of 2D MXenes in energy conversion and storage systems. <i>Chemical Society Reviews</i> , <b>2019</b> , 48, 72-133	58.5	878
305	Can graphene be used as a substrate for Raman enhancement?. Nano Letters, 2010, 10, 553-61	11.5	771
304	Synthesis of nitrogen-doped graphene using embedded carbon and nitrogen sources. <i>Advanced Materials</i> , <b>2011</b> , 23, 1020-4	24	653
303	Controlled growth of high-quality monolayer WS2 layers on sapphire and imaging its grain boundary. <i>ACS Nano</i> , <b>2013</b> , 7, 8963-71	16.7	586
302	Ultrathin two-dimensional atomic crystals as stable interfacial layer for improvement of lithium metal anode. <i>Nano Letters</i> , <b>2014</b> , 14, 6016-22	11.5	545
301	Silicon carbide-free graphene growth on silicon for lithium-ion battery with high volumetric energy density. <i>Nature Communications</i> , <b>2015</b> , 6, 7393	17.4	376
300	Ultrafast epitaxial growth of metre-sized single-crystal graphene on industrial Cu foil. <i>Science Bulletin</i> , <b>2017</b> , 62, 1074-1080	10.6	326
299	Atomic resolution imaging and topography of boron nitride sheets produced by chemical exfoliation. <i>ACS Nano</i> , <b>2010</b> , 4, 1299-304	16.7	285
298	Direct low-temperature nanographene CVD synthesis over a dielectric insulator. ACS Nano, <b>2010</b> , 4, 420	06-1.9	279
297	Applications of Phosphorene and Black Phosphorus in Energy Conversion and Storage Devices. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702093	21.8	272
296	Free-standing single-atom-thick iron membranes suspended in graphene pores. <i>Science</i> , <b>2014</b> , 343, 122	.833 <i>2</i> 3	223
295	Synthesis challenges for graphene industry. <i>Nature Materials</i> , <b>2019</b> , 18, 520-524	27	217
294	Roll-to-Roll Green Transfer of CVD Graphene onto Plastic for a Transparent and Flexible Triboelectric Nanogenerator. <i>Advanced Materials</i> , <b>2015</b> , 27, 5210-6	24	215
293	Direct imaging of rotational stacking faults in few layer graphene. Nano Letters, 2009, 9, 102-6	11.5	204
292	Rational design of a binary metal alloy for chemical vapour deposition growth of uniform single-layer graphene. <i>Nature Communications</i> , <b>2011</b> , 2, 522	17.4	201
291	Structural transformations in graphene studied with high spatial and temporal resolution. <i>Nature Nanotechnology</i> , <b>2009</b> , 4, 500-4	28.7	191
290	A growth mechanism for free-standing vertical graphene. <i>Nano Letters</i> , <b>2014</b> , 14, 3064-71	11.5	182

# (2018-2013)

289	van der Waals epitaxial growth of graphene on sapphire by chemical vapor deposition without a metal catalyst. <i>ACS Nano</i> , <b>2013</b> , 7, 385-95	16.7	182
288	Scalable Seashell-Based Chemical Vapor Deposition Growth of Three-Dimensional Graphene Foams for Oil-Water Separation. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 6360-3	16.4	177
287	Extremely Weak van der Waals Coupling in Vertical ReS2 Nanowalls for High-Current-Density Lithium-Ion Batteries. <i>Advanced Materials</i> , <b>2016</b> , 28, 2616-23	24	169
286	Bridging the Gap between Reality and Ideal in Chemical Vapor Deposition Growth of Graphene. <i>Chemical Reviews</i> , <b>2018</b> , 118, 9281-9343	68.1	160
285	Wearable energy sources based on 2D materials. <i>Chemical Society Reviews</i> , <b>2018</b> , 47, 3152-3188	58.5	158
284	Synthesis of boron-doped graphene monolayers using the sole solid feedstock by chemical vapor deposition. <i>Small</i> , <b>2013</b> , 9, 1316-20	11	157
283	Direct Chemical Vapor Deposition-Derived Graphene Glasses Targeting Wide Ranged Applications. <i>Nano Letters</i> , <b>2015</b> , 15, 5846-54	11.5	152
282	Carbon nanostructures as multi-functional drug delivery platforms. <i>Journal of Materials Chemistry B</i> , <b>2013</b> , 1, 401-428	7.3	149
281	Chemical vapor deposition growth of large-scale hexagonal boron nitride with controllable orientation. <i>Nano Research</i> , <b>2015</b> , 8, 3164-3176	10	131
280	Direct growth of high-quality graphene on high-ldielectric SrTiOlsubstrates. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 6574-7	16.4	119
279	Size and shape control of colloidal copper(I) sulfide nanorods. ACS Nano, 2012, 6, 5889-96	16.7	118
278	Novel catalysts, room temperature, and the importance of oxygen for the synthesis of single-walled carbon nanotubes. <i>Nano Letters</i> , <b>2005</b> , 5, 1209-15	11.5	116
277	Direct Growth of MoS[h-BN Heterostructures via a Sulfide-Resistant Alloy. ACS Nano, 2016, 10, 2063-70	16.7	115
276	Graphene: Piecing it together. Advanced Materials, <b>2011</b> , 23, 4471-90	24	115
275	2D WC single crystal embedded in graphene for enhancing hydrogen evolution reaction. <i>Nano Energy</i> , <b>2017</b> , 33, 356-362	17.1	109
274	Tailoring N-Doped Single and Double Wall Carbon Nanotubes from a Nondiluted Carbon/Nitrogen Feedstock. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 2879-2884	3.8	107
273	Directly Grown Vertical Graphene Carpets as Janus Separators toward Stabilized Zn Metal Anodes. <i>Advanced Materials</i> , <b>2020</b> , 32, e2003425	24	106
272	Biotemplating Growth of Nepenthes-like N-Doped Graphene as a Bifunctional Polysulfide Scavenger for Li-S Batteries. <i>ACS Nano</i> , <b>2018</b> , 12, 10240-10250	16.7	104

271	Three-dimensional nanostructured graphene: Synthesis and energy, environmental and biomedical applications. <i>Synthetic Metals</i> , <b>2017</b> , 234, 53-85	3.6	103
270	CVD growth of large area smooth-edged graphene nanomesh by nanosphere lithography. <i>Scientific Reports</i> , <b>2013</b> , 3, 1238	4.9	102
269	Growing Uniform Graphene Disks and Films on Molten Glass for Heating Devices and Cell Culture. <i>Advanced Materials</i> , <b>2015</b> , 27, 7839-46	24	102
268	Twinned growth behaviour of two-dimensional materials. <i>Nature Communications</i> , <b>2016</b> , 7, 13911	17.4	101
267	Scalable chemical-vapour-deposition growth of three-dimensional graphene materials towards energy-related applications. <i>Chemical Society Reviews</i> , <b>2018</b> , 47, 3018-3036	58.5	98
266	Synthesis and characterization of carbon nanowalls on different substrates by radio frequency plasma enhanced chemical vapor deposition. <i>Carbon</i> , <b>2014</b> , 72, 372-380	10.4	98
265	Hierarchical Carbide-Derived Carbon Foams with Advanced Mesostructure as a Versatile Electrochemical Energy-Storage Material. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1300645	21.8	90
264	Towards super-clean graphene. <i>Nature Communications</i> , <b>2019</b> , 10, 1912	17.4	89
263	In Situ Observations of Free-Standing Graphene-like Mono- and Bilayer ZnO Membranes. <i>ACS Nano</i> , <b>2015</b> , 9, 11408-13	16.7	89
262	Self-Terminating Confinement Approach for Large-Area Uniform Monolayer Graphene Directly over Si/SiO by Chemical Vapor Deposition. <i>ACS Nano</i> , <b>2017</b> , 11, 1946-1956	16.7	87
261	Evolutionary Chlorination of Graphene: From Charge-Transfer Complex to Covalent Bonding and Nonbonding. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 844-850	3.8	87
<b>2</b> 60	Oxide-driven carbon nanotube growth in supported catalyst CVD. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 15772-3	16.4	87
259	Thermal decomposition of ferrocene as a method for production of single-walled carbon nanotubes without additional carbon sources. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 20973-7	3.4	86
258	Investigating the graphitization mechanism of SiO(2) nanoparticles in chemical vapor deposition. <i>ACS Nano</i> , <b>2009</b> , 3, 4098-104	16.7	81
257	Direct in situ observations of single Fe atom catalytic processes and anomalous diffusion at graphene edges. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 15641-6	11.5	8o
256	Direct growth of ultrafast transparent single-layer graphene defoggers. Small, 2015, 11, 1840-6	11	78
255	Investigating the diameter-dependent stability of single-walled carbon nanotubes. <i>ACS Nano</i> , <b>2009</b> , 3, 1557-63	16.7	76
254	Liquid Metal: An Innovative Solution to Uniform Graphene Films. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 3637-	-3643	75

253	Atomic structure of interconnected few-layer graphene domains. ACS Nano, 2011, 5, 6610-8	16.7	73	
252	Stranski-Krastanov and Volmer-Weber CVD Growth Regimes To Control the Stacking Order in Bilayer Graphene. <i>Nano Letters</i> , <b>2016</b> , 16, 6403-6410	11.5	73	
251	Direct CVD Growth of Graphene on Traditional Glass: Methods and Mechanisms. <i>Advanced Materials</i> , <b>2019</b> , 31, e1803639	24	73	
250	Understanding the catalyst-free transformation of amorphous carbon into graphene by current-induced annealing. <i>Scientific Reports</i> , <b>2013</b> , 3,	4.9	72	
249	Growing three-dimensional biomorphic graphene powders using naturally abundant diatomite templates towards high solution processability. <i>Nature Communications</i> , <b>2016</b> , 7, 13440	17.4	71	
248	Synthesis of carbon nanotubes with and without catalyst particles. <i>Nanoscale Research Letters</i> , <b>2011</b> , 6, 303	5	70	
247	High-mobility graphene on liquid p-block elements by ultra-low-loss CVD growth. <i>Scientific Reports</i> , <b>2013</b> , 3, 2670	4.9	69	
246	Recent Progress on Two-Dimensional Materials. <i>Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica</i> , <b>2021</b> , 2108017-0	3.8	69	
245	Supercritical carbon dioxide anchored FeDIhanoparticles on graphene foam and lithium battery performance. <i>ACS Applied Materials &amp; Samp; Interfaces</i> , <b>2014</b> , 6, 22527-33	9.5	68	
244	Shedding light on the crystallographic etching of multi-layer graphene at the atomic scale. <i>Nano Research</i> , <b>2009</b> , 2, 695-705	10	68	
243	Confined crystals of the smallest phase-change material. <i>Nano Letters</i> , <b>2013</b> , 13, 4020-7	11.5	65	
242	Synthesis, characterization, and electrical properties of nitrogen-doped single-walled carbon nanotubes with different nitrogen content. <i>Diamond and Related Materials</i> , <b>2010</b> , 19, 1199-1206	3.5	65	
241	Graphene-Like ZnO: A Mini Review. <i>Crystals</i> , <b>2016</b> , 6, 100	2.3	64	
240	Scalable Salt-Templated Synthesis of Nitrogen-Doped Graphene Nanosheets toward Printable Energy Storage. <i>ACS Nano</i> , <b>2019</b> , 13, 7517-7526	16.7	60	
239	Nanosized carbon black combined with Ni2O3 as "universal" catalysts for synergistically catalyzing carbonization of polyolefin wastes to synthesize carbon nanotubes and application for supercapacitors. <i>Environmental Science &amp; Environmental Science &amp; Camp; Technology</i> , <b>2014</b> , 48, 4048-55	10.3	60	
238	CVD growth of 1D and 2D sp2 carbon nanomaterials. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 640-667	4.3	59	
237	Graphene oxide-based drug delivery vehicles: functionalization, characterization, and cytotoxicity evaluation. <i>Journal of Nanoparticle Research</i> , <b>2013</b> , 15, 1	2.3	59	
236	A one step approach to B-doped single-walled carbon nanotubes. <i>Journal of Materials Chemistry</i> , <b>2008</b> , 18, 5676		59	

235	The catalytic potential of high-ldielectrics for graphene formation. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 073110	3.4	57
234	Seed-Assisted Growth of Single-Crystalline Patterned Graphene Domains on Hexagonal Boron Nitride by Chemical Vapor Deposition. <i>Nano Letters</i> , <b>2016</b> , 16, 6109-6116	11.5	56
233	Direct Chemical-Vapor-Deposition-Fabricated, Large-Scale Graphene Glass with High Carrier Mobility and Uniformity for Touch Panel Applications. <i>ACS Nano</i> , <b>2016</b> , 10, 11136-11144	16.7	56
232	Catalyst volume to surface area constraints for nucleating carbon nanotubes. <i>Journal of Physical Chemistry B</i> , <b>2007</b> , 111, 8234-41	3.4	55
231	Plasmon-Free Surface-Enhanced Raman Spectroscopy Using Metallic 2D Materials. <i>ACS Nano</i> , <b>2019</b> , 13, 8312-8319	16.7	54
230	Switching Vertical to Horizontal Graphene Growth Using Faraday Cage-Assisted PECVD Approach for High-Performance Transparent Heating Device. <i>Advanced Materials</i> , <b>2018</b> , 30, 1704839	24	53
229	High Power Q-Switched Thulium Doped Fibre Laser using Carbon Nanotube Polymer Composite Saturable Absorber. <i>Scientific Reports</i> , <b>2016</b> , 6, 24220	4.9	53
228	On the Role of Vapor Trapping for Chemical Vapor Deposition (CVD) Grown Graphene over Copper. <i>Chemistry of Materials</i> , <b>2013</b> , 25, 4861-4866	9.6	52
227	Oxidation as A Means to Remove Surface Contaminants on Cu Foil Prior to Graphene Growth by Chemical Vapor Deposition. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 13363-13368	3.8	52
226	Amorphous carbon under 80 kV electron irradiation: a means to make or break graphene. <i>Advanced Materials</i> , <b>2012</b> , 24, 5630-5	24	52
225	Programmable sub-nanometer sculpting of graphene with electron beams. ACS Nano, 2012, 6, 10327-3	416.7	49
224	Two-dimensional membrane as elastic shell with proof on the folds revealed by three-dimensional atomic mapping. <i>Nature Communications</i> , <b>2015</b> , 6, 8935	17.4	48
223	Isotope-Engineered Single-Wall Carbon Nanotubes; A Key Material for Magnetic Studies. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 4094-4098	3.8	48
222	Single-wall-carbon-nanotube/single-carbon-chain molecular junctions. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	47
221	Examining co-based nanocrystals on graphene using low-voltage aberration-corrected transmission electron microscopy. <i>ACS Nano</i> , <b>2010</b> , 4, 470-6	16.7	47
220	A size dependent evaluation of the cytotoxicity and uptake of nanographene oxide. <i>Journal of Materials Chemistry B</i> , <b>2015</b> , 3, 2522-2529	7-3	46
219	A universal transfer route for graphene. <i>Nanoscale</i> , <b>2014</b> , 6, 889-96	7.7	46
218	CVD-grown horizontally aligned single-walled carbon nanotubes: synthesis routes and growth mechanisms. <i>Small</i> , <b>2012</b> , 8, 1973-92	11	46

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217	A review of recent developments in Si/C composite materials for Li-ion batteries. <i>Energy Storage Materials</i> , <b>2021</b> , 34, 735-754	19.4	46
216	Direct Synthesis of Few-Layer Graphene on NaCl Crystals. <i>Small</i> , <b>2015</b> , 11, 6302-8	11	45
215	pH-dependent release of doxorubicin from fast photo-cross-linkable polymersomes based on benzophenone units. <i>Chemistry - A European Journal</i> , <b>2012</b> , 18, 12227-31	4.8	45
214	Nanoengineered Catalyst Particles as a Key for Tailor-Made Carbon Nanotubes. <i>Chemistry of Materials</i> , <b>2007</b> , 19, 5006-5009	9.6	45
213	Investigating the outskirts of Fe and Co catalyst particles in alumina-supported catalytic CVD carbon nanotube growth. <i>ACS Nano</i> , <b>2010</b> , 4, 1146-52	16.7	44
212	Isotropic Growth of Graphene toward Smoothing Stitching. ACS Nano, 2016, 10, 7189-96	16.7	43
211	Large-Area Synthesis of Superclean Graphene via Selective Etching of Amorphous Carbon with Carbon Dioxide. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 14446-14451	16.4	43
210	Ultra-smooth glassy graphene thin films for flexible transparent circuits. Science Advances, 2016, 2, e16	50145.34	43
209	Electron-Driven In Situ Transmission Electron Microscopy of 2D Transition Metal Dichalcogenides and Their 2D Heterostructures. <i>ACS Nano</i> , <b>2019</b> , 13, 978-995	16.7	42
208	Ultrafast Self-Limited Growth of Strictly Monolayer WSe Crystals. <i>Small</i> , <b>2016</b> , 12, 5741-5749	11	42
207	Atomic resolution imaging of the edges of catalytically etched suspended few-layer graphene. <i>ACS Nano</i> , <b>2011</b> , 5, 1975-83	16.7	42
206	Natural Biopolymers for Flexible Sensing and Energy Devices. <i>Chinese Journal of Polymer Science</i> (English Edition), <b>2020</b> , 38, 459-490	3.5	41
205	Direct Chemical Vapor Deposition Growth of Graphene on Insulating Substrates. <i>ChemNanoMat</i> , <b>2016</b> , 2, 9-18	3.5	41
204	Bandgap tuning of two-dimensional materials by sphere diameter engineering. <i>Nature Materials</i> , <b>2020</b> , 19, 528-533	27	40
203	Few-layer graphene shells and nonmagnetic encapsulates: a versatile and nontoxic carbon nanomaterial. <i>ACS Nano</i> , <b>2013</b> , 7, 10552-62	16.7	40
202	High-Quality Double-Walled Carbon Nanotubes Grown by a Cold-Walled Radio Frequency Chemical Vapor Deposition Process. <i>Chemistry of Materials</i> , <b>2008</b> , 20, 3466-3472	9.6	40
201	Self-Aligned Single-Crystalline Hexagonal Boron Nitride Arrays: Toward Higher Integrated Electronic Devices. <i>Advanced Electronic Materials</i> , <b>2015</b> , 1, 1500223	6.4	38
200	Low voltage transmission electron microscopy of graphene. <i>Small</i> , <b>2015</b> , 11, 515-42	11	37

199	Universal Substrate-Trapping Strategy To Grow Strictly Monolayer Transition Metal Dichalcogenides Crystals. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 6095-6103	9.6	36
198	Revealing the Small-Bundle Internal Structure of Vertically Aligned Single-Walled Carbon Nanotube Films [] <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 17861-17864	3.8	36
197	Edge-to-Edge Oriented Self-Assembly of ReS2 Nanoflakes. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 11101-4	16.4	35
196	Synthesis of Doped Porous 3D Graphene Structures by Chemical Vapor Deposition and Its Applications. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1904457	15.6	35
195	Synthesis and toxicity characterization of carbon coated iron oxide nanoparticles with highly defined size distributions. <i>Biochimica Et Biophysica Acta - General Subjects</i> , <b>2014</b> , 1840, 160-9	4	35
194	One-dimensional confined motion of single metal atoms inside double-walled carbon nanotubes. <i>Physical Review Letters</i> , <b>2009</b> , 102, 195504	7.4	32
193	Examining the Edges of Multi-Layer Graphene Sheets. <i>Chemistry of Materials</i> , <b>2009</b> , 21, 2418-2421	9.6	32
192	Catalyst size dependencies for carbon nanotube synthesis. <i>Physica Status Solidi (B): Basic Research</i> , <b>2007</b> , 244, 3911-3915	1.3	32
191	Lattice expansion in seamless bilayer graphene constrictions at high bias. <i>Nano Letters</i> , <b>2012</b> , 12, 4455-	911.5	31
190	The polycyclic aromatic hydrocarbon concentrations in soils in the Region of Valasske Mezirici, the Czech Republic. <i>Geochemical Transactions</i> , <b>2009</b> , 10, 12	3	31
189	Hetero-site nucleation for growing twisted bilayer graphene with a wide range of twist angles. <i>Nature Communications</i> , <b>2021</b> , 12, 2391	17.4	31
188	Iodine-Mediated Chemical Vapor Deposition Growth of Metastable Transition Metal Dichalcogenides. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 4641-4644	9.6	30
187	Copper-Containing Carbon Feedstock for Growing Superclean Graphene. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 7670-7674	16.4	30
186	Catalyst poisoning by amorphous carbon during carbon nanotube growth: fact or fiction?. <i>ACS Nano</i> , <b>2011</b> , 5, 8928-34	16.7	29
185	Theoretical Insight into High-Efficiency Triple-Junction Tandem Solar Cells via the Band Engineering of Antimony Chalcogenides. <i>Solar Rrl</i> , <b>2021</b> , 5, 2000800	7.1	29
184	Fast and uniform growth of graphene glass using confined-flow chemical vapor deposition and its unique applications. <i>Nano Research</i> , <b>2016</b> , 9, 3048-3055	10	28
183	Clean and efficient transfer of CVD-grown graphene by electrochemical etching of metal substrate. Journal of Electroanalytical Chemistry, <b>2013</b> , 688, 243-248	4.1	28
182	Human-Like Sensing and Reflexes of Graphene-Based Films. <i>Advanced Science</i> , <b>2016</b> , 3, 1600130	13.6	28

# (2010-2015)

181	Direct synthesis of graphene from adsorbed organic solvent molecules over copper. <i>RSC Advances</i> , <b>2015</b> , 5, 60884-60891	3.7	27	
180	Confirming the Dual Role of Etchants during the Enrichment of Semiconducting Single Wall Carbon Nanotubes by Chemical Vapor Deposition. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 5964-5973	9.6	27	
179	Single Cr atom catalytic growth of graphene. <i>Nano Research</i> , <b>2018</b> , 11, 2405-2411	10	27	
178	Insights into the Early Growth of Homogeneous Single-Layer Graphene over NiMo Binary Substrates. <i>Chemistry of Materials</i> , <b>2013</b> , 25, 3880-3887	9.6	27	
177	The use of aliphatic alcohol chain length to control the nitrogen type and content in nitrogen doped carbon nanotubes. <i>Carbon</i> , <b>2013</b> , 52, 316-325	10.4	27	
176	The formation of stacked-cup carbon nanotubes using chemical vapor deposition from ethanol over silica. <i>Carbon</i> , <b>2010</b> , 48, 3175-3181	10.4	27	
175	Unveiling the Atomic Structure of Single-Wall Boron Nanotubes. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4127-4134	15.6	26	
174	Electron paramagnetic resonance investigation of purified catalyst-free single-walled carbon nanotubes. <i>ACS Nano</i> , <b>2010</b> , 4, 7708-16	16.7	26	
173	Enhancement of the structure stability of MOF-5 confined to multiwalled carbon nanotubes. <i>Physica Status Solidi (B): Basic Research</i> , <b>2010</b> , 247, 2664-2668	1.3	26	
172	Preparation of organovermiculites using HDTMA: structure and sorptive properties using naphthalene. <i>Journal of Colloid and Interface Science</i> , <b>2008</b> , 327, 341-7	9.3	26	
171	Graphene Glass Inducing Multidomain Orientations in Cholesteric Liquid Crystal Devices toward Wide Viewing Angles. <i>ACS Nano</i> , <b>2018</b> , 12, 6443-6451	16.7	26	
170	Li-storage performance of binder-free and flexible iron fluoride@graphene cathodes. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 23930-23935	13	25	
169	Carbon-nanotube-based stimuli-responsive controlled-release system. <i>Chemistry - A European Journal</i> , <b>2011</b> , 17, 4454-9	4.8	25	
168	Structural distortions in few-layer graphene creases. <i>ACS Nano</i> , <b>2011</b> , 5, 9984-91	16.7	25	
167	Graphene synthesis: On-the-spot growth. <i>Nature Materials</i> , <b>2016</b> , 15, 9-10	27	24	
166	In situ observations of self-repairing single-walled carbon nanotubes. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	24	
165	Examining the stability of folded graphene edges against electron beam induced sputtering with atomic resolution. <i>Nanotechnology</i> , <b>2010</b> , 21, 325702	3.4	24	
164	High-performance field effect transistors from solution processed carbon nanotubes. <i>ACS Nano</i> , <b>2010</b> , 4, 6659-64	16.7	24	

163	Capturing the motion of molecular nanomaterials encapsulated within carbon nanotubes with ultrahigh temporal resolution. <i>ACS Nano</i> , <b>2009</b> , 3, 3037-44	16.7	24
162	Resonant Raman spectroscopy on enriched 13C carbon nanotubes. <i>Carbon</i> , <b>2011</b> , 49, 4719-4723	10.4	24
161	Chemical vapor deposition of functionalized single-walled carbon nanotubes with defined nitrogen doping. <i>Physica Status Solidi (B): Basic Research</i> , <b>2007</b> , 244, 4051-4055	1.3	24
160	Highly Conductive Nitrogen-Doped Graphene Grown on Glass toward Electrochromic Applications. <i>ACS Applied Materials &amp; District Material</i>	9.5	24
159	Phosphorus-Based Composites as Anode Materials for Advanced Alkali Metal Ion Batteries. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2004648	15.6	23
158	New Frontiers in Electron Beam-Driven Chemistry in and around Graphene. <i>Advanced Materials</i> , <b>2019</b> , 31, e1800715	24	22
157	CO2 enhanced chemical vapor deposition growth of few-layer graphene over NiO(x). <i>ACS Nano</i> , <b>2014</b> , 8, 9224-32	16.7	22
156	Size-dependent nanographene oxide as a platform for efficient carboplatin release. <i>Journal of Materials Chemistry B</i> , <b>2013</b> , 1, 6107-6114	7.3	22
155	Understanding high-yield catalyst-free growth of horizontally aligned single-walled carbon nanotubes nucleated by activated C60 species. <i>ACS Nano</i> , <b>2012</b> , 6, 10825-34	16.7	22
154	On the catalytic hydrogenation of graphite for graphene nanoribbon fabrication. <i>Physica Status Solidi (B): Basic Research</i> , <b>2009</b> , 246, 2540-2544	1.3	22
153	Graphene Coating of Silicon Nanoparticles with CO2 -Enhanced Chemical Vapor Deposition. <i>Small</i> , <b>2016</b> , 12, 658-67	11	22
152	Controllable Sliding Transfer of Wafer-Size Graphene. <i>Advanced Science</i> , <b>2016</b> , 3, 1600006	13.6	21
151	Dominantly epitaxial growth of graphene on Ni (1 1 1) substrate. <i>Applied Surface Science</i> , <b>2014</b> , 314, 490	0 <b>49</b> 9	21
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148	Self-assembly formation of multi-walled carbon nanotubes on gold surfaces. <i>Nanoscale</i> , <b>2010</b> , 2, 2835-4	<b>0</b> 7.7	20
147	Synergized Multimetal Oxides with Amorphous/Crystalline Heterostructure as Efficient Electrocatalysts for Lithium Dxygen Batteries. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2100110	21.8	20
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137	Amphiphilic O-functionalized calix[4]resocinarenes with tunable structural behavior. <i>RSC Advances</i> , <b>2014</b> , 4, 9912	3.7	17
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135	Optimizing substrate surface and catalyst conditions for high yield chemical vapor deposition grown epitaxially aligned single-walled carbon nanotubes. <i>Carbon</i> , <b>2011</b> , 49, 5029-5037	10.4	16
134	Raman spectroscopy study on concentrated acid treated carbon nanotubes. <i>Physica Status Solidi</i> (B): Basic Research, <b>2009</b> , 246, 2717-2720	1.3	16
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121	In Situ Formation of Free-Standing Single-Atom-Thick Antiferromagnetic Chromium Membranes. <i>Nano Letters</i> , <b>2020</b> , 20, 4354-4361	11.5	12
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106	A pinecone-inspired nanostructure design for long-cycle and high performance Si anodes. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 5395-5401	13	10
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71	Growth of 12-inch uniform monolayer graphene film on molten glass and its application in PbI2-based photodetector. <i>Nano Research</i> , <b>2019</b> , 12, 1888-1893	10	6
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63	Carbon nanotube synthesis via ceramic catalysts. <i>Physica Status Solidi (B): Basic Research</i> , <b>2009</b> , 246, 248	36-348	96
62	Low pressure chemical vapor deposition synthesis of large area hetero-doped mono- and few-layer graphene with nitrogen and oxygen species. <i>Materials Research Express</i> , <b>2019</b> , 6, 055604	1.7	6
61	In-situ observations of novel single-atom thick 2D tin membranes embedded in graphene. <i>Nano Research</i> , <b>2021</b> , 14, 747-753	10	6
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54	Characterisation Techniques <b>2013</b> , 229-332		5
53	Silicon carbide embedded in carbon nanofibres: structure and band gap determination. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 24437-42	3.6	5
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41	Hydrogen-induced self-assembly of helical carbon nanostructures from ethanol over SiO2 catalysts. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 094317	2.5	4
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35	Single-walled carbon nanotubes fractionation via electrophoresis. <i>Polish Journal of Chemical Technology</i> , <b>2011</b> , 13, 1-4	1	3
34	Separation of surfactant functionalized single-walled carbon nanotubes via free solution electrophoresis method. <i>Open Physics</i> , <b>2011</b> , 9,	1.3	3
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31	Tracking down the catalytic hydrogenation of multilayer graphene. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, 2731-2734		3
30	Toward stable lithium-ion batteries: Accelerating the transfer and alloying reactions of Sn-based anodes via coordination atom regulation and carbon hybridization. <i>Journal of Power Sources</i> , <b>2022</b> , 519, 230778	8.9	3
29	A comparative study on simple and practical chemical gas sensors from chemically modified graphene films. <i>Materials Research Express</i> , <b>2019</b> , 6, 015607	1.7	3
28	Room temperature single-step synthesis of metal decorated boron-rich nanowires via laser ablation. <i>Nano Convergence</i> , <b>2019</b> , 6, 14	9.2	2
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26	Spatial recognition of defects and tube type in carbon nanotube field effect transistors using electrostatic force microscopy. <i>Nanotechnology</i> , <b>2013</b> , 24, 235708	3.4	2
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20	Charge Density Waves Driven by Peierls Instability at the Interface of Two-Dimensional Lateral Heterostructures. <i>Small</i> , <b>2018</b> , 14, e1803040	11	2

19	Frontispiece: Large-Area Synthesis of Superclean Graphene via Selective Etching of Amorphous Carbon with Carbon Dioxide. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58,	16.4	1
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16	High resolution X-ray absorption on metallicity selected C60 peapods, single-, and double walled carbon nanotubes. <i>Physica Status Solidi (B): Basic Research</i> , <b>2011</b> , 248, 2544-2547	1.3	1
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13	T2- and T1 relaxivities and magnetic hyperthermia of iron-oxide nanoparticles combined with paramagnetic Gd complexes. <i>Journal of Chemical Sciences</i> , <b>2021</b> , 133, 1	1.8	1
12	Direct synthesis of large-area Al-doped graphene by chemical vapor deposition: Advancing the substitutionally doped graphene family. <i>Nano Research</i> ,1	10	1
11	Nanoparticles for Nanocomposites and Their CharacterizationBelected Peer-Reviewed Articles from NanoOstrava 2015. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2016</b> , 16, 7781-7782	1.3	1
10	Tailoring the stoichiometry of CN nanosheets under electron beam irradiation. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 4747-4756	3.6	1
9	Eliminating Graphite Exfoliation with an Artificial Solid Electrolyte Interphase for Stable Lithium-Ion Batteries <i>Small</i> , <b>2022</b> , e2107460	11	1
8	Ru clusters anchored on Magnli phase Ti4O7 nanofibers enables flexible and highly efficient Li <b>D</b> 2 batteries. <i>Energy Storage Materials</i> , <b>2022</b> , 50, 355-364	19.4	1
7	RETRACTEDElectron-driven engineering of graphene. Journal of Materials Research, 2013, 1-7	2.5	O
6	On the Catalytic Activity of Sn Monomers and Dimers at Graphene Edges and the Synchronized Edge Dependence of Diffusing Atoms in Sn Dimers. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2104340	15.6	O
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4	Toward Direct Growth of Ultra-Flat Graphene. Advanced Functional Materials,2200428	15.6	O
3	On the carbo-thermal reduction of silica for carbon nano-fibre formation via CVD. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1284, 25		
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