Humberto Terrones

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#	Paper	IF	Citations
218	Recent Advances in Two-Dimensional Materials beyond Graphene. <i>ACS Nano</i> , 2015 , 9, 11509-39	16.7	1581
217	Vertical and in-plane heterostructures from WS2/MoS2 monolayers. <i>Nature Materials</i> , 2014 , 13, 1135-42	227	1580
216	Extraordinary room-temperature photoluminescence in triangular WS2 monolayers. <i>Nano Letters</i> , 2013 , 13, 3447-54	11.5	1145
215	Identification of individual and few layers of WS2 using Raman Spectroscopy. <i>Scientific Reports</i> , 2013 , 3,	4.9	911
214	Graphene and graphite nanoribbons: Morphology, properties, synthesis, defects and applications. <i>Nano Today</i> , 2010 , 5, 351-372	17.9	695
213	Controlled production of aligned-nanotube bundles. <i>Nature</i> , 1997 , 388, 52-55	50.4	690
212	Identification of Electron Donor States in N-Doped Carbon Nanotubes. <i>Nano Letters</i> , 2001 , 1, 457-460	11.5	659
211	Defect engineering of two-dimensional transition metal dichalcogenides. 2D Materials, 2016 , 3, 022002	5.9	538
210	Bulk production of a new form of sp(2) carbon: crystalline graphene nanoribbons. <i>Nano Letters</i> , 2008 , 8, 2773-8	11.5	524
209	Nitrogen-doped graphene: beyond single substitution and enhanced molecular sensing. <i>Scientific Reports</i> , 2012 , 2, 586	4.9	517
208	Selective Attachment of Gold Nanoparticles to Nitrogen-Doped Carbon Nanotubes. <i>Nano Letters</i> , 2003 , 3, 275-277	11.5	486
207	Photosensor Device Based on Few-Layered WS2 Films. Advanced Functional Materials, 2013, 23, 5511-55	5 13 .6	480
206	Controlled synthesis and transfer of large-area WS2 sheets: from single layer to few layers. <i>ACS Nano</i> , 2013 , 7, 5235-42	16.7	453
205	Structure and electronic properties of MoS2 nanotubes. <i>Physical Review Letters</i> , 2000 , 85, 146-9	7-4	432
204	Beyond Graphene: Progress in Novel Two-Dimensional Materials and van der Waals Solids. <i>Annual Review of Materials Research</i> , 2015 , 45, 1-27	12.8	430
203	Coalescence of single-walled carbon nanotubes. <i>Science</i> , 2000 , 288, 1226-9	33.3	425
202	New metallic allotropes of planar and tubular carbon. <i>Physical Review Letters</i> , 2000 , 84, 1716-9	7.4	407

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201	Three-dimensionally bonded spongy graphene material with super compressive elasticity and near-zero Poisson's ratio. <i>Nature Communications</i> , 2015 , 6, 6141	17.4	389
200	The role of defects and doping in 2D graphene sheets and 1D nanoribbons. <i>Reports on Progress in Physics</i> , 2012 , 75, 062501	14.4	383
199	Band gap engineering and layer-by-layer mapping of selenium-doped molybdenum disulfide. <i>Nano Letters</i> , 2014 , 14, 442-9	11.5	378
198	Novel hetero-layered materials with tunable direct band gaps by sandwiching different metal disulfides and diselenides. <i>Scientific Reports</i> , 2013 , 3, 1549	4.9	378
197	N-doping and coalescence of carbon nanotubes: synthesis and electronic properties. <i>Applied Physics A: Materials Science and Processing</i> , 2002 , 74, 355-361	2.6	367
196	Biocompatibility and toxicological studies of carbon nanotubes doped with nitrogen. <i>Nano Letters</i> , 2006 , 6, 1609-16	11.5	305
195	Covalently bonded three-dimensional carbon nanotube solids via boron induced nanojunctions. <i>Scientific Reports</i> , 2012 , 2, 363	4.9	300
194	Defect-induced photoluminescence in monolayer semiconducting transition metal dichalcogenides. <i>ACS Nano</i> , 2015 , 9, 1520-7	16.7	295
193	Longitudinal cutting of pure and doped carbon nanotubes to form graphitic nanoribbons using metal clusters as nanoscalpels. <i>Nano Letters</i> , 2010 , 10, 366-72	11.5	284
192	Field-effect transistors based on few-layered \(\text{MoTe(2)}. \) ACS Nano, 2014 , 8, 5911-20	16.7	281
191	Enhanced magnetic coercivities in Fe nanowires. <i>Applied Physics Letters</i> , 1999 , 75, 3363-3365	3.4	276
190	Metal particle catalysed production of nanoscale BN structures. <i>Chemical Physics Letters</i> , 1996 , 259, 568	8-25₹3	256
189	Electronic and optical properties of strained graphene and other strained 2D materials: a review. <i>Reports on Progress in Physics</i> , 2017 , 80, 096501	14.4	252
188	Electron and phonon renormalization near charged defects in carbon nanotubes. <i>Nature Materials</i> , 2008 , 7, 878-83	27	236
187	Spectroscopic signatures for interlayer coupling in MoS2-WSe2 van der Waals stacking. <i>ACS Nano</i> , 2014 , 8, 9649-56	16.7	233
186	Carbon Nitride Nanocomposites: Formation of Aligned CxNy Nanofibers. <i>Advanced Materials</i> , 1999 , 11, 655-658	24	231
185	Efficient route to large arrays of CNx nanofibers by pyrolysis of ferrocene/melamine mixtures. <i>Applied Physics Letters</i> , 1999 , 75, 3932-3934	3.4	229
184	Pyrolytically grown BxCyNz nanomaterials: nanofibres and nanotubes. <i>Chemical Physics Letters</i> , 1996 , 257, 576-582	2.5	200

183	Electrolytic formation of carbon nanostructures. Chemical Physics Letters, 1996, 262, 161-166	2.5	196
182	In situ nucleation of carbon nanotubes by the injection of carbon atoms into metal particles. <i>Nature Nanotechnology</i> , 2007 , 2, 307-11	28.7	195
181	Electronic transport and mechanical properties of phosphorus- and phosphorus-nitrogen-doped carbon nanotubes. <i>ACS Nano</i> , 2009 , 3, 1913-21	16.7	191
180	Covalent 2D and 3D networks from 1D nanostructures: designing new materials. <i>Nano Letters</i> , 2007 , 7, 570-6	11.5	191
179	Nitrogen-mediated carbon nanotube growth: diameter reduction, metallicity, bundle dispersability, and bamboo-like structure formation. <i>ACS Nano</i> , 2007 , 1, 369-75	16.7	185
178	Synthesis and characterization of long strands of nitrogen-doped single-walled carbon nanotubes. <i>Chemical Physics Letters</i> , 2006 , 424, 345-352	2.5	173
177	CVD-grown monolayered MoS 2 as an effective photosensor operating at low-voltage. <i>2D Materials</i> , 2014 , 1, 011004	5.9	170
176	Probing the interlayer coupling of twisted bilayer MoS2 using photoluminescence spectroscopy. <i>Nano Letters</i> , 2014 , 14, 5500-8	11.5	168
175	Fullerene Coalescence in Nanopeapods: A Path to Novel Tubular Carbon. <i>Nano Letters</i> , 2003 , 3, 1037-1	042 .5	166
174	Heterodoped nanotubes: theory, synthesis, and characterization of phosphorus-nitrogen doped multiwalled carbon nanotubes. <i>ACS Nano</i> , 2008 , 2, 441-8	16.7	165
173	Metallic and ferromagnetic edges in molybdenum disulfide nanoribbons. <i>Nanotechnology</i> , 2009 , 20, 32	5 <u>7</u> 03	164
172	Fabrication of vapor and gas sensors using films of aligned CNx nanotubes. <i>Chemical Physics Letters</i> , 2004 , 386, 137-143	2.5	159
171	Microstructural changes induced in Stacked cupltarbon nanofibers by heat treatment. <i>Carbon</i> , 2003 , 41, 1941-1947	10.4	159
170	Excited excitonic states in 1L, 2L, 3L, and bulk WSe2 observed by resonant Raman spectroscopy. <i>ACS Nano</i> , 2014 , 8, 9629-35	16.7	154
169	Thermal stability studies of CVD-grown graphene nanoribbons: Defect annealing and loop formation. <i>Chemical Physics Letters</i> , 2009 , 469, 177-182	2.5	147
168	Tungsten oxide tree-like structures. <i>Chemical Physics Letters</i> , 1999 , 309, 327-334	2.5	145
167	Curved nanostructured materials. New Journal of Physics, 2003, 5, 126-126	2.9	140
166	Magnetic behavior in zinc oxide zigzag nanoribbons. <i>Nano Letters</i> , 2008 , 8, 1562-5	11.5	138

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165	Efficient anchoring of silver nanoparticles on N-doped carbon nanotubes. <i>Small</i> , 2006 , 2, 346-50	11	138
164	Graphitic cones in palladium catalysed carbon nanofibres. <i>Chemical Physics Letters</i> , 2001 , 343, 241-250	2.5	138
163	Synthetic routes to nanoscale BxCyNz architectures. <i>Carbon</i> , 2002 , 40, 1665-1684	10.4	136
162	Enhanced Electron Field Emission in B-doped Carbon Nanotubes. <i>Nano Letters</i> , 2002 , 2, 1191-1195	11.5	125
161	Hydrogen storage in nanoporous carbon materials: myth and facts. <i>Physical Chemistry Chemical Physics</i> , 2007 , 9, 1786-92	3.6	124
160	Synthesis, electronic structure, and Raman scattering of phosphorus-doped single-wall carbon nanotubes. <i>Nano Letters</i> , 2009 , 9, 2267-72	11.5	121
159	Observation of magnetic edge state in graphene nanoribbons. <i>Physical Review B</i> , 2010 , 81,	3.3	120
158	Boron-Mediated Growth of Long Helicity-Selected Carbon Nanotubes. <i>Physical Review Letters</i> , 1999 , 83, 5078-5081	7.4	108
157	Tellurium-Assisted Low-Temperature Synthesis of MoS2 and WS2 Monolayers. ACS Nano, 2015, 9, 1165	8 166 7	107
156	Aligned CNx nanotubes by pyrolysis of ferrocene/C60 under NH3 atmosphere. <i>Applied Physics Letters</i> , 2000 , 77, 1807	3.4	107
155	Boron nitride nanoribbons become metallic. <i>Nano Letters</i> , 2011 , 11, 3267-73	11.5	105
154	3D Silicon oxide nanostructures: from nanoflowers to radiolaria. <i>Journal of Materials Chemistry</i> , 1998 , 8, 1859-1864		102
153	Chemical vapor deposition synthesis of N-, P-, and Si-doped single-walled carbon nanotubes. <i>ACS Nano</i> , 2010 , 4, 1696-702	16.7	101
152	Heterojunctions between metals and carbon nanotubes as ultimate nanocontacts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 4591-5	11.5	100
151	Effects of 45-nm silver nanoparticles on coronary endothelial cells and isolated rat aortic rings. <i>Toxicology Letters</i> , 2009 , 191, 305-13	4.4	99
150	Boron-doping effects in carbon nanotubes. <i>Journal of Materials Chemistry</i> , 2000 , 10, 1425-1429		95
149	Pentagonal rings and nitrogen excess in fullerene-based BN cages and nanotube caps. <i>Chemical Physics Letters</i> , 1999 , 299, 359-367	2.5	95
148	On the electronic structure of WS2 nanotubes. <i>Solid State Communications</i> , 2000 , 114, 245-248	1.6	92

147	Atypical Exciton-Phonon Interactions in WS2 and WSe2 Monolayers Revealed by Resonance Raman Spectroscopy. <i>Nano Letters</i> , 2016 , 16, 2363-8	11.5	91
146	Large-area Si-doped graphene: controllable synthesis and enhanced molecular sensing. <i>Advanced Materials</i> , 2014 , 26, 7593-9	24	91
145	Production of WS2 Nanotubes. <i>Chemistry of Materials</i> , 2000 , 12, 1190-1194	9.6	88
144	Two-dimensional transition metal dichalcogenides: Clusters, ribbons, sheets and more. <i>Nano Today</i> , 2015 , 10, 559-592	17.9	84
143	Metal to Insulator Quantum-Phase Transition in Few-Layered ReS\(\textsize\) Nano Letters, 2015 , 15, 8377-84	11.5	82
142	One-dimensional extended lines of divacancy defects in graphene. <i>Nanoscale</i> , 2011 , 3, 2868-72	7.7	82
141	Structure, transport and field-emission properties of compound nanotubes: CNx vs. BNCx (x. <i>Applied Physics A: Materials Science and Processing</i> , 2003 , 76, 499-507	2.6	82
140	Comparison study of semi-crystalline and highly crystalline multiwalled carbon nanotubes. <i>Applied Physics Letters</i> , 2001 , 79, 1531-1533	3.4	82
139	A Simple Route to Silicon-Based Nanostructures. <i>Advanced Materials</i> , 1999 , 11, 844-847	24	81
138	Direct observation of the structure of gold nanoparticles by total scattering powder neutron diffraction. <i>Chemical Physics Letters</i> , 2004 , 393, 385-388	2.5	79
137	Novel NbS2 metallic nanotubes. <i>Solid State Communications</i> , 2000 , 115, 635-638	1.6	78
136	Facile synthesis of MoS2 and MoxW1-xS2 triangular monolayers. <i>APL Materials</i> , 2014 , 2, 092514	5.7	75
135	Zipper mechanism of nanotube fusion: theory and experiment. <i>Physical Review Letters</i> , 2004 , 92, 07550	4 7.4	75
134	Phosphorus and phosphorus-nitrogen doped carbon nanotubes for ultrasensitive and selective molecular detection. <i>Nanoscale</i> , 2011 , 3, 1008-13	7.7	74
133	Efficient encapsulation of gaseous nitrogen inside carbon nanotubes with bamboo-like structure using aerosol thermolysis. <i>Chemical Physics Letters</i> , 2004 , 396, 167-173	2.5	72
132	Generation of hollow crystalline tungsten oxide fibres. <i>Applied Physics A: Materials Science and Processing</i> , 2000 , 70, 231-233	2.6	71
131	Atomic nanotube welders: boron interstitials triggering connections in double-walled carbon nanotubes. <i>Nano Letters</i> , 2005 , 5, 1099-105	11.5	70
130	An atomistic branching mechanism for carbon nanotubes: sulfur as the triggering agent. Angewandte Chemie - International Edition, 2008, 47, 2948-53	16.4	69

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129	An Alternative Route to Molybdenum Disulfide Nanotubes. <i>Journal of the American Chemical Society</i> , 2000 , 122, 10155-10158	16.4	69	
128	Nonlinear Behavior in the Thermopower of Doped Carbon Nanotubes Due to Strong, Localized States. <i>Nano Letters</i> , 2003 , 3, 839-842	11.5	66	
127	A theoretical and experimental study on manipulating the structure and properties of carbon nanotubes using substitutional dopants. <i>International Journal of Quantum Chemistry</i> , 2009 , 109, 97-118	2.1	64	
126	Controlling the dimensions, reactivity and crystallinity of multiwalled carbon nanotubes using low ethanol concentrations. <i>Chemical Physics Letters</i> , 2008 , 453, 55-61	2.5	64	
125	Coalescence of Double-Walled Carbon Nanotubes: Formation of Novel Carbon Bicables. <i>Nano Letters</i> , 2004 , 4, 1451-1454	11.5	64	
124	Hydroxyl-functionalized and N-doped multiwalled carbon nanotubes decorated with silver nanoparticles preserve cellular function. <i>ACS Nano</i> , 2011 , 5, 2458-66	16.7	63	
123	Beyond C60: graphite structures for the future. <i>Chemical Society Reviews</i> , 1995 , 24, 341	58.5	60	
122	Hydrogen storage in spherical nanoporous carbons. <i>Chemical Physics Letters</i> , 2005 , 403, 363-366	2.5	58	
121	Molecular dynamics study of the dewetting of copper on graphite and graphene: implications for nanoscale self-assembly. <i>Physical Review E</i> , 2011 , 83, 041603	2.4	57	
120	A novel route to aligned nanotubes and nanofibres using laser-patterned catalytic substrates. <i>Applied Physics A: Materials Science and Processing</i> , 2000 , 70, 175-183	2.6	57	
119	Single-atom doping of MoS with manganese enables ultrasensitive detection of dopamine: Experimental and computational approach. <i>Science Advances</i> , 2020 , 6, eabc4250	14.3	57	
118	How to Identify Haeckelite Structures: A Theoretical Study of Their Electronic and Vibrational Properties. <i>Nano Letters</i> , 2004 , 4, 805-810	11.5	56	
117	Stable BC2N nanostructures: low-temperature production of segregated C/BN layered materials. <i>Chemical Physics Letters</i> , 1999 , 310, 459-465	2.5	56	
116	Quantum transport in graphene nanonetworks. <i>Nano Letters</i> , 2011 , 11, 3058-64	11.5	55	
115	Controlling high coercivities of ferromagnetic nanowires encapsulated in carbon nanotubes. <i>Journal of Materials Chemistry</i> , 2010 , 20, 5906		54	
114	Viability studies of pure carbon- and nitrogen-doped nanotubes with Entamoeba histolytica: from amoebicidal to biocompatible structures. <i>Small</i> , 2007 , 3, 1723-9	11	53	
113	Production and State-of-the-Art Characterization of Aligned Nanotubes with Homogeneous BCxN (1 脉 ⑤) Compositions. <i>Advanced Materials</i> , 2003 , 15, 1899-1903	24	53	
112	Spin polarized conductance in hybrid graphene nanoribbons using 5-7 defects. ACS Nano, 2009, 3, 3606-	1126.7	52	

111	Structure, Chirality, and Formation of Giant Icosahedral Fullerenes and Spherical Graphitic Onions. <i>Structural Chemistry</i> , 2002 , 13, 373-384	1.8	50
110	Guiding electrical current in nanotube circuits using structural defects: a step forward in nanoelectronics. <i>ACS Nano</i> , 2008 , 2, 2585-91	16.7	48
109	Metallic edges in zinc oxide nanoribbons. <i>Chemical Physics Letters</i> , 2007 , 448, 258-263	2.5	48
108	Carrier lifetime enhancement in halide perovskite via remote epitaxy. <i>Nature Communications</i> , 2019 , 10, 4145	17.4	45
107	Strain and the optoelectronic properties of nonplanar phosphorene monolayers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 5888-92	11.5	44
106	Universal Substitutional Doping of Transition Metal Dichalcogenides by Liquid-Phase Precursor-Assisted Synthesis. <i>ACS Nano</i> , 2020 , 14, 4326-4335	16.7	44
105	Millimeter-long carbon nanotubes: outstanding electron-emitting sources. ACS Nano, 2011, 5, 5072-7	16.7	44
104	The Role of Sulfur in the Synthesis of Novel Carbon Morphologies: From Covalent Y-Junctions to Sea-Urchin-Like Structures. <i>Advanced Functional Materials</i> , 2009 , 19, 1193-1199	15.6	44
103	Electrochemical formation of novel nanowires and their dynamic effects. <i>Chemical Physics Letters</i> , 1998 , 284, 177-183	2.5	41
102	Multivalency-Induced Band Gap Opening at MoS2 Edges. <i>Chemistry of Materials</i> , 2015 , 27, 3326-3331	9.6	39
101	The carbon nanocosmos: novel materials for the twenty-first century. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2003 , 361, 2789-806	3	39
100	Synthesis and state of art characterization of BN bamboo-like nanotubes: Evidence of a root growth mechanism catalyzed by Fe. <i>Chemical Physics Letters</i> , 2005 , 416, 342-348	2.5	38
99	The formation of ReS(2) inorganic fullerene-like structures containing Re(4) parallelogram units and metal-metal bonds. <i>Journal of the American Chemical Society</i> , 2002 , 124, 11580-1	16.4	38
98	Properties of one-dimensional molybdenum nanowires in a confined environment. <i>Nano Letters</i> , 2009 , 9, 1487-92	11.5	37
97	Decorating carbon nanotubes with nanostructured nickel particles via chemical methods. <i>Chemical Physics Letters</i> , 2006 , 431, 104-109	2.5	37
96	Electrolytic Formation of Carbon-Sheathed Mixed Sn B b Nanowires. <i>Chemistry of Materials</i> , 1999 , 11, 1747-1751	9.6	36
95	Third order nonlinear optical response exhibited by mono- and few-layers of WS 2. <i>2D Materials</i> , 2016 , 3, 021005	5.9	35
94	Acid modified bamboo-type carbon nanotubes and cup-stacked-type carbon nanofibres as adsorbent materials: cadmium removal from aqueous solution. <i>Journal of Chemical Technology and Biotechnology</i> 2009 84 519-524	3.5	35

93	Quantitative density-functional study of nested fullerenes. <i>Physical Review B</i> , 1998 , 57, 13339-13342	3.3	35
92	Structure and Electronic Properties of Edge-Functionalized Armchair Boron Nitride Nanoribbons. Journal of Physical Chemistry C, 2012 , 116, 15675-15681	3.8	34
91	Quasiperiodic icosahedral graphite sheets and high-genus fullereneswith nonpositive Gaussian curvature. <i>Physical Review B</i> , 1997 , 55, 9969-9974	3.3	34
90	Large second harmonic generation in alloyed TMDs and boron nitride nanostructures. <i>Scientific Reports</i> , 2018 , 8, 10118	4.9	33
89	Bilayers of transition metal dichalcogenides: Different stackings and heterostructures. <i>Journal of Materials Research</i> , 2014 , 29, 373-382	2.5	33
88	Theoretical Predictions of Freestanding Honeycomb Sheets of Cadmium Chalcogenides. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 16236-16245	3.8	33
87	Mechanical properties of hypothetical graphene foams: Giant Schwarzites. <i>Carbon</i> , 2016 , 96, 1191-1199	10.4	32
86	Differential Response of Doped/Defective Graphene and Dopamine to Electric Fields: A Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 13972-13978	3.8	32
85	Enhanced ferromagnetism in ZnO nanoribbons and clusters passivated with sulfur. <i>Nano Research</i> , 2008 , 1, 420-426	10	32
84	Cables of BN-insulated BIIN nanotubes. <i>Applied Physics Letters</i> , 2003 , 82, 1275-1277	3.4	32
83	Theoretical characterization of several models of nanoporous carbon. <i>New Journal of Physics</i> , 2003 , 5, 123-123	2.9	31
82	Spectroscopic characterization of N-doped single-walled carbon nanotube strands: an X-ray photoelectron spectroscopy and Raman study. <i>Journal of Nanoscience and Nanotechnology</i> , 2010 , 10, 3959-64	1.3	30
81	Preparation of aligned multi-walled BN and B/C/N nanotubular arrays and their characterization using HRTEM, EELS and energy-filtered TEM. <i>Physica B: Condensed Matter</i> , 2002 , 323, 60-66	2.8	30
80	Nitrogen-Doped Graphitic Nanoribbons: Synthesis, Characterization, and Transport. <i>Advanced Functional Materials</i> , 2013 , 23, 3755-3762	15.6	28
79	Microscopy Study of the Growth Process and Structural Features of Silicon Oxide Nanoflowers. <i>Chemistry of Materials</i> , 1999 , 11, 2709-2715	9.6	28
78	Three-dimensional massless Dirac fermions in carbon schwarzites. <i>Physical Review B</i> , 2014 , 90,	3.3	27
77	Femtosecond laser nanosurgery of defects in carbon nanotubes. <i>Nano Letters</i> , 2005 , 5, 1361-5	11.5	27
76	Pressure-Induced Selectivity for Probing Inner Tubes in Double- and Triple-Walled Carbon Nanotubes: A Resonance Raman Study. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 8153-8158	3.8	26

75	Curved graphite and its mathematical transformations. <i>Journal of Mathematical Chemistry</i> , 1994 , 15, 143-156	2.1	26
74	Edge-edge interactions in stacked graphene nanoplatelets. <i>ACS Nano</i> , 2013 , 7, 2834-41	16.7	25
73	Controlling the velocity of jumping nanodroplets via their initial shape and temperature. <i>ACS Nano</i> , 2011 , 5, 7130-6	16.7	25
72	Quantitative chemistry and the discrete geometry of conformal atom-thin crystals. <i>ACS Nano</i> , 2014 , 8, 1136-46	16.7	24
71	Electronic control over attachment and self-assembly of alkyne groups on gold. ACS Nano, 2012, 6, 926	7 <u>1</u> 7657	24
70	Electron transport properties of ordered networks using carbon nanotubes. <i>Nanotechnology</i> , 2008 , 19, 315704	3.4	23
69	The two peaks G? band in carbon nanotubes. <i>Physica Status Solidi (B): Basic Research</i> , 2008 , 245, 2197-2	2003	23
68	Resonant Raman and Exciton Coupling in High-Quality Single Crystals of Atomically Thin Molybdenum Diselenide Grown by Vapor-Phase Chalcogenization. <i>ACS Nano</i> , 2018 , 12, 740-750	16.7	22
67	Electron transport study on functionalized armchair graphene nanoribbons: DFT calculations. <i>RSC Advances</i> , 2016 , 6, 21954-21960	3.7	22
66	Controlling the Optical, Electrical and Chemical Properties of Carbon Inverse Opal by Nitrogen Doping. <i>Advanced Functional Materials</i> , 2014 , 24, 2612-2619	15.6	20
65	KCl crystallization within the space between carbon nanotube walls. <i>Chemical Physics Letters</i> , 2000 , 317, 77-82	2.5	20
64	Structures, Energetics, and Electronic Properties of Layered Materials and Nanotubes of Cadmium Chalcogenides. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 25817-25825	3.8	19
63	NitrogenBilicon Heterodoping of Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 8481-8	4 9 Ø	19
62	Fullerenes and nanotubes with non-positive Gaussian curvature. <i>Carbon</i> , 1998 , 36, 725-730	10.4	19
61	Magnetic response in finite carbon graphene sheets and nanotubes. <i>Optical Materials</i> , 2006 , 29, 110-11	53.3	19
60	Nanocages of layered BN: Super-high-pressure nanocells for formation of solid nitrogen. <i>Journal of Chemical Physics</i> , 2002 , 116, 8523	3.9	19
59	Beryllium doping graphene, graphene-nanoribbons, C60-fullerene, and carbon nanotubes. <i>Carbon</i> , 2015 , 84, 317-326	10.4	18
58	Doping (10, 0)-Semiconductor Nanotubes with Nitrogen and Vacancy Defects. <i>Materials Express</i> , 2011 , 1, 127-135	1.3	18

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57	Effect of impurities on the electronic and magnetic properties of zinc oxide nanostructures. <i>Chemical Physics Letters</i> , 2010 , 492, 82-88	2.5	18
56	Electronic, magnetic, optical, and edge-reactivity properties of semiconducting and metallic WS 2 nanoribbons. <i>2D Materials</i> , 2015 , 2, 015002	5.9	17
55	Raman and electrical transport properties of few-layered arsenic-doped black phosphorus. <i>Nanoscale</i> , 2019 , 11, 18449-18463	7.7	17
54	Electronic properties of giant fullerenes and complex graphitic nanostructures with novel morphologies. <i>Chemical Physics Letters</i> , 2003 , 381, 683-690	2.5	16
53	Spin Transport of Polyacetylene Chains Bridging Zigzag Graphene Nanoribbon Electrodes: A Nonequilibrium Treatment of Structural Control and Spin Filtering. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 21178-21185	3.8	15
52	Production and detailed characterization of bean husk-based carbon: efficient cadmium (II) removal from aqueous solutions. <i>Water Research</i> , 2008 , 42, 3473-9	12.5	15
51	Synthesis of SWCNT rings made by two Y junctions and possible applications in electron interferometry. <i>Small</i> , 2007 , 3, 1900-5	11	15
50	Shape and complexity at the atomic scale: the case of layered nanomaterials. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2004 , 362, 2039-63	3	15
49	Self-assembly of Si nanostructures. Chemical Physics Letters, 2000, 322, 312-320	2.5	15
48	3D Nanocomposites of Covalently Interconnected Multiwalled Carbon Nanotubes with SiC with Enhanced Thermal and Electrical Properties. <i>Advanced Functional Materials</i> , 2015 , 25, 4985-4993	15.6	14
47	Excitonic Complexes and Emerging Interlayer Electron-Phonon Coupling in BN Encapsulated Monolayer Semiconductor Alloy: WSSe. <i>Nano Letters</i> , 2019 , 19, 299-307	11.5	14
46	. IEEE Nanotechnology Magazine, 2003 , 2, 349-354	2.6	13
45	Phase Modulators Based on High Mobility Ambipolar ReSe Field-Effect Transistors. <i>Scientific Reports</i> , 2018 , 8, 12745	4.9	13
44	Analysis of the molecular structure of human enamel with fluorosis using micro-Raman spectroscopy. <i>Journal of Oral Science</i> , 2012 , 54, 93-8	1.5	12
43	Anomalous paramagnetism in doped carbon nanostructures. Small, 2007, 3, 120-5	11	12
42	Synthesis and electronic properties of coalesced graphitic nanocones. <i>Chemical Physics Letters</i> , 2005 , 407, 327-332	2.5	12
41	Temperature- and power-dependent phonon properties of suspended continuous WS2 monolayer films. <i>Vibrational Spectroscopy</i> , 2016 , 86, 270-276	2.1	11
40	Novel Nanocarbons for Adsorption 2012 , 3-34		11

39	Magnetic properties of individual carbon clusters, clusters inside fullerenes and graphitic nanoribbons. <i>Journal of Materials Chemistry</i> , 2008 , 18, 1535		11
38	Strain dependence of second harmonic generation in transition metal dichalcogenide monolayers and the fine structure of the C exciton. <i>Physical Review B</i> , 2020 , 101,	3.3	10
37	Architectures from aligned nanotubes using controlled micropatterning of silicon substrates and electrochemical methods. <i>Small</i> , 2007 , 3, 1157-63	11	10
36	Biotin molecules on nitrogen-doped carbon nanotubes enhance the uniform anchoring and formation of Ag nanoparticles. <i>Carbon</i> , 2015 , 88, 51-59	10.4	9
35	Self-Assembly Synthesis of Decorated Nitrogen-Doped Carbon Nanotubes with ZnO Nanoparticles: Anchoring Mechanism and the Effects of Sulfur. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 741-747	3.8	9
34	Iron Particle Nanodrilling of Few Layer Graphene at Low Electron Beam Accelerating Voltages. <i>Particle and Particle Systems Characterization</i> , 2013 , 30, 76-82	3.1	8
33	Electric-Field-Assisted Directed Assembly of Transition Metal Dichalcogenide Monolayer Sheets. <i>ACS Nano</i> , 2016 , 10, 5006-14	16.7	7
32	Ultrafast structural evolution and formation of linear carbon chains in single-walled carbon nanotube networks by femtosecond laser irradiation. <i>Nanoscale</i> , 2017 , 9, 16627-16631	7.7	6
31	Beyond carbon nanopeapods. <i>ChemPhysChem</i> , 2012 , 13, 2273-6	3.2	6
30	Soft purification of N-doped and undoped multi-wall carbon nanotubes. <i>Nanotechnology</i> , 2008 , 19, 155	79.4	6
29	Determination of chiralities of single-walled carbon nanotubes by neutron powder diffraction technique. <i>Diamond and Related Materials</i> , 2007 , 16, 473-476	3.5	6
28	Second harmonic generation in two-dimensional transition metal dichalcogenides with growth and post-synthesis defects. <i>2D Materials</i> , 2020 , 7, 045020	5.9	6
27	Evidence of itinerant holes for long-range magnetic order in the tungsten diselenide semiconductor with vanadium dopants. <i>Physical Review B</i> , 2021 , 103,	3.3	6
26	Temperature Dependence of Sensors Based on Silver-Decorated Nitrogen-Doped Multiwalled Carbon Nanotubes. <i>Journal of Sensors</i> , 2016 , 2016, 1-10	2	6
25	Large Metallic Vanadium Disulfide Ultrathin Flakes for Spintronic Circuits and Quantum Computing Devices. <i>ACS Applied Nano Materials</i> , 2019 , 2, 3684-3694	5.6	5
24	Extrapolating Dynamic Leidenfrost Principles to Metallic Nanodroplets on Asymmetrically Textured Surfaces. <i>Scientific Reports</i> , 2015 , 5, 11769	4.9	5
23	Sensors: Photosensor Device Based on Few-Layered WS2 Films (Adv. Funct. Mater. 44/2013). <i>Advanced Functional Materials</i> , 2013 , 23, 5510-5510	15.6	5
22	Transport properties through hexagonal boron nitride clusters embedded in graphene nanoribbons. <i>Nanotechnology</i> , 2016 , 27, 185203	3.4	5

21	Fullerene and nanotube growth: new insights using first principles and molecular dynamics. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016 , 374,	3	5
20	Doped Graphene: Theory, Synthesis, Characterization, and Applications 2013 , 183-207		4
19	Fullerenes with Non-Positive Gaussian Curvature: Holey-Balls and Holey-Tubes. <i>Fullerenes, Nanotubes, and Carbon Nanostructures</i> , 1998 , 6, 751-767		4
18	Bandgap Tuning in BaZrS3 Perovskite Thin Films. ACS Applied Electronic Materials, 2021, 3, 3306-3312	4	4
17	Stable and solid pellets of functionalized multi-walled carbon nanotubes produced under high pressure and temperature. <i>Journal of Nanoparticle Research</i> , 2015 , 17, 1	2.3	3
16	BNC nanoshells: a novel structure for atomic storage. <i>Nanotechnology</i> , 2017 , 28, 465201	3.4	3
15	Synthesis, Characterization and Magnetic Properties of Defective Nitrogen-Doped Multiwall Carbon Nanotubes Encapsulating Ferromagnetic Nanoparticles. <i>Journal of Nano Research</i> , 2014 , 28, 39-	49	2
14	Covalent Networks: 3D Nanocomposites of Covalently Interconnected Multiwalled Carbon Nanotubes with SiC with Enhanced Thermal and Electrical Properties (Adv. Funct. Mater. 31/2015). <i>Advanced Functional Materials</i> , 2015 , 25, 4922-4922	15.6	2
13	Three-dimensional Nanotube Networks and a New Horizon of Applications 2014 , 457-493		2
12	Importance of Multiple Excitation Wavelengths for TERS Characterization of TMDCs and Their Vertical Heterostructures. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 5218-5223	3.8	2
11	Porous Materials: Controlling the Optical, Electrical and Chemical Properties of Carbon Inverse Opal by Nitrogen Doping (Adv. Funct. Mater. 18/2014). <i>Advanced Functional Materials</i> , 2014 , 24, 2611-2	617.6	1
10	Transparent Foamlike 2D Networks of Nitrogen-Doped Multiwalled Carbon Nanotubes Obtained by Self-Assembly. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 11447-11452	3.8	1
9	The Formation of ReS2 Inorganic Fullerene-Like Structures Containing Re4 Parallelogram Units and Metal Metal Bonds <i>ChemInform</i> , 2010 , 33, no-no		1
8	Fullerenes and Beyond: Complexity, Morphology, and Functionality in Closed Carbon Nanostructures 2013 , 83-104		1
7			
6	Voltage-Dependent Barrier Height of Electron Transport through Iron Porphyrin Molecular Junctions. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 7350-7357	3.8	1
5	A Simple Route to Silicon-Based Nanostructures 1999 , 11, 844		1
4	Nanoribbons: Nitrogen-Doped Graphitic Nanoribbons: Synthesis, Characterization, and Transport (Adv. Funct. Mater. 30/2013). <i>Advanced Functional Materials</i> , 2013 , 23, 3714-3714	15.6	

- Nanodrilling: Iron Particle Nanodrilling of Few Layer Graphene at Low Electron Beam Accelerating Voltages (Part. Part. Syst. Charact. 1/2013). Particle and Particle Systems Characterization, **2013**, 30, 75- 73^{-1}
- Graphene: Large-Area Si-Doped Graphene: Controllable Synthesis and Enhanced Molecular Sensing
 (Adv. Mater. 45/2014). *Advanced Materials*, **2014**, 26, 7676-7676

Philosophical transactions. Introduction. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2004**, 362, 2035-7

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