Georg S Duesberg

List of Publications by Year
in descending order

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		8172	3031
271	36,575	76	188
papers	citations	h-index	g-index

277	277	277	36817
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Two-Dimensional Nanosheets Produced by Liquid Exfoliation of Layered Materials. Science, 2011, 331, 568-571.	6.0	6,190
2	High-yield production of graphene by liquid-phase exfoliation of graphite. Nature Nanotechnology, 2008, 3, 563-568.	15.6	5,431
3	Liquid Phase Production of Graphene by Exfoliation of Graphite in Surfactant/Water Solutions. Journal of the American Chemical Society, 2009, 131, 3611-3620.	6.6	2,038
4	Scalable production of large quantities of defect-free few-layer graphene by shear exfoliation in liquids. Nature Materials, 2014, 13, 624-630.	13.3	1,958
5	Oxidation Stability of Colloidal Two-Dimensional Titanium Carbides (MXenes). Chemistry of Materials, 2017, 29, 4848-4856.	3.2	1,120
6	Largeâ€Scale Exfoliation of Inorganic Layered Compounds in Aqueous Surfactant Solutions. Advanced Materials, 2011, 23, 3944-3948.	11.1	1,012
7	Liquid exfoliation of solvent-stabilized few-layer black phosphorus for applications beyond electronics. Nature Communications, 2015, 6, 8563.	5.8	921
8	Transparent, Flexible, and Conductive 2D Titanium Carbide (MXene) Films with High Volumetric Capacitance. Advanced Materials, 2017, 29, 1702678.	11.1	756
9	Carbon nanotubes in interconnect applications. Microelectronic Engineering, 2002, 64, 399-408.	1.1	566
10	Highâ€Performance Sensors Based on Molybdenum Disulfide Thin Films. Advanced Materials, 2013, 25, 6699-6702.	11.1	435
11	Edge and confinement effects allow in situ measurement of size and thickness of liquid-exfoliated nanosheets. Nature Communications, 2014, 5, 4576.	5.8	432
12	Polarized Raman Spectroscopy on Isolated Single-Wall Carbon Nanotubes. Physical Review Letters, 2000, 85, 5436-5439.	2.9	423
13	Transparent carbon nanotube coatings. Applied Surface Science, 2005, 252, 425-429.	3.1	397
14	A Commercial Conducting Polymer as Both Binder and Conductive Additive for Silicon Nanoparticle-Based Lithium-Ion Battery Negative Electrodes. ACS Nano, 2016, 10, 3702-3713.	7.3	394
15	All-printed thin-film transistors from networks of liquid-exfoliated nanosheets. Science, 2017, 356, 69-73.	6.0	391
16	Flexible, Transparent, Conducting Films of Randomly Stacked Graphene from Surfactantâ€Stabilized, Oxideâ€Free Graphene Dispersions. Small, 2010, 6, 458-464.	5.2	371
17	Production and processing of graphene and related materials. 2D Materials, 2020, 7, 022001.	2.0	333
18	Direct Observation of Degenerate Two-Photon Absorption and Its Saturation in WS₂ and MoS₂ Monolayer and Few-Layer Films. ACS Nano, 2015, 9, 7142-7150.	7.3	322

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19	High-Performance Hybrid Electronic Devices from Layered PtSe₂ Films Grown at Low Temperature. ACS Nano, 2016, 10, 9550-9558.	7.3	310
20	Basal-Plane Functionalization of Chemically Exfoliated Molybdenum Disulfide by Diazonium Salts. ACS Nano, 2015, 9, 6018-6030.	7.3	293
21	Production of Molybdenum Trioxide Nanosheets by Liquid Exfoliation and Their Application in High-Performance Supercapacitors. Chemistry of Materials, 2014, 26, 1751-1763.	3.2	266
22	Investigation of the optical properties of MoS₂ thin films using spectroscopic ellipsometry. Applied Physics Letters, 2014, 104, 103114.	1.5	255
23	Silicon-Nanowire Transistors with Intruded Nickel-Silicide Contacts. Nano Letters, 2006, 6, 2660-2666.	4.5	231
24	Electrochemical ascorbic acid sensor based on DMF-exfoliated graphene. Journal of Materials Chemistry, 2010, 20, 7864.	6.7	224
25	Electrical Characteristics of Molybdenum Disulfide Flakes Produced by Liquid Exfoliation. Advanced Materials, 2011, 23, 4178-4182.	11.1	224
26	Functionalization of Liquidâ€Exfoliated Twoâ€Dimensional 2Hâ€MoS₂. Angewandte Chemie - International Edition, 2015, 54, 2638-2642.	7.2	219
27	Functionalization of Twoâ€Dimensional MoS₂: On the Reaction Between MoS₂ and Organic Thiols. Angewandte Chemie - International Edition, 2016, 55, 5803-5808.	7.2	219
28	In Situ Formed Protective Barrier Enabled by Sulfur@Titanium Carbide (MXene) Ink for Achieving Highâ€Capacity, Long Lifetime Liâ€S Batteries. Advanced Science, 2018, 5, 1800502.	5.6	210
29	Plasma-assisted simultaneous reduction and nitrogen doping of graphene oxide nanosheets. Journal of Materials Chemistry A, 2013, 1, 4431.	5.2	198
30	Preparation of Gallium Sulfide Nanosheets by Liquid Exfoliation and Their Application As Hydrogen Evolution Catalysts. Chemistry of Materials, 2015, 27, 3483-3493.	3.2	195
31	Noncovalently Functionalized Monolayer Graphene for Sensitivity Enhancement of Surface Plasmon Resonance Immunosensors. Journal of the American Chemical Society, 2015, 137, 2800-2803.	6.6	190
32	Interconnection of carbon nanotubes by chemical functionalization. Applied Physics Letters, 2002, 80, 3811-3813.	1.5	188
33	How do carbon nanotubes fit into the semiconductor roadmap?. Applied Physics A: Materials Science and Processing, 2005, 80, 1141-1151.	1.1	172
34	Raman characterization of platinum diselenide thin films. 2D Materials, 2016, 3, 021004.	2.0	172
35	Nanopatterning and Electrical Tuning of MoS₂ Layers with a Subnanometer Helium Ion Beam. Nano Letters, 2015, 15, 5307-5313.	4.5	171
36	Nanoscale Mapping of Electrical Resistivity and Connectivity in Graphene Strips and Networks. Nano Letters, 2011, 11, 16-22.	4.5	170

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37	Raman Modes of Index-Identified Freestanding Single-Walled Carbon Nanotubes. Physical Review Letters, 2005, 95, 217401.	2.9	169
38	Chemical Vapor Deposition Growth of Single-Walled Carbon Nanotubes at 600 Â°C and a Simple Growth Model. Journal of Physical Chemistry B, 2004, 108, 1888-1893.	1.2	157
39	Chemically Modulated Graphene Diodes. Nano Letters, 2013, 13, 2182-2188.	4.5	156
40	Growth and electrical transport of germanium nanowires. Journal of Applied Physics, 2001, 90, 5747-5751.	1.1	152
41	Plasma assisted synthesis of WS2 for gas sensing applications. Chemical Physics Letters, 2014, 615, 6-10.	1.2	150
42	Controlled synthesis of transition metal dichalcogenide thin films for electronic applications. Applied Surface Science, 2014, 297, 139-146.	3.1	144
43	High-Current Nanotube Transistors. Nano Letters, 2004, 4, 831-834.	4.5	143
44	Wide Spectral Photoresponse of Layered Platinum Diselenide-Based Photodiodes. Nano Letters, 2018, 18, 1794-1800.	4.5	140
45	Low-Overpotential High-Activity Mixed Manganese and Ruthenium Oxide Electrocatalysts for Oxygen Evolution Reaction in Alkaline Media. ACS Catalysis, 2016, 6, 2408-2415.	5.5	139
46	Memory and Threshold Resistance Switching in Ni/NiO Coreâ€“Shell Nanowires. Nano Letters, 2011, 11, 4601-4606.	4.5	136
47	Langmuirâ€'Blodgett Films of Matrix-Diluted Single-Walled Carbon Nanotubes. Chemistry of Materials, 1998, 10, 2338-2340.	3.2	131
48	Sub-20 nm Short Channel Carbon Nanotube Transistors. Nano Letters, 2005, 5, 147-150.	4.5	128
49	Comparison of liquid exfoliated transition metal dichalcogenides reveals MoSe₂to be the most effective hydrogen evolution catalyst. Nanoscale, 2016, 8, 5737-5749.	2.8	127
50	Highly Sensitive Electromechanical Piezoresistive Pressure Sensors Based on Large-Area Layered PtSe₂ Films. Nano Letters, 2018, 18, 3738-3745.	4.5	125
51	Carbon Nanotube Applications in Microelectronics. IEEE Transactions on Components and Packaging Technologies, 2004, 27, 629-634.	1.4	121
52	Controlled deposition of carbon nanotubes on a patterned substrate. Surface Science, 2000, 462, 195-202.	0.8	117
53	Synthesis and analysis of thin conducting pyrolytic carbon films. Carbon, 2012, 50, 1216-1226.	5.4	116
54	Thickness Dependence and Percolation Scaling of Hydrogen Production Rate in MoS₂ Nanosheet and Nanosheetâ€“Carbon Nanotube Composite Catalytic Electrodes. ACS Nano, 2016, 10, 672-683.	7.3	116

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55	Mapping of Low-Frequency Raman Modes in CVD-Grown Transition Metal Dichalcogenides: Layer Number, Stacking Orientation and Resonant Effects. Scientific Reports, 2016, 6, 19476.	1.6	111
56	MoS₂ Memtransistors Fabricated by Localized Helium Ion Beam Irradiation. ACS Nano, 2019, 13, 14262-14273.	7.3	99
57	Large-area integration of two-dimensional materials and their heterostructures by wafer bonding. Nature Communications, 2021, 12, 917.	5.8	99
58	Strain, Bubbles, Dirt, and Folds: A Study of Graphene Polymerâ€Assisted Transfer. Advanced Materials Interfaces, 2014, 1, 1400115.	1.9	98
59	Simultaneous electrochemical determination of dopamine and paracetamol based on thin pyrolytic carbon films. Analytical Methods, 2012, 4, 2048.	1.3	95
60	The effect of downstream plasma treatments on graphene surfaces. Carbon, 2012, 50, 395-403.	5.4	95
61	Induction of Chirality in Two-Dimensional Nanomaterials: Chiral 2D MoS₂ Nanostructures. ACS Nano, 2018, 12, 954-964.	7.3	93
62	Nanoelectromechanical Sensors Based on Suspended 2D Materials. Research, 2020, 2020, 8748602.	2.8	93
63	Raman spectroscopy on single- and multi-walled nanotubes under high pressure. Applied Physics A: Materials Science and Processing, 1999, 69, 309-312.	1.1	91
64	Towards the integration of carbon nanotubes in microelectronics. Diamond and Related Materials, 2004, 13, 1296-1300.	1.8	91
65	Carbon Nanotubes for Microelectronics?. Small, 2005, 1, 382-390.	5.2	90
66	Effect of Percolation on the Capacitance of Supercapacitor Electrodes Prepared from Composites of Manganese Dioxide Nanoplatelets and Carbon Nanotubes. ACS Nano, 2014, 8, 9567-9579.	7.3	89
67	Nitrogen-doped reduced graphene oxide electrodes for electrochemical supercapacitors. Physical Chemistry Chemical Physics, 2014, 16, 2280.	1.3	87
68	Dispersion of nonlinear refractive index in layered WS_2 and WSe_2 semiconductor films induced by two-photon absorption. Optics Letters, 2016, 41, 3936.	1.7	86
69	Characterization of graphene-silicon Schottky barrier diodes using impedance spectroscopy. Applied Physics Letters, 2013, 103, 193106.	1.5	82
70	Oxide-mediated recovery of field-effect mobility in plasma-treated MoS ₂. Science Advances, 2018, 4, eaao5031.	4.7	82
71	A new purification method for single-wall carbon nanotubes (SWNTs). Applied Physics A: Materials Science and Processing, 2000, 70, 599-602.	1.1	81
72	DMF-exfoliated graphene for electrochemical NADH detection. Physical Chemistry Chemical Physics, 2011, 13, 7747.	1.3	81

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73	Chromatography of carbon nanotubes. Synthetic Metals, 1999, 103, 2484-2485.	2.1	80
74	Carbon nanotubes for microelectronics: status and future prospects. Materials Science and Engineering C, 2003, 23, 663-669.	3.8	80
75	Heterojunction Hybrid Devices from Vapor Phase Grown MoS2. Scientific Reports, 2014, 4, 5458.	1.6	80
76	Saturation of Two-Photon Absorption in Layered Transition Metal Dichalcogenides: Experiment and Theory. ACS Photonics, 2018, 5, 1558-1565.	3.2	79
77	Highly sensitive, transparent, and flexible gas sensors based on gold nanoparticle decorated carbon nanotubes. Sensors and Actuators B: Chemical, 2013, 188, 571-575.	4.0	77
78	Functionalisation of graphene surfaces with downstream plasma treatments. Carbon, 2013, 54, 283-290.	5.4	77
79	Large variations in both dark- and photoconductivity in nanosheet networks as nanomaterial is varied from MoS₂to WTe₂. Nanoscale, 2015, 7, 198-208.	2.8	76
80	Growth of Isolated Carbon Nanotubes with Lithographically Defined Diameter and Location. Nano Letters, 2003, 3, 257-259.	4.5	75
81	Percolation scaling in composites of exfoliated MoS2 filled with nanotubes and graphene. Nanoscale, 2012, 4, 6260.	2.8	75
82	Electrical devices from top-down structured platinum diselenide films. Npj 2D Materials and Applications, 2018, 2, .	3.9	74
83	Reduced contact resistance between an individual single-walled carbon nanotube and a metal electrode by a local point annealing. Nanotechnology, 2007, 18, 095203.	1.3	73
84	Photoluminescence from Liquidâ€Exfoliated WS₂ Monomers in Poly(Vinyl Alcohol) Polymer Composites. Advanced Functional Materials, 2016, 26, 1028-1039.	7.8	73
85	Transition Metal Dichalcogenide Growth via Close Proximity Precursor Supply. Scientific Reports, 2014, 4, 7374.	1.6	72
86	Electron diffraction analysis of individual single-walled carbon nanotubes. Ultramicroscopy, 2006, 106, 176-190.	0.8	71
87	Production of Ni(OH)₂nanosheets by liquid phase exfoliation: from optical properties to electrochemical applications. Journal of Materials Chemistry A, 2016, 4, 11046-11059.	5.2	71
88	Enabling Flexible Heterostructures for Liâ€Ion Battery Anodes Based on Nanotube and Liquidâ€Phase Exfoliated 2D Gallium Chalcogenide Nanosheet Colloidal Solutions. Small, 2017, 13, 1701677.	5.2	71
89	Carbon nanotubes acting like actuators. Carbon, 2002, 40, 1735-1739.	5.4	70
90	Ion irradiation induced structural and electrical transition in graphene. Journal of Chemical Physics, 2010, 133, 234703.	1.2	70

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91	Quantum confinement-induced semimetal-to-semiconductor evolution in large-area ultra-thin PtSe2 films grown at 400â€‰Â°C. Npj 2D Materials and Applications, 2019, 3, .	3.9	69
92	Electronic transport in carbon nanotube ropes and mats. Synthetic Metals, 1999, 103, 2547-2550.	2.1	68
93	Helium ion microscopy of graphene: beam damage, image quality and edge contrast. Nanotechnology, 2013, 24, 335702.	1.3	68
94	A perfect match. Nature Materials, 2014, 13, 1075-1076.	13.3	68
95	Large Magnetoresistance in Few Layer Graphene Stacks with Current Perpendicular to Plane Geometry. Advanced Materials, 2012, 24, 1862-1866.	11.1	66
96	Ways towards the scaleable integration of carbon nanotubes into silicon based technology. Diamond and Related Materials, 2004, 13, 354-361.	1.8	65
97	Spectral sensitivity of graphene/silicon heterojunction photodetectors. Solid-State Electronics, 2016, 115, 207-212.	0.8	65
98	Graphene field emission devices. Applied Physics Letters, 2014, 105, 103107.	1.5	62
99	In-Situ Contacted Single-Walled Carbon Nanotubes and Contact Improvement by Electroless Deposition. Nano Letters, 2003, 3, 965-968.	4.5	60
100	Bias dependence and electrical breakdown of small diameter single-walled carbon nanotubes. Journal of Applied Physics, 2004, 96, 6694-6699.	1.1	60
101	Electrochromic Nickel Oxide Films for Smart Window Applications. International Journal of Electrochemical Science, 2016, 11, 6636-6647.	0.5	60
102	Ultrafast Carrier Dynamics and Bandgap Renormalization in Layered PtSe₂. Small, 2019, 15, e1902728.	5.2	60
103	Large-scale parallel arrays of silicon nanowires via block copolymer directed self-assembly. Nanoscale, 2012, 4, 3228.	2.8	59
104	Siteâ€Specific Transferâ€Printing of Individual Graphene Microscale Patterns to Arbitrary Surfaces. Advanced Materials, 2011, 23, 3938-3943.	11.1	55
105	Towards processing of carbon nanotubes for technical applications. Applied Physics A: Materials Science and Processing, 1999, 69, 269-274.	1.1	54
106	Insights into Multilevel Resistive Switching in Monolayer MoS₂. ACS Applied Materials & Interfaces, 2020, 12, 6022-6029.	4.0	54
107	Spin-dependent transport properties of Fe3O4/MoS2/Fe3O4 junctions. Scientific Reports, 2015, 5, 15984.	1.6	53
108	Molybdenum disulfide/pyrolytic carbon hybrid electrodes for scalable hydrogen evolution. Nanoscale, 2014, 6, 8185.	2.8	48

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109	The goldilocks electrolyte: examining the performance of iron/nickel oxide thin films as catalysts for electrochemical water splitting in various aqueous NaOH solutions. Journal of Materials Chemistry A, 2016, 4, 11397-11407.	5.2	47
110	Raman Imaging of Single Carbon Nanotubes. Advanced Materials, 2000, 12, 1210-1214.	11.1	46
111	Functionalization of Twoâ€Dimensional MoS₂: On the Reaction Between MoS₂ and Organic Thiols. Angewandte Chemie, 2016, 128, 5897-5902.	1.6	46
112	Defect sizing, separation, and substrate effects in ion-irradiated monolayer two-dimensional materials. Physical Review B, 2018, 98, .	1.1	46
113	Atom-Resolved Evidence of Anisotropic Growth in ZnS Nanotetrapods. Nano Letters, 2011, 11, 2983-2988.	4.5	43
114	Electroanalytical Sensing Properties of Pristine and Functionalized Multilayer Graphene. Chemistry of Materials, 2014, 26, 1807-1812.	3.2	43
115	Gas phase controlled deposition of high quality large-area graphene films. Chemical Communications, 2010, 46, 1422.	2.2	42
116	Perforating Freestanding Molybdenum Disulfide Monolayers with Highly Charged Ions. Journal of Physical Chemistry Letters, 2019, 10, 904-910.	2.1	42
117	Reversible bending of carbon nanotubes using a transmission electron microscope. Applied Physics Letters, 1998, 73, 1961-1963.	1.5	41
118	Contact improvement of carbon nanotubes via electroless nickel deposition. Applied Physics A: Materials Science and Processing, 2003, 77, 731-734.	1.1	41
119	Hydrothermal functionalisation of single-walled carbon nanotubes. Synthetic Metals, 2004, 142, 263-266.	2.1	40
120	Field Emission Characteristics of Contact Printed Graphene Fins. Small, 2014, 10, 95-99.	5.2	40
121	Rhenium-doped MoS2 films. Applied Physics Letters, 2017, 111, .	1.5	40
122	Decoration of multi-walled carbon nanotubes with noble- and transition-metal clusters and formation of CNT?CNT networks. Applied Physics A: Materials Science and Processing, 2003, 77, 735-738.	1.1	39
123	Atomic layer deposition on 2D transition metal chalcogenides: layer dependent reactivity and seeding with organic ad-layers. Chemical Communications, 2015, 51, 16553-16556.	2.2	39
124	Intensities of the Raman-active modes in single and multiwall nanotubes. Physical Review B, 2001, 63, .	1.1	38
125	Improving the performance of porous nickel foam for water oxidation using hydrothermally prepared Ni and Fe metal oxides. Sustainable Energy and Fuels, 2017, 1, 207-216.	2.5	38
126	Investigations of vapour-phase deposited transition metal dichalcogenide films for future electronic applications. Solid-State Electronics, 2016, 125, 39-51.	0.8	36

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127	Functionalization of Liquidâ€Exfoliated Twoâ€Dimensional 2Hâ€MoS₂. Angewandte Chemie, 2015, 127, 2676-2680.	1.6	35
128	Liquid phase exfoliation of MoO₂ nanosheets for lithium ion battery applications. Nanoscale Advances, 2019, 1, 1560-1570.	2.2	35
129	Electrical transport in single-walled carbon nanotube bundles embedded in Langmuirâ€“Blodgett monolayers. Synthetic Metals, 2000, 110, 245-249.	2.1	34
130	Reliable processing of graphene using metal etchmasks. Nanoscale Research Letters, 2011, 6, 390.	3.1	34
131	Transparent ultrathin conducting carbon films. Applied Surface Science, 2010, 256, 6186-6190.	3.1	33
132	A New 2H-2Hâ€²/1T Cophase in Polycrystalline MoS₂ and MoSe₂ Thin Films. ACS Applied Materials & Interfaces, 2016, 8, 31442-31448.	4.0	33
133	Quantum Confinement and Gas Sensing of Mechanically Exfoliated GaSe. Advanced Materials Technologies, 2017, 2, 1600197.	3.0	33
134	Wafer-Scale Fabrication of Recessed-Channel PtSe₂ MOSFETs With Low Contact Resistance and Improved Gate Control. IEEE Transactions on Electron Devices, 2018, 65, 4102-4108.	1.6	33
135	PtSe ₂ grown directly on polymer foil for use as a robust piezoresistive sensor. 2D Materials, 2019, 6, 045029.	2.0	33
136	CVD growth and processing of graphene for electronic applications. Physica Status Solidi (B): Basic Research, 2011, 248, 2604-2608.	0.7	31
137	Template-free synthesis of mesoporous manganese oxides with catalytic activity in the oxygen evolution reaction. Sustainable Energy and Fuels, 2017, 1, 780-788.	2.5	31
138	Grain boundary-mediated nanopores in molybdenum disulfide grown by chemical vapor deposition. Nanoscale, 2017, 9, 1591-1598.	2.8	31
139	Borophenes made easy. Science Advances, 2021, 7, eabk1490.	4.7	31
140	Growth of 1Tâ€² MoTe₂ by Thermally Assisted Conversion of Electrodeposited Tellurium Films. ACS Applied Energy Materials, 2019, 2, 521-530.	2.5	30
141	Fluorination of carbon nanotubes with xenon difluoride. Chemical Physics Letters, 2004, 399, 280-283.	1.2	29
142	Low wavenumber Raman spectroscopy of highly crystalline MoSe₂grown by chemical vapor deposition. Physica Status Solidi (B): Basic Research, 2015, 252, 2385-2389.	0.7	29
143	Investigation of growth-induced strain in monolayer MoS2 grown by chemical vapor deposition. Applied Surface Science, 2020, 508, 145126.	3.1	29
144	Defect Engineering of Twoâ€Dimensional Molybdenum Disulfide. Chemistry - A European Journal, 2020, 26, 6535-6544.	1.7	29

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145	AFM-IR and IR-SNOM for the Characterization of Small Molecule Organic Semiconductors. Journal of Physical Chemistry C, 2020, 124, 5331-5344.	1.5	29
146	Imaging and identification of point defects in PtTe2. Npj 2D Materials and Applications, 2021, 5, .	3.9	29
147	Covalent Bisfunctionalization of Twoâ€Đimensional Molybdenum Disulfide. Angewandte Chemie - International Edition, 2021, 60, 13484-13492.	7.2	28
148	Controlled Folding of Graphene: GraFold Printing. Nano Letters, 2015, 15, 857-863.	4.5	27
149	Carbon SWNTs as wires and structural templates between nanoelectrodes. Synthetic Metals, 1999, 103, 2540-2542.	2.1	26
150	Silicon nanowires: catalytic growth and electrical characterization. Physica Status Solidi (B): Basic Research, 2006, 243, 3340-3345.	0.7	26
151	Growth of high-density carbon nanotube forests on conductive TiSiN supports. Applied Physics Letters, 2015, 106, 083108.	1.5	26
152	Raman Spectroscopy of Suspended MoS₂. Physica Status Solidi (B): Basic Research, 2017, 254, 1700218.	0.7	26
153	Optimized single-layer MoS₂ field-effect transistors by non-covalent functionalisation. Nanoscale, 2018, 10, 17557-17566.	2.8	26
154	Thin film pyrolytic carbon electrodes: A new class of carbon electrode for electroanalytical sensing applications. Electrochemistry Communications, 2010, 12, 1034-1036.	2.3	25
155	Investigation of the Interfaces in Schottky Diodes Using Equivalent Circuit Models. ACS Applied Materials & Interfaces, 2013, 5, 6951-6958.	4.0	25
156	Understanding and optimising the packing density of perylene bisimide layers on CVD-grown graphene. Nanoscale, 2015, 7, 16337-16342.	2.8	25
157	Effects of Excitonic Resonance on Second and Third Order Nonlinear Scattering from Few-Layer MoS₂. ACS Photonics, 2018, 5, 1235-1240.	3.2	25
158	Modification of Single-Walled Carbon Nanotubes by Hydrothermal Treatment. Chemistry of Materials, 2003, 15, 3314-3319.	3.2	24
159	Vertical Single-Crystalline Organic Nanowires on Graphene: Solution-Phase Epitaxy and Optical Microcavities. Nano Letters, 2016, 16, 4754-4762.	4.5	24
160	Origami-based spintronics in graphene. Europhysics Letters, 2013, 104, 47001.	0.7	23
161	Low-temperature synthesis and electrocatalytic application of large-area PtTe₂ thin films. Nanotechnology, 2020, 31, 375601.	1.3	23
162	Highly Sensitive, Selective, Stable, and Flexible NO₂ Sensor Based on GaSe. Advanced Materials Technologies, 2020, 5, 1901085.	3.0	23

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163	Sub-millimeter size high mobility single crystal MoSe₂ monolayers synthesized by NaCl-assisted chemical vapor deposition. RSC Advances, 2020, 10, 1580-1587.	1.7	23
164	Lateral size selection of surfactant-stabilised graphene flakes using size exclusion chromatography. Chemical Physics Letters, 2012, 531, 169-172.	1.2	21
165	Spectroscopic thickness and quality metrics for PtSe₂ layers produced by top-down and bottom-up techniques. 2D Materials, 2020, 7, 045027.	2.0	21
166	An investigation of the electrical properties of pyrolytic carbon in reduced dimensions: Vias and wires. Journal of Applied Physics, 2010, 107, .	1.1	20
167	Hot-Volumes as Uniform and Reproducible SERS-Detection Enhancers in Weakly-Coupled Metallic Nanohelices. Scientific Reports, 2017, 7, 45548.	1.6	20
168	Dependence of Photocurrent Enhancements in Quantum Dot (QD)â€Sensitized MoS₂ Devices on MoS₂ Film Properties. Advanced Functional Materials, 2018, 28, 1706149.	7.8	20
169	Calibration of Nonstationary Gas Sensors Based on Two-Dimensional Materials. ACS Omega, 2020, 5, 5959-5963.	1.6	20
170	Thermally Prepared Mn₂O₃/RuO₂/Ru Thin Films as Highly Active Catalysts for the Oxygen Evolution Reaction in Alkaline Media. ChemElectroChem, 2016, 3, 1847-1855.	1.7	19
171	Nanoelectronics beyond silicon. Microelectronic Engineering, 2006, 83, 619-623.	1.1	18
172	Synthesis and characterisation of thin-film platinum disulfide and platinum sulfide. Nanoscale, 2021, 13, 7403-7411.	2.8	18
173	Magnetoresistance of Fe3O4-graphene-Fe3O4 junctions. Applied Physics Letters, 2011, 98, 052511.	1.5	17
174	Inkjet-defined field-effect transistors from chemical vapour deposited graphene. Carbon, 2014, 71, 332-337.	5.4	17
175	Lithium Titanate/Carbon Nanotubes Composites Processed by Ultrasound Irradiation as Anodes for Lithium Ion Batteries. Scientific Reports, 2017, 7, 7614.	1.6	17
176	Fieldâ€Dependent Electrical and Thermal Transport in Polycrystalline WSe₂. Advanced Materials Interfaces, 2018, 5, 1701161.	1.9	17
177	Correlating Nanocrystalline Structure with Electronic Properties in 2D Platinum Diselenide. Advanced Functional Materials, 2021, 31, 2102929.	7.8	17
178	Hybrid Devices by Selective and Conformal Deposition of PtSe₂ at Low Temperatures. Advanced Functional Materials, 2021, 31, 2103936.	7.8	17
179	Large area suspended graphene for nano-mechanical devices. Physica Status Solidi (B): Basic Research, 2015, 252, 2429-2432.	0.7	16
180	Photoresponsivity enhancement in monolayer MoS2 by rapid O2:Ar plasma treatment. Applied Physics Letters, 2019, 114, .	1.5	16

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181	Few-Layer MoS₂/a-Si:H Heterojunction Pin-Photodiodes for Extended Infrared Detection. ACS Photonics, 2019, 6, 1372-1378.	3.2	15
182	Carbon / high-k Trench Capacitor for the 40nm DRAM Generation. , 2007, , .		14
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