## Georg S Duesberg

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5942850/publications.pdf

Version: 2024-02-01

271 papers

36,575 citations

76 h-index

8172

188 g-index

277 all docs

277 docs citations

times ranked

277

36817 citing authors

#	Article	IF	CITATIONS
1	Patterning Functionalized Surfaces of 2D Materials by Nanoshaving. Nanomanufacturing and Metrology, 2022, 5, 23-31.	1.5	1
2	Wafer-scale integration of layered 2D materials by adhesive wafer bonding. , 2022, , .		0
3	Two-Dimensional Platinum Diselenide Waveguide-Integrated Infrared Photodetectors. ACS Photonics, 2022, 9, 859-867.	3.2	14
4	Probing the Impact of Tribolayers on Enhanced Wear Resistance Behavior of Carbon-Rich Molybdenum-Based Coatings. ACS Applied Materials & Samp; Interfaces, 2022, 14, 26148-26161.	4.0	10
5	Stacking Polymorphism in PtSe <sub>2</sub> Drastically Affects Its Electromechanical Properties. Advanced Science, 2022, 9, .	5.6	4
6	Tuning the Photoâ€electrochemical Performance of Ru II â€Sensitized Twoâ€Dimensional MoS 2. Chemistry - A European Journal, 2021, 27, 984-992.	1.7	3
7	Highly Selective Nonâ€Covalent Onâ€Chip Functionalization of Layered Materials. Advanced Electronic Materials, 2021, 7, 2000564.	2.6	9
8	Hydrogenation of diamond nanowire surfaces for effective electrostatic charge storage. Nanoscale, 2021, 13, 7308-7321.	2.8	4
9	Synthesis and characterisation of thin-film platinum disulfide and platinum sulfide. Nanoscale, 2021, 13, 7403-7411.	2.8	18
10	Imaging and identification of point defects in PtTe2. Npj 2D Materials and Applications, 2021, 5, .	3.9	29
11	Large-area integration of two-dimensional materials and their heterostructures by wafer bonding. Nature Communications, 2021, 12, 917.	5.8	99
12	Influence of defect density on the gas sensing properties of multi-layered graphene grown by chemical vapor deposition. Carbon Trends, 2021, 3, 100024.	1.4	7
13	Covalent Bisfunctionalization of Twoâ€Dimensional Molybdenum Disulfide. Angewandte Chemie, 2021, 133, 13596-13604.	1.6	2
14	Slippery polymer monoliths: Surface functionalization with ordered MoS2 microparticle arrays. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 617, 126363.	2.3	1
15	Covalent Bisfunctionalization of Twoâ€Dimensional Molybdenum Disulfide. Angewandte Chemie - International Edition, 2021, 60, 13484-13492.	7.2	28
16	Waveguide-Integrated Photodetectors based on 2D Platinum Diselenide. , 2021, , .		1
17	Correlating Nanocrystalline Structure with Electronic Properties in 2D Platinum Diselenide. Advanced Functional Materials, 2021, 31, 2102929.	7.8	17
18	Covalent Patterning of 2D MoS <sub>2</sub> . Chemistry - A European Journal, 2021, 27, 13117-13122.	1.7	9

#	Article	IF	CITATIONS
19	Hybrid Devices by Selective and Conformal Deposition of PtSe <sub>2</sub> at Low Temperatures. Advanced Functional Materials, 2021, 31, 2103936.	7.8	17
20	Postsynthetic treatment of nickel–iron layered double hydroxides for the optimum catalysis of the oxygen evolution reaction. Npj 2D Materials and Applications, 2021, 5, .	3.9	12
21	Large-area growth of MoS <sub>2</sub> at temperatures compatible with integrating back-end-of-line functionality. 2D Materials, 2021, 8, 025008.	2.0	14
22	Borophenes made easy. Science Advances, 2021, 7, eabk1490.	4.7	31
23	Suppression of the metal-insulator transition in magnetron sputtered Ti2O3 films. Thin Solid Films, 2020, 694, 137642.	0.8	8
24	Insights into Multilevel Resistive Switching in Monolayer MoS <sub>2</sub> . ACS Applied Materials & amp; Interfaces, 2020, 12, 6022-6029.	4.0	54
25	Investigation of growth-induced strain in monolayer MoS2 grown by chemical vapor deposition. Applied Surface Science, 2020, 508, 145126.	3.1	29
26	Correlation of Material Structure and Electronic Properties in 2D Platinum-Diselenide-based Devices., 2020,,.		0
27	Functionalization of Contacted Carbon Nanotube Forests by Dip Coating for Highâ€Performance Biocathodes. ChemElectroChem, 2020, 7, 4685-4689.	1.7	6
28	Electronic and structural characterisation of polycrystalline platinum disulfide thin films. RSC Advances, 2020, 10, 42001-42007.	1.7	10
29	Titelbild: Siteâ€Selective Oxidation of Monolayered Liquidâ€Exfoliated WS <sub>2</sub> by Shielding the Basal Plane through Adsorption of a Facial Amphiphile (Angew. Chem. 33/2020). Angewandte Chemie, 2020, 132, 13769-13769.	1.6	0
30	Synthesis of tungsten ditelluride thin films and highly crystalline nanobelts from pre-deposited reactants. Tungsten, 2020, 2, 321-334.	2.0	11
31	Effect of localized helium ion irradiation on the performance of synthetic monolayer MoS <sub>2</sub> field-effect transistors. Beilstein Journal of Nanotechnology, 2020, 11, 1329-1335.	1.5	6
32	Directing the Morphology of Chemical Vapor Depositionâ€Grown MoS <sub>2</sub> on Sapphire by Crystal Plane Selection. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000073.	0.8	9
33	Siteâ€Selective Oxidation of Monolayered Liquidâ€Exfoliated WS <sub>2</sub> by Shielding the Basal Plane through Adsorption of a Facial Amphiphile. Angewandte Chemie, 2020, 132, 13889-13896.	1.6	7
34	Low-Humidity Sensing Properties of Multi-Layered Graphene Grown by Chemical Vapor Deposition. Sensors, 2020, 20, 3174.	2.1	5
35	Low-temperature synthesis and electrocatalytic application of large-area PtTe <sub>2</sub> thin films. Nanotechnology, 2020, 31, 375601.	1.3	23
36	Calibration of Nonstationary Gas Sensors Based on Two-Dimensional Materials. ACS Omega, 2020, 5, 5959-5963.	1.6	20

3

#	Article	IF	CITATIONS
37	Defect Engineering of Twoâ€Dimensional Molybdenum Disulfide. Chemistry - A European Journal, 2020, 26, 6535-6544.	1.7	29
38	Rapid and Large-Area Visualization of Grain Boundaries in MoS <sub>2</sub> on SiO <sub>2</sub> Using Vapor Hydrofluoric Acid. ACS Applied Materials & Interfaces, 2020, 12, 34049-34057.	4.0	13
39	Highly Sensitive, Selective, Stable, and Flexible NO <sub>2</sub> Sensor Based on GaSe. Advanced Materials Technologies, 2020, 5, 1901085.	3.0	23
40	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
41	Sub-millimeter size high mobility single crystal MoSe <sub>2</sub> monolayers synthesized by NaCl-assisted chemical vapor deposition. RSC Advances, 2020, 10, 1580-1587.	1.7	23
42	Production and processing of graphene and related materials. 2D Materials, 2020, 7, 022001.	2.0	333
43	Crystal-structure of active layers of small molecule organic photovoltaics before and after solvent vapor annealing. Zeitschrift Fur Kristallographie - Crystalline Materials, 2020, 235, 15-28.	0.4	6
44	Siteâ€Selective Oxidation of Monolayered Liquidâ€Exfoliated WS <sub>2</sub> by Shielding the Basal Plane through Adsorption of a Facial Amphiphile. Angewandte Chemie - International Edition, 2020, 59, 13785-13792.	7.2	7
45	Spectroscopic thickness and quality metrics for PtSe <sub>2</sub> layers produced by top-down and bottom-up techniques. 2D Materials, 2020, 7, 045027.	2.0	21
46	Nanoelectromechanical Sensors Based on Suspended 2D Materials. Research, 2020, 2020, 8748602.	2.8	93
47	PtSe <sub>2</sub> grown directly on polymer foil for use as a robust piezoresistive sensor. 2D Materials, 2019, 6, 045029.	2.0	33
48	Nitrogen as a Suitable Replacement for Argon within Methaneâ€Based Hotâ€Wall Graphene Chemical Vapor Deposition. Physica Status Solidi (B): Basic Research, 2019, 256, 1900240.	0.7	2
49	Ultrafast Carrier Dynamics and Bandgap Renormalization in Layered PtSe <sub>2</sub> . Small, 2019, 15, e1902728.	5.2	60
50	Defect-moderated oxidative etching of MoS2. Journal of Applied Physics, 2019, 126, .	1.1	12
51	Quantum confinement-induced semimetal-to-semiconductor evolution in large-area ultra-thin PtSe2 films grown at 400 °C. Npj 2D Materials and Applications, 2019, 3, .	3.9	69
52	Few-Layer MoS <sub>2</sub> /a-Si:H Heterojunction Pin-Photodiodes for Extended Infrared Detection. ACS Photonics, 2019, 6, 1372-1378.	3.2	15
53	Dependence of Photocurrent Enhancements in Hybrid Quantum Dot-MoS <sub>2</sub> Devices on Quantum Dot Emission Wavelength. ACS Photonics, 2019, 6, 976-984.	3.2	9
54	Suppression of the shear Raman mode in defective bilayer MoS2. Journal of Applied Physics, 2019, 125, .	1.1	5

#	Article	IF	CITATIONS
55	Photoresponsivity enhancement in monolayer MoS2 by rapid O2:Ar plasma treatment. Applied Physics Letters, 2019, 114, .	1.5	16
56	Liquid phase exfoliation of MoO <sub>2</sub> nanosheets for lithium ion battery applications. Nanoscale Advances, 2019, 1, 1560-1570.	2.2	35
57	MoS <sub>2</sub> Memtransistors Fabricated by Localized Helium Ion Beam Irradiation. ACS Nano, 2019, 13, 14262-14273.	7.3	99
58	Perforating Freestanding Molybdenum Disulfide Monolayers with Highly Charged Ions. Journal of Physical Chemistry Letters, 2019, 10, 904-910.	2.1	42
59	Growth of 1T′ MoTe <sub>2</sub> by Thermally Assisted Conversion of Electrodeposited Tellurium Films. ACS Applied Energy Materials, 2019, 2, 521-530.	2.5	30
60	Wide Spectral Photoresponse of Layered Platinum Diselenide-Based Photodiodes. Nano Letters, 2018, 18, 1794-1800.	4.5	140
61	Saturation of Two-Photon Absorption in Layered Transition Metal Dichalcogenides: Experiment and Theory. ACS Photonics, 2018, 5, 1558-1565.	3.2	79
62	Electrical devices from top-down structured platinum diselenide films. Npj 2D Materials and Applications, 2018, 2, .	3.9	74
63	Oxide-mediated recovery of field-effect mobility in plasma-treated MoS <sub>2</sub> . Science Advances, 2018, 4, eaao5031.	4.7	82
64	Induction of Chirality in Two-Dimensional Nanomaterials: Chiral 2D MoS <sub>2</sub> Nanostructures. ACS Nano, 2018, 12, 954-964.	7.3	93
65	Dependence of Photocurrent Enhancements in Quantum Dot (QD)â€5ensitized MoS <sub>2</sub> Devices on MoS <sub>2</sub> Film Properties. Advanced Functional Materials, 2018, 28, 1706149.	7.8	20
66	Effects of Excitonic Resonance on Second and Third Order Nonlinear Scattering from Few-Layer MoS <sub>2</sub> . ACS Photonics, 2018, 5, 1235-1240.	3.2	25
67	Fieldâ€Dependent Electrical and Thermal Transport in Polycrystalline WSe <sub>2</sub> . Advanced Materials Interfaces, 2018, 5, 1701161.	1.9	17
68	Nonradiative Energy Transfer and Photocurrent Enhancements in Hybrid Quantum Dot-MoS <inf>2</inf> Devices. , 2018, , .		0
69	Defect sizing, separation, and substrate effects in ion-irradiated monolayer two-dimensional materials. Physical Review B, 2018, 98, .	1.1	46
70	Terahertz Spectroscopy of Amorphous WSe2 and MoSe2 Thin Films. Materials, 2018, 11, 1613.	1.3	8
71	Optimized single-layer MoS <sub>2</sub> field-effect transistors by non-covalent functionalisation. Nanoscale, 2018, 10, 17557-17566.	2.8	26
72	Highly Sensitive Electromechanical Piezoresistive Pressure Sensors Based on Large-Area Layered PtSe <sub>2</sub> Films. Nano Letters, 2018, 18, 3738-3745.	4.5	125

#	Article	IF	Citations
73	Control of the plasmonic near-field in metallic nanohelices. Nanotechnology, 2018, 29, 325204.	1.3	10
74	In Situ Formed Protective Barrier Enabled by Sulfur@Titanium Carbide (MXene) Ink for Achieving Highâ€Capacity, Long Lifetime Li‧ Batteries. Advanced Science, 2018, 5, 1800502.	5.6	210
75	Wafer-Scale Fabrication of Recessed-Channel PtSe <sub>2</sub> MOSFETs With Low Contact Resistance and Improved Gate Control. IEEE Transactions on Electron Devices, 2018, 65, 4102-4108.	1.6	33
76	Enhanced photoresponse of graphene oxide functionalised SnSe films. AIP Advances, 2018, 8, 075123.	0.6	10
77	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
78	Fabrication of self-organized precisely tunable plasmonic SERS substrates via glancing angle deposition. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700088.	0.8	2
79	Oxidation Stability of Colloidal Two-Dimensional Titanium Carbides (MXenes). Chemistry of Materials, 2017, 29, 4848-4856.	3.2	1,120
80	All-printed thin-film transistors from networks of liquid-exfoliated nanosheets. Science, 2017, 356, 69-73.	6.0	391
81	Hot-Volumes as Uniform and Reproducible SERS-Detection Enhancers in Weakly-Coupled Metallic Nanohelices. Scientific Reports, 2017, 7, 45548.	1.6	20
82	Grain boundary-mediated nanopores in molybdenum disulfide grown by chemical vapor deposition. Nanoscale, 2017, 9, 1591-1598.	2.8	31
83	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
84	Controlling Defect and Dopant Concentrations in Graphene by Remote Plasma Treatments. Physica Status Solidi (B): Basic Research, 2017, 254, 1700214.	0.7	11
85	Atmospheric pulsed laser deposition and thermal annealing of plasmonic silver nanoparticle films. Nanotechnology, 2017, 28, 445601.	1.3	12
86	Lithium Titanate/Carbon Nanotubes Composites Processed by Ultrasound Irradiation as Anodes for Lithium Ion Batteries. Scientific Reports, 2017, 7, 7614.	1.6	17
87	Transparent, Flexible, and Conductive 2D Titanium Carbide (MXene) Films with High Volumetric Capacitance. Advanced Materials, 2017, 29, 1702678.	11.1	756
88	Synthesis of layered platelets by self-assembly of rhenium-based clusters directed by long-chain amines. Npj 2D Materials and Applications, 2017, $1$ , .	3.9	3
89	Enabling Flexible Heterostructures for Liâ€lon Battery Anodes Based on Nanotube and Liquidâ€Phase Exfoliated 2D Gallium Chalcogenide Nanosheet Colloidal Solutions. Small, 2017, 13, 1701677.	5.2	71
90	Raman Spectroscopy of Suspended MoS <sub>2</sub> . Physica Status Solidi (B): Basic Research, 2017, 254, 1700218.	0.7	26

#	Article	IF	Citations
91	Rhenium-doped MoS2 films. Applied Physics Letters, 2017, 111, .	1.5	40
92	Quantum Confinement and Gas Sensing of Mechanically Exfoliated GaSe. Advanced Materials Technologies, 2017, 2, 1600197.	3.0	33
93	Ex-situ plasma doping of MoS <inf>2</inf> thin films synthesised by thermally assisted conversion process: Simulations and experiment. , 2017, , .		0
94	Electrochromic Nickel Oxide Films for Smart Window Applications. International Journal of Electrochemical Science, 2016, 11, 6636-6647.	0.5	60
95	Photoluminescence from Liquidâ€Exfoliated WS <sub>2</sub> Monomers in Poly(Vinyl Alcohol) Polymer Composites. Advanced Functional Materials, 2016, 26, 1028-1039.	7.8	73
96	Functionalization of Twoâ€Dimensional MoS <sub>2</sub> : On the Reaction Between MoS <sub>2</sub> and Organic Thiols. Angewandte Chemie - International Edition, 2016, 55, 5803-5808.	7.2	219
97	Structural and Electrical Investigation of MoS <sub>2</sub> Thin Films Formed by Thermal Assisted Conversion of Mo Metal. ECS Journal of Solid State Science and Technology, 2016, 5, Q3016-Q3020.	0.9	6
98	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
99	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
100	Long-chain amine-templated synthesis of gallium sulfide and gallium selenide nanotubes. Nanoscale, 2016, 8, 11698-11706.	2.8	11
101	Raman characterization of platinum diselenide thin films. 2D Materials, 2016, 3, 021004.	2.0	172
102	High-Performance Hybrid Electronic Devices from Layered PtSe <sub>2</sub> Films Grown at Low Temperature. ACS Nano, 2016, 10, 9550-9558.	7.3	310
103	Investigations of vapour-phase deposited transition metal dichalcogenide films for future electronic applications. Solid-State Electronics, 2016, 125, 39-51.	0.8	36
104	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
105	Thermally Prepared Mn <sub>2</sub> O <sub>3</sub> /RuO <sub>2</sub> /Ru Thin Films as Highly Active Catalysts for the Oxygen Evolution Reaction in Alkaline Media. ChemElectroChem, 2016, 3, 1847-1855.	1.7	19
106	Vertical Single-Crystalline Organic Nanowires on Graphene: Solution-Phase Epitaxy and Optical Microcavities. Nano Letters, 2016, 16, 4754-4762.	4.5	24
107	A New 2H-2H′/1T Cophase in Polycrystalline MoS <sub>2</sub> and MoSe <sub>2</sub> Thin Films. ACS Applied Materials & Discrete Substitution (1998). Applied Materials & Discrete Substitution (1998	4.0	33
108	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

#	Article	IF	CITATIONS
109	Production of Ni(OH) < sub > 2 < / sub > nanosheets by liquid phase exfoliation: from optical properties to electrochemical applications. Journal of Materials Chemistry A, 2016, 4, 11046-11059.	5.2	71
110	A comparison of catabolic pathways induced in primary macrophages by pristine single walled carbon nanotubes and pristine graphene. RSC Advances, 2016, 6, 65299-65310.	1.7	13
111	Functionalization of Twoâ€Dimensional MoS <sub>2</sub> : On the Reaction Between MoS <sub>2</sub> and Organic Thiols. Angewandte Chemie, 2016, 128, 5897-5902.	1.6	46
112	Thickness Dependence and Percolation Scaling of Hydrogen Production Rate in MoS <sub>2</sub> Nanosheet and Nanosheet–Carbon Nanotube Composite Catalytic Electrodes. ACS Nano, 2016, 10, 672-683.	7.3	116
113	Comparison of liquid exfoliated transition metal dichalcogenides reveals MoSe <sub>2</sub> to be the most effective hydrogen evolution catalyst. Nanoscale, 2016, 8, 5737-5749.	2.8	127
114	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
115	Spectral sensitivity of graphene/silicon heterojunction photodetectors. Solid-State Electronics, 2016, 115, 207-212.	0.8	65
116	Investigations of vapor phase deposited transition metal dichalcogenide films for future electronic applications. , 2015, , .		1
117	Spin-dependent transport properties of Fe3O4/MoS2/Fe3O4 junctions. Scientific Reports, 2015, 5, 15984.	1.6	53
118	Low wavenumber Raman spectroscopy of highly crystalline MoSe <sub>2</sub> grown by chemical vapor deposition. Physica Status Solidi (B): Basic Research, 2015, 252, 2385-2389.	0.7	29
119	Largeâ€Scale Diffusion Barriers from CVD Grown Graphene. Advanced Materials Interfaces, 2015, 2, 1500082.	1.9	12
120	Large area suspended graphene for nano-mechanical devices. Physica Status Solidi (B): Basic Research, 2015, 252, 2429-2432.	0.7	16
121	Growth of high-density carbon nanotube forests on conductive TiSiN supports. Applied Physics Letters, 2015, 106, 083108.	1.5	26
122	Low wavenumber Raman spectroscopy of highly crystalline MoSe2 grown by chemical vapor deposition (Phys. Status Solidi B 11/2015). Physica Status Solidi (B): Basic Research, 2015, 252, .	0.7	0
123	Controlled Folding of Graphene: GraFold Printing. Nano Letters, 2015, 15, 857-863.	4.5	27
124	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
125	Functionalization of Liquidâ€Exfoliated Twoâ€Dimensional 2Hâ€MoS <sub>2</sub> . Angewandte Chemie - International Edition, 2015, 54, 2638-2642.	7.2	219
126	Functionalization of Liquidâ€Exfoliated Twoâ€Dimensional 2Hâ€MoS <sub>2</sub> . Angewandte Chemie, 2015, 127, 2676-2680.	1.6	35

#	Article	IF	Citations
127	Direct Observation of Degenerate Two-Photon Absorption and Its Saturation in WS <sub>2</sub> and MoS <sub>2</sub> Monolayer and Few-Layer Films. ACS Nano, 2015, 9, 7142-7150.	7.3	322
128	Nanopatterning and Electrical Tuning of MoS <sub>2</sub> Layers with a Subnanometer Helium Ion Beam. Nano Letters, 2015, 15, 5307-5313.	4.5	171
129	Basal-Plane Functionalization of Chemically Exfoliated Molybdenum Disulfide by Diazonium Salts. ACS Nano, 2015, 9, 6018-6030.	7.3	293
130	Interface and strain effects on the fabrication of suspended CVD graphene devices. Solid-State Electronics, 2015, 108, 75-83.	0.8	12
131	Spectral sensitivity of a graphene/silicon pn-junction photodetector., 2015,,.		6
132	Investigation of 2D transition metal dichalcogenide films for electronic devices., 2015,,.		4
133	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
134	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
135	On-surface derivatisation of aromatic molecules on graphene: the importance of packing density. Chemical Communications, 2015, 51, 16778-16781.	2.2	14
136	Liquid exfoliation of solvent-stabilized few-layer black phosphorus for applications beyond electronics. Nature Communications, 2015, 6, 8563.	5.8	921
137	Understanding and optimising the packing density of perylene bisimide layers on CVD-grown graphene. Nanoscale, 2015, 7, 16337-16342.	2.8	25
138	Optimisation of copper catalyst by the addition of chromium for the chemical vapour deposition growth of monolayer graphene. Carbon, 2015, 95, 789-793.	5.4	1
139	Large variations in both dark- and photoconductivity in nanosheet networks as nanomaterial is varied from MoS <sub>2</sub> to WTe <sub>2</sub> . Nanoscale, 2015, 7, 198-208.	2.8	76
140	Low temperature characterization of CVD graphene devices fabricated with a scalable process route. , 2014, , .		0
141	Graphene field emission devices. Applied Physics Letters, 2014, 105, 103107.	1.5	62
142	Investigation of the optical properties of MoS <sub>2</sub> thin films using spectroscopic ellipsometry. Applied Physics Letters, 2014, 104, 103114.	1.5	255
143	Inkjet-defined field-effect transistors from chemical vapour deposited graphene. Carbon, 2014, 71, 332-337.	5.4	17
144	Field Emission Characteristics of Contact Printed Graphene Fins. Small, 2014, 10, 95-99.	5.2	40

#	Article	IF	CITATIONS
145	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
146	Controlled synthesis of transition metal dichalcogenide thin films for electronic applications. Applied Surface Science, 2014, 297, 139-146.	3.1	144
147	Microtransfer Printing: Field Emission Characteristics of Contact Printed Graphene Fins (Small) Tj ETQq1 1 0.7843	14 rgBT /C 5.2	Oyerlock 10
148	Strain, Bubbles, Dirt, and Folds: A Study of Graphene Polymerâ€Assisted Transfer. Advanced Materials Interfaces, 2014, 1, 1400115.	1.9	98
149	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
150	A perfect match. Nature Materials, 2014, 13, 1075-1076.	13.3	68
151	Plasma assisted synthesis of WS2 for gas sensing applications. Chemical Physics Letters, 2014, 615, 6-10.	1.2	150
152	Edge and confinement effects allow in situ measurement of size and thickness of liquid-exfoliated nanosheets. Nature Communications, 2014, 5, 4576.	5.8	432
153	Field emission applications of graphene. , 2014, , .		1
154	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
155	Challenges in suspending CVD graphene: More than capillary effects. , 2014, , .		2
156	Molybdenum disulfide/pyrolytic carbon hybrid electrodes for scalable hydrogen evolution. Nanoscale, 2014, 6, 8185.	2.8	48
157	Electroanalytical Sensing Properties of Pristine and Functionalized Multilayer Graphene. Chemistry of Materials, 2014, 26, 1807-1812.	3.2	43
158	Growth optimisation of high quality graphene from ethene at low temperatures. Chemical Physics Letters, 2014, 595-596, 192-196.	1.2	9
159	Nitrogen-doped reduced graphene oxide electrodes for electrochemical supercapacitors. Physical Chemistry Chemical Physics, 2014, 16, 2280.	1.3	87
160	Comparison of carbon nanotube forest growth using AlSi, TiSiN, and TiN as conductive catalyst supports. Physica Status Solidi (B): Basic Research, 2014, 251, 2389-2393.	0.7	9
161	Transition Metal Dichalcogenide Growth via Close Proximity Precursor Supply. Scientific Reports, 2014, 4, 7374.	1.6	72
162	Heterojunction Hybrid Devices from Vapor Phase Grown MoS2. Scientific Reports, 2014, 4, 5458.	1.6	80

#	Article	lF	Citations
163	Helium ion microscope generated nitrogen-vacancy centres in type lb diamond. , 2014, , .		O
164	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
165	Helium ion microscopy of graphene: beam damage, image quality and edge contrast. Nanotechnology, 2013, 24, 335702.	1.3	68
166	Characterization of graphene-silicon Schottky barrier diodes using impedance spectroscopy. Applied Physics Letters, 2013, 103, 193106.	1.5	82
167	Nitrogen-doped pyrolytic carbon films as highly electrochemically active electrodes. Physical Chemistry Chemical Physics, 2013, 15, 18688.	1.3	5
168	Highâ€Performance Sensors Based on Molybdenum Disulfide Thin Films. Advanced Materials, 2013, 25, 6699-6702.	11.1	435
169	The electrical characteristics of high density arrays of silicon nanowire field-effect transistors: Dependence on wire spacing. , 2013, , .		0
170	Investigation of carbon-silicon schottky diodes and their use as chemical sensors. , 2013, , .		6
171	Functionalisation of graphene surfaces with downstream plasma treatments. Carbon, 2013, 54, 283-290.	5.4	77
172	Chemically Modulated Graphene Diodes. Nano Letters, 2013, 13, 2182-2188.	4.5	156
173	Plasma-assisted simultaneous reduction and nitrogen doping of graphene oxide nanosheets. Journal of Materials Chemistry A, 2013, 1, 4431.	5.2	198
174	Investigation of the Interfaces in Schottky Diodes Using Equivalent Circuit Models. ACS Applied Materials & Samp; Interfaces, 2013, 5, 6951-6958.	4.0	25
175	Prussian blue-functionalised graphene in the amperometric detection of peroxide and hydrazine. Technology, 2013, 01, 58-62.	1.4	2
176	Origami-based spintronics in graphene. Europhysics Letters, 2013, 104, 47001.	0.7	23
177	Electrical properties of high density arrays of silicon nanowire field effect transistors. Journal of Applied Physics, 2013, 114, 144503.	1.1	8
178	Report on the Special Miniworkshop "nano&Management― Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1877-1881.	0.8	0
179	Polymer-assisted transfer printing of graphene composite films. Physica Status Solidi (B): Basic Research, 2013, 250, 2668-2671.	0.7	8
180	Investigation of carbon–silicon Schottky barrier diodes. Physica Status Solidi (B): Basic Research, 2012, 249, 2553-2557.	0.7	3

#	Article	IF	CITATIONS
181	Production of 3Dâ€shaped graphene via transfer printing. Physica Status Solidi (B): Basic Research, 2012, 249, 2515-2518.	0.7	13
182	Percolation scaling in composites of exfoliated MoS2 filled with nanotubes and graphene. Nanoscale, 2012, 4, 6260.	2.8	75
183	Large-scale parallel arrays of silicon nanowires via block copolymer directed self-assembly. Nanoscale, 2012, 4, 3228.	2.8	59
184	Cell Proliferation Tracking Using Graphene Sensor Arrays. Journal of Sensors, 2012, 2012, 1-7.	0.6	7
185	Carbon–Silicon Schottky Barrier Diodes. Small, 2012, 8, 1360-1364.	5.2	12
186	Graphene resist interlacing process for versatile fabrication of free-standing graphene. Nanotechnology, 2012, 23, 145302.	1.3	4
187	Simultaneous electrochemical determination of dopamine and paracetamol based on thin pyrolytic carbon films. Analytical Methods, 2012, 4, 2048.	1.3	95
188	The effect of downstream plasma treatments on graphene surfaces. Carbon, 2012, 50, 395-403.	5.4	95
189	Synthesis and analysis of thin conducting pyrolytic carbon films. Carbon, 2012, 50, 1216-1226.	5.4	116
190	Lateral size selection of surfactant-stabilised graphene flakes using size exclusion chromatography. Chemical Physics Letters, 2012, 531, 169-172.	1.2	21
191	Remote Plasmaâ€Assisted CVD Growth of Carbon Nanotubes in an Optimised Rapid Thermal Reactor. Chemical Vapor Deposition, 2012, 18, 17-21.	1.4	3
192	Large Magnetoresistance in Few Layer Graphene Stacks with Current Perpendicular to Plane Geometry. Advanced Materials, 2012, 24, 1862-1866.	11.1	66
193	Nanoscale Mapping of Electrical Resistivity and Connectivity in Graphene Strips and Networks. Nano Letters, 2011, 11, 16-22.	4.5	170
194	Atom-Resolved Evidence of Anisotropic Growth in ZnS Nanotetrapods. Nano Letters, 2011, 11, 2983-2988.	4.5	43
195	Memory and Threshold Resistance Switching in Ni/NiO Core–Shell Nanowires. Nano Letters, 2011, 11, 4601-4606.	4.5	136
196	Nanocarbon structures for electronic applications & $\#x2014$ ; A critical review., $2011$ ,,.		0
197	DMF-exfoliated graphene for electrochemical NADH detection. Physical Chemistry Chemical Physics, 2011, 13, 7747.	1.3	81
198	Two-Dimensional Nanosheets Produced by Liquid Exfoliation of Layered Materials. Science, 2011, 331, 568-571.	6.0	6,190

#	Article	IF	Citations
199	Reliable processing of graphene using metal etchmasks. Nanoscale Research Letters, 2011, 6, 390.	3.1	34
200	CVD growth and processing of graphene for electronic applications. Physica Status Solidi (B): Basic Research, 2011, 248, 2604-2608.	0.7	31
201	Electrical Characteristics of Molybdenum Disulfide Flakes Produced by Liquid Exfoliation. Advanced Materials, 2011, 23, 4178-4182.	11.1	224
202	Siteâ€Specific Transferâ€Printing of Individual Graphene Microscale Patterns to Arbitrary Surfaces. Advanced Materials, 2011, 23, 3938-3943.	11.1	55
203	Largeâ€Scale Exfoliation of Inorganic Layered Compounds in Aqueous Surfactant Solutions. Advanced Materials, 2011, 23, 3944-3948.	11.1	1,012
204	Magnetoresistance of Fe3O4-graphene-Fe3O4 junctions. Applied Physics Letters, 2011, 98, 052511.	1.5	17
205	Thin film pyrolytic carbon electrodes: A new class of carbon electrode for electroanalytical sensing applications. Electrochemistry Communications, 2010, 12, 1034-1036.	2.3	25
206	Transparent ultrathin conducting carbon films. Applied Surface Science, 2010, 256, 6186-6190.	3.1	33
207	Flexible, Transparent, Conducting Films of Randomly Stacked Graphene from Surfactantâ€Stabilized, Oxideâ€Free Graphene Dispersions. Small, 2010, 6, 458-464.	5.2	371
208	Electrochemical ascorbic acid sensor based on DMF-exfoliated graphene. Journal of Materials Chemistry, 2010, 20, 7864.	6.7	224
209	Ion irradiation induced structural and electrical transition in graphene. Journal of Chemical Physics, 2010, 133, 234703.	1.2	70
210	An investigation of the electrical properties of pyrolytic carbon in reduced dimensions: Vias and wires. Journal of Applied Physics, 2010, 107, .	1.1	20
211	Gas phase controlled deposition of high quality large-area graphene films. Chemical Communications, 2010, 46, 1422.	2.2	42
212	Low Temperature Graphene Growth. ECS Transactions, 2009, 19, 175-181.	0.3	8
213	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
214	High-yield production of graphene by liquid-phase exfoliation of graphite. Nature Nanotechnology, 2008, 3, 563-568.	15.6	5,431
215	Carbon / high-k Trench Capacitor for the 40nm DRAM Generation. , 2007, , .		14
216	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

#	Article	IF	Citations
217	Silicon-Nanowire Transistors with Intruded Nickel-Silicide Contacts. Nano Letters, 2006, 6, 2660-2666.	<b>4.</b> 5	231
218	Silicon nanowires: catalytic growth and electrical characterization. Physica Status Solidi (B): Basic Research, 2006, 243, 3340-3345.	0.7	26
219	Electron diffraction analysis of individual single-walled carbon nanotubes. Ultramicroscopy, 2006, 106, 176-190.	0.8	71
220	Nanoelectronics beyond silicon. Microelectronic Engineering, 2006, 83, 619-623.	1.1	18
221	Transparent carbon nanotube coatings. Applied Surface Science, 2005, 252, 425-429.	3.1	397
222	How do carbon nanotubes fit into the semiconductor roadmap?. Applied Physics A: Materials Science and Processing, 2005, 80, 1141-1151.	1.1	172
223	Carbon Nanotubes for Microelectronics?. Small, 2005, 1, 382-390.	5.2	90
224	Novel freestanding nanotube devices for combining TEM and electron diffraction with Raman and Transport. AIP Conference Proceedings, 2005, , .	0.3	0
225	Raman Modes of Index-Identified Freestanding Single-Walled Carbon Nanotubes. Physical Review Letters, 2005, 95, 217401.	2.9	169
226	Sub-20 nm Short Channel Carbon Nanotube Transistors. Nano Letters, 2005, 5, 147-150.	<b>4.</b> 5	128
227	Electrical Interconnects Made of Carbon Nanotubes. AIP Conference Proceedings, 2004, , .	0.3	3
228	Freestanding nanostructures for TEM-combined investigations of nanotubes. AIP Conference Proceedings, 2004, , .	0.3	1
229	Catalytic CVD of SWCNTs at Low Temperatures and SWCNT Devices. AIP Conference Proceedings, 2004, ,	0.3	0
230	Contact Resistance between Individual Single Walled Carbon Nanotubes and Metal Electrodes. AIP Conference Proceedings, 2004, , .	0.3	0
231	Bias dependence and electrical breakdown of small diameter single-walled carbon nanotubes. Journal of Applied Physics, 2004, 96, 6694-6699.	1.1	60
232	Ways towards the scaleable integration of carbon nanotubes into silicon based technology. Diamond and Related Materials, 2004, 13, 354-361.	1.8	65
233	Carbon Nanotube Applications in Microelectronics. IEEE Transactions on Components and Packaging Technologies, 2004, 27, 629-634.	1.4	121
234	Fluorination of carbon nanotubes with xenon difluoride. Chemical Physics Letters, 2004, 399, 280-283.	1,2	29

#	Article	IF	CITATIONS
235	High-Current Nanotube Transistors. Nano Letters, 2004, 4, 831-834.	4.5	143
236	Chemical Vapor Deposition Growth of Single-Walled Carbon Nanotubes at 600 $\hat{A}^{\circ}$ C and a Simple Growth Model. Journal of Physical Chemistry B, 2004, 108, 1888-1893.	1.2	157
237	Towards the integration of carbon nanotubes in microelectronics. Diamond and Related Materials, 2004, 13, 1296-1300.	1.8	91
238	Hydrothermal functionalisation of single-walled carbon nanotubes. Synthetic Metals, 2004, 142, 263-266.	2.1	40
239	Carbon Nanotubes: Can they become a microelectronics technology?. AIP Conference Proceedings, 2004, , .	0.3	1
240	Contact improvement of carbon nanotubes via electroless nickel deposition. Applied Physics A: Materials Science and Processing, 2003, 77, 731-734.	1.1	41
241	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
242	Carbon nanotubes for microelectronics: status and future prospects. Materials Science and Engineering C, 2003, 23, 663-669.	3.8	80
243	Modification of Single-Walled Carbon Nanotubes by Hydrothermal Treatment. Chemistry of Materials, 2003, 15, 3314-3319.	3.2	24
244	Growth of Isolated Carbon Nanotubes with Lithographically Defined Diameter and Location. Nano Letters, 2003, 3, 257-259.	4.5	75
245	In-Situ Contacted Single-Walled Carbon Nanotubes and Contact Improvement by Electroless Deposition. Nano Letters, 2003, 3, 965-968.	4.5	60
246	Self-Aligned Contacting of Carbon Nanotubes. AIP Conference Proceedings, 2003, , .	0.3	0
247	Large-scale integration of carbon nanotubes into silicon-based microelectronics. , 2003, , .		2
248	Interconnection of carbon nanotubes by chemical functionalization. Applied Physics Letters, 2002, 80, 3811-3813.	1.5	188
249	Carbon nanotubes in interconnect applications. Microelectronic Engineering, 2002, 64, 399-408.	1.1	566
250	Carbon nanotubes acting like actuators. Carbon, 2002, 40, 1735-1739.	5.4	70
251	Growth and electrical transport of germanium nanowires. Journal of Applied Physics, 2001, 90, 5747-5751.	1.1	152
252	Intensities of the Raman-active modes in single and multiwall nanotubes. Physical Review B, 2001, 63, .	1.1	38

#	Article	IF	CITATIONS
253	Raman Imaging of Single Carbon Nanotubes. Advanced Materials, 2000, 12, 1210-1214.	11.1	46
254	A new purification method for single-wall carbon nanotubes (SWNTs). Applied Physics A: Materials Science and Processing, 2000, 70, 599-602.	1,1	81
255	Electrical transport in single-walled carbon nanotube bundles embedded in Langmuir–Blodgett monolayers. Synthetic Metals, 2000, 110, 245-249.	2.1	34
256	Controlled deposition of carbon nanotubes on a patterned substrate. Surface Science, 2000, 462, 195-202.	0.8	117
257	Polarized Raman Spectroscopy on Isolated Single-Wall Carbon Nanotubes. Physical Review Letters, 2000, 85, 5436-5439.	2.9	423
258	Novel purification procedure and derivatization method of single-walled carbon nanotubes (SWNTs). AIP Conference Proceedings, 2000, , .	0.3	5
259	Application of scanning force microscopy in nanotube science. Applied Physics A: Materials Science and Processing, 1999, 69, 261-267.	1.1	12
260	Towards processing of carbon nanotubes for technical applications. Applied Physics A: Materials Science and Processing, 1999, 69, 269-274.	1.1	54
261	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
262	Electronic transport in carbon nanotube ropes and mats. Synthetic Metals, 1999, 103, 2547-2550.	2.1	68
263	2-D localization in single wall carbon nanotube network synthesized by arc-plasma method. Synthetic Metals, 1999, 103, 2551-2554.	2.1	2
264	Chromatography of carbon nanotubes. Synthetic Metals, 1999, 103, 2484-2485.	2.1	80
265	Transport properties of single-walled carbon nanotubes. Synthetic Metals, 1999, 103, 2513-2514.	2.1	10
266	Carbon SWNTs as wires and structural templates between nanoelectrodes. Synthetic Metals, 1999, 103, 2540-2542.	2.1	26
267	Langmuirâ´'Blodgett Films of Matrix-Diluted Single-Walled Carbon Nanotubes. Chemistry of Materials, 1998, 10, 2338-2340.	3.2	131
268	Reversible bending of carbon nanotubes using a transmission electron microscope. Applied Physics Letters, 1998, 73, 1961-1963.	1.5	41
269	Controlled Adsorption of Carbon Nanotubes on Chemically Modified Electrode Arrays. Advanced Materials, 1998, 10, 584-588.	11.1	4
270	Manipulation of Transition Metal Dichalcogenides: Nanomachining 2D PtSe2 using AFM., 0,,.		0

# ARTICLE IF CITATIONS

271 Manipulation of Transition Metal Dichalcogenides: Nanomachining 2D PtSe2 using AFM., 0,,... o