Stephan Hofmann

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Flexible Electronics: The Next Ubiquitous Platform. Proceedings of the IEEE, 2012, 100, 1486-1517.	16.4	822
2	In situ Observations of Catalyst Dynamics during Surface-Bound Carbon Nanotube Nucleation. Nano Letters, 2007, 7, 602-608.	4.5	662
3	Carbon Nanotubes and Related Nanomaterials: Critical Advances and Challenges for Synthesis toward Mainstream Commercial Applications. ACS Nano, 2018, 12, 11756-11784.	7.3	388
4	Low-temperature growth of carbon nanotubes by plasma-enhanced chemical vapor deposition. Applied Physics Letters, 2003, 83, 135-137.	1.5	364
5	Surface Diffusion: The Low Activation Energy Path for Nanotube Growth. Physical Review Letters, 2005, 95, 036101.	2.9	362
6	Revealing lithiumâ€"silicide phase transformations in nano-structured silicon-based lithium ion batteries via in situ NMR spectroscopy. Nature Communications, 2014, 5, 3217.	5.8	332
7	Raman spectroscopy of silicon nanowires. Physical Review B, 2003, 68, .	1.1	326
8	Catalytic Chemical Vapor Deposition of Single-Wall Carbon Nanotubes at Low Temperatures. Nano Letters, 2006, 6, 1107-1112.	4.5	297
9	Single-nanowire spectrometers. Science, 2019, 365, 1017-1020.	6.0	291
10	Interface dynamics and crystal phase switching in GaAs nanowires. Nature, 2016, 531, 317-322.	13.7	272
11	Piezoelectric Materials for Energy Harvesting and Sensing Applications: Roadmap for Future Smart Materials. Advanced Science, 2021, 8, e2100864.	5.6	259
12	In Situ Characterization of Alloy Catalysts for Low-Temperature Graphene Growth. Nano Letters, 2011, 11, 4154-4160.	4.5	258
13	Ledge-flow-controlled catalyst interface dynamics during Si nanowire growth. Nature Materials, 2008, 7, 372-375.	13.3	248
14	Gold catalyzed growth of silicon nanowires by plasma enhanced chemical vapor deposition. Journal of Applied Physics, 2003, 94, 6005-6012.	1.1	247
15	In-situ X-ray Photoelectron Spectroscopy Study of Catalystâ^'Support Interactions and Growth of Carbon Nanotube Forests. Journal of Physical Chemistry C, 2008, 112, 12207-12213.	1.5	240
16	Observing Graphene Grow: Catalystâ€"Graphene Interactions during Scalable Graphene Growth on Polycrystalline Copper. Nano Letters, 2013, 13, 4769-4778.	4.5	231
17	Nanoscale Zirconia as a Nonmetallic Catalyst for Graphitization of Carbon and Growth of Single- and Multiwall Carbon Nanotubes. Journal of the American Chemical Society, 2009, 131, 12144-12154.	6.6	219
18	Metal Oxide Induced Charge Transfer Doping and Band Alignment of Graphene Electrodes for Efficient Organic Light Emitting Diodes. Scientific Reports, 2014, 4, 5380.	1.6	202

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19	In Situ Observations during Chemical Vapor Deposition of Hexagonal Boron Nitride on Polycrystalline Copper. Chemistry of Materials, 2014, 26, 6380-6392.	3.2	190
20	The Phase of Iron Catalyst Nanoparticles during Carbon Nanotube Growth. Chemistry of Materials, 2012, 24, 4633-4640.	3.2	180
21	State of Transition Metal Catalysts During Carbon Nanotube Growth. Journal of Physical Chemistry C, 2009, 113, 1648-1656.	1.5	166
22	Binder free three-dimensional sulphur/few-layer graphene foam cathode with enhanced high-rate capability for rechargeable lithium sulphur batteries. Nanoscale, 2014, 6, 5746-5753.	2.8	166
23	Direct growth of aligned carbon nanotube field emitter arrays onto plastic substrates. Applied Physics Letters, 2003, 83, 4661-4663.	1.5	164
24	<i>In Situ</i> Observations of the Atomistic Mechanisms of Ni Catalyzed Low Temperature Graphene Growth. ACS Nano, 2013, 7, 7901-7912.	7.3	163
25	Kinetic Control of Catalytic CVD for High-Quality Graphene at Low Temperatures. ACS Nano, 2012, 6, 9996-10003.	7.3	159
26	The Parameter Space of Graphene Chemical Vapor Deposition on Polycrystalline Cu. Journal of Physical Chemistry C, 2012, 116, 22492-22501.	1.5	155
27	Nucleation Control for Large, Single Crystalline Domains of Monolayer Hexagonal Boron Nitride via Si-Doped Fe Catalysts. Nano Letters, 2015, 15, 1867-1875.	4.5	139
28	Graphene-Passivated Nickel as an Oxidation-Resistant Electrode for Spintronics. ACS Nano, 2012, 6, 10930-10934.	7.3	138
29	Growth of Ultrahigh Density Vertically Aligned Carbon Nanotube Forests for Interconnects. ACS Nano, 2010, 4, 7431-7436.	7.3	136
30	Long-Term Passivation of Strongly Interacting Metals with Single-Layer Graphene. Journal of the American Chemical Society, 2015, 137, 14358-14366.	6.6	133
31	High-Mobility, Wet-Transferred Graphene Grown by Chemical Vapor Deposition. ACS Nano, 2019, 13, 8926-8935.	7.3	132
32	Low-Bias Terahertz Amplitude Modulator Based on Split-Ring Resonators and Graphene. ACS Nano, 2014, 8, 2548-2554.	7.3	131
33	Understanding and Controlling Cu-Catalyzed Graphene Nucleation: The Role of Impurities, Roughness, and Oxygen Scavenging. Chemistry of Materials, 2016, 28, 8905-8915.	3.2	128
34	Diffusion- and Reaction-Limited Growth of Carbon Nanotube Forests. ACS Nano, 2009, 3, 3560-3566.	7.3	127
35	Effects of catalyst film thickness on plasma-enhanced carbon nanotube growth. Journal of Applied Physics, 2005, 98, 034308.	1.1	123
36	Acetylene: A Key Growth Precursor for Single-Walled Carbon Nanotube Forests. Journal of Physical Chemistry C, 2009, 113, 17321-17325.	1.5	120

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37	Magnetic tunnel junctions with monolayer hexagonal boron nitride tunnel barriers. Applied Physics Letters, 2016, 108, .	1.5	118
38	Controlling Catalyst Bulk Reservoir Effects for Monolayer Hexagonal Boron Nitride CVD. Nano Letters, 2016, 16, 1250-1261.	4.5	114
39	Towards a general growth model for graphene CVD on transition metal catalysts. Nanoscale, 2016, 8, 2149-2158.	2.8	114
40	Cyclic Supersaturation and Triple Phase Boundary Dynamics in Germanium Nanowire Growth. Journal of Physical Chemistry C, 2011, 115, 4413-4417.	1.5	111
41	Sub-nanometer Atomic Layer Deposition for Spintronics in Magnetic Tunnel Junctions Based on Graphene Spin-Filtering Membranes. ACS Nano, 2014, 8, 7890-7895.	7.3	109
42	The influence of intercalated oxygen on the properties of graphene on polycrystalline Cu under various environmental conditions. Physical Chemistry Chemical Physics, 2014, 16, 25989-26003.	1.3	108
43	Time Evolution of the Wettability of Supported Graphene under Ambient Air Exposure. Journal of Physical Chemistry C, 2016, 120, 2215-2224.	1.5	108
44	Extrinsic Cation Selectivity of 2D Membranes. ACS Nano, 2017, 11, 1340-1346.	7.3	105
45	Introducing Carbon Diffusion Barriers for Uniform, High-Quality Graphene Growth from Solid Sources. Nano Letters, 2013, 13, 4624-4631.	4.5	104
46	CVD-Enabled Graphene Manufacture and Technology. Journal of Physical Chemistry Letters, 2015, 6, 2714-2721.	2.1	100
47	Interdependency of Subsurface Carbon Distribution and Grapheneâ€"Catalyst Interaction. Journal of the American Chemical Society, 2014, 136, 13698-13708.	6.6	95
48	Solar Water Splitting with a Hydrogenase Integrated in Photoelectrochemical Tandem Cells. Angewandte Chemie - International Edition, 2018, 57, 10595-10599.	7.2	93
49	Measuring the nonlinear refractive index of graphene using the optical Kerr effect method. Optics Letters, 2016, 41, 3281.	1.7	92
50	On the Mechanisms of Niâ€Catalysed Graphene Chemical Vapour Deposition. ChemPhysChem, 2012, 13, 2544-2549.	1.0	90
51	Insulator-to-Metallic Spin-Filtering in 2D-Magnetic Tunnel Junctions Based on Hexagonal Boron Nitride. ACS Nano, 2018, 12, 4712-4718.	7.3	88
52	Low-temperature synthesis of ZnSe nanowires and nanosaws by catalyst-assisted molecular-beam epitaxy. Applied Physics Letters, 2005, 86, 153103.	1.5	87
53	Geometrical Effect in 2D Nanopores. Nano Letters, 2017, 17, 4223-4230.	4.5	87
54	Active Control of Electromagnetically Induced Transparency in a Terahertz Metamaterial Array with Graphene for Continuous Resonance Frequency Tuning. Advanced Optical Materials, 2018, 6, 1800570.	3.6	85

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55	Graphene based plasmonic terahertz amplitude modulator operating above 100â€‰MHz. Applied Physics Letters, 2016, 108, .	1.5	83
56	Synthesis of nanostructures in nanowires using sequential catalyst reactions. Nature Materials, 2015, 14, 820-825.	13.3	82
57	Low-temperature plasma enhanced chemical vapour deposition of carbon nanotubes. Diamond and Related Materials, 2004, 13, 1171-1176.	1.8	81
58	Self-assembled oxide films with tailored nanoscale ionic and electronic channels for controlled resistive switching. Nature Communications, 2016, 7, 12373.	5.8	81
59	Thermal and chemical vapor deposition of Si nanowires: Shape control, dispersion, and electrical properties. Journal of Applied Physics, 2007, 102, .	1.1	80
60	State of the catalyst during carbon nanotube growth. Diamond and Related Materials, 2009, 18, 940-945.	1.8	80
61	In Situ Observations of Phase Transitions in Metastable Nickel (Carbide)/Carbon Nanocomposites. Journal of Physical Chemistry C, 2016, 120, 22571-22584.	1.5	80
62	Enhancing Photoluminescence and Mobilities in WS₂ Monolayers with Oleic Acid Ligands. Nano Letters, 2019, 19, 6299-6307.	4.5	80
63	Substrate-assisted nucleation of ultra-thin dielectric layers on graphene by atomic layer deposition. Applied Physics Letters, 2012, 100, .	1.5	78
64	The role of precursor gases on the surface restructuring of catalyst films during carbon nanotube growth. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 37, 1-5.	1.3	76
65	Atmospheric pressure X-ray photoelectron spectroscopy apparatus: Bridging the pressure gap. Review of Scientific Instruments, 2016, 87, 053121.	0.6	76
66	Dynamic Catalyst Restructuring during Carbon Nanotube Growth. ACS Nano, 2010, 4, 7587-7595.	7.3	74
67	Graphene-Based Ultrathin Flat Lenses. ACS Photonics, 2015, 2, 200-207.	3.2	70
68	Surface properties of vertically aligned carbon nanotube arrays. Diamond and Related Materials, 2008, 17, 1518-1524.	1.8	68
69	Highly chiral-selective growth of single-walled carbon nanotubes with a simple monometallic Co catalyst. Physical Review B, 2012, 85, .	1.1	68
70	Formation of Metastable Liquid Catalyst during Subeutectic Growth of Germanium Nanowires. Nano Letters, 2010, 10, 2972-2976.	4.5	65
71	Protecting nickel with graphene spin-filtering membranes: A single layer is enough. Applied Physics Letters, 2015, 107, .	1.5	65
72	Understanding Capacitance Variation in Sub-nanometer Pores by <i>in Situ</i> Tuning of Interlayer Constrictions. ACS Nano, 2016, 10, 747-754.	7.3	64

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73	Wide-Field Spectral Super-Resolution Mapping of Optically Active Defects in Hexagonal Boron Nitride. Nano Letters, 2019, 19, 2516-2523.	4.5	63
74	In Situ Graphene Growth Dynamics on Polycrystalline Catalyst Foils. Nano Letters, 2016, 16, 6196-6206.	4.5	62
75	Surface Electron-Hole Rich Species Active in the Electrocatalytic Water Oxidation. Journal of the American Chemical Society, 2021, 143, 12524-12534.	6.6	62
76	High-kâ€^(k=30) amorphous hafnium oxide films from high rate room temperature deposition. Applied Physics Letters, 2011, 98, .	1.5	61
77	Bioâ€Inspired Hierarchical Polymer Fiberâ€"Carbon Nanotube Adhesives. Advanced Materials, 2014, 26, 1456-1461.	11.1	61
78	Imaging of Optically Active Defects with Nanometer Resolution. Nano Letters, 2018, 18, 1739-1744.	4.5	61
79	Raman Spectrum of silicon nanowires. Materials Science and Engineering C, 2003, 23, 931-934.	3.8	60
80	Low temperature synthesis of carbon nanofibres on carbon fibre matrices. Carbon, 2005, 43, 2643-2648.	5.4	60
81	Supportâ^'Catalystâ^'Gas Interactions during Carbon Nanotube Growth on Metallic Ta Films. Journal of Physical Chemistry C, 2011, 115, 4359-4369.	1.5	60
82	Organic light emitting diodes with environmentally and thermally stable doped graphene electrodes. Journal of Materials Chemistry C, 2014, 2, 6940.	2.7	59
83	Graphene Liquid Enclosure for Single-Molecule Analysis of Membrane Proteins in Whole Cells Using Electron Microscopy. ACS Nano, 2017, 11, 11108-11117.	7.3	59
84	Nanoscale Plasmonâ€Enhanced Spectroscopy in Memristive Switches. Small, 2016, 12, 1334-1341.	5.2	57
85	Measuring the proton selectivity of graphene membranes. Applied Physics Letters, 2015, 107, .	1.5	56
86	Layered material platform for surface plasmon resonance biosensing. Scientific Reports, 2019, 9, 20286.	1.6	55
87	Use of carbon nanotubes for VLSI interconnects. Diamond and Related Materials, 2009, 18, 957-962.	1.8	54
88	Nanostructured hematite photoelectrochemical electrodes prepared by the low temperature thermal oxidation of iron. Solar Energy Materials and Solar Cells, 2011, 95, 1819-1825.	3.0	54
89	Effects of polymethylmethacrylate-transfer residues on the growth of organic semiconductor molecules on chemical vapor deposited graphene. Applied Physics Letters, 2015, 106, .	1.5	54
90	Growth of vertically-aligned carbon nanotube forests on conductive cobalt disilicide support. Journal of Applied Physics, 2010, 108, .	1.1	53

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91	Rational Passivation of Sulfur Vacancy Defects in Two-Dimensional Transition Metal Dichalcogenides. ACS Nano, 2021, 15, 8780-8789.	7.3	52
92	Controlling nanowire growth through electric field-induced deformation of the catalyst droplet. Nature Communications, 2016, 7, 12271.	5.8	49
93	Engineering the Photoresponse of InAs Nanowires. ACS Applied Materials & Interfaces, 2017, 9, 43993-44000.	4.0	49
94	Scalable silicon nanowire photodetectors. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 38, 64-66.	1.3	48
95	Parameter Space of Atomic Layer Deposition of Ultrathin Oxides on Graphene. ACS Applied Materials & Interfaces, 2016, 8, 30564-30575.	4.0	47
96	Spectrally Resolved Photodynamics of Individual Emitters in Large-Area Monolayers of Hexagonal Boron Nitride. ACS Nano, 2019, 13, 4538-4547.	7.3	47
97	Adhesive Properties of Gecko-Inspired Mimetic via Micropatterned Carbon Nanotube Forests. Journal of Physical Chemistry C, 2012, 116, 20047-20053.	1.5	46
98	A Terahertz Chiral Metamaterial Modulator. Advanced Optical Materials, 2020, 8, 2000581.	3.6	46
99	Synthesis and optical properties of silicon nanowires grown by different methods. Applied Physics A: Materials Science and Processing, 2006, 85, 247-253.	1.1	45
100	Free-standing graphene membranes on glass nanopores for ionic current measurements. Applied Physics Letters, 2015, 106, .	1.5	45
101	Graphene-Integrated Metamaterial Device for All-Electrical Polarization Control of Terahertz Quantum Cascade Lasers. ACS Photonics, 2019, 6, 1547-1555.	3.2	45
102	Growth of aligned millimeter-long carbon nanotube by chemical vapor deposition. Diamond and Related Materials, 2008, 17, 1447-1451.	1.8	44
103	Terahertz Nanoscopy of Plasmonic Resonances with a Quantum Cascade Laser. ACS Photonics, 2017, 4, 2150-2157.	3.2	44
104	Growth of high-density vertically aligned arrays of carbon nanotubes by plasma-assisted catalyst pretreatment. Applied Physics Letters, 2009, 95, .	1.5	43
105	Engineering high charge transfer n-doping of graphene electrodes and its application to organic electronics. Nanoscale, 2015, 7, 13135-13142.	2.8	43
106	Fast Room-Temperature Detection of Terahertz Quantum Cascade Lasers with Graphene-Loaded Bow-Tie Plasmonic Antenna Arrays. ACS Photonics, 2016, 3, 1747-1753.	3.2	42
107	Twin Plane Re-entrant Mechanism for Catalytic Nanowire Growth. Nano Letters, 2014, 14, 1288-1292.	4.5	41
108	Effects of pre-treatment and plasma enhancement on chemical vapor deposition of carbon nanotubes from ultra-thin catalyst films. Diamond and Related Materials, 2006, 15, 1029-1035.	1.8	40

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109	Ni-silicide growth kinetics in Si and Si/SiO₂core/shell nanowires. Nanotechnology, 2011, 22, 365305.	1.3	40
110	Catalyst Interface Engineering for Improved 2D Film Lift-Off and Transfer. ACS Applied Materials & Interfaces, 2016, 8, 33072-33082.	4.0	40
111	Mechanical characterization and cleaning of CVD single-layer h-BN resonators. Npj 2D Materials and Applications, 2017, 1, .	3.9	40
112	Encapsulation of graphene transistors and vertical device integration by interface engineering with atomic layer deposited oxide. 2D Materials, 2017, 4, 011008.	2.0	39
113	Tunable Klein-like tunnelling of high-temperature superconducting pairs into graphene. Nature Physics, 2018, 14, 25-29.	6.5	39
114	Use of plasma treatment to grow carbon nanotube forests on TiN substrate. Journal of Applied Physics, 2011, 109, .	1.1	37
115	Effect of Catalyst Pretreatment on Chirality-Selective Growth of Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2014, 118, 5773-5781.	1.5	37
116	Fast Modulation of Terahertz Quantum Cascade Lasers Using Graphene Loaded Plasmonic Antennas. ACS Photonics, 2016, 3, 464-470.	3.2	37
117	Spin filtering by proximity effects at hybridized interfaces in spin-valves with 2D graphene barriers. Nature Communications, 2020, 11, 5670.	5.8	37
118	Direct measurement of the charge distribution along a biased carbon nanotube bundle using electron holography. Applied Physics Letters, 2011, 98, .	1.5	36
119	Tunable Anion-Selective Transport through Monolayer Graphene and Hexagonal Boron Nitride. ACS Nano, 2020, 14, 2729-2738.	7.3	36
120	Manipulation of the catalyst-support interactions for inducing nanotube forest growth. Journal of Applied Physics, 2011, 109, 044303-044303-7.	1.1	35
121	Introducing Overlapping Grain Boundaries in Chemical Vapor Deposited Hexagonal Boron Nitride Monolayer Films. ACS Nano, 2017, 11, 4521-4527.	7.3	35
122	Contactless graphene conductivity mapping on a wide range of substrates with terahertz time-domain reflection spectroscopy. Scientific Reports, 2017, 7, 10625.	1.6	35
123	A Peeling Approach for Integrated Manufacturing of Large Monolayer h-BN Crystals. ACS Nano, 2019, 13, 2114-2126.	7.3	35
124	In-situ study of growth of carbon nanotube forests on conductive CoSi2 support. Journal of Applied Physics, 2011, 109, .	1.1	33
125	Influence of Packing Density and Surface Roughness of Vertically-Aligned Carbon Nanotubes on Adhesive Properties of Gecko-Inspired Mimetics. ACS Applied Materials & Interfaces, 2015, 7, 3626-3632.	4.0	33
126	Raman spectral indicators of catalyst decoupling for transfer of CVD grown 2D materials. Carbon, 2017, 117, 75-81.	5.4	33

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127	Electrochemically active Ir NPs on graphene for OER in acidic aqueous electrolyte investigated by in situ and ex situ spectroscopies. Surface Science, 2019, 681, 1-8.	0.8	33
128	Nickel Formate Route to the Growth of Carbon Nanotubes. Journal of Physical Chemistry B, 2004, 108, 18446-18450.	1.2	32
129	Selective growth of ZnSe and ZnCdSe nanowires by molecular beam epitaxy. Nanotechnology, 2005, 16, S139-S142.	1.3	32
130	Robust mapping of electrical properties of graphene from terahertz time-domain spectroscopy with timing jitter correction. Optics Express, 2017, 25, 2725.	1.7	32
131	Fast, Noncontact, Wafer-Scale, Atomic Layer Resolved Imaging of Two-Dimensional Materials by Ellipsometric Contrast Micrography. ACS Nano, 2018, 12, 8555-8563.	7.3	31
132	CVD Growth of Carbon Nanostructures from Zirconia: Mechanisms and a Method for Enhancing Yield. Journal of the American Chemical Society, 2014, 136, 17808-17817.	6.6	30
133	Low temperature growth of carbon nanotubes on tetrahedral amorphous carbon using Feâ€"Cu catalyst. Carbon, 2015, 81, 639-649.	5.4	30
134	Synthesis of individual single-walled carbon nanotube bridges controlled by support micromachining. Journal of Micromechanics and Microengineering, 2007, 17, 603-608.	1.5	29
135	Growth of aligned carbon nanofibres over large areas using colloidal catalysts at low temperatures. Chemical Communications, 2004, , 1416.	2.2	28
136	Submicron patterning of Co colloid catalyst for growth of vertically aligned carbon nanotubes. Nanotechnology, 2005, 16, 1636-1640.	1.3	27
137	External amplitude and frequency modulation of a terahertz quantum cascade laser using metamaterial/graphene devices. Scientific Reports, 2017, 7, 7657.	1.6	27
138	Quantum Emitter Localization in Layer-Engineered Hexagonal Boron Nitride. ACS Nano, 2021, 15, 13591-13603.	7.3	27
139	Metastable Crystalline AuGe Catalysts Formed During Isothermal Germanium Nanowire Growth. Physical Review Letters, 2012, 108, 255702.	2.9	26
140	Thirty Gigahertz Optoelectronic Mixing in Chemical Vapor Deposited Graphene. Nano Letters, 2016, 16, 2988-2993.	4.5	26
141	Design of gas diffusion electrodes using nanocarbon. Journal of Power Sources, 2008, 176, 494-498.	4.0	25
142	Hafnia nanoparticles â€" a model system for graphene growth on a dielectric. Physica Status Solidi - Rapid Research Letters, 2011, 5, 341-343.	1.2	25
143	Stretched Contact Printing of One-Dimensional Nanostructures for Hybrid Inorganicâ€"Organic Field Effect Transistors. Journal of Physical Chemistry C, 2012, 116, 7118-7125.	1.5	25
144	Applications of Carbon Nanotubes Grown by Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2012, 51, 01AH01.	0.8	25

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145	Highâ€density remote plasma sputtering of highâ€dielectricâ€constant amorphous hafnium oxide films. Physica Status Solidi (B): Basic Research, 2013, 250, 957-967.	0.7	25
146	Optimized Vertical Carbon Nanotube Forests for Multiplex Surface-Enhanced Raman Scattering Detection. Journal of Physical Chemistry Letters, 2012, 3, 3486-3492.	2.1	24
147	Catalyst patterning methods for surface-bound chemical vapor deposition of carbon nanotubes. Applied Physics A: Materials Science and Processing, 2005, 81, 1559-1567.	1.1	23
148	Structure and growth mechanism of ZnSe nanowires. Journal of Applied Physics, 2008, 104, .	1.1	23
149	Co-Catalytic Solid-State Reduction Applied to Carbon Nanotube Growth. Journal of Physical Chemistry C, 2012, 116, 1107-1113.	1.5	23
150	The Role of Adsorbed and Subsurface Carbon Species for the Selective Alkyne Hydrogenation Over a Pd-Black Catalyst: An Operando Study of Bulk and Surface. Topics in Catalysis, 2018, 61, 2052-2061.	1.3	23
151	Surface Crystallization of Liquid Auâ€"Si and Its Impact on Catalysis. Advanced Materials, 2019, 31, 1806544.	11.1	23
152	Integrated Wafer Scale Growth of Single Crystal Metal Films and High Quality Graphene. ACS Nano, 2020, 14, 13593-13601.	7.3	23
153	Applications of Carbon Nanotubes Grown by Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2012, 51, 01AH01.	0.8	23
154	Controlled low-temperature growth of carbon nanofibres by plasma deposition. New Journal of Physics, 2003, 5, 153-153.	1.2	22
155	Wet catalyst assisted growth of carbon nanofibers on complex three-dimensional substrates. Diamond and Related Materials, 2005, 14, 733-738.	1.8	22
156	Deterministic shape-selective synthesis of nanowires, nanoribbons and nanosaws by steady-state vapour-transport. Nanotechnology, 2006, 17, 1046-1051.	1.3	22
157	Plasma restructuring of catalysts for chemical vapor deposition of carbon nanotubes. Journal of Applied Physics, 2009, 105, 064304.	1.1	22
158	Chemical vapor deposition of carbon nanotube forests. Physica Status Solidi (B): Basic Research, 2012, 249, 2315-2322.	0.7	22
159	Nitrogen controlled iron catalyst phase during carbon nanotube growth. Applied Physics Letters, 2014, 105, .	1.5	22
160	Bolometric detection of terahertz quantum cascade laser radiation with graphene-plasmonic antenna arrays. Journal Physics D: Applied Physics, 2017, 50, 174001.	1.3	22
161	Graphene-based nanolaminates as ultra-high permeation barriers. Npj 2D Materials and Applications, 2017, 1, .	3.9	21
162	Reduced Graphene Oxide as a Monolithic Multifunctional Conductive Binder for Activated Carbon Supercapacitors. ACS Omega, 2018, 3, 9246-9255.	1.6	21

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163	The Role and Control of Residual Bulk Oxygen in the Catalytic Growth of 2D Materials. Journal of Physical Chemistry C, 2019, 123, 16257-16267.	1.5	21
164	Carbon nanotube forest growth on NiTi shape memory alloy thin films for thermal actuation. Thin Solid Films, 2011, 519, 6126-6129.	0.8	19
165	Multifunctional oxides for integrated manufacturing of efficient graphene electrodes for organic electronics. Applied Physics Letters, 2015, 106, .	1.5	19
166	Crystal Orientation Dependent Oxidation Modes at the Buried Grapheneâ€“Cu Interface. Chemistry of Materials, 2020, 32, 7766-7776.	3.2	19
167	Through-substrate terahertz time-domain reflection spectroscopy for environmental graphene conductivity mapping. Applied Physics Letters, 2020, 116, .	1.5	19
168	Active Terahertz Modulator and Slow Light Metamaterial Devices with Hybrid Grapheneâ€“Superconductor Photonic Integrated Circuits. Nanomaterials, 2021, 11, 2999.	1.9	19
169	Atomic layer deposited oxide films as protective interface layers for integrated graphene transfer. Nanotechnology, 2017, 28, 485201.	1.3	18
170	Chemical vapour deposition of freestanding sub-60â€‰nm graphene gyroids. Applied Physics Letters, 2017, 111, .	1.5	18
171	Measuring the thermal properties of anisotropic materials using beam-offset frequency domain thermoreflectance. Journal of Applied Physics, 2018, 123, .	1.1	18
172	Visible Diffraction from Graphene and Its Application in Holograms. Advanced Optical Materials, 2013, 1, 869-874.	3.6	17
173	Terahertz optical modulator based on metamaterial split-ring resonators and graphene. Optical Engineering, 2014, 53, 057108.	0.5	17
174	The role of the sp2:sp3 substrate content in carbon supported nanotube growth. Carbon, 2014, 75, 327-334.	5.4	17
175	Electronic properties of CVD graphene: The role of grain boundaries, atmospheric doping, and encapsulation by ALD. Physica Status Solidi (B): Basic Research, 2016, 253, 2321-2325.	0.7	17
176	Nondestructive Thickness Mapping of Wafer-Scale Hexagonal Boron Nitride Down to a Monolayer. ACS Applied Materials & Interfaces, 2018, 10, 25804-25810.	4.0	17
177	Surface-bound chemical vapour deposition of carbon nanotubes: In situ study of catalyst activation. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2238-2242.	1.3	16
178	Enhanced Subthreshold Slopes in Large Diameter Single Wall Carbon Nanotube Field Effect Transistors. IEEE Nanotechnology Magazine, 2008, 7, 458-462.	1.1	16
179	Controlling Nanowire Growth by Light. Nano Letters, 2015, 15, 7452-7457.	4.5	16
180	Stabilizing a graphene platform toward discrete components. Applied Physics Letters, 2016, 109, 253110.	1.5	16

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181	From Growth Surface to Device Interface: Preserving Metallic Fe under Monolayer Hexagonal Boron Nitride. ACS Applied Materials & Interfaces, 2017, 9, 29973-29981.	4.0	16
182	Solar Water Splitting with a Hydrogenase Integrated in Photoelectrochemical Tandem Cells. Angewandte Chemie, 2018, 130, 10755-10759.	1.6	16
183	Reactive intercalation and oxidation at the buried graphene-germanium interface. APL Materials, 2019, 7, .	2.2	16
184	Low-Temperature Self-Assembly of Novel Encapsulated Compound Nanowires. Advanced Materials, 2002, 14, 1821-1824.	11.1	15
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