Xiangfeng Duan

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4464839/publications.pdf

Version: 2024-02-01

363 papers	79,897 citations	599 128 h-index	488 276 g-index
386 all docs	386 docs citations	386 times ranked	71386 citing authors

#	Article	IF	Citations
1	The promises, challenges and pathways to room-temperature sodium-sulfur batteries. National Science Review, 2022, 9, nwab050.	4.6	68
2	1D PtCo nanowires as catalysts for PEMFCs with low Pt loading. Science China Materials, 2022, 65, 704-711.	3.5	16
3	Van der Waals superlattices. National Science Review, 2022, 9, nwab166.	4.6	18
4	Noble Metal Based Electrocatalysts for Alcohol Oxidation Reactions in Alkaline Media. Advanced Functional Materials, 2022, 32, .	7.8	70
5	A Silicon Monoxide Lithium-Ion Battery Anode with Ultrahigh Areal Capacity. Nano-Micro Letters, 2022, 14, 50.	14.4	59
6	Multiplexed nanomaterial-assisted laser desorption/ionization for pan-cancer diagnosis and classification. Nature Communications, 2022, 13, 617.	5.8	27
7	2D Heterostructures for Ubiquitous Electronics and Optoelectronics: Principles, Opportunities, and Challenges. Chemical Reviews, 2022, 122, 6514-6613.	23.0	187
8	Combined anodic and cathodic hydrogen production from aldehyde oxidation and hydrogen evolution reaction. Nature Catalysis, 2022, 5, 66-73.	16.1	276
9	Highly stretchable van der Waals thin films for adaptable and breathable electronic membranes. Science, 2022, 375, 852-859.	6.0	96
10	Macroscopic assembled graphene nanofilms based room temperature ultrafast midâ€infrared photodetectors. InformaÅnÃ-MateriÃ¡ly, 2022, 4, .	8.5	24
11	Importance of Multiple Excitation Wavelengths for TERS Characterization of TMDCs and Their Vertical Heterostructures. Journal of Physical Chemistry C, 2022, 126, 5218-5223.	1.5	4
12	Endoepitaxial growth of monolayer mosaic heterostructures. Nature Nanotechnology, 2022, 17, 493-499.	15.6	58
13	Graphene charge-injection photodetectors. Nature Electronics, 2022, 5, 281-288.	13.1	70
14	Boosting the performance of single-atom catalysts via external electric field polarization. Nature Communications, 2022, 13, .	5.8	52
15	Experimental Sabatier plot for predictive design of active and stable Pt-alloy oxygen reduction reaction catalysts. Nature Catalysis, 2022, 5, 513-523.	16.1	57
16	Chiral molecular intercalation superlattices. Nature, 2022, 606, 902-908.	13.7	67
17	Hypocrystalline ceramic aerogels for thermal insulation at extreme conditions. Nature, 2022, 606, 909-916.	13.7	123
18	Fundamentals and applications of mixed-dimensional heterostructures. APL Materials, 2022, 10, .	2.2	2

#	Article	IF	Citations
19	Inâ€plane epitaxial growth of 2D CoSeâ€WSe 2 metalâ€semiconductor lateral heterostructures with improved WSe 2 transistors performance. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 222-228.	8.5	21
20	Elastic ceramic aerogels for thermal superinsulation under extreme conditions. Materials Today, 2021, 42, 162-177.	8.3	73
21	Ultraâ€Steep Slope Impact Ionization Transistors Based on Graphene/InAs Heterostructures. Small Structures, 2021, 2, 2000039.	6.9	11
22	Van der Waals Heterostructures by Design: From 1D and 2D to 3D. Matter, 2021, 4, 552-581.	5.0	83
23	Autobifunctional Mechanism of Jagged Pt Nanowires for Hydrogen Evolution Kinetics via End-to-End Simulation. Journal of the American Chemical Society, 2021, 143, 5355-5363.	6.6	33
24	The Nano Research Young Innovators (NR45) Awards in two-dimensional materials. Nano Research, 2021, 14, 1575-1582.	5.8	1
25	Van der Waals epitaxial growth of air-stable CrSe2 nanosheets with thickness-tunable magnetic order. Nature Materials, 2021, 20, 818-825.	13.3	206
26	High-order superlattices by rolling up van der Waals heterostructures. Nature, 2021, 591, 385-390.	13.7	163
27	Toward Rational Design of Single-Atom Catalysts. Journal of Physical Chemistry Letters, 2021, 12, 2837-2847.	2.1	45
28	Promises and prospects of two-dimensional transistors. Nature, 2021, 591, 43-53.	13.7	548
29	Layered Intercalation Materials. Advanced Materials, 2021, 33, e2004557.	11.1	92
30	Probing and pushing the limit of emerging electronic materials via van der Waals integration. MRS Bulletin, 2021, 46, 534-546.	1.7	5
31	High-yield exfoliation of 2D semiconductor monolayers and reassembly of organic/inorganic artificial superlattices. CheM, 2021, 7, 1887-1902.	5.8	36
32	On the occasion of the 80th birthday of Professor Yitai Qian: Celebrating 60 years of innovation in solid-state chemistry and nanoscience. Nano Research, 2021, 14, 3337-3342.	5.8	1
33	Organic Semiconductor Single Crystals for Xâ€ray Imaging. Advanced Materials, 2021, 33, e2104749.	11.1	43
34	Two-dimensional van der Waals thin film transistors as active matrix for spatially resolved pressure sensing. Nano Research, 2021, 14, 3395-3401.	5.8	19
35	Silver nanoparticles boost charge-extraction efficiency in Shewanella microbial fuel cells. Science, 2021, 373, 1336-1340.	6.0	171
36	Tunable one-dimensional inorganic perovskite nanomeshes library for water splitting. Nano Energy, 2021, 88, 106251.	8.2	12

#	Article	IF	Citations
37	Large-Area Synthesis and Patterning of All-Inorganic Lead Halide Perovskite Thin Films and Heterostructures. Nano Letters, 2021, 21, 1454-1460.	4.5	27
38	Hidden Vacancy Benefit in Monolayer 2D Semiconductors. Advanced Materials, 2021, 33, e2007051.	11.1	65
39	Approaching the intrinsic exciton physics limit in two-dimensional semiconductor diodes. Nature, 2021, 599, 404-410.	13.7	57
40	Valence oscillation and dynamic active sites in monolayer NiCo hydroxides for water oxidation. Nature Catalysis, 2021, 4, 1050-1058.	16.1	272
41	Hierarchical N-doping germanium/carbon nanofibers as anode for high-performance lithium-ion and sodium-ion batteries. Nanotechnology, 2020, 31, 015402.	1.3	22
42	Ultrafast growth of large single crystals of monolayer WS2 and WSe2. National Science Review, 2020, 7, 737-744.	4.6	64
43	Boosting superconductivity in organic-inorganic superlattices. Science Bulletin, 2020, 65, 177-178.	4.3	5
44	A Fully Aqueous Hybrid Electrolyte Rechargeable Battery with High Voltage and High Energy Density. Advanced Energy Materials, 2020, 10, 2001583.	10.2	40
45	Beyond Extended Surfaces: Understanding the Oxygen Reduction Reaction on Nanocatalysts. Journal of the American Chemical Society, 2020, 142, 17812-17827.	6.6	134
46	Tailoring a Three-Phase Microenvironment for High-Performance Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cells. Matter, 2020, 3, 1774-1790.	5.0	71
47	Pushing the conductance and transparency limit of monolayer graphene electrodes for flexible organic light-emitting diodes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25991-25998.	3.3	28
48	Black phosphorus composites with engineered interfaces for high-rate high-capacity lithium storage. Science, 2020, 370, 192-197.	6.0	336
49	Highâ€Performance Flexible Bismuth Telluride Thin Film from Solution Processed Colloidal Nanoplates. Advanced Materials Technologies, 2020, 5, 2000600.	3.0	26
50	Probing photoelectrical transport in lead halide perovskites with van der Waals contacts. Nature Nanotechnology, 2020, 15, 768-775.	15.6	63
51	Graphene-based vertical thin film transistors. Science China Information Sciences, 2020, 63, 1.	2.7	24
52	Single Atoms at Crystal Ladder Steps. CheM, 2020, 6, 3169-3171.	5.8	0
53	Enhancement of oxygen reduction reaction activity by grain boundaries in platinum nanostructures. Nano Research, 2020, 13, 3310-3314.	5.8	17
54	Manipulation of Valley Pseudospin by Selective Spin Injection in Chiral Two-Dimensional Perovskite/Monolayer Transition Metal Dichalcogenide Heterostructures. ACS Nano, 2020, 14, 15154-15160.	7.3	49

#	Article	IF	Citations
55	A fundamental look at electrocatalytic sulfur reduction reaction. Nature Catalysis, 2020, 3, 762-770.	16.1	455
56	Robust Flexible Pressure Sensors Made from Conductive Micropyramids for Manipulation Tasks. ACS Nano, 2020, 14, 12866-12876.	7.3	106
57	Highly active and stable stepped Cu surface for enhanced electrochemical CO2 reduction to C2H4. Nature Catalysis, 2020, 3, 804-812.	16.1	298
58	Iridium single-atom catalyst on nitrogen-doped carbon for formic acid oxidation synthesized using a general hostâ€“guest strategy. Nature Chemistry, 2020, 12, 764-772.	6.6	452
59	Redox Control of Charge Transport in Vertical Ferrocene Molecular Tunnel Junctions. CheM, 2020, 6, 1172-1182.	5.8	40
60	Organosulfur Compounds Enable Uniform Lithium Plating and Long-Term Battery Cycling Stability. Nano Letters, 2020, 20, 2594-2601.	4.5	29
61	General synthesis of two-dimensional van der Waals heterostructure arrays. Nature, 2020, 579, 368-374.	13.7	393
62	Molecular Design of Singleâ€Atom Catalysts for Oxygen Reduction Reaction. Advanced Energy Materials, 2020, 10, 1903815.	10.2	295
63	Efficient strain modulation of 2D materials via polymer encapsulation. Nature Communications, 2020, 11, 1151.	5.8	215
64	Highly Reliable Low-Voltage Memristive Switching and Artificial Synapse Enabled by van der Waals Integration. Matter, 2020, 2, 965-976.	5.0	40
65	Covalent Selenium Embedded in Hierarchical Carbon Nanofibers for Ultra-High Areal Capacity Li-Se Batteries. IScience, 2020, 23, 100919.	1.9	40
66	Doping on demand in 2D devices. Nature Electronics, 2020, 3, 77-78.	13.1	18
67	van der Waals Integrated Devices Based on Nanomembranes of 3D Materials. Nano Letters, 2020, 20, 1410-1416.	4.5	19
68	Sensitive pressure sensors based on conductive microstructured air-gap gates and two-dimensional semiconductor transistors. Nature Electronics, 2020, 3, 59-69.	13.1	150
69	Possible Luttinger liquid behavior of edge transport in monolayer transition metal dichalcogenide crystals. Nature Communications, 2020, 11, 659.	5.8	23
70	Pt3Ag alloy wavy nanowires as highly effective electrocatalysts for ethanol oxidation reaction. Nano Research, 2020, 13, 1472-1478.	5.8	58
71	Suppressed threshold voltage roll-off and ambipolar transport in multilayer transition metal dichalcogenide feed-back gate transistors. Nano Research, 2020, 13, 1943-1947.	5.8	5
72	Doping-free complementary WSe2 circuit via van der Waals metal integration. Nature Communications, 2020, 11, 1866.	5.8	153

#	Article	IF	Citations
73	Programmable devices based on reversible solid-state doping of two-dimensional semiconductors with superionic silver iodide. Nature Electronics, 2020, 3, 630-637.	13.1	61
74	Hierarchical Porous Carbon Derived from Covalent Triazine Frameworks for High Mass Loading Supercapacitors. , 2019, 1, 320-326.		29
75	PtCuNi Tetrahedra Catalysts with Tailored Surfaces for Efficient Alcohol Oxidation. Nano Letters, 2019, 19, 5431-5436.	4.5	93
76	Nanowire Electronics: From Nanoscale to Macroscale. Chemical Reviews, 2019, 119, 9074-9135.	23.0	210
77	Rapid Electrochemical Cleaning Silver Nanowire Thin Films for High-Performance Transparent Conductors. Journal of the American Chemical Society, 2019, 141, 12251-12257.	6.6	37
78	SnSe/MoS₂ van der Waals Heterostructure Junction Fieldâ€Effect Transistors with Nearly Ideal Subthreshold Slope. Advanced Materials, 2019, 31, e1902962.	11.1	49
79	Differential Surface Elemental Distribution Leads to Significantly Enhanced Stability of PtNi-Based ORR Catalysts. Matter, 2019, 1, 1567-1580.	5.0	82
80	In situ interface engineering for probing the limit of quantum dot photovoltaic devices. Nature Nanotechnology, 2019, 14, 950-956.	15.6	30
81	Ultra-high Areal Capacity Realized in Three-Dimensional Holey Graphene/SnO2 Composite Anodes. IScience, 2019, 19, 728-736.	1.9	40
82	In Situ Probing Molecular Intercalation in Two-Dimensional Layered Semiconductors. Nano Letters, 2019, 19, 6819-6826.	4.5	72
83	Microwave Shock Synthesis beyond Thermodynamic Equilibrium. Matter, 2019, 1, 555-557.	5.0	6
84	Van der Waals thin-film electronics. Nature Electronics, 2019, 2, 378-388.	13.1	131
85	Selective growth of wide band gap atomically thin Sb2O3 inorganic molecular crystal on WS2. Nano Research, 2019, 12, 2781-2787.	5.8	9
86	van der Waals Epitaxial Growth of Atomically Thin 2D Metals on Danglingâ€Bondâ€Free WSe₂ and WS₂. Advanced Functional Materials, 2019, 29, 1806611.	7.8	99
87	A field-effect approach to directly profiling the localized states in monolayer MoS2. Science Bulletin, 2019, 64, 1049-1055.	4.3	5
88	In Situ Transmission Electron Microscopy for Energy Materials and Devices. Advanced Materials, 2019, 31, e1900608.	11.1	95
89	Bacteria-Derived Biological Carbon Building Robust Liâ€“S Batteries. Nano Letters, 2019, 19, 4384-4390.	4.5	95
90	Large-area graphene-nanomesh/carbon-nanotube hybrid membranes for ionic and molecular nanofiltration. Science, 2019, 364, 1057-1062.	6.0	475

#	Article	IF	Citations
91	Single-atom tailoring of platinum nanocatalysts for high-performance multifunctional electrocatalysis. Nature Catalysis, 2019, 2, 495-503.	16.1	464
92	Rational Kinetics Control toward Universal Growth of 2D Vertically Stacked Heterostructures. Advanced Materials, 2019, 31, e1901351.	11.1	79
93	Nanoscale electronic devices based on transition metal dichalcogenides. 2D Materials, 2019, 6, 032004.	2.0	51
94	A scalable slurry process to fabricate a 3D lithiophilic and conductive framework for a high performance lithium metal anode. Journal of Materials Chemistry A, 2019, 7, 13225-13233.	5.2	49
95	Phaseâ€Tunable Synthesis of Ultrathin Layered Tetragonal CoSe and Nonlayered Hexagonal CoSe Nanoplates. Advanced Materials, 2019, 31, e1900901.	11.1	52
96	Synthesis of surface controlled nickel/palladium hydride nanodendrites with high performance in benzyl alcohol oxidation. Nano Research, 2019, 12, 1467-1472.	5.8	29
97	Van der Waals integration before and beyond two-dimensional materials. Nature, 2019, 567, 323-333.	13.7	946
98	Direct van der Waals epitaxial growth of 1D/2D Sb2Se3/WS2 mixed-dimensional p-n heterojunctions. Nano Research, 2019, 12, 1139-1145.	5.8	63
99	Self-Assembled Molecular-Electronic Films Controlled by Room Temperature Quantum Interference. CheM, 2019, 5, 474-484.	5.8	45
100	Villiform carbon fiber paper as current collector for capacitive deionization devices with high areal electrosorption capacity. Desalination, 2019, 459, 1-9.	4.0	29
101	Self-trapped state enabled filterless narrowband photodetections in 2D layered perovskite single crystals. Nature Communications, 2019, 10, 806.	5.8	207
102	Double-negative-index ceramic aerogels for thermal superinsulation. Science, 2019, 363, 723-727.	6.0	429
103	Single atom electrocatalysts supported on graphene or graphene-like carbons. Chemical Society Reviews, 2019, 48, 5207-5241.	18.7	441
104	Uniform and ultrathin high-Îº gate dielectrics for two-dimensional electronic devices. Nature Electronics, 2019, 2, 563-571.	13.1	204
105	Direct Observation of Nanoscale Light Confinement without Metal. Advanced Materials, 2019, 31, e1806341.	11.1	17
106	Nanoscale Structure Design for Highâ€Performance Ptâ€Based ORR Catalysts. Advanced Materials, 2019, 31, e1802234.	11.1	478
107	Hierarchical 3D electrodes for electrochemical energy storage. Nature Reviews Materials, 2019, 4, 45-60.	23.3	554
108	Long-Range Hierarchical Nanocrystal Assembly Driven by Molecular Structural Transformation. Journal of the American Chemical Society, 2019, 141, 1498-1505.	6.6	21

#	Article	IF	Citations
109	Inhibiting Polysulfide Shuttling with a Graphene Composite Separator for Highly Robust Lithium-Sulfur Batteries. Joule, 2019, 3, 303.	11.7	14
110	Maximizing the Current Output in Self-Aligned Grapheneâ€“InAsâ€“Metal Vertical Transistors. ACS Nano, 2019, 13, 847-854.	7.3	23
111	A Highly Active Star Decahedron Cu Nanocatalyst for Hydrocarbon Production at Low Overpotentials. Advanced Materials, 2019, 31, e1805405.	11.1	134
112	High-Performance Black Phosphorus Field-Effect Transistors with Long-Term Air Stability. Nano Letters, 2019, 19, 331-337.	4.5	62
113	Ultrathin wavy Rh nanowires as highly effective electrocatalysts for methanol oxidation reaction with ultrahigh ECSA. Nano Research, 2019, 12, 211-215.	5.8	66
114	Nitrogen Doped Graphdiyne Enhances Oxygen Reduction Reactions. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2019, 35, 559-560.	2.2	2
115	The Blossoming of 2D Materials. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2019, 35, 1039-1040.	2.2	3
116	Quantitative Surface Plasmon Interferometry via Upconversion Photoluminescence Mapping. Research, 2019, 2019, 8304824.	2.8	2
117	Monolayer atomic crystal molecular superlattices. Nature, 2018, 555, 231-236.	13.7	323
118	A molecular cross-linking approach for hybrid metal oxides. Nature Materials, 2018, 17, 341-348.	13.3	90
119	On-Chip in Situ Monitoring of Competitive Interfacial Anionic Chemisorption as a Descriptor for Oxygen Reduction Kinetics. ACS Central Science, 2018, 4, 590-599.	5.3	29
120	Strain-Tuning Atomic Substitution in Two-Dimensional Atomic Crystals. ACS Nano, 2018, 12, 4853-4860.	7.3	75
121	Fewâ€Layer GeAs Fieldâ€Effect Transistors and Infrared Photodetectors. Advanced Materials, 2018, 30, e1705934.	11.1	100
122	WSe2/GeSe heterojunction photodiode with giant gate tunability. Nano Energy, 2018, 49, 103-108.	8.2	73
123	Roles of Mo Surface Dopants in Enhancing the ORR Performance of Octahedral PtNi Nanoparticles. Nano Letters, 2018, 18, 798-804.	4.5	162
124	General synthesis and definitive structural identification of MN4C4 single-atom catalysts with tunable electrocatalytic activities. Nature Catalysis, 2018, 1, 63-72.	16.1	1,476
125	Metal@semiconductor core-shell nanocrystals with atomically organized interfaces for efficient hot electron-mediated photocatalysis. Nano Energy, 2018, 48, 44-52.	8.2	118
126	Chemical synthesis of two-dimensional atomic crystals, heterostructures and superlattices. Chemical Society Reviews, 2018, 47, 3129-3151.	18.7	132

#	Article	IF	Citations
127	Direct Room Temperature Welding and Chemical Protection of Silver Nanowire Thin Films for High Performance Transparent Conductors. Journal of the American Chemical Society, 2018, 140, 193-199.	6.6	153
128	Broadband gate-tunable terahertz plasmons in graphene heterostructures. Nature Photonics, 2018, 12, 22-28.	15.6	127
129	Highly-anisotropic optical and electrical properties in layered SnSe. Nano Research, 2018, 11, 554-564.	5.8	114
130	Building two-dimensional materials one row at a time: Avoiding the nucleation barrier. Science, 2018, 362, 1135-1139.	6.0	155
131	Chemical Vapor Deposition Growth of Single Crystalline CoTe₂ Nanosheets with Tunable Thickness and Electronic Properties. Chemistry of Materials, 2018, 30, 8891-8896.	3.2	51
132	Solution-processable 2D semiconductors for high-performance large-area electronics. Nature, 2018, 562, 254-258.	13.7	644
133	Inhibiting Polysulfide Shuttling with a Graphene Composite Separator for Highly Robust Lithium-Sulfur Batteries. Joule, 2018, 2, 2091-2104.	11.7	345
134	Quantum interference mediated vertical molecular tunneling transistors. Science Advances, 2018, 4, eaat8237.	4.7	64
135	Synthetic Control of Two-Dimensional NiTe₂ Single Crystals with Highly Uniform Thickness Distributions. Journal of the American Chemical Society, 2018, 140, 14217-14223.	6.6	119
136	Enhanced interlayer neutral excitons and trions in trilayer van der Waals heterostructures. Npj 2D Materials and Applications, 2018, 2, .	3.9	44
137	Composition modulation in one-dimensional and two-dimensional chalcogenide semiconductor nanostructures. Chemical Society Reviews, 2018, 47, 7504-7521.	18.7	99
138	Pt-Ni alloy catalysts for highly selective anti-Markovnikov alkene hydrosilylation. Science China Materials, 2018, 61, 1339-1344.	3.5	13
139	Thickness-Tunable Synthesis of Ultrathin Type-II Dirac Semimetal PtTe₂ Single Crystals and Their Thickness-Dependent Electronic Properties. Nano Letters, 2018, 18, 3523-3529.	4.5	147
140	Approaching the Schottkyâ€“Mott limit in van der Waals metalâ€“semiconductor junctions. Nature, 2018, 557, 696-700.	13.7	1,279
141	Synthesis of Ultrathin Metallic MTe₂ (M = V, Nb, Ta) Singleâ€Crystalline Nanoplates. Advanced Materials, 2018, 30, e1801043.	11.1	183
142	Two-dimensional transistors beyond graphene and TMDCs. Chemical Society Reviews, 2018, 47, 6388-6409.	18.7	301
143	Improvement by Channel Recess of Contact Resistance and Gate Control in Large-Scale Spin-Coated MoS₂ MOSFETs. IEEE Electron Device Letters, 2018, 39, 1453-1456.	2.2	6
144	Microwaveâ€Assisted Rapid Synthesis of Grapheneâ€Supported Single Atomic Metals. Advanced Materials, 2018, 30, e1802146.	11.1	244

#	Article	IF	Citations
145	Synthesis of ultrathin two-dimensional nanosheets and van der Waals heterostructures from non-layered Î³-CuI. Npj 2D Materials and Applications, 2018, 2, .	3.9	34
146	Gate-tunable frequency combs in grapheneâ€“nitride microresonators. Nature, 2018, 558, 410-414.	13.7	182
147	Strong Fluorescence Enhancement with Silica-Coated Au Nanoshell Dimers. Plasmonics, 2017, 12, 263-269.	1.8	5
148	Three-dimensional graphene/polyimide composite-derived flexible high-performance organic cathode for rechargeable lithium and sodium batteries. Journal of Materials Chemistry A, 2017, 5, 2710-2716.	5.2	119
149	Molecular ligand modulation of palladium nanocatalysts for highly efficient and robust heterogeneous oxidation of cyclohexenone to phenol. Science Advances, 2017, 3, e1600615.	4.7	24
150	Designing an Efficient Multimode Environmental Sensor Based on Grapheneâ€“Silicon Heterojunction. Advanced Materials Technologies, 2017, 2, 1600262.	3.0	55
151	Spatially composition-modulated two-dimensional WS_{2x}Se_{2(1â^'x)}nanosheets. Nanoscale, 2017, 9, 4707-4712.	2.8	39
152	Flexible Dielectric Nanocomposites with Ultrawide Zero-Temperature Coefficient Windows for Electrical Energy Storage and Conversion under Extreme Conditions. ACS Applied Materials & Interfaces, 2017, 9, 7591-7600.	4.0	29
153	Ambipolar Barristors for Reconfigurable Logic Circuits. Nano Letters, 2017, 17, 1448-1454.	4.5	29
154	Photodetectors: Solventâ€Based Softâ€Patterning of Graphene Lateral Heterostructures for Broadband Highâ€Speed Metalâ€“Semiconductorâ€“Metal Photodetectors (Adv. Mater. Technol. 2/2017). Advanced Materials Technologies, 2017, 2, .	3.0	2
155	Broken Symmetry Induced Strong Nonlinear Optical Effects in Spiral WS₂ Nanosheets. ACS Nano, 2017, 11, 4892-4898.	7.3	123
156	A self-powered high-performance graphene/silicon ultraviolet photodetector with ultra-shallow junction: breaking the limit of silicon?. Npj 2D Materials and Applications, 2017, 1, .	3.9	211
157	Three-dimensional holey-graphene/niobia composite architectures for ultrahigh-rate energy storage. Science, 2017, 356, 599-604.	6.0	1,229
158	Selfâ€Optimization of the Active Site of Molybdenum Disulfide by an Irreversible Phase Transition during Photocatalytic Hydrogen Evolution. Angewandte Chemie - International Edition, 2017, 56, 7610-7614.	7.2	221
159	Selfâ€Optimization of the Active Site of Molybdenum Disulfide by an Irreversible Phase Transition during Photocatalytic Hydrogen Evolution. Angewandte Chemie, 2017, 129, 7718-7722.	1.6	61
160	Nonlinear photoluminescence in monolayer WS₂: parabolic emission and excitation fluence-dependent recombination dynamics. Nanoscale, 2017, 9, 7235-7241.	2.8	41
161	Ultrafine Graphene Nanomesh with Large On/Off Ratio for Highâ€Performance Flexible Biosensors. Advanced Functional Materials, 2017, 27, 1604096.	7.8	111
162	Photodetectors: A Broadband Fluorographene Photodetector (Adv. Mater. 22/2017). Advanced Materials, 2017, 29, .	11.1	1

#	Article	IF	Citations
163	A Broadband Fluorographene Photodetector. Advanced Materials, 2017, 29, 1700463.	11.1	110
164	A Solution Processable Highâ€Performance Thermoelectric Copper Selenide Thin Film. Advanced Materials, 2017, 29, 1606662.	11.1	96
165	Growth of Single-Crystalline Cadmium Iodide Nanoplates, CdI₂/MoS₂ (WS₂, WSe₂) van der Waals Heterostructures, and Patterned Arrays. ACS Nano, 2017, 11, 3413-3419.	7.3	59
166	Solventâ€Based Softâ€Patterning of Graphene Lateral Heterostructures for Broadband Highâ€Speed Metalâ€“Semiconductorâ€“Metal Photodetectors. Advanced Materials Technologies, 2017, 2, 1600241.	3.0	53
167	Light welding nanoparticles: from metal colloids to free-standing conductive metallic nanoparticle film. Science China Materials, 2017, 60, 39-48.	3.5	12
168	Vapor growth and interfacial carrier dynamics of high-quality CdS-CdSSe-CdS axial nanowire heterostructures. Nano Energy, 2017, 32, 28-35.	8.2	62
169	Gate-Induced Insulator to Band-Like Transport Transition in Organolead Halide Perovskite. Journal of Physical Chemistry Letters, 2017, 8, 429-434.	2.1	20
170	Composition-Modulated Two-Dimensional Semiconductor Lateral Heterostructures via Layer-Selected Atomic Substitution. ACS Nano, 2017, 11, 961-967.	7.3	99
171	Nanoplates: Synthesis of 2D Layered BiI₃ Nanoplates, BiI₃/WSe₂van der Waals Heterostructures and Their Electronic, Optoelectronic Properties (Small 38/2017). Small, 2017, 13, .	5.2	2
172	Vertical Charge Transport and Negative Transconductance in Multilayer Molybdenum Disulfides. Nano Letters, 2017, 17, 5495-5501.	4.5	42
173	Synthesis of 2D Layered BiI₃ Nanoplates, BiI₃/WSe₂van der Waals Heterostructures and Their Electronic, Optoelectronic Properties. Small, 2017, 13, 1701034.	5.2	59
174	Robust epitaxial growth of two-dimensional heterostructures, multiheterostructures, and superlattices. Science, 2017, 357, 788-792.	6.0	518
175	Van der Waals epitaxial growth and optoelectronics of large-scale WSe2/SnS2 vertical bilayer pâ€“n junctions. Nature Communications, 2017, 8, 1906.	5.8	369
176	General Strategy for Two-Dimensional Transition Metal Dichalcogenides by Ion Exchange. Chemistry of Materials, 2017, 29, 10019-10026.	3.2	18
177	Layer-by-Layer Degradation of Methylammonium Lead Tri-iodide Perovskite Microplates. Joule, 2017, 1, 548-562.	11.7	199
178	Confined Pyrolysis within Metalâ€“Organic Frameworks To Form Uniform Ru₃ Clusters for Efficient Oxidation of Alcohols. Journal of the American Chemical Society, 2017, 139, 9795-9798.	6.6	258
179	Hot graphene sponge cleans viscous crude-oil spill. Science China Materials, 2017, 60, 681-682.	3.5	3
180	Chemical vapor deposition growth of single-crystalline cesium lead halide microplatelets and heterostructures for optoelectronic applications. Nano Research, 2017, 10, 1223-1233.	5.8	96

#	Article	IF	Citations
181	Highly Sensitive Chemical Detection with Tunable Sensitivity and Selectivity from Ultrathin Platinum Nanowires. Small, 2017, 13, 1602969.	5.2	19
182	The Effect of Thermal Annealing on Charge Transport in Organolead Halide Perovskite Microplate Fieldâ€Effect Transistors. Advanced Materials, 2017, 29, 1601959.	11.1	91
183	Three-dimensional graphene membrane cathode for high energy density rechargeable lithium-air batteries in ambient conditions. Nano Research, 2017, 10, 472-482.	5.8	32
184	Enhanced electrical characteristics of black phosphorus by polyaniline and protonic acid surface doping. , 2017, , .		1
185	Graphene Q-switched distributed feedback fiber lasers with narrow linewidth approaching the transform limit. Optics Express, 2017, 25, 8202.	1.7	24
186	Holey graphene hydrogel with in-plane pores for high-performance capacitive desalination. Nano Research, 2016, 9, 2458-2466.	5.8	110
187	Contacts between Two- and Three-Dimensional Materials: Ohmic, Schottky, and pâ€“n Heterojunctions. ACS Nano, 2016, 10, 4895-4919.	7.3	308
188	Pushing the Performance Limit of Sub-100 nm Molybdenum Disulfide Transistors. Nano Letters, 2016, 16, 6337-6342.	4.5	117
189	Composition tunable ternary Ptâ€“Niâ€“Co octahedra for optimized oxygen reduction activity. Chemical Communications, 2016, 52, 11215-11218.	2.2	44
190	Tuning the Catalytic Activity of a Metalâ€“Organic Framework Derived Copper and Nitrogen Co-Doped Carbon Composite for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2016, 8, 26769-26774.	4.0	63
191	Three-dimensional macro-structures of two-dimensional nanomaterials. Chemical Society Reviews, 2016, 45, 5541-5588.	18.7	280
192	Functional Three-Dimensional Graphene/Polymer Composites. ACS Nano, 2016, 10, 7231-7247.	7.3	296
193	Mechanically Shaped Two-Dimensional Covalent Organic Frameworks Reveal Crystallographic Alignment and Fast Li-Ion Conductivity. Journal of the American Chemical Society, 2016, 138, 9767-9770.	6.6	227
194	Van der Waals heterostructures and devices. Nature Reviews Materials, 2016, 1, .	23.3	1,897
195	A hyperaccumulation pathway to three-dimensional hierarchical porous nanocomposites for highly robust high-power electrodes. Nature Communications, 2016, 7, 13432.	5.8	68
196	WangetÂal.Reply:. Physical Review Letters, 2016, 117, 219702.	2.9	2
197	Ultrafine jagged platinum nanowires enable ultrahigh mass activity for the oxygen reduction reaction. Science, 2016, 354, 1414-1419.	6.0	1,292
198	Unusually efficient photocurrent extraction in monolayer van der Waals heterostructure by tunnelling through discretized barriers. Nature Communications, 2016, 7, 13278.	5.8	120

#	Article	IF	Citations
199	Scalable solution-phase epitaxial growth of symmetry-mismatched heterostructures on two-dimensional crystal soft template. Science Advances, 2016, 2, e1600993.	4.7	52
200	Nanoelectronic Investigation Reveals the Electrochemical Basis of Electrical Conductivity in Shewanella and Geobacter. ACS Nano, 2016, 10, 9919-9926.	7.3	46
201	Size-dependent phase transition in methylammonium lead iodide perovskite microplate crystals. Nature Communications, 2016, 7, 11330.	5.8	206
202	Highâ€Currentâ€Density Verticalâ€Tunneling Transistors from Graphene/Highly Doped Silicon Heterostructures. Advanced Materials, 2016, 28, 4120-4125.	11.1	43
203	Electronic and Ionic Transport Dynamics in Organolead Halide Perovskites. ACS Nano, 2016, 10, 6933-6941.	7.3	115
204	In situ development of highly concave and composition-confined PtNi octahedra with high oxygen reduction reaction activity and durability. Nano Research, 2016, 9, 149-157.	5.8	64
205	Plasmonic/Nonlinear Optical Material Core/Shell Nanorods as Nanoscale Plasmon Modulators and Optical Voltage Sensors. Angewandte Chemie - International Edition, 2016, 55, 583-587.	7.2	21
206	Three-dimensional graphene framework with ultra-high sulfur content for a robust lithiumâ€“sulfur battery. Nano Research, 2016, 9, 240-248.	5.8	165
207	van der Waals Heterojunction Devices Based on Organohalide Perovskites and Two-Dimensional Materials. Nano Letters, 2016, 16, 367-373.	4.5	185
208	Synthesis of WS_{2x}Se_{2â€“2x} Alloy Nanosheets with Composition-Tunable Electronic Properties. Nano Letters, 2016, 16, 264-269.	4.5	308
209	Transparent megahertz circuits from solution-processed composite thin films. Nanoscale, 2016, 8, 7978-7983.	2.8	3
210	Interlayer Transition and Infrared Photodetection in Atomically Thin Type-II MoTe₂/MoS₂ van der Waals Heterostructures. ACS Nano, 2016, 10, 3852-3858.	7.3	453
211	Omnidirectional enhancement of photocatalytic hydrogen evolution over hierarchical â€œcauline leafâ€• nanoarchitectures. Applied Catalysis B: Environmental, 2016, 186, 88-96.	10.8	117
212	Vertically Stacked Heterostructures for Tunable Photonic Devices - from 2D Materials to Hybrid Perovskites. , 2016, , .		2
213	51.4: Invited Paper: High Performance Flexible TFTs from Oxide/Carbon Heterostructures. Digest of Technical Papers SID International Symposium, 2015, 46, 775-777.	0.1	0
214	Self-Assembled Three-Dimensional Graphene Macrostructures: Synthesis and Applications in Supercapacitors. Accounts of Chemical Research, 2015, 48, 1666-1675.	7.6	441
215	Significantly Enhanced Visible Light Photoelectrochemical Activity in TiO₂ Nanowire Arrays by Nitrogen Implantation. Nano Letters, 2015, 15, 4692-4698.	4.5	159
216	Solution Processable Holey Graphene Oxide and Its Derived Macrostructures for High-Performance Supercapacitors. Nano Letters, 2015, 15, 4605-4610.	4.5	426

#	Article	IF	Citations
217	High-performance transition metalâ€“doped Pt ₃ Ni octahedra for oxygen reduction reaction. Science, 2015, 348, 1230-1234.	6.0	1,623
218	Synthesis of Stable Shape-Controlled Catalytically Active Î²-Palladium Hydride. Journal of the American Chemical Society, 2015, 137, 15672-15675.	6.6	117
219	Highly sensitive detection of mercury(II) ions with few-layer molybdenum disulfide. Nano Research, 2015, 8, 257-262.	5.8	82
220	Solvated Graphene Frameworks as Highâ€Performance Anodes for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2015, 54, 5345-5350.	7.2	124
221	Metal-Organic Framework Templated Synthesis of Ultrathin, Well-Aligned Metallic Nanowires. ACS Nano, 2015, 9, 3044-3049.	7.3	59
222	Reduced graphene oxide/silicon nanowire heterostructures with enhanced photoactivity and superior photoelectrochemical stability. Nano Research, 2015, 8, 2850-2858.	5.8	34
223	High Gain Submicrometer Optical Amplifier at Near-Infrared Communication Band. Physical Review Letters, 2015, 115, 027403.	2.9	43
224	High Surface Area Tunnels in Hexagonal WO₃. Nano Letters, 2015, 15, 4834-4838.	4.5	144
225	Electric-field-induced strong enhancement of electroluminescence in multilayer molybdenum disulfide. Nature Communications, 2015, 6, 7509.	5.8	132
226	Lateral Growth of Composition Graded Atomic Layer MoS_{2(1â€“x)}Se_{2x} Nanosheets. Journal of the American Chemical Society, 2015, 137, 5284-5287.	6.6	191
227	Toward Barrier Free Contact to Molybdenum Disulfide Using Graphene Electrodes. Nano Letters, 2015, 15, 3030-3034.	4.5	362
228	Plasma-engineered MoS₂ thin-film as an efficient electrocatalyst for hydrogen evolution reaction. Chemical Communications, 2015, 51, 7470-7473.	2.2	263
229	Cosolvent Approach for Solution-Processable Electronic Thin Films. ACS Nano, 2015, 9, 4398-4405.	7.3	63
230	Two-dimensional transition metal dichalcogenides as atomically thin semiconductors: opportunities and challenges. Chemical Society Reviews, 2015, 44, 8859-8876.	18.7	917
231	High-Performance Organic Vertical Thin Film Transistor Using Graphene as a Tunable Contact. ACS Nano, 2015, 9, 11102-11108.	7.3	85
232	Wafer-scale growth of large arrays of perovskite microplate crystals for functional electronics and optoelectronics. Science Advances, 2015, 1, e1500613.	4.7	265
233	An on-chip electrical transport spectroscopy approach for in situ monitoring electrochemical interfaces. Nature Communications, 2015, 6, 7867.	5.8	64
234	Graphene-Assisted Solution Growth of Vertically Oriented Organic Semiconducting Single Crystals. ACS Nano, 2015, 9, 9486-9496.	7.3	46

#	Article	IF	Citations
235	Large Area Growth and Electrical Properties of p-Type WSe₂ Atomic Layers. Nano Letters, 2015, 15, 709-713.	4.5	372
236	Vertical heterostructure field effect transistor for high performance electronics. , 2014, , .		0
237	Metalâ€“semiconductor transition in atomically thin Bi2Sr2Co2O8 nanosheets. APL Materials, 2014, 2, .	2.2	8
238	Thickness Scaling Effect on Interfacial Barrier and Electrical Contact to Two-Dimensional MoS₂ Layers. ACS Nano, 2014, 8, 12836-12842.	7.3	149
239	Bandâ€Selective Infrared Photodetectors with Completeâ€Compositionâ€Range InAs_xP_{1â€x} Alloy Nanowires. Advanced Materials, 2014, 26, 7444-7449.	11.1	67
240	Integration of molecular and enzymatic catalysts on graphene for biomimetic generation of antithrombotic species. Nature Communications, 2014, 5, 3200.	5.8	90
241	Chemical vapor deposition growth of monolayer MoSe2 nanosheets. Nano Research, 2014, 7, 511-517.	5.8	331
242	Silver nanoparticles protected by monolayer graphene as a stabilized substrate for surface enhanced Raman spectroscopy. Carbon, 2014, 66, 713-719.	5.4	123
243	Solution Processable Colloidal Nanoplates as Building Blocks for High-Performance Electronic Thin Films on Flexible Substrates. Nano Letters, 2014, 14, 6547-6553.	4.5	69
244	A rational design of carbon-supported dispersive Pt-based octahedra as efficient oxygen reduction reaction catalysts. Energy and Environmental Science, 2014, 7, 2957-2962.	15.6	172
245	High Density Catalytic Hot Spots in Ultrafine Wavy Nanowires. Nano Letters, 2014, 14, 3887-3894.	4.5	107
246	Highly Flexible Electronics from Scalable Vertical Thin Film Transistors. Nano Letters, 2014, 14, 1413-1418.	4.5	131
247	Holey graphene frameworks for highly efficient capacitive energy storage. Nature Communications, 2014, 5, 4554.	5.8	1,161
248	Lateral epitaxial growth of two-dimensional layered semiconductor heterojunctions. Nature Nanotechnology, 2014, 9, 1024-1030.	15.6	1,056
249	Electroluminescence and Photocurrent Generation from Atomically Sharp WSe₂/MoS₂ Heterojunction pâ€“n Diodes. Nano Letters, 2014, 14, 5590-5597.	4.5	937
250	Few-layer molybdenum disulfide transistors and circuits for high-speed flexible electronics. Nature Communications, 2014, 5, 5143.	5.8	408
251	A Rational Biomimetic Approach to Structure Defect Generation in Colloidal Nanocrystals. ACS Nano, 2014, 8, 6934-6944.	7.3	49
252	Growth of Alloy MoS_{2x}Se_{2(1â€“x)} Nanosheets with Fully Tunable Chemical Compositions and Optical Properties. Journal of the American Chemical Society, 2014, 136, 3756-3759.	6.6	444

#	Article	IF	Citations
253	A rational design of cosolvent exfoliation of layered materials by directly probing liquidâ€“solid interaction. Nature Communications, 2013, 4, 2213.	5.8	235
254	Real-time electrical detection of nitric oxide in biological systems with sub-nanomolar sensitivity. Nature Communications, 2013, 4, 2225.	5.8	121
255	Functionalized Graphene Hydrogelâ€Based Highâ€Performance Supercapacitors. Advanced Materials, 2013, 25, 5779-5784.	11.1	577
256	Variability Effects in Graphene: Challenges and Opportunities for Device Engineering and Applications. Proceedings of the IEEE, 2013, 101, 1670-1688.	16.4	29
257	Graphene-hemin hybrid material as effective catalyst for selective oxidation of primary C-H bond in toluene. Scientific Reports, 2013, 3, .	1.6	45
258	High performance thin film electronics based on inorganic nanostructures and composites. Nano Today, 2013, 8, 514-530.	6.2	33
259	Highly efficient gate-tunable photocurrent generation in vertical heterostructures of layered materials. Nature Nanotechnology, 2013, 8, 952-958.	15.6	1,017
260	Very high energy density silicideâ€“air primary batteries. Energy and Environmental Science, 2013, 6, 2621.	15.6	21
261	Biomimetic Synthesis of an Ultrathin Platinum Nanowire Network with a High Twin Density for Enhanced Electrocatalytic Activity and Durability. Angewandte Chemie - International Edition, 2013, 52, 12577-12581.	7.2	174
262	Monodisperse Cu@PtCu nanocrystals and their conversion into hollow-PtCu nanostructures for methanol oxidation. Journal of Materials Chemistry A, 2013, 1, 14449.	5.2	58
263	Progress, challenge and perspective of heterogeneous photocatalysts. Chemical Society Reviews, 2013, 42, 2568-2580.	18.7	1,255
264	Vertically stacked multi-heterostructures of layered materials for logic transistors and complementary inverters. Nature Materials, 2013, 12, 246-252.	13.3	812
265	Tunable transport gap in narrow bilayer graphene nanoribbons. Scientific Reports, 2013, 3, 1248.	1.6	49
266	One-step strategy to graphene/Ni(OH)2 composite hydrogels as advanced three-dimensional supercapacitor electrode materials. Nano Research, 2013, 6, 65-76.	5.8	202
267	Palladiumâ€Based Nanostructures with Highly Porous Features and Perpendicular Pore Channels as Enhanced Organic Catalysts. Angewandte Chemie - International Edition, 2013, 52, 2520-2524.	7.2	147
268	High performance amorphous ZnMgO/carbon nanotube composite thin-film transistors with a tunable threshold voltage. Nanoscale, 2013, 5, 2830.	2.8	10
269	A low-temperature method to produce highly reduced graphene oxide. Nature Communications, 2013, 4, 1539.	5.8	436
270	Transferred wrinkled Al2O3 for highly stretchableÂand transparent grapheneâ€“carbon nanotube transistors. Nature Materials, 2013, 12, 403-409.	13.3	295

#	Article	IF	Citations
271	Flexible Solid-State Supercapacitors Based on Three-Dimensional Graphene Hydrogel Films. ACS Nano, 2013, 7, 4042-4049.	7.3	1,037
272	Untangling nanowire assembly. Nature Nanotechnology, 2013, 8, 312-313.	15.6	16
273	Plasmonic and Catalytic AuPd Nanowheels for the Efficient Conversion of Light into Chemical Energy. Angewandte Chemie - International Edition, 2013, 52, 6063-6067.	7.2	152
274	Chemical vapour deposition growth of large single crystals of monolayer and bilayer graphene. Nature Communications, 2013, 4, 2096.	5.8	493
275	Kinetic Manipulation of Silicide Phase Formation in Si Nanowire Templates. Nano Letters, 2013, 13, 3703-3708.	4.5	33
276	A Facile Strategy to Pt₃Ni Nanocrystals with Highly Porous Features as an Enhanced Oxygen Reduction Reaction Catalyst. Advanced Materials, 2013, 25, 2974-2979.	11.1	232
277	A versatile strategy to the selective synthesis of Cu nanocrystals and the in situ conversion to CuRu nanotubes. Nanoscale, 2013, 5, 6284.	2.8	36
278	Graphene Hydrogels: Functionalized Graphene Hydrogel-Based High-Performance Supercapacitors (Adv. Mater. 40/2013). Advanced Materials, 2013, 25, 5828-5828.	11.1	3
279	A guide for nanowire growth. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15171-15172.	3.3	11
280	Asymmetric light propagation in composition-graded semiconductor nanowires. Scientific Reports, 2012, 2, 820.	1.6	60
281	Room-Temperature Dual-Wavelength Lasing from Single-Nanoribbon Lateral Heterostructures. Journal of the American Chemical Society, 2012, 134, 12394-12397.	6.6	109
282	Rational Design of Amorphous Indium Zinc Oxide/Carbon Nanotube Hybrid Film for Unique Performance Transistors. Nano Letters, 2012, 12, 3596-3601.	4.5	83
283	Wavelength-Converted/Selective Waveguiding Based on Composition-Graded Semiconductor Nanowires. Nano Letters, 2012, 12, 5003-5007.	4.5	87
284	High-Yield Chemical Vapor Deposition Growth of High-Quality Large-Area AB-Stacked Bilayer Graphene. ACS Nano, 2012, 6, 8241-8249.	7.3	246
285	Graphene: An Emerging Electronic Material. Advanced Materials, 2012, 24, 5782-5825.	11.1	718
286	Graphene: An Emerging Electronic Material (Adv. Mater. 43/2012). Advanced Materials, 2012, 24, 5776-5776.	11.1	29
287	Domain Wall Motion in Synthetic Co₂Si Nanowires. Nano Letters, 2012, 12, 1972-1976.	4.5	17
288	Large-Scale Integration of Semiconductor Nanowires for High-Performance Flexible Electronics. ACS Nano, 2012, 6, 1888-1900.	7.3	202

#	Article	IF	Citations
289	Graphene for radio frequency electronics. Materials Today, 2012, 15, 328-338.	8.3	112
290	A systematic study of atmospheric pressure chemical vapor deposition growth of large-area monolayer graphene. Journal of Materials Chemistry, 2012, 22, 1498-1503.	6.7	76
291	Towards highly efficient photocatalysts using semiconductor nanoarchitectures. Energy and Environmental Science, 2012, 5, 6732.	15.6	400
292	New Porous Crystals of Extended Metal-Catecholates. Chemistry of Materials, 2012, 24, 3511-3513.	3.2	618
293	One-dimensional homogeneous and heterogeneous nanowires for solar energy conversion. Journal of Materials Chemistry, 2012, 22, 16171.	6.7	53
294	InnenrÃ¼cktitelbild: Graphene-Supported Hemin as a Highly Active Biomimetic Oxidation Catalyst (Angew. Chem. 16/2012). Angewandte Chemie, 2012, 124, 4045-4045.	1.6	0
295	Grapheneâ€Supported Hemin as a Highly Active Biomimetic Oxidation Catalyst. Angewandte Chemie - International Edition, 2012, 51, 3822-3825.	7.2	309
296	Inside Back Cover: Graphene-Supported Hemin as a Highly Active Biomimetic Oxidation Catalyst (Angew.) Tj ETQq0 0 0 rgBT /Overlock 1	7.2	0
297	Porous, Conductive Metalâ€Triazolates and Their Structural Elucidation by the Chargeâ€Flipping Method. Chemistry - A European Journal, 2012, 18, 10595-10601.	1.7	227
298	Simplifying the Creation of Dumbbellâ€Like Cuâ€Ag Nanostructures and Their Enhanced Catalytic Activity. Chemistry - A European Journal, 2012, 18, 9505-9510.	1.7	54
299	Scalable Fabrication of Self-Aligned Graphene Transistors and Circuits on Glass. Nano Letters, 2012, 12, 2653-2657.	4.5	74
300	High-frequency self-aligned graphene transistors with transferred gate stacks. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11588-11592.	3.3	312
301	Synthesis of PtPd Bimetal Nanocrystals with Controllable Shape, Composition, and Their Tunable Catalytic Properties. Nano Letters, 2012, 12, 4265-4270.	4.5	227
302	Highâ€Capacity Siliconâ€“Air Battery in Alkaline Solution. ChemSusChem, 2012, 5, 177-180.	3.6	50
303	Synthesis and electric properties of dicobalt silicide nanobelts. Chemical Communications, 2011, 47, 1255-1257.	2.2	15
304	Edge Effect on Resistance Scaling Rules in Graphene Nanostructures. Nano Letters, 2011, 11, 1082-1086.	4.5	37
305	Top-Gated Chemical Vapor Deposition Grown Graphene Transistors with Current Saturation. Nano Letters, 2011, 11, 2555-2559.	4.5	88
306	Linewidth roughness in nanowire-mask-based graphene nanoribbons. Applied Physics Letters, 2011, 98, 243118.	1.5	13

#	Article	IF	Citations
307	Unveiling the Formation Pathway of Single Crystalline Porous Silicon Nanowires. ACS Applied Materials & Interfaces, 2011, 3, 261-270.	4.0	156
308	Composition tuning the upconversion emission in NaYF4:Yb/Tm hexaplate nanocrystals. Nanoscale, 2011, 3, 963.	2.8	73
309	Highly spectral dependent enhancement of upconversion emission with sputtered gold island films. Chemical Communications, 2011, 47, 979-981.	2.2	95
310	Toward Tunable Band Gap and Tunable Dirac Point in Bilayer Graphene with Molecular Doping. Nano Letters, 2011, 11, 4759-4763.	4.5	142
311	Plasmonic Enhancements of Photocatalytic Activity of Pt/n-Si/Ag Photodiodes Using Au/Ag Core/Shell Nanorods. Journal of the American Chemical Society, 2011, 133, 16730-16733.	6.6	121
312	pH-Operated Mechanized Porous Silicon Nanoparticles. Journal of the American Chemical Society, 2011, 133, 8798-8801.	6.6	146
313	Covalent Organic Frameworks with High Charge Carrier Mobility. Chemistry of Materials, 2011, 23, 4094-4097.	3.2	659
314	Porous silicon nanowires. Nanoscale, 2011, 3, 4060.	2.8	129
315	Plasmon resonance enhanced multicolour photodetection by graphene. Nature Communications, 2011, 2, 579.	5.8	639
316	Approaching Terahertz Graphene Transistors. ECS Transactions, 2011, 35, 239-252.	0.3	0
317	Heterointegration of Pt/Si/Ag Nanowire Photodiodes and Their Photocatalytic Properties. Advanced Functional Materials, 2010, 20, 3005-3011.	7.8	28
318	Heterointegration of Pt/Si/Ag Nanowire Photodiodes and Their Photocatalytic Properties. Advanced Functional Materials, 2010, 20, n/a-n/a.	7.8	0
319	Highâ€Performance Topâ€Gated Grapheneâ€Nanoribbon Transistors Using Zirconium Oxide Nanowires as Highâ€Dielectricâ€Constant Gate Dielectrics. Advanced Materials, 2010, 22, 1941-1945.	11.1	132
320	Plasmonic Modulation of the Upconversion Fluorescence in NaYF₄:Yb/Tm Hexaplate Nanocrystals Using Gold Nanoparticles or Nanoshells. Angewandte Chemie - International Edition, 2010, 49, 2865-2868.	7.2	343
321	Grapheneâ€“dielectric integration for graphene transistors. Materials Science and Engineering Reports, 2010, 70, 354-370.	14.8	97
322	Graphene nanomeshes: Onset of conduction band gaps. Chemical Physics Letters, 2010, 498, 334-337.	1.2	27
323	High-speed graphene transistors with a self-aligned nanowire gate. Nature, 2010, 467, 305-308.	13.7	1,156
324	High-yield self-limiting single-nanowire assembly with dielectrophoresis. Nature Nanotechnology, 2010, 5, 525-530.	15.6	375

#	Article	IF	Citations
325	Very large magnetoresistance in graphene nanoribbons. Nature Nanotechnology, 2010, 5, 655-659.	15.6	253
326	Graphene nanomesh. Nature Nanotechnology, 2010, 5, 190-194.	15.6	1,276
327	Highly Efficient Photocatalysts from Nanoscale Metal/Semiconductor/Metal Heterojunctions. ECS Transactions, 2010, 33, 23-38.	0.3	0
328	Top-Gated Graphene Nanoribbon Transistors with Ultrathin High-k Dielectrics. Nano Letters, 2010, 10, 1917-1921.	4.5	160
329	Single-layer graphene on Al₂O₃/Si substrate: better contrast and higher performance of graphene transistors. Nanotechnology, 2010, 21, 015705.	1.3	87
330	Enhanced Conductance Fluctuation by Quantum Confinement Effect in Graphene Nanoribbons. Nano Letters, 2010, 10, 4590-4594.	4.5	27
331	High- Î oxide nanoribbons as gate dielectrics for high mobility top-gated graphene transistors. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6711-6715.	3.3	187
332	Low-noise submicron channel graphene nanoribbons. Applied Physics Letters, 2010, 97, 073107.	1.5	19
333	Nanoscale Morphology, Dimensional Control, and Electrical Properties of Oligoanilines. Journal of the American Chemical Society, 2010, 132, 10365-10373.	6.6	217
334	Photocatalytic properties of porous silicon nanowires. Journal of Materials Chemistry, 2010, 20, 3590.	6.7	120
335	Chemically Synthesized Semiconductor Nanowires for High-Performance Electronics and Optoelectronics. , 2010, , 27-66.		2
336	Sub-100 nm Channel Length Graphene Transistors. Nano Letters, 2010, 10, 3952-3956.	4.5	167
337	Functional inorganic nanostructures, new opportunities for future electronics. , 2010, , .		0
338	Rational Design and Synthesis of Freestanding Photoelectric Nanodevices as Highly Efficient Photocatalysts. Nano Letters, 2010, 10, 1941-1949.	4.5	62
339	Electrically Conductive and Optically Active Porous Silicon Nanowires. Nano Letters, 2009, 9, 4539-4543.	4.5	324
340	Rational Fabrication of Graphene Nanoribbons Using a Nanowire Etch Mask. Nano Letters, 2009, 9, 2083-2087.	4.5	362
341	Nanowire Thin-Film Transistors: A New Avenue to High-Performance Macroelectronics. IEEE Transactions on Electron Devices, 2008, 55, 3056-3062.	1.6	20
342	Semiconductor Nanowires. , 2008, , 3910-3940.		3

#	Article	IF	Citations
343	Semiconductor Nanowires. , 2008, , 3941-3953.		0
344	Assembled Semiconductor Nanowire Thin Films for High-Performance Flexible Macroelectronics. MRS Bulletin, 2007, 32, 134-141.	1.7	66
345	Nanowires for Integrated Multicolor Nanophotonics. Small, 2004, 1, 142-147.	5.2	606
346	Single-nanowire electrically driven lasers. Nature, 2003, 421, 241-245.	13.7	2,344
347	High-performance thin-film transistors using semiconductor nanowires and nanoribbons. Nature, 2003, 425, 274-278.	13.7	895
348	Nanowires as Building Blocks for Nanoscale Science and Technology. , 2003, , 3-68.		16
349	Nonvolatile Memory and Programmable Logic from Molecule-Gated Nanowires. Nano Letters, 2002, 2, 487-490.	4.5	330
350	Gallium Nitride Nanowire Nanodevices. Nano Letters, 2002, 2, 101-104.	4.5	871
351	Directed Assembly of One-Dimensional Nanostructures into Functional Networks. Science, 2001, 291, 630-633.	6.0	2,105
352	Highly Polarized Photoluminescence and Photodetection from Single Indium Phosphide Nanowires. Science, 2001, 293, 1455-1457.	6.0	1,744
353	Indium phosphide nanowires as building blocks for nanoscale electronic and optoelectronic devices. Nature, 2001, 409, 66-69.	13.7	3,256
354	Logic Gates and Computation from Assembled Nanowire Building Blocks. Science, 2001, 294, 1313-1317.	6.0	2,056
355	General Synthesis of Compound Semiconductor Nanowires. Advanced Materials, 2000, 12, 298-302.	11.1	1,334
356	Doping and Electrical Transport in Silicon Nanowires. Journal of Physical Chemistry B, 2000, 104, 5213-5216.	1.2	885
357	Synthesis and optical properties of gallium arsenide nanowires. Applied Physics Letters, 2000, 76, 1116-1118.	1.5	279
358	Laser-Assisted Catalytic Growth of Single Crystal GaN Nanowires. Journal of the American Chemical Society, 2000, 122, 188-189.	6.6	797
359	Nanocrystalline Silver Particles: Synthesis, Agglomeration, and Sputtering Induced by Electron Beam. Journal of Colloid and Interface Science, 1999, 209, 347-349.	5.0	94
360	Self-Regulation Synthesis of Nanocrystalline ZnGa2O4by Hydrothermal Reaction. Chemistry of Materials, 1998, 10, 17-18.	3.2	63

#	Article	IF	Citations
361	Giant magnetoresistance in bulk La0.6Mg0.4MnO3. Journal of Materials Research, 1997, 12, 2648-2650.	1.2	3
362	Solvothermal Co-reduction Route to the Nanocrystalline IIIâˆ’V Semiconductor InAs. Journal of the American Chemical Society, 1997, 119, 7869-7870.	6.6	78
363	Graphene Electronics. , 0, , 159-179.		0