

# Qiyuan He

## List of Publications by Year in descending order

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82  
papers

20,893  
citations

36271

51  
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60583

81  
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84  
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84  
docs citations

84  
times ranked

27864  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent Advances in Ultrathin Two-Dimensional Nanomaterials. <i>Chemical Reviews</i> , 2017, 117, 6225-6331.	23.0	3,940
2	Graphene-Based Materials: Synthesis, Characterization, Properties, and Applications. <i>Small</i> , 2011, 7, 1876-1902.	5.2	2,239
3	Single-Layer Semiconducting Nanosheets: High-Yield Preparation and Device Fabrication. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 11093-11097.	7.2	1,517
4	Fabrication of Single- and Multilayer MoS <sub>2</sub> Film-Based Field-Effect Transistors for Sensing NO at Room Temperature. <i>Small</i> , 2012, 8, 63-67.	5.2	1,346
5	Fabrication of Flexible MoS <sub>2</sub> Thin-Film Transistor Arrays for Practical Gas Sensing Applications. <i>Small</i> , 2012, 8, 2994-2999.	5.2	817
6	High phase-purity 1T <sup>-2</sup> -MoS <sub>2</sub> - and 1T <sup>-2</sup> -MoSe <sub>2</sub> -layered crystals. <i>Nature Chemistry</i> , 2018, 10, 638-643.	6.6	757
7	Graphene-based electronic sensors. <i>Chemical Science</i> , 2012, 3, 1764.	3.7	663
8	Centimeter-Long and Large-Scale Micropatterns of Reduced Graphene Oxide Films: Fabrication and Sensing Applications. <i>ACS Nano</i> , 2010, 4, 3201-3208.	7.3	571
9	Organic Photovoltaic Devices Using Highly Flexible Reduced Graphene Oxide Films as Transparent Electrodes. <i>ACS Nano</i> , 2010, 4, 5263-5268.	7.3	566
10	Mechanical Exfoliation and Characterization of Single- and Few-Layer Nanosheets of WSe <sub>2</sub> , TaS <sub>2</sub> , and TaSe <sub>2</sub> . <i>Small</i> , 2013, 9, 1974-1981.	5.2	544
11	Graphene-Based Electrochemical Sensors. <i>Small</i> , 2013, 9, 1160-1172.	5.2	526
12	Phase engineering of nanomaterials. <i>Nature Reviews Chemistry</i> , 2020, 4, 243-256.	13.8	438
13	Graphene-Based Materials for Solar Cell Applications. <i>Advanced Energy Materials</i> , 2014, 4, 1300574.	10.2	398
14	Electrochemically Reduced Single-Layer MoS <sub>2</sub> Nanosheets: Characterization, Properties, and Sensing Applications. <i>Small</i> , 2012, 8, 2264-2270.	5.2	373
15	Toward Barrier Free Contact to Molybdenum Disulfide Using Graphene Electrodes. <i>Nano Letters</i> , 2015, 15, 3030-3034.	4.5	362
16	Monolayer atomic crystal molecular superlattices. <i>Nature</i> , 2018, 555, 231-236.	13.7	323
17	Two-dimensional nanomaterial-based field-effect transistors for chemical and biological sensing. <i>Chemical Society Reviews</i> , 2017, 46, 6872-6904.	18.7	316
18	Transparent, Flexible, All-Reduced Graphene Oxide Thin Film Transistors. <i>ACS Nano</i> , 2011, 5, 5038-5044.	7.3	305

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19	Interfacing Live Cells with Nanocarbon Substrates. <i>Langmuir</i> , 2010, 26, 2244-2247.	1.6	301
20	Optical Identification of Single- and Few-Layer MoS <sub>2</sub> Sheets. <i>Small</i> , 2012, 8, 682-686.	5.2	290
21	Electrical Detection of Metal Ions Using Field-Effect Transistors Based on Micropatterned Reduced Graphene Oxide Films. <i>ACS Nano</i> , 2011, 5, 1990-1994.	7.3	279
22	Wafer-scale growth of large arrays of perovskite microplate crystals for functional electronics and optoelectronics. <i>Science Advances</i> , 2015, 1, e1500613.	4.7	265
23	MOF-Based Hierarchical Structures for Solar-Thermal Clean Water Production. <i>Advanced Materials</i> , 2019, 31, e1808249.	11.1	233
24	Real-time DNA detection using Pt nanoparticle-decorated reduced graphene oxide field-effect transistors. <i>Nanoscale</i> , 2012, 4, 293-297.	2.8	185
25	van der Waals Heterojunction Devices Based on Organohalide Perovskites and Two-Dimensional Materials. <i>Nano Letters</i> , 2016, 16, 367-373.	4.5	185
26	Self-gating in semiconductor electrocatalysis. <i>Nature Materials</i> , 2019, 18, 1098-1104.	13.3	167
27	Electrochemical Deposition of Semiconductor Oxides on Reduced Graphene Oxide-Based Flexible, Transparent, and Conductive Electrodes. <i>Journal of Physical Chemistry C</i> , 2010, 114, 11816-11821.	1.5	159
28	Engineering grain boundaries at the 2D limit for the hydrogen evolution reaction. <i>Nature Communications</i> , 2020, 11, 57.	5.8	153
29	Sensitive pressure sensors based on conductive microstructured air-gap gates and two-dimensional semiconductor transistors. <i>Nature Electronics</i> , 2020, 3, 59-69.	13.1	150
30	Memory Devices Using a Mixture of MoS <sub>2</sub> and Graphene Oxide as the Active Layer. <i>Small</i> , 2013, 9, 727-731.	5.2	144
31	Synthesis of PdM (M = Zn, Cd, ZnCd) Nanosheets with an Unconventional Face-Centered Tetragonal Phase as Highly Efficient Electrocatalysts for Ethanol Oxidation. <i>ACS Nano</i> , 2019, 13, 14329-14336.	7.3	133
32	Synthesis of Fe <sub>3</sub> O <sub>4</sub> and Pt nanoparticles on reduced graphene oxide and their use as a recyclable catalyst. <i>Nanoscale</i> , 2012, 4, 2478.	2.8	131
33	Reduced graphene oxide films used as matrix of MALDI-TOF-MS for detection of octachlorodibenzo-p-dioxin. <i>Chemical Communications</i> , 2010, 46, 6974.	2.2	124
34	Metastable 1T <sup>-2</sup> -phase group VIB transition metal dichalcogenide crystals. <i>Nature Materials</i> , 2021, 20, 1113-1120.	13.3	119
35	Pushing the Performance Limit of Sub-100 nm Molybdenum Disulfide Transistors. <i>Nano Letters</i> , 2016, 16, 6337-6342.	4.5	117
36	Electrochemical deposition of Cl-doped n-type Cu <sub>2</sub> O on reduced graphene oxide electrodes. <i>Journal of Materials Chemistry</i> , 2011, 21, 3467-3470.	6.7	91

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37	The Effect of Thermal Annealing on Charge Transport in Organolead Halide Perovskite Microplate Field-Effect Transistors. <i>Advanced Materials</i> , 2017, 29, 1601959.	11.1	91
38	Rh(I)-Catalyzed Alkylation of <i>ortho</i> -C-H Bonds in Aromatic Amides with Maleimides. <i>Organic Letters</i> , 2017, 19, 4544-4547.	2.4	79
39	Graphene Oxide as a Carbon Source for Controlled Growth of Carbon Nanowires. <i>Small</i> , 2011, 7, 1199-1202.	5.2	75
40	Quest for p-Type Two-Dimensional Semiconductors. <i>ACS Nano</i> , 2019, 13, 12294-12300.	7.3	72
41	In Situ Probing Molecular Intercalation in Two-Dimensional Layered Semiconductors. <i>Nano Letters</i> , 2019, 19, 6819-6826.	4.5	72
42	Solution Processable Colloidal Nanoplates as Building Blocks for High-Performance Electronic Thin Films on Flexible Substrates. <i>Nano Letters</i> , 2014, 14, 6547-6553.	4.5	69
43	On-chip electrocatalytic microdevice: an emerging platform for expanding the insight into electrochemical processes. <i>Chemical Society Reviews</i> , 2020, 49, 2916-2936.	18.7	68
44	An on-chip electrical transport spectroscopy approach for in situ monitoring electrochemical interfaces. <i>Nature Communications</i> , 2015, 6, 7867.	5.8	64
45	Cosolvent Approach for Solution-Processable Electronic Thin Films. <i>ACS Nano</i> , 2015, 9, 4398-4405.	7.3	63
46	Graphene Oxide Scrolls on Hydrophobic Substrates Fabricated by Molecular Combing and Their Application in Gas Sensing. <i>Small</i> , 2013, 9, 382-386.	5.2	57
47	Designing an Efficient Multimode Environmental Sensor Based on Graphene-Silicon Heterojunction. <i>Advanced Materials Technologies</i> , 2017, 2, 1600262.	3.0	55
48	In-Plane Anisotropic Properties of 1T-MoS <sub>2</sub> Layers. <i>Advanced Materials</i> , 2019, 31, e1807764.	11.1	55
49	Solvent-Based Soft Patterning of Graphene Lateral Heterostructures for Broadband High-Speed Metal-Semiconductor-Metal Photodetectors. <i>Advanced Materials Technologies</i> , 2017, 2, 1600241.	3.0	53
50	Strong Charge Transfer at 2H-1T Phase Boundary of MoS <sub>2</sub> for Superb High-Performance Energy Storage. <i>Small</i> , 2019, 15, e1900131.	5.2	53
51	Scalable solution-phase epitaxial growth of symmetry-mismatched heterostructures on two-dimensional crystal soft template. <i>Science Advances</i> , 2016, 2, e1600993.	4.7	52
52	Nucleation Mechanism of Electrochemical Deposition of Cu on Reduced Graphene Oxide Electrodes. <i>Journal of Physical Chemistry C</i> , 2011, 115, 15973-15979.	1.5	50
53	Realization of vertical metal semiconductor heterostructures via solution phase epitaxy. <i>Nature Communications</i> , 2018, 9, 3611.	5.8	49
54	Transforming Monolayer Transition-Metal Dichalcogenide Nanosheets into One-Dimensional Nanoscrolls with High Photosensitivity. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 13011-13018.	4.0	45

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55	High-Current-Density Vertical Tunneling Transistors from Graphene/Highly Doped Silicon Heterostructures. <i>Advanced Materials</i> , 2016, 28, 4120-4125.	11.1	43
56	Vertical Charge Transport and Negative Transconductance in Multilayer Molybdenum Disulfides. <i>Nano Letters</i> , 2017, 17, 5495-5501.	4.5	42
57	Surface Modification of Smooth Poly(L-lactic acid) Films for Gelatin Immobilization. <i>ACS Applied Materials &amp; Interfaces</i> , 2012, 4, 687-693.	4.0	38
58	Palladium-Catalyzed Site-Selective [3+2] Annulation via Benzylic and <i>meta</i> -C-H Bond Activation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 5189-5192.	7.2	37
59	The Pd-catalyzed C-H alkylation of <i>ortho</i> -methyl-substituted aromatic amides with maleimide occurs preferentially at the <i>ortho</i> -methyl C-H bond over the <i>ortho</i> -C-H bond. <i>Chemical Communications</i> , 2019, 55, 9983-9986.	2.2	34
60	The extended growth of graphene oxide flakes using ethanol CVD. <i>Nanoscale</i> , 2013, 5, 2945.	2.8	31
61	Emerging elemental two-dimensional materials for energy applications. <i>Journal of Materials Chemistry A</i> , 2021, 9, 18793-18817.	5.2	30
62	A Synthesis of 3,4-Dihydroisoquinolin-1(2H)-one via the Rhodium-Catalyzed Alkylation of Aromatic Amides with N-Vinylphthalimide. <i>Journal of Organic Chemistry</i> , 2018, 83, 13587-13594.	1.7	29
63	Unusual 4H-phase twinned noble metal nanokites. <i>Nature Communications</i> , 2019, 10, 2881.	5.8	25
64	Nanoscale-Controlled Enzymatic Degradation of Poly(L-lactic acid) Films Using Dip-Pen Nanolithography. <i>Small</i> , 2011, 7, 226-229.	5.2	24
65	Graphene Oxide Architectures Prepared by Molecular Combing on Hydrophilic-Hydrophobic Micropatterns. <i>Small</i> , 2014, 10, 2239-2244.	5.2	23
66	<i>In-Situ</i> Probing of Crystal-Phase-Dependent Photocatalytic Activities of Au Nanostructures by Surface-Enhanced Raman Spectroscopy. , 2020, 2, 409-414.		22
67	Plasmonic/Nonlinear Optical Material Core/Shell Nanorods as Nanoscale Plasmon Modulators and Optical Voltage Sensors. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 583-587.	7.2	21
68	Recent Advances in Cantilever-Free Scanning Probe Lithography: High-Throughput, Space-Confined Synthesis of Nanostructures and Beyond. <i>ACS Nano</i> , 2017, 11, 4381-4386.	7.3	21
69	Highly Sensitive Chemical Detection with Tunable Sensitivity and Selectivity from Ultrathin Platinum Nanowires. <i>Small</i> , 2017, 13, 1602969.	5.2	19
70	Single-layer graphene oxide sheet: a novel substrate for dip-pen nanolithography. <i>Chemical Communications</i> , 2011, 47, 10070.	2.2	16
71	TaS <sub>2</sub> nanosheet-based room-temperature dosage meter for nitric oxide. <i>APL Materials</i> , 2014, 2, .	2.2	16
72	The mechanism of graphene oxide as a growth template for complete reduced graphene oxide coverage on an SiO <sub>2</sub> substrate. <i>Journal of Materials Chemistry C</i> , 2014, 2, 109-114.	2.7	16

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73	Generation of Dual Patterns of Metal Oxide Nanomaterials Based on Seed-Mediated Selective Growth. <i>Langmuir</i> , 2010, 26, 4616-4619.	1.6	12
74	Surface immobilized cholera toxin B subunit (CTB) facilitates vesicle docking, trafficking and exocytosis. <i>Integrative Biology (United Kingdom)</i> , 2010, 2, 250.	0.6	12
75	Palladium-Catalyzed Site-Selective [3+2] Annulation via Benzylic and meta C-H Bond Activation. <i>Angewandte Chemie</i> , 2021, 133, 5249-5252.	1.6	7
76	A field-effect approach to directly profiling the localized states in monolayer MoS <sub>2</sub> . <i>Science Bulletin</i> , 2019, 64, 1049-1055.	4.3	5
77	Palladium-Catalyzed Site-Selective [5 + 1] Annulation of Aromatic Amides with Alkenes: Acceleration of $\beta$ -Hydride Elimination by Maleic Anhydride from Palladacycle. <i>ACS Catalysis</i> , 2022, 12, 1595-1600.	5.5	5
78	Reaction Path Determination of Rhodium(I)-Catalyzed C-H Alkylation of <i>N</i> -8-Aminoquinolinyl Aromatic Amides with Maleimides. <i>Journal of Organic Chemistry</i> , 2022, 87, 737-743.	1.7	5
79	Nanoscale patterning heats up. <i>Nature Electronics</i> , 2019, 2, 13-14.	13.1	3
80	Quantitative Surface Plasmon Interferometry via Upconversion Photoluminescence Mapping. <i>Research</i> , 2019, 2019, 8304824.	2.8	2
81	2D materials-wrapped microparticles. <i>Nature Materials</i> , 2018, 17, 956-957.	13.3	1
82	Fabrication of Bio- and Nanopatterns by Dip Pen Nanolithography. , 2010, , 187-204.		0