Chunxiao Cong

List of Publications by Year
in descending order

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119 papers	8,509 citations	47006 47 h-index	45317 90 g-index
121 all docs	121 docs citations	121 times ranked	13006 citing authors

#	Article	IF	Citations
1	Mechanical Exfoliation and Characterization of Singleâ€•and Fewâ€Łayer Nanosheets of WSe₂, TaS₂, and TaSe₂. Small, 2013, 9, 1974-1981.	10.0	544
2	Hysteresis of Electronic Transport in Graphene Transistors. ACS Nano, 2010, 4, 7221-7228.	14.6	526
3	Synthesis and Optical Properties of Largeâ€Area Singleâ€Crystalline 2D Semiconductor WS₂ Monolayer from Chemical Vapor Deposition. Advanced Optical Materials, 2014, 2, 131-136.	7.3	513
4	Raman Spectroscopy Study of Lattice Vibration and Crystallographic Orientation of Monolayer MoS₂ under Uniaxial Strain. Small, 2013, 9, 2857-2861.	10.0	363
5	Strain-induced directâ€“indirect bandgap transition and phonon modulation in monolayer WS2. Nano Research, 2015, 8, 2562-2572.	10.4	323
6	Observation of Excitonic Fine Structure in a 2D Transition-Metal Dichalcogenide Semiconductor. ACS Nano, 2015, 9, 647-655.	14.6	288
7	Nonblinking, Intense Two-Dimensional Light Emitter: Monolayer WS₂ Triangles. ACS Nano, 2013, 7, 10985-10994.	14.6	281
8	Thermal conductivity determination of suspended mono- and bilayer WS2 by Raman spectroscopy. Nano Research, 2015, 8, 1210-1221.	10.4	280
9	Optical Properties of 2D Semiconductor WS₂. Advanced Optical Materials, 2018, 6, 1700767.	7.3	265
10	A general strategy toward graphene@metal oxide coreâ€“shell nanostructures for high-performance lithium storage. Energy and Environmental Science, 2011, 4, 4954.	30.8	255
11	Fabrication of Co3O4-reduced graphene oxide scrolls for high-performance supercapacitor electrodes. Physical Chemistry Chemical Physics, 2011, 13, 14462.	2.8	215
12	1Tâ€² Transition Metal Telluride Atomic Layers for Plasmon-Free SERS at Femtomolar Levels. Journal of the American Chemical Society, 2018, 140, 8696-8704.	13.7	192
13	Raman Characterization of ABA- and ABC-Stacked Trilayer Graphene. ACS Nano, 2011, 5, 8760-8768.	14.6	184
14	Electrically Tunable Valley-Light Emitting Diode (vLED) Based on CVD-Grown Monolayer WS₂. Nano Letters, 2016, 16, 1560-1567.	9.1	175
15	Silane-catalysed fast growth of large single-crystalline graphene on hexagonal boron nitride. Nature Communications, 2015, 6, 6499.	12.8	173
16	345 m underwater optical wireless communication with 270 Gbps data rate based on a green laser diode with NRZ-OOK modulation. Optics Express, 2017, 25, 27937.	3.4	162
17	Stacking-Dependent Optical Conductivity of Bilayer Graphene. ACS Nano, 2010, 4, 4074-4080.	14.6	145
18	Second-Order Overtone and Combination Raman Modes of Graphene Layers in the Range of 1690â^’2150 cm^{â^’1}. ACS Nano, 2011, 5, 1600-1605.	14.6	140

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19	Dichroic spinâ€“valley photocurrent in monolayer molybdenum disulphide. Nature Communications, 2015, 6, 7636.	12.8	128
20	Periodic Organicâ€“Inorganic Halide Perovskite Microplatelet Arrays on Silicon Substrates for Roomâ€Temperature Lasing. Advanced Science, 2016, 3, 1600137.	11.2	121
21	Contrast and Raman spectroscopy study of single- and few-layered charge density wave material: 2H-TaSe2. Scientific Reports, 2013, 3, 2593.	3.3	120
22	Oriented graphene nanoribbons embedded in hexagonal boron nitride trenches. Nature Communications, 2017, 8, 14703.	12.8	119
23	Thickness-dependent patterning of MoS2 sheets with well-oriented triangular pits by heating in air. Nano Research, 2013, 6, 703-711.	10.4	118
24	Controlled Synthesis of Organic/Inorganic van der Waals Solid for Tunable Lightâ€“Matter Interactions. Advanced Materials, 2015, 27, 7800-7808.	21.0	109
25	Comparison of surface-enhanced Raman scattering on graphene oxide, reduced graphene oxide and graphene surfaces. Carbon, 2013, 62, 422-429.	10.3	107
26	Room-temperature 2D semiconductor activated vertical-cavity surface-emitting lasers. Nature Communications, 2017, 8, 543.	12.8	102
27	Thickness identification of two-dimensional materials by optical imaging. Nanotechnology, 2012, 23, 495713.	2.6	101
28	Fabrication of Graphene Nanodisk Arrays Using Nanosphere Lithography. Journal of Physical Chemistry C, 2009, 113, 6529-6532.	3.1	98
29	Raman Study on the G Mode of Graphene for Determination of Edge Orientation. ACS Nano, 2010, 4, 3175-3180.	14.6	90
30	Synthesis of Coâ€Doped MoS₂ Monolayers with Enhanced Valley Splitting. Advanced Materials, 2020, 32, e1906536.	21.0	84
31	Towards chirality control of graphene nanoribbons embedded in hexagonal boron nitride. Nature Materials, 2021, 20, 202-207.	27.5	80
32	Zone folding effect in Raman<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>G</mml:mi></mml:math>-band intensity of twisted bilayer graphene. Physical Review B, 2012, 86, .	3.2	79
33	Enhanced ultra-low-frequency interlayer shear modes in folded graphene layers. Nature Communications, 2014, 5, 4709.	12.8	77
34	Vaporâ€“liquidâ€“solid growth of large-area multilayer hexagonal boron nitride on dielectric substrates. Nature Communications, 2020, 11, 849.	12.8	75
35	Mass Production of Largeâ€Sized, Nonlayered 2D Nanosheets: Their Directed Synthesis by a Rapid â€œGelâ€Blowingâ€•Strategy, and Applications in Li/Na Storage and Catalysis. Advanced Materials, 2018, 30, e1803569.	21.0	74
36	Remarkable anisotropic phonon response in uniaxially strained few-layer black phosphorus. Nano Research, 2015, 8, 3944-3953.	10.4	68

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37	Controlled Growth and Reliable Thicknessâ€Dependent Properties of Organicâ€“Inorganic Perovskite Platelet Crystal. Advanced Functional Materials, 2016, 26, 5263-5270.	14.9	64
38	Engineering Valley Polarization of Monolayer WS₂: A Physical Doping Approach. Small, 2019, 15, e1805503.	10.0	62
39	High-Performance WSe₂ Photodetector Based on a Laser-Induced pâ€“n Junction. ACS Applied Materials & Interfaces, 2019, 11, 43330-43336.	8.0	61
40	Direct Observation of the Linear Dichroism Transition in Two-Dimensional Palladium Diselenide. Nano Letters, 2020, 20, 1172-1182.	9.1	61
41	High-performance polarization-sensitive photodetector based on a few-layered PdSe2 nanosheet. Nano Research, 2020, 13, 1780-1786.	10.4	60
42	Femtosecond UV-pump/visible-probe measurements of carrier dynamics in stacked graphene films. Applied Physics Letters, 2010, 97, 163103.	3.3	56
43	Raman spectra of out-of-plane phonons in bilayer graphene. Physical Review B, 2011, 84, .	3.2	55
44	The origin of sub-bands in the Raman D-band of graphene. Carbon, 2012, 50, 4252-4258.	10.3	54
45	Stacking sequence determines Raman intensities of observed interlayer shear modes in 2D layered materials â€“ A general bond polarizability model. Scientific Reports, 2015, 5, 14565.	3.3	51
46	Facile synthesis and shape evolution of highly symmetric 26-facet polyhedral microcrystals of Cu2O. CrystEngComm, 2009, 11, 2291.	2.6	50
47	Laser-based white-light source for high-speed underwater wireless optical communication and high-efficiency underwater solid-state lighting. Optics Express, 2018, 26, 19259.	3.4	50
48	Inâ€Plane Anisotropic Thermal Conductivity of Fewâ€Layered Transition Metal Dichalcogenide Tdâ€WTe₂. Advanced Materials, 2019, 31, e1804979.	21.0	45
49	Thickness-dependent azobenzene doping in mono- and few-layer graphene. Carbon, 2012, 50, 201-208.	10.3	44
50	Multicolor Broadband and Fast Photodetector Based on InGaAsâ€“Insulatorâ€“Graphene Hybrid Heterostructure. Advanced Electronic Materials, 2020, 6, 1901007.	5.1	44
51	Visualization of arrangements of carbon atoms in graphene layers by Raman mapping and atomic-resolution TEM. Scientific Reports, 2013, 3, 1195.	3.3	43
52	Influence of seeding promoters on the properties of CVD grown monolayer molybdenum disulfide. Nano Research, 2019, 12, 823-827.	10.4	39
53	Gbps Long-Distance Real-Time Visible Light Communications Using a High-Bandwidth GaN-Based Micro-LED. IEEE Photonics Journal, 2017, 9, 1-9.	2.0	37
54	Light Sources and Photodetectors Enabled by 2D Semiconductors. Small Methods, 2018, 2, 1800019.	8.6	35

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55	Uniform Decoration of Reduced Graphene Oxide Sheets with Gold Nanoparticles. Journal of Nanotechnology, 2012, 2012, 1-8.	3.4	34
56	Observation of double indirect interlayer exciton in WSe₂/WS₂ heterostructure. Optics Express, 2020, 28, 13260.	3.4	32
57	New Colloidal Lithographic Nanopatterns Fabricated by Combining Pre-Heating and Reactive Ion Etching. Nanoscale Research Letters, 2009, 4, 1324-1328.	5.7	30
58	Raman scattering investigation of twisted WS2/MoS2 heterostructures: interlayer mechanical coupling versus charge transfer. Nano Research, 2021, 14, 2215-2223.	10.4	29
59	Unveiling exceptionally robust valley contrast in AA- and AB-stacked bilayer WS₂. Nanoscale Horizons, 2019, 4, 396-403.	8.0	28
60	Evolution of Raman<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>G</mml:mi></mml:math>and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mi>G</mml:mi><mml:mo>â€²</mml:mo></mml:msup></mml:math> folded graphene layers. Physical Review B, 2014, 89, .	3.2	27
61	Extending the Spectral Responsivity of MoS₂ Phototransistors by Incorporating Upâ€Conversion Microcrystals. Advanced Optical Materials, 2018, 6, 1800660.	7.3	25
62	From Anomalous to Normal: Temperature Dependence of the Band Gap in Two-Dimensional Black Phosphorus. Physical Review Letters, 2020, 125, 156802.	7.8	23
63	Visualizing the Anomalous Charge Density Wave States in Graphene/NbSe₂ Heterostructures. Advanced Materials, 2020, 32, e2003746.	21.0	23
64	Antiâ€Stokes Photoluminescence of van der Waals Layered Semiconductor PbI₂. Advanced Optical Materials, 2017, 5, 1700609.	7.3	20
65	Tunable excitonic emission of monolayer WS2 for the optical detection of DNA nucleobases. Nano Research, 2018, 11, 1744-1754.	10.4	20
66	Probing magnetic-proximity-effect enlarged valley splitting in monolayer WSe2 by photoluminescence. Nano Research, 2018, 11, 6252-6259.	10.4	20
67	Effects of interlayer coupling on the excitons and electronic structures of WS2/hBN/MoS2 van der Waals heterostructures. Nano Research, 2022, 15, 2674-2681.	10.4	20
68	Effects of dielectric screening on the excitonic and critical points properties of WS₂/MoS₂ heterostructures. Nanoscale, 2020, 12, 23732-23739.	5.6	19
69	Optical properties of thickness-controlled PtSe₂thin films studiedviaspectroscopic ellipsometry. Physical Chemistry Chemical Physics, 2020, 22, 26383-26389.	2.8	19
70	Revealing electronic nature of broad bound exciton bands in two-dimensional semiconducting <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">W</mml:mi><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Mo</mml:mi><mml:msub><mml:mi	2.4	19
71	Observation of split defect-bound excitons in twisted WSe2/WSe2 homostructure. Applied Physics Letters, 2020, 117, .	3.3	18
72	Valley-polarized local excitons in WSe₂/WS₂ vertical heterostructures. Optics Express, 2020, 28, 22135.	3.4	18

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73	Direct observation of inner and outer Gâ€² band double-resonance Raman scattering in free standing graphene. Applied Physics Letters, 2012, 100, .	3.3	17
74	Strong magnetophonon resonance induced triple G-mode splitting in graphene on graphite probed by micromagneto Raman spectroscopy. Physical Review B, 2013, 88, .	3.2	17
75	Large-Area Monolayer MoS₂ Nanosheets on GaN Substrates for Light-Emitting Diodes and Valley-Spin Electronic Devices. ACS Applied Nano Materials, 2021, 4, 12127-12136.	5.0	17
76	Molecular ferroelectric/semiconductor interfacial memristors for artificial synapses. Npj Flexible Electronics, 2022, 6, .	10.7	17
77	A real-time Raman spectroscopy study of the dynamics of laser-thinning of MoS2 flakes to monolayers. AIP Advances, 2017, 7, .	1.3	16
78	Continuousâ€Wave Vertical Cavity Surfaceâ€Emitting Lasers based on Single Crystalline Lead Halide Perovskites. Advanced Optical Materials, 2021, 9, 2001982.	7.3	16
79	Spaceâ€Chargeâ€Stabilized Ferroelectric Polarization in Selfâ€Oriented Croconic Acid Films. Advanced Functional Materials, 2018, 28, 1705463.	14.9	15
80	Precise Layer Control of MoTe2 by Ozone Treatment. Nanomaterials, 2019, 9, 756.	4.1	15
81	Large-signal modulation characteristics of a GaN-based micro-LED for Gbps visible-light communication. Applied Physics Express, 2018, 11, 044101.	2.4	14
82	Probing quantum confinement effects on the excitonic property and electronic band structures of MoS2. Applied Surface Science, 2020, 519, 146262.	6.1	14
83	Selfâ€Limited Oxidation: A Route to Form Graphene Layers from Graphite by Oneâ€Step Heating. Small, 2010, 6, 2837-2841.	10.0	13
84	Competing Mechanisms for Photocurrent Induced at the Monolayerâ€“Multilayer Graphene Junction. Small, 2018, 14, e1800691.	10.0	13
85	Inverse design for directional emitter and power splitter based on photonic crystal waveguide with surface corrugations. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 2157.	2.1	12
86	Dewettingâ€Assisted Patterning of Organic Semiconductors for Microâ€OLED Arrays with a Pixel Size of 1ÂÂµm. Small Methods, 2022, 6, e2101509.	8.6	12
87	Probing near Dirac point electron-phonon interaction in graphene. Optical Materials Express, 2012, 2, 1713.	3.0	10
88	Low temperature photoresponse of monolayer tungsten disulphide. APL Materials, 2014, 2, .	5.1	10
89	Atomicâ€Layerâ€Tiâ€Doped Ga₂O₃ Thin Films with Tunable Optical Properties and Wide Ultraviolet Optoelectronic Responses. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100411.	2.4	10
90	2H Tantalum Disulfide Nanosheets as Substrates for Ultrasensitive SERS-Based Sensing. ACS Applied Nano Materials, 2022, 5, 8913-8920.	5.0	10

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91	Observation of lowâ€wavenumber outâ€ofâ€plane optical phonon in fewâ€layer graphene. Journal of Raman Spectroscopy, 2013, 44, 70-74.	2.5	9
92	Direct laser writing of vertical junctions in graphene oxide films for broad spectral position-sensitive detectors. Nanophotonics, 2018, 7, 1563-1570.	6.0	9
93	Remarkable quality improvement of as-grown monolayer MoS2 by sulfur vapor pretreatment of SiO2/Si substrates. Nanoscale, 2020, 12, 1958-1966.	5.6	9
94	Liquidâ€Metalâ€Induced Memristor Behavior in Polymer Insulators. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000050.	2.4	9
95	Unveiling the origin of anomalous low-frequency Raman mode in CVD-grown monolayer WS2. Nano Research, 2021, 14, 4314-4320.	10.4	9
96	Magnetic oscillation of optical phonon in ABA- and ABC-stacked trilayer graphene. Physical Review B, 2015, 91, .	3.2	8
97	Electrical field tuning of magneto-Raman scattering in monolayer graphene. Nano Research, 2015, 8, 1139-1147.	10.4	8
98	Intrinsic excitonic emission and valley Zeeman splitting in epitaxial MS2 (M = Mo and W) monolayers on hexagonal boron nitride. Nano Research, 2018, 11, 6227-6236.	10.4	8
99	Observation of Strong Valley Magnetic Response in Monolayer Transition Metal Dichalcogenide Alloys of Mo_{0.5}W_{0.5}Se₂ and Mo_{0.5}W_{0.5}Se₂/WS₂ Heterostructures. ACS Nano, 2021, 15, 8397-8406.	14.6	8
100	Optical properties of Sub-30 nm-thick ZnS films studied by spectroscopic ellipsometry. Materials Science in Semiconductor Processing, 2022, 142, 106454.	4.0	8
101	Versatile band structure and electronâ€”phonon coupling in layered PtSe2 with strong interlayer interaction. Nano Research, 2022, 15, 6613-6619.	10.4	8
102	Laser-scribed highly responsive infrared detectors with semi-reduced graphene oxide. Applied Physics Express, 2018, 11, 015101.	2.4	6
103	Self-assembled non-volatile micro memory arrays of molecular ferroelectrics. Journal of Materials Chemistry C, 2020, 8, 16742-16748.	5.5	6
104	Spatial variations of valley splitting in monolayer transition metal dichalcogenide. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 585-592.	17.3	5
105	Waferâ€Scale Diisopropylammonium Bromide Films for Lowâ€Power Lateral Organic Ferroelectric Capacitors. Advanced Electronic Materials, 2021, 7, 2000778.	5.1	4
106	Controlled Synthesis of Pure-Phase GaAs Nanowires through Shear Tension. ACS Photonics, 2021, 8, 2889-2897.	6.6	4
107	Single-Crystalline Thin-Film Memory Arrays of Molecular Ferroelectrics with Ultralow Operation Voltages. , 2022, 4, 758-763.		4
108	Stacking monolayers at will: A scalable device optimization strategy for two-dimensional semiconductors. Nano Research, 2022, 15, 6620-6627.	10.4	4

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109	Magneto-Optical Study of Defect Induced Sharp Photoluminescence in LaAlO3 and SrTiO3. Scientific Reports, 2016, 6, 33145.	3.3	3
110	Photovoltage Reversal in Organic Optoelectronic Devices with Insulator-Semiconductor Interfaces. Materials, 2018, 11, 1530.	2.9	3
111	Deterministic and Scalable Generation of Exciton Emitters in 2D Semiconductor Nanodisks. Advanced Optical Materials, 2022, 10, .	7.3	3
112	Origin and Quenching of Novel ultraviolet and blue emission in NdGaO3: Concept of Super-Hydrogenic Dopants. Scientific Reports, 2016, 6, 36352.	3.3	2
113	Whiteâ€Light Driven Resonant Emission from a Monolayer Semiconductor. Advanced Materials, 2022, , 2103527.	21.0	2
114	Passively Q-switched Nd:GdYTaO4 laser based on two-dimensional MoS2 saturable absorber. Infrared Physics and Technology, 2019, 102, 102985.	2.9	1
115	Raman Spectroscopy Study of Two-Dimensional Materials Under Strain. Springer Series in Materials Science, 2019, , 111-129.	0.6	1
116	Optical characterization of two-dimensional semiconductors. , 2020, , 135-166.		1
117	The photoresponsivity of monolayer molybdenum disulfide grown by chemical vapor deposition with different seeding promoters. Applied Physics Express, 2020, 13, 071006.	2.4	1
118	Organic semiconductor/water interfaces for photoelectrical viscosity sensing. Electrochemistry Communications, 2018, 95, 18-22.	4.7	0
119	Fabrication of Uniform Gold Nanopatterns on Graphene by Using Nanosphere Lithography. Journal of Nanoscience and Nanotechnology, 2019, 19, 2851-2855.	0.9	0