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	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
2	Optical properties of Sub-30 nm-thick ZnS films studied by spectroscopic ellipsometry. Materials Science in Semiconductor Processing, 2022, 142, 106454.	4.0	8
3	Deterministic and Scalable Generation of Exciton Emitters in 2D Semiconductor Nanodisks. Advanced Optical Materials, 2022, 10, .	7.3	3
4	Whiteâ€Light Driven Resonant Emission from a Monolayer Semiconductor. Advanced Materials, 2022, , 2103527.	21.0	2
5	Dewettingâ€Assisted Patterning of Organic Semiconductors for Microâ€OLED Arrays with a Pixel Size of 1ÂÂµm. Small Methods, 2022, 6, e2101509.	8.6	12
6	Single-Crystalline Thin-Film Memory Arrays of Molecular Ferroelectrics with Ultralow Operation Voltages. , 2022, 4, 758-763.		4
7	Versatile band structure and electronâ€"phonon coupling in layered PtSe2 with strong interlayer interaction. Nano Research, 2022, 15, 6613-6619.	10.4	8
8	Molecular ferroelectric/semiconductor interfacial memristors for artificial synapses. Npj Flexible Electronics, 2022, 6, .	10.7	17
9	Stacking monolayers at will: A scalable device optimization strategy for two-dimensional semiconductors. Nano Research, 2022, 15, 6620-6627.	10.4	4
10	2H Tantalum Disulfide Nanosheets as Substrates for Ultrasensitive SERS-Based Sensing. ACS Applied Nano Materials, 2022, 5, 8913-8920.	5.0	10
11	Waferâ€Scale Diisopropylammonium Bromide Films for Lowâ€Power Lateral Organic Ferroelectric Capacitors. Advanced Electronic Materials, 2021, 7, 2000778.	5.1	4
12	Towards chirality control of graphene nanoribbons embedded in hexagonal boron nitride. Nature Materials, 2021, 20, 202-207.	27.5	80
13	Raman scattering investigation of twisted WS2/MoS2 heterostructures: interlayer mechanical coupling versus charge transfer. Nano Research, 2021, 14, 2215-2223.	10.4	29
14	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
15	Continuousâ€Wave Vertical Cavity Surfaceâ€Emitting Lasers based on Single Crystalline Lead Halide Perovskites. Advanced Optical Materials, 2021, 9, 2001982.	7.3	16
16	Unveiling the origin of anomalous low-frequency Raman mode in CVD-grown monolayer WS2. Nano Research, 2021, 14, 4314-4320.	10.4	9
17	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
18	Controlled Synthesis of Pure-Phase GaAs Nanowires through Shear Tension. ACS Photonics, 2021, 8, 2889-2897.	6.6	4

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19	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
20	Remarkable quality improvement of as-grown monolayer MoS2 by sulfur vapor pretreatment of SiO2/Si substrates. Nanoscale, 2020, 12, 1958-1966.	5.6	9
21	Spatial variations of valley splitting in monolayer transition metal dichalcogenide. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 585-592.	17.3	5
22	Optical characterization of two-dimensional semiconductors. , 2020, , 135-166.		1
23	From Anomalous to Normal: Temperature Dependence of the Band Gap in Two-Dimensional Black Phosphorus. Physical Review Letters, 2020, 125, 156802.	7.8	23
24	Visualizing the Anomalous Charge Density Wave States in Graphene/NbSe₂ Heterostructures. Advanced Materials, 2020, 32, e2003746.	21.0	23
25	Effects of dielectric screening on the excitonic and critical points properties of WS₂/MoS₂ heterostructures. Nanoscale, 2020, 12, 23732-23739.	5.6	19
26	Optical properties of thickness-controlled PtSe₂thin films studiedviaspectroscopic ellipsometry. Physical Chemistry Chemical Physics, 2020, 22, 26383-26389.	2.8	19
27	Self-assembled non-volatile micro memory arrays of molecular ferroelectrics. Journal of Materials Chemistry C, 2020, 8, 16742-16748.	5.5	6
28	Observation of split defect-bound excitons in twisted WSe2/WSe2 homostructure. Applied Physics Letters, 2020, 117, .	3.3	18
29	The photoresponsivity of monolayer molybdenum disulfide grown by chemical vapor deposition with different seeding promoters. Applied Physics Express, 2020, 13, 071006.	2.4	1
30	Liquidâ€Metalâ€Induced Memristor Behavior in Polymer Insulators. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000050.	2.4	9
31	Direct Observation of the Linear Dichroism Transition in Two-Dimensional Palladium Diselenide. Nano Letters, 2020, 20, 1172-1182.	9.1	61
32	Multicolor Broadband and Fast Photodetector Based on InGaAsâ€“Insulatorâ€“Graphene Hybrid Heterostructure. Advanced Electronic Materials, 2020, 6, 1901007.	5.1	44
33	Synthesis of Coâ€Doped MoS₂ Monolayers with Enhanced Valley Splitting. Advanced Materials, 2020, 32, e1906536.	21.0	84
34	High-performance polarization-sensitive photodetector based on a few-layered PdSe2 nanosheet. Nano Research, 2020, 13, 1780-1786.	10.4	60
35	Probing quantum confinement effects on the excitonic property and electronic band structures of MoS2. Applied Surface Science, 2020, 519, 146262.	6.1	14
36	Vaporâ€“liquidâ€“solid growth of large-area multilayer hexagonal boron nitride on dielectric substrates. Nature Communications, 2020, 11, 849.	12.8	75

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37	Observation of double indirect interlayer exciton in WSe₂/WS₂ heterostructure. Optics Express, 2020, 28, 13260.	3.4	32
38	Valley-polarized local excitons in WSe₂/WS₂ vertical heterostructures. Optics Express, 2020, 28, 22135.	3.4	18
39	Passively Q-switched Nd:GdYTaO4 laser based on two-dimensional MoS2 saturable absorber. Infrared Physics and Technology, 2019, 102, 102985.	2.9	1
40	High-Performance WSe₂ Photodetector Based on a Laser-Induced pâ€“n Junction. ACS Applied Materials & Interfaces, 2019, 11, 43330-43336.	8.0	61
41	Unveiling exceptionally robust valley contrast in AA- and AB-stacked bilayer WS₂. Nanoscale Horizons, 2019, 4, 396-403.	8.0	28
42	Precise Layer Control of MoTe2 by Ozone Treatment. Nanomaterials, 2019, 9, 756.	4.1	15
43	Influence of seeding promoters on the properties of CVD grown monolayer molybdenum disulfide. Nano Research, 2019, 12, 823-827.	10.4	39
44	Engineering Valley Polarization of Monolayer WS₂: A Physical Doping Approach. Small, 2019, 15, e1805503.	10.0	62
45	Inâ€Plane Anisotropic Thermal Conductivity of Fewâ€Layered Transition Metal Dichalcogenide Tdâ€WTe₂. Advanced Materials, 2019, 31, e1804979.	21.0	45
46	Raman Spectroscopy Study of Two-Dimensional Materials Under Strain. Springer Series in Materials Science, 2019, , 111-129.	0.6	1
47	Fabrication of Uniform Gold Nanopatterns on Graphene by Using Nanosphere Lithography. Journal of Nanoscience and Nanotechnology, 2019, 19, 2851-2855.	0.9	0
48	Laser-scribed highly responsive infrared detectors with semi-reduced graphene oxide. Applied Physics Express, 2018, 11, 015101.	2.4	6
49	Spaceâ€Chargeâ€Stabilized Ferroelectric Polarization in Selfâ€Oriented Croconic Acid Films. Advanced Functional Materials, 2018, 28, 1705463.	14.9	15
50	Light Sources and Photodetectors Enabled by 2D Semiconductors. Small Methods, 2018, 2, 1800019.	8.6	35
51	Large-signal modulation characteristics of a GaN-based micro-LED for Gbps visible-light communication. Applied Physics Express, 2018, 11, 044101.	2.4	14
52	Tunable excitonic emission of monolayer WS2 for the optical detection of DNA nucleobases. Nano Research, 2018, 11, 1744-1754.	10.4	20
53	Optical Properties of 2D Semiconductor WS₂. Advanced Optical Materials, 2018, 6, 1700767.	7.3	265
54	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

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55	Organic semiconductor/water interfaces for photoelectrical viscosity sensing. Electrochemistry Communications, 2018, 95, 18-22.	4.7	0
56	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
57	Photovoltage Reversal in Organic Optoelectronic Devices with Insulator-Semiconductor Interfaces. Materials, 2018, 11, 1530.	2.9	3
58	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
59	Competing Mechanisms for Photocurrent Induced at the Monolayerâ€“Multilayer Graphene Junction. Small, 2018, 14, e1800691.	10.0	13
60	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
61	Probing magnetic-proximity-effect enlarged valley splitting in monolayer WSe2 by photoluminescence. Nano Research, 2018, 11, 6252-6259.	10.4	20
62	Direct laser writing of vertical junctions in graphene oxide films for broad spectral position-sensitive detectors. Nanophotonics, 2018, 7, 1563-1570.	6.0	9
63	Extending the Spectral Responsivity of MoS₂ Phototransistors by Incorporating Upâ€Conversion Microcrystals. Advanced Optical Materials, 2018, 6, 1800660.	7.3	25
64	Oriented graphene nanoribbons embedded in hexagonal boron nitride trenches. Nature Communications, 2017, 8, 14703.	12.8	119
65	Antiâ€Stokes Photoluminescence of van der Waals Layered Semiconductor PbI₂. Advanced Optical Materials, 2017, 5, 1700609.	7.3	20
66	Room-temperature 2D semiconductor activated vertical-cavity surface-emitting lasers. Nature Communications, 2017, 8, 543.	12.8	102
67	A real-time Raman spectroscopy study of the dynamics of laser-thinning of MoS2 flakes to monolayers. AIP Advances, 2017, 7, .	1.3	16
68	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
69	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
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	Controlled Growth and Reliable Thicknessâ€Dependent Properties of Organicâ€“Inorganic Perovskite Platelet Crystal. Advanced Functional Materials, 2016, 26, 5263-5270.	14.9	64
72	Origin and Quenching of Novel ultraviolet and blue emission in NdGaO3: Concept of Super-Hydrogenic Dopants. Scientific Reports, 2016, 6, 36352.	3.3	2

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73	Periodic Organicâ€“Inorganic Halide Perovskite Microplatelet Arrays on Silicon Substrates for Roomâ€Temperature Lasing. Advanced Science, 2016, 3, 1600137.	11.2	121
74	Magneto-Optical Study of Defect Induced Sharp Photoluminescence in LaAlO3 and SrTiO3. Scientific Reports, 2016, 6, 33145.	3.3	3
75	Electrically Tunable Valley-Light Emitting Diode (νLED) Based on CVD-Grown Monolayer WS₂. Nano Letters, 2016, 16, 1560-1567.	9.1	175
76	Magnetic oscillation of optical phonon in ABA- and ABC-stacked trilayer graphene. Physical Review B, 2015, 91, .	3.2	8
77	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
78	Controlled Synthesis of Organic/Inorganic van der Waals Solid for Tunable Lightâ€“Matter Interactions. Advanced Materials, 2015, 27, 7800-7808.	21.0	109
79	Remarkable anisotropic phonon response in uniaxially strained few-layer black phosphorus. Nano Research, 2015, 8, 3944-3953.	10.4	68
80	Observation of Excitonic Fine Structure in a 2D Transition-Metal Dichalcogenide Semiconductor. ACS Nano, 2015, 9, 647-655.	14.6	288
81	Silane-catalysed fast growth of large single-crystalline graphene on hexagonal boron nitride. Nature Communications, 2015, 6, 6499.	12.8	173
82	Dichroic spinâ€“valley photocurrent in monolayer molybdenum disulphide. Nature Communications, 2015, 6, 7636.	12.8	128
83	Strain-induced directâ€“indirect bandgap transition and phonon modulation in monolayer WS2. Nano Research, 2015, 8, 2562-2572.	10.4	323
84	Thermal conductivity determination of suspended mono- and bilayer WS2 by Raman spectroscopy. Nano Research, 2015, 8, 1210-1221.	10.4	280
85	Electrical field tuning of magneto-Raman scattering in monolayer graphene. Nano Research, 2015, 8, 1139-1147.	10.4	8
86	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
87	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
88	Low temperature photoresponse of monolayer tungsten disulphide. APL Materials, 2014, 2, .	5.1	10
89	Enhanced ultra-low-frequency interlayer shear modes in folded graphene layers. Nature Communications, 2014, 5, 4709.	12.8	77
90	Observation of lowâ€wavenumber outâ€ofâ€plane optical phonon in fewâ€layer graphene. Journal of Raman Spectroscopy, 2013, 44, 70-74.	2.5	9

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91	Thickness-dependent patterning of MoS2 sheets with well-oriented triangular pits by heating in air. Nano Research, 2013, 6, 703-711.	10.4	118
92	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
93	Nonblinking, Intense Two-Dimensional Light Emitter: Monolayer WS₂ Triangles. ACS Nano, 2013, 7, 10985-10994.	14.6	281
94	Mechanical Exfoliation and Characterization of Singleâ€•and Fewâ€Łayer Nanosheets of WSe₂, TaS₂, and TaSe₂. Small, 2013, 9, 1974-1981.	10.0	544
95	Visualization of arrangements of carbon atoms in graphene layers by Raman mapping and atomic-resolution TEM. Scientific Reports, 2013, 3, 1195.	3.3	43
96	Raman Spectroscopy Study of Lattice Vibration and Crystallographic Orientation of Monolayer MoS₂ under Uniaxial Strain. Small, 2013, 9, 2857-2861.	10.0	363
97	Comparison of surface-enhanced Raman scattering on graphene oxide, reduced graphene oxide and graphene surfaces. Carbon, 2013, 62, 422-429.	10.3	107
98	Contrast and Raman spectroscopy study of single- and few-layered charge density wave material: 2H-TaSe2. Scientific Reports, 2013, 3, 2593.	3.3	120
99	Probing near Dirac point electron-phonon interaction in graphene. Optical Materials Express, 2012, 2, 1713.	3.0	10
100	Thickness identification of two-dimensional materials by optical imaging. Nanotechnology, 2012, 23, 495713.	2.6	101
101	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
102	Uniform Decoration of Reduced Graphene Oxide Sheets with Gold Nanoparticles. Journal of Nanotechnology, 2012, 2012, 1-8.	3.4	34
103	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
104	Thickness-dependent azobenzene doping in mono- and few-layer graphene. Carbon, 2012, 50, 201-208.	10.3	44
105	The origin of sub-bands in the Raman D-band of graphene. Carbon, 2012, 50, 4252-4258.	10.3	54
106	Raman Characterization of ABA- and ABC-Stacked Trilayer Graphene. ACS Nano, 2011, 5, 8760-8768.	14.6	184
107	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
108	Fabrication of Co3O4-reduced graphene oxide scrolls for high-performance supercapacitor electrodes. Physical Chemistry Chemical Physics, 2011, 13, 14462.	2.8	215

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109	Raman spectra of out-of-plane phonons in bilayer graphene. Physical Review B, 2011, 84, .	3.2	55
110	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
111	Hysteresis of Electronic Transport in Graphene Transistors. ACS Nano, 2010, 4, 7221-7228.	14.6	526
112	Selfâ€Limited Oxidation: A Route to Form Graphene Layers from Graphite by Oneâ€Step Heating. Small, 2010, 6, 2837-2841.	10.0	13
113	Femtosecond UV-pump/visible-probe measurements of carrier dynamics in stacked graphene films. Applied Physics Letters, 2010, 97, 163103.	3.3	56
114	Raman Study on the G Mode of Graphene for Determination of Edge Orientation. ACS Nano, 2010, 4, 3175-3180.	14.6	90
115	Stacking-Dependent Optical Conductivity of Bilayer Graphene. ACS Nano, 2010, 4, 4074-4080.	14.6	145
116	New Colloidal Lithographic Nanopatterns Fabricated by Combining Pre-Heating and Reactive Ion Etching. Nanoscale Research Letters, 2009, 4, 1324-1328.	5.7	30
117	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
118	Fabrication of Graphene Nanodisk Arrays Using Nanosphere Lithography. Journal of Physical Chemistry C, 2009, 113, 6529-6532.	3.1	98
119	Facile synthesis and shape evolution of highly symmetric 26-facet polyhedral microcrystals of Cu2O. CrystEngComm, 2009, 11, 2291.	2.6	50