

Lain-Jong Li

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#	Paper	IF	Citations
427	The chemistry of two-dimensional layered transition metal dichalcogenide nanosheets. <i>Nature Chemistry</i> , 2013 , 5, 263-75	17.2	6534
426	Synthesis of large-area MoS ₂ atomic layers with chemical vapor deposition. <i>Advanced Materials</i> , 2012 , 24, 2320-5	23.6	2511
425	Growth of large-area and highly crystalline MoS ₂ thin layers on insulating substrates. <i>Nano Letters</i> , 2012 , 12, 1538-44	11.3	1526
424	Integrated circuits based on bilayer MoS ₂ transistors. <i>Nano Letters</i> , 2012 , 12, 4674-80	11.3	1326
423	Synthesis of few-layer hexagonal boron nitride thin film by chemical vapor deposition. <i>Nano Letters</i> , 2010 , 10, 4134-9	11.3	883
422	Monolayer MoS ₂ heterojunction solar cells. <i>ACS Nano</i> , 2014 , 8, 8317-22	16.4	862
421	NANOELECTRONICS. Epitaxial growth of a monolayer WSe ₂ -MoS ₂ lateral p-n junction with an atomically sharp interface. <i>Science</i> , 2015 , 349, 524-8	32.2	791
420	van der Waals epitaxy of MoS ₂ layers using graphene as growth templates. <i>Nano Letters</i> , 2012 , 12, 2784-91	11.3	777
419	Janus monolayers of transition metal dichalcogenides. <i>Nature Nanotechnology</i> , 2017 , 12, 744-749	28	759
418	High-quality thin graphene films from fast electrochemical exfoliation. <i>ACS Nano</i> , 2011 , 5, 2332-9	16.4	748
417	Large-area synthesis of highly crystalline WSe ₂ monolayers and device applications. <i>ACS Nano</i> , 2014 , 8, 923-30	16.4	719
416	High-gain phototransistors based on a CVD MoS ₂ monolayer. <i>Advanced Materials</i> , 2013 , 25, 3456-61	23.6	716
415	Ultrahigh-gain photodetectors based on atomically thin graphene-MoS ₂ heterostructures. <i>Scientific Reports</i> , 2014 , 4, 3826	4.7	663
414	Highly flexible MoS ₂ thin-film transistors with ion gel dielectrics. <i>Nano Letters</i> , 2012 , 12, 4013-7	11.3	649
413	Highly efficient electrocatalytic hydrogen production by MoS ₂ grown on graphene-protected 3D Ni foams. <i>Advanced Materials</i> , 2013 , 25, 756-60	23.6	622
412	Recent advances in controlled synthesis of two-dimensional transition metal dichalcogenides via vapour deposition techniques. <i>Chemical Society Reviews</i> , 2015 , 44, 2744-56	57.5	550
411	Wafer-scale MoS ₂ thin layers prepared by MoO ₃ sulfurization. <i>Nanoscale</i> , 2012 , 4, 6637-41	7.5	524

410	Synthesis and transfer of single-layer transition metal disulfides on diverse surfaces. <i>Nano Letters</i> , 2013 , 13, 1852-7	11.3	523
409	Doping single-layer graphene with aromatic molecules. <i>Small</i> , 2009 , 5, 1422-6	10.8	490
408	Few-Layer MoS2 with high broadband Photogain and fast optical switching for use in harsh environments. <i>ACS Nano</i> , 2013 , 7, 3905-11	16.4	466
407	Electrical detection of DNA hybridization with single-base specificity using transistors based on CVD-grown graphene sheets. <i>Advanced Materials</i> , 2010 , 22, 1649-53	23.6	441
406	Work function engineering of graphene electrode via chemical doping. <i>ACS Nano</i> , 2010 , 4, 2689-94	16.4	439
405	Exceptional tunability of band energy in a compressively strained trilayer MoS2 sheet. <i>ACS Nano</i> , 2013 , 7, 7126-31	16.4	425
404	Electrical and Spectroscopic Characterizations of Ultra-Large Reduced Graphene Oxide Monolayers. <i>Chemistry of Materials</i> , 2009 , 21, 5674-5680	9.5	420
403	Determination of band alignment in the single-layer MoS2/WSe2 heterojunction. <i>Nature Communications</i> , 2015 , 6, 7666	16.9	402
402	Monolayer MoSe2 grown by chemical vapor deposition for fast photodetection. <i>ACS Nano</i> , 2014 , 8, 8582-80	16.9	402
401	Graphene-modified LiFePO4 cathode for lithium ion battery beyond theoretical capacity. <i>Nature Communications</i> , 2013 , 4, 1687	16.9	383
400	Graphene and two-dimensional materials for silicon technology. <i>Nature</i> , 2019 , 573, 507-518	47.5	377
399	Nanoelectronic biosensors based on CVD grown graphene. <i>Nanoscale</i> , 2010 , 2, 1485-8	7.5	347
398	Selective decoration of Au nanoparticles on monolayer MoS2 single crystals. <i>Scientific Reports</i> , 2013 , 3, 1839	4.7	337
397	Direct imaging of band profile in single layer MoS2 on graphite: quasiparticle energy gap, metallic edge states, and edge band bending. <i>Nano Letters</i> , 2014 , 14, 2443-7	11.3	337
396	Heterostructures based on two-dimensional layered materials and their potential applications. <i>Materials Today</i> , 2016 , 19, 322-335	21.5	312
395	Role of metal contacts in high-performance phototransistors based on WSe2 monolayers. <i>ACS Nano</i> , 2014 , 8, 8653-61	16.4	305
394	Atomically thin resonant tunnel diodes built from synthetic van der Waals heterostructures. <i>Nature Communications</i> , 2015 , 6, 7311	16.9	298
393	Heterostructured WS2 /CH3 NH3 PbI3 Photoconductors with Suppressed Dark Current and Enhanced Photodetectivity. <i>Advanced Materials</i> , 2016 , 28, 3683-9	23.6	303

392	Intrinsic homogeneous linewidth and broadening mechanisms of excitons in monolayer transition metal dichalcogenides. <i>Nature Communications</i> , 2015 , 6, 8315	16.9	301
391	Enhancing the conductivity of transparent graphene films via doping. <i>Nanotechnology</i> , 2010 , 21, 2852053,3		293
390	Graphene-based biosensors for detection of bacteria and their metabolic activities. <i>Journal of Materials Chemistry</i> , 2011 , 21, 12358		291
389	CoP nanosheet assembly grown on carbon cloth: A highly efficient electrocatalyst for hydrogen generation. <i>Nano Energy</i> , 2015 , 15, 634-641	16.9	285
388	Second harmonic generation from artificially stacked transition metal dichalcogenide twisted bilayers. <i>ACS Nano</i> , 2014 , 8, 2951-8	16.4	283
387	Bandgap tunability at single-layer molybdenum disulphide grain boundaries. <i>Nature Communications</i> , 2015 , 6, 6298	16.9	279
386	Toward the extraction of single species of single-walled carbon nanotubes using fluorene-based polymers. <i>Nano Letters</i> , 2007 , 7, 3013-7	11.3	280
385	Self-assembly of hierarchical MoS _x /CNT nanocomposites (2). <i>Scientific Reports</i> , 2013 , 3, 2169	4.7	266
384	Intercorrelated In-Plane and Out-of-Plane Ferroelectricity in Ultrathin Two-Dimensional Layered Semiconductor InSe. <i>Nano Letters</i> , 2018 , 18, 1253-1258	11.3	263
383	Interlayer couplings, Moiré patterns, and 2D electronic superlattices in MoS/WSe hetero-bilayers. <i>Science Advances</i> , 2017 , 3, e1601459	13.9	257
382	Direct formation of wafer scale graphene thin layers on insulating substrates by chemical vapor deposition. <i>Nano Letters</i> , 2011 , 11, 3612-6	11.3	247
381	Graphene/MoS ₂ heterostructures for ultrasensitive detection of DNA hybridisation. <i>Advanced Materials</i> , 2014 , 26, 4838-44	23.6	243
380	Optical properties of monolayer transition metal dichalcogenides probed by spectroscopic ellipsometry. <i>Applied Physics Letters</i> , 2014 , 105, 201905	3.3	243
379	Spectroscopic signatures for interlayer coupling in MoS ₂ -WSe ₂ van der Waals stacking. <i>ACS Nano</i> , 2014 , 8, 9649-56	16.4	227
378	Highly efficient restoration of graphitic structure in graphene oxide using alcohol vapors. <i>ACS Nano</i> , 2010 , 4, 5285-92	16.4	224
377	Nitrogen-doped graphene sheets grown by chemical vapor deposition: synthesis and influence of nitrogen impurities on carrier transport. <i>ACS Nano</i> , 2013 , 7, 6522-32	16.4	223
376	Diameter-selective encapsulation of metallocenes in single-walled carbon nanotubes. <i>Nature Materials</i> , 2005 , 4, 481-5	26.5	220
375	Mode locking of ceramic Nd:yttrium aluminum garnet with graphene as a saturable absorber. <i>Applied Physics Letters</i> , 2010 , 96, 031106	3.3	208

374	Pressure-dependent optical and vibrational properties of monolayer molybdenum disulfide. <i>Nano Letters</i> , 2015 , 15, 346-53	11.3	212
373	Symmetry breaking of graphene monolayers by molecular decoration. <i>Physical Review Letters</i> , 2009 , 102, 135501	7.3	206
372	Giant photoluminescence enhancement in tungsten-diselenide-gold plasmonic hybrid structures. <i>Nature Communications</i> , 2016 , 7, 11283	16.9	198
371	Epitaxial Growth of Two-Dimensional Layered Transition-Metal Dichalcogenides: Growth Mechanism, Controllability, and Scalability. <i>Chemical Reviews</i> , 2018 , 118, 6134-6150	66.4	196
370	Piezoelectric effect in chemical vapour deposition-grown atomic-monolayer triangular molybdenum disulfide piezotronics. <i>Nature Communications</i> , 2015 , 6, 7430	16.9	186
369	Ultrafast generation of pseudo-magnetic field for valley excitons in WSe ₂ monolayers. <i>Science</i> , 2014 , 346, 1205-8	32.2	188
368	Strain engineering and epitaxial stabilization of halide perovskites. <i>Nature</i> , 2020 , 577, 209-215	47.5	190
367	Opening an electrical band gap of bilayer graphene with molecular doping. <i>ACS Nano</i> , 2011 , 5, 7517-24	16.4	187
366	Layer-by-layer graphene/TCNQ stacked films as conducting anodes for organic solar cells. <i>ACS Nano</i> , 2012 , 6, 5031-9	16.4	185
365	Wafer-scale single-crystal hexagonal boron nitride monolayers on Cu ²⁺ (111). <i>Nature</i> , 2020 , 579, 219-223	47.5	178
364	Emerging energy applications of two-dimensional layered transition metal dichalcogenides. <i>Nano Energy</i> , 2015 , 18, 293-305	16.9	171
363	Strong Rashba-Edelstein Effect-Induced Spin-Orbit Torques in Monolayer Transition Metal Dichalcogenide/Ferromagnet Bilayers. <i>Nano Letters</i> , 2016 , 16, 7514-7520	11.3	171
362	Graphene-based high-efficiency surface-enhanced Raman scattering-active platform for sensitive and multiplex DNA detection. <i>Analytical Chemistry</i> , 2012 , 84, 4622-7	7.7	168
361	Nitrogen-Doped Nanoporous Carbon Membranes with Co/CoP Janus-Type Nanocrystals as Hydrogen Evolution Electrode in Both Acidic and Alkaline Environments. <i>ACS Nano</i> , 2017 , 11, 4358-4364	16.4	166
360	(n,m) Selectivity of single-walled carbon nanotubes by different carbon precursors on Co-Mo catalysts. <i>Journal of the American Chemical Society</i> , 2007 , 129, 9014-9	16	166
359	Direct measurement of exciton valley coherence in monolayer WSe ₂ . <i>Nature Physics</i> , 2016 , 12, 677-682	16	164
358	Enhanced thermopower of graphene films with oxygen plasma treatment. <i>ACS Nano</i> , 2011 , 5, 2749-55	16.4	160
357	Effective doping of single-layer graphene from underlying SiO ₂ substrates. <i>Physical Review B</i> , 2009 , 79,	3.3	159

356	Enhanced thermoelectric performance of PEDOT:PSS flexible bulky papers by treatment with secondary dopants. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 94-100	9.4	156
355	Comparative study on MoS ₂ and WS ₂ for electrocatalytic water splitting. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 12302-12309	6.7	155
354	One-step growth of graphene-carbon nanotube hybrid materials by chemical vapor deposition. <i>Carbon</i> , 2011 , 49, 2944-2949	10.1	154
353	Metal-Organic Framework-Based Separators for Enhancing Li-Battery Stability: Mechanism of Mitigating Polysulfide Diffusion. <i>ACS Energy Letters</i> , 2017 , 2, 2362-2367	19.7	153
352	Ultrafast transient terahertz conductivity of monolayer MoS ₂ and WSe ₂ grown by chemical vapor deposition. <i>ACS Nano</i> , 2014 , 8, 11147-53	16.4	155
351	Label-free detection of DNA hybridization using transistors based on CVD grown graphene. <i>Biosensors and Bioelectronics</i> , 2013 , 41, 103-9	11.6	152
350	Ultra-large single-layer graphene obtained from solution chemical reduction and its electrical properties. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 2164-9	3.5	153
349	Using oxidation to increase the electrical conductivity of carbon nanotube electrodes. <i>Carbon</i> , 2009 , 47, 1867-1870	10.1	144
348	Extraordinarily Stretchable All-Carbon Collaborative Nanoarchitectures for Epidermal Sensors. <i>Advanced Materials</i> , 2017 , 29, 1606411	23.6	142
347	Recognizing the Mechanism of Sulfurized Polyacrylonitrile Cathode Materials for Li-Batteries and beyond in Al-Batteries. <i>ACS Energy Letters</i> , 2018 , 3, 2899-2907	19.7	139
346	Photoluminescence Enhancement and Structure Repairing of Monolayer MoSe ₂ by Hydrohalic Acid Treatment. <i>ACS Nano</i> , 2016 , 10, 1454-61	16.4	136
345	Growth of large-sized graphene thin-films by liquid precursor-based chemical vapor deposition under atmospheric pressure. <i>Carbon</i> , 2011 , 49, 3672-3678	10.1	132
344	Stable mode-locked fiber laser based on CVD fabricated graphene saturable absorber. <i>Optics Express</i> , 2012 , 20, 2460-5	3.2	135
343	Two-dimensional materials with piezoelectric and ferroelectric functionalities. <i>Npj 2D Materials and Applications</i> , 2018 , 2,	8.5	132
342	High-Sulfur-Vacancy Amorphous Molybdenum Sulfide as a High Current Electrocatalyst in Hydrogen Evolution. <i>Small</i> , 2016 , 12, 5530-5537	10.8	133
341	Interfacing glycosylated carbon-nanotube-network devices with living cells to detect dynamic secretion of biomolecules. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 2723-6	16.1	132
340	Probing Critical Point Energies of Transition Metal Dichalcogenides: Surprising Indirect Gap of Single Layer WSe ₂ . <i>Nano Letters</i> , 2015 , 15, 6494-500	11.3	130
339	Photoelectrical response in single-layer graphene transistors. <i>Small</i> , 2009 , 5, 2005-11	10.8	130

338	Strain distributions and their influence on electronic structures of WSe-MoS laterally strained heterojunctions. <i>Nature Nanotechnology</i> , 2018 , 13, 152-158	28	129
337	DNA sensing by field-effect transistors based on networks of carbon nanotubes. <i>Journal of the American Chemical Society</i> , 2007 , 129, 14427-32	16	128
336	Multidirection Piezoelectricity in Mono- and Multilayered Hexagonal HnSe. <i>ACS Nano</i> , 2018 , 12, 4976-4986	16.4	125
335	Highly acid-durable carbon coated Co3O4 nanoarrays as efficient oxygen evolution electrocatalysts. <i>Nano Energy</i> , 2016 , 25, 42-50	16.9	122
334	Synthesis of single-crystal-like nanoporous carbon membranes and their application in overall water splitting. <i>Nature Communications</i> , 2017 , 8, 13592	16.9	120
333	Optically initialized robust valley-polarized holes in monolayer WSe2. <i>Nature Communications</i> , 2015 , 6, 8963	16.9	118
332	New Insights on Graphite Anode Stability in Rechargeable Batteries: Li Ion Coordination Structures Prevail over Solid Electrolyte Interphases. <i>ACS Energy Letters</i> , 2018 , 3, 335-340	19.7	115
331	Fluorinated graphene as high performance dielectric materials and the applications for graphene nanoelectronics. <i>Scientific Reports</i> , 2014 , 4, 5893	4.7	113
330	Defect Structure of Localized Excitons in a WSe ₂ Monolayer. <i>Physical Review Letters</i> , 2017 , 119, 046101	11.3	113
329	Atomically thin heterostructures based on single-layer tungsten diselenide and graphene. <i>Nano Letters</i> , 2014 , 14, 6936-41	11.3	110
328	Novel field-effect Schottky barrier transistors based on graphene-MoS ₂ heterojunctions. <i>Scientific Reports</i> , 2014 , 4, 5951	4.7	110
327	Room-Temperature Ferroelectricity in Hexagonally Layered Hn2Se3 Nanoflakes down to the Monolayer Limit. <i>Advanced Functional Materials</i> , 2018 , 28, 1803738	15.4	107
326	Formation of Segregation Morphology in Crystalline/Amorphous Polymer Blends: Molecular Weight Effect. <i>Macromolecules</i> , 1998 , 31, 2255-2264	5.4	109
325	Selective synthesis of (9,8) single walled carbon nanotubes on cobalt incorporated TUD-1 catalysts. <i>Journal of the American Chemical Society</i> , 2010 , 132, 16747-9	16	107
324	Rugae-like FeP nanocrystal assembly on a carbon cloth: an exceptionally efficient and stable cathode for hydrogen evolution. <i>Nanoscale</i> , 2015 , 7, 10974-81	7.5	105
323	Observation of chiral phonons. <i>Science</i> , 2018 , 359, 579-582	32.2	106
322	How 2D semiconductors could extend Moore's law. <i>Nature</i> , 2019 , 567, 169-170	47.5	102
321	Synthesis and Characterization of New Soluble Polyimides from 3,3',4,4'-Benzhydryl Tetracarboxylic Dianhydride and Various Diamines. <i>Chemistry of Materials</i> , 1998 , 10, 734-739	9.5	104

3 ²⁰	G-band Raman double resonance in twisted bilayer graphene: Evidence of band splitting and folding. <i>Physical Review B</i> , 2009 , 80,	3.3	103
3 ¹⁹	Three-Dimensional Heterostructures of MoS ₂ Nanosheets on Conducting MoO ₂ as an Efficient Electrocatalyst To Enhance Hydrogen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 23328-35	9.4	102
3 ¹⁸	Hole mobility enhancement and p -doping in monolayer WSe ₂ by gold decoration. <i>2D Materials</i> , 2014 , 1, 034001	5.7	99
3 ¹⁷	Visualizing band offsets and edge states in bilayer-monolayer transition metal dichalcogenides lateral heterojunction. <i>Nature Communications</i> , 2016 , 6, 10349	16.9	95
3 ¹⁶	Ultralow contact resistance between semimetal and monolayer semiconductors. <i>Nature</i> , 2021 , 593, 211-217	21.5	98
3 ¹⁵	Observing grain boundaries in CVD-grown monolayer transition metal dichalcogenides. <i>ACS Nano</i> , 2014 , 8, 11401-8	16.4	95
3 ¹⁴	Direct determination of monolayer MoS ₂ and WSe ₂ exciton binding energies on insulating and metallic substrates. <i>2D Materials</i> , 2018 , 5, 025003	5.7	92
3 ¹³	Molybdenum Sulfide Supported on Crumpled Graphene Balls for Electrocatalytic Hydrogen Production. <i>Advanced Energy Materials</i> , 2014 , 4, 1400398	21.6	92
3 ¹²	Label-Free Electrical Detection of DNA Hybridization on Graphene using Hall Effect Measurements: Revisiting the Sensing Mechanism. <i>Advanced Functional Materials</i> , 2013 , 23, 2301-2307	15.4	90
3 ¹¹	Extreme sensitivity of graphene photoconductivity to environmental gases. <i>Nature Communications</i> , 2012 , 3, 1228	16.9	92
3 ¹⁰	Band gap-tunable molybdenum sulfide selenide monolayer alloy. <i>Small</i> , 2014 , 10, 2589-94	10.8	90
3 ⁰⁹	Spherulitic Crystallization Behavior of Poly(ϵ -caprolactone) with a Wide Range of Molecular Weight. <i>Macromolecules</i> , 1997 , 30, 1718-1722	5.4	90
3 ⁰⁸	Electrical Detection of Femtomolar DNA via Gold-Nanoparticle Enhancement in Carbon-Nanotube-Network Field-Effect Transistors. <i>Advanced Materials</i> , 2008 , 20, 2389-2393	23.6	88
3 ⁰⁷	Highly Flexible and High-Performance Complementary Inverters of Large-Area Transition Metal Dichalcogenide Monolayers. <i>Advanced Materials</i> , 2016 , 28, 4111-9	23.6	85
3 ⁰⁶	Activating basal-plane catalytic activity of two-dimensional MoS ₂ monolayer with remote hydrogen plasma. <i>Nano Energy</i> , 2016 , 30, 846-852	16.9	86
3 ⁰⁵	Converting graphene oxide monolayers into boron carbonitride nanosheets by substitutional doping. <i>Small</i> , 2012 , 8, 1384-91	10.8	86
3 ⁰⁴	Cellular behavior of human mesenchymal stem cells cultured on single-walled carbon nanotube film. <i>Carbon</i> , 2010 , 48, 1095-1104	10.1	85
3 ⁰³	Comparative studies on acid and thermal based selective purification of HiPCO produced single-walled carbon nanotubes. <i>Chemical Physics Letters</i> , 2004 , 386, 239-243	2.4	84

302	Plasmonic Gold Nanorods Coverage Influence on Enhancement of the Photoluminescence of Two-Dimensional MoS ₂ Monolayer. <i>Scientific Reports</i> , 2015 , 5, 16374	4.7	80
301	MXene based self-assembled cathode and antifouling separator for high-rate and dendrite-inhibited LiB battery. <i>Nano Energy</i> , 2019 , 61, 478-485	16.9	82
300	Direct electrochemistry-based hydrogen peroxide biosensor formed from single-layer graphene nanoplatelet-enzyme composite film. <i>Talanta</i> , 2010 , 82, 1344-8	6.1	81
299	Symmetrical synergy of hybrid Co ₉ S ₈ -MoS _x electrocatalysts for hydrogen evolution reaction. <i>Nano Energy</i> , 2017 , 32, 470-478	16.9	79
298	Single Atomically Sharp Lateral Monolayer p-n Heterojunction Solar Cells with Extraordinarily High Power Conversion Efficiency. <i>Advanced Materials</i> , 2017 , 29, 1701168	23.6	78
297	New Insight on the Role of Electrolyte Additives in Rechargeable Lithium Ion Batteries. <i>ACS Energy Letters</i> , 2019 , 4, 2613-2622	19.7	77
296	Structurally Deformed MoS for Electrochemically Stable, Thermally Resistant, and Highly Efficient Hydrogen Evolution Reaction. <i>Advanced Materials</i> , 2017 , 29, 1703863	23.6	77
295	Low overpotential and high current CO ₂ reduction with surface reconstructed Cu foam electrodes. <i>Nano Energy</i> , 2016 , 27, 121-129	16.9	76
294	Three-dimensional molybdenum sulfide sponges for electrocatalytic water splitting. <i>Small</i> , 2014 , 10, 895-900	10.8	74
293	Differentiation of Gas Molecules Using Flexible and All-Carbon Nanotube Devices. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 650-653	3.7	72
292	Two-dimensional materials for electronic applications. <i>MRS Bulletin</i> , 2014 , 39, 711-718	3	73
291	Band Gap Tuning of Graphene by Adsorption of Aromatic Molecules. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 13788-13794	3.7	73
290	Point Defects and Localized Excitons in 2D WSe. <i>ACS Nano</i> , 2019 , 13, 6050-6059	16.4	72
289	Sub-nanometre channels embedded in two-dimensional materials. <i>Nature Materials</i> , 2018 , 17, 129-133	26.5	71
288	Fabrication of stretchable MoS ₂ thin-film transistors using elastic ion-gel gate dielectrics. <i>Applied Physics Letters</i> , 2013 , 103, 023505	3.3	72
287	High quantity and quality few-layers transition metal disulfide nanosheets from wet-milling exfoliation. <i>RSC Advances</i> , 2013 , 3, 13193	3.6	69
286	Controllable Synthesis of Band-Gap-Tunable and Monolayer Transition-Metal Dichalcogenide Alloys. <i>Frontiers in Energy Research</i> , 2014 , 2,	3.7	67
285	A flexible hydrophilic-modified graphene microprobe for neural and cardiac recording. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2013 , 9, 600-4	5.8	68

- 284 Decoupling of CVD graphene by controlled oxidation of recrystallized Cu. *RSC Advances*, **2012**, 2, 3008 3.6 68
- 283 Multilayer Approach for Advanced Hybrid Lithium Battery. *ACS Nano*, **2016**, 10, 6037-44 16.4 67
- 282 Evidence of indirect gap in monolayer WSe. *Nature Communications*, **2017**, 8, 929 16.9 67
- 281 Heterointerface Screening Effects between Organic Monolayers and Monolayer Transition Metal Dichalcogenides. *ACS Nano*, **2016**, 10, 2476-84 16.4 67
- 280 Bifunctional separator as a polysulfide mediator for highly stable LiS batteries. *Journal of Materials Chemistry A*, **2016**, 4, 9661-9669 12.8 66
- 279 Observation of Switchable Photoresponse of a Monolayer WSe₂-MoS₂ Lateral Heterostructure via Photocurrent Spectral Atomic Force Microscopic Imaging. *Nano Letters*, **2016**, 16, 3571-7 11.3 66
- 278 Enhanced electrocatalytic activity of MoS(x) on TCNQ-treated electrode for hydrogen evolution reaction. *ACS Applied Materials & Interfaces*, **2014**, 6, 17679-85 9.4 65
- 277 Scalable Approach To Construct Free-Standing and Flexible Carbon Networks for Lithium-Sulfur Battery. *ACS Applied Materials & Interfaces*, **2017**, 9, 8047-8054 9.4 65
- 276 Synergistic additive-mediated CVD growth and chemical modification of 2D materials. *Chemical Society Reviews*, **2019**, 48, 4639-4654 57.5 64
- 275 Multilayer Graphene-WSe Heterostructures for WSe Transistors. *ACS Nano*, **2017**, 11, 12817-12823 16.4 63
- 274 Growth selectivity of hexagonal-boron nitride layers on Ni with various crystal orientations. *RSC Advances*, **2012**, 2, 111-115 3.6 64
- 273 Symmetric synergy of hybrid CoS₂/WS₂ electrocatalysts for the hydrogen evolution reaction. *Journal of Materials Chemistry A*, **2017**, 5, 15552-15558 12.8 63
- 272 Pressure-Induced Single-Walled Carbon Nanotube (n,m) Selectivity on Co/Mo Catalysts. *Journal of Physical Chemistry C*, **2007**, 111, 14612-14616 3.7 63
- 271 Functional Two-Dimensional Coordination Polymeric Layer as a Charge Barrier in Li-S Batteries. *ACS Nano*, **2018**, 12, 836-843 16.4 62
- 270 Substrate Lattice-Guided Seed Formation Controls the Orientation of 2D Transition-Metal Dichalcogenides. *ACS Nano*, **2017**, 11, 9215-9222 16.4 62
- 269 Exciton mapping at subwavelength scales in two-dimensional materials. *Physical Review Letters*, **2015**, 114, 107601 7.3 61
- 268 Chemically modified graphene: flame retardant or fuel for combustion?. *Journal of Materials Chemistry*, **2011**, 21, 3277-3279 60
- 267 Colorless-to-colorful switching electrochromic polyimides with very high contrast ratio. *Nature Communications*, **2019**, 10, 1239 16.9 59

266	Negative circular polarization emissions from WSe/MoSe commensurate heterobilayers. <i>Nature Communications</i> , 2018 , 9, 1356	16.9	59
265	Degradable Conjugated Polymers: Synthesis and Applications in Enrichment of Semiconducting Single-Walled Carbon Nanotubes. <i>Advanced Functional Materials</i> , 2011 , 21, 1643-1651	15.4	58
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