

Y-L Chueh

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

342
papers

13,872
citations

55
h-index

106
g-index

358
ext. papers

15,722
ext. citations

9
avg, IF

6.44
L-index

#	Paper	IF	Citations
342	Intercalation of Zinc Monochloride Cations by Deep Eutectic Solvents for High-Performance Rechargeable Non-aqueous Zinc Ion Batteries.. <i>ACS Applied Materials & Interfaces</i> , 2022 ,	9.5	5
341	Metal- and Alloy-Based CoreShell Particles in Nitrate Senary Salt with Low Thermal Hysteresis for Solar Thermal Energy Storage. <i>ACS Applied Energy Materials</i> , 2022 , 5, 2697-2705	6.1	
340	Zeolitic Imidazolate Framework-Derived Copper Single Atom Anchored on Nitrogen-Doped Porous Carbon as a Highly Efficient Electrocatalyst for the Oxygen Reduction Reaction toward ZnAir Battery. <i>Chemistry of Materials</i> , 2022 , 34, 4104-4114	9.6	0
339	Rational Design on Controllable Cation Injection with Improved Conductive-Bridge Random Access Memory by Glancing Angle Deposition Technology toward Neuromorphic Application. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 55470-55480	9.5	0
338	Multifunctional Ion-Sensitive Floating Gate Fin Field-Effect Transistor with Three-Dimensional Nanoseaweed Structure by Glancing Angle Deposition Technology. <i>Small</i> , 2021 , e2104168	11	
337	Rational design of a polysulfide catholyte electrocatalyst by interfacial engineering based on novel MoS ₂ /MoN heterostructures for superior room-temperature NaS batteries. <i>Nano Energy</i> , 2021 , 90, 106590	17.1	4
336	Artificial Synapse Based on a 2D-SnO Memtransistor with Dynamically Tunable Analog Switching for Neuromorphic Computing. <i>ACS Applied Materials & Interfaces</i> , 2021 ,	9.5	9
335	Atomically Thin Tin Monoxide-Based p-Channel Thin-Film Transistor and a Low-Power Complementary Inverter. <i>ACS Applied Materials & Interfaces</i> , 2021 ,	9.5	6
334	Recycling and recovery of perovskite solar cells. <i>Materials Today</i> , 2021 , 43, 185-197	21.8	20
333	Current-Accelerated Phase Cycling with Metallic and Semiconducting Switching in Copper Nanobelts at Room Temperature. <i>ACS Nano</i> , 2021 , 15, 4789-4801	16.7	1
332	An Emerging Energy Storage System: Advanced Na-Se Batteries. <i>ACS Nano</i> , 2021 , 15, 5876-5903	16.7	15
331	Adhesive Wet Metallization on TiO ₂ -Coated Glass. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 042506	5.06	
330	Recovery of Valuable Materials from the Waste Crystalline-Silicon Photovoltaic Cell and Ribbon. <i>Processes</i> , 2021 , 9, 712	2.9	6
329	Fabrication of Large-Scale High-Mobility Flexible Transparent Zinc Oxide Single Crystal Wafers. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 18991-18998	9.5	0
328	Engineered tunneling layer with enhanced impact ionization for detection improvement in graphene/silicon heterojunction photodetectors. <i>Light: Science and Applications</i> , 2021 , 10, 113	16.7	9
327	Significant perpendicular magnetic anisotropy in room-temperature layered ferromagnet of Cr-intercalated CrTe ₂ . <i>2D Materials</i> , 2021 , 8, 031003	5.9	5
326	Thermally Strain-Induced Band Gap Opening on Platinum Diselenide-Layered Films: A Promising Two-Dimensional Material with Excellent Thermoelectric Performance. <i>Chemistry of Materials</i> , 2021 , 33, 3490-3498	9.6	4

325	Opportunities and Challenges in Precise Synthesis of Transition Metal Single-Atom Supported by 2D Materials as Catalysts toward Oxygen Reduction Reaction. <i>Advanced Functional Materials</i> , 2021 , 31, 2103558	15.6	15
324	Chemical welding of diamine molecules in graphene oxide nanosheets: Design of precisely controlled interlayer spacings with the fast Li ⁺ diffusion coefficient toward high-performance storage application. <i>Electrochimica Acta</i> , 2021 , 380, 138114	6.7	5
323	Improved On/Off Current Ratio and Linearity of InAlN/GaN HEMTs with N ₂ O Surface Treatment for Radio Frequency Application. <i>ECS Journal of Solid State Science and Technology</i> , 2021 , 10, 065013	2	0
322	Recent Advances in Two-Dimensional Quantum Dots and Their Applications. <i>Nanomaterials</i> , 2021 , 11,	5.4	11
321	Ultrasensitive and light-activated NO ₂ gas sensor based on networked MoS ₂ /ZnO nanohybrid with adsorption/desorption kinetics study. <i>Applied Surface Science</i> , 2021 , 536, 147933	6.7	28
320	Diamine molecules double lock-link structured graphene oxide sheets for high-performance sodium ions storage. <i>Energy Storage Materials</i> , 2021 , 34, 45-52	19.4	20
319	An Ultrasensitive Gateless Photodetector Based on the 2D Bilayer MoS-1D Si Nanowire-0D Ag Nanoparticle Hybrid Structure. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 4126-4132	9.5	4
318	Glancing angle deposition of large-scale helical Si@CuSi nanorod arrays for high-performance anodes in rechargeable Li-ion batteries. <i>Nanoscale</i> , 2021 , 13, 18626-18631	7.7	2
317	Consequences of gamma-ray irradiation on structural and electronic properties of PEDOT:PSS polymer in air and vacuum environments.. <i>RSC Advances</i> , 2021 , 11, 20752-20759	3.7	2
316	Improved Long-Term Reliability of a Silica-Encapsulated Perovskite Quantum-Dot Light-Emitting Device with an Optically Pumped Remote Film Package. <i>ACS Omega</i> , 2021 , 6, 2836-2845	3.9	7
315	Smart Design of Resistive Switching Memory by an In Situ Current-Induced Oxidization Process on a Single Crystalline Metallic Nanowire. <i>Advanced Electronic Materials</i> , 2021 , 7, 2000252	6.4	0
314	Regulating Interlayer Spacing with Pillar- and Strain-Structures in Ti ₃ C ₂ MXene Layers by Molecular Welding for Superior Alkali-Metal Ions Storage. <i>Materials Today Energy</i> , 2021 , 22, 100832	7	3
313	Rutile-phase TiO ₂ @carbon core-shell nanowires and their photoactivation in visible light region. <i>Carbon</i> , 2021 , 181, 280-289	10.4	10
312	All-inorganic CsPbBr ₃ perovskite solar cells with enhanced efficiency by exploiting lone pair electrons via passivation of crystal boundary using carbon nitride (g-C ₃ N ₄) nanosheets. <i>Materials Today Energy</i> , 2021 , 21, 100782	7	5
311	Optimum resistive switching characteristics of NiFe ₂ O ₄ by controlling film thickness. <i>Applied Surface Science</i> , 2021 , 564, 150091	6.7	1
310	Highly stable Pd/HNbO-based flexible humidity sensor for perdurable wireless wearable applications. <i>Nanoscale Horizons</i> , 2021 , 6, 260-270	10.8	13
309	synthesis of FeO nanosphere/CoO nanowire-connected reduced graphene oxide hybrid networks for high-performance supercapacitors. <i>Nanoscale</i> , 2021 , 13, 15431-15444	7.7	4
308	High-Performance Rechargeable Aluminum-Selenium Battery with a New Deep Eutectic Solvent Electrolyte: Thiourea-AlCl. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 27064-27073	9.5	24

307	Nanoprobing of MoS by Synchrotron Radiation When van der Waals Epitaxy Is Locally Invalid. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 32041-32053	9.5	1
306	Transparent Flexible Heteroepitaxy of NiO Coated AZO Nanorods Arrays on Muscovites for Enhanced Energy Storage Application. <i>Small</i> , 2020 , 16, e2000020	11	5
305	Hierarchical Mn-doped Fe ₂ O ₃ @rGO hollow core-shell spheres for high-performance hybrid capacitor. <i>Materials Today Energy</i> , 2020 , 17, 100388	7	7
304	Interface Engineered Binary Platinum Free Alloy-based Counter Electrodes with Improved Performance in Dye-Sensitized Solar Cells. <i>Scientific Reports</i> , 2020 , 10, 9157	4.9	1
303	Three-Dimensional Molybdenum Diselenide Helical Nanorod Arrays for High-Performance Aluminum-Ion Batteries. <i>ACS Nano</i> , 2020 , 14, 8539-8550	16.7	38
302	Hybridizing Plasmonic Materials with 2D-Transition Metal Dichalcogenides toward Functional Applications. <i>Small</i> , 2020 , 16, e1904271	11	49
301	Mechanically controllable nonlinear dielectrics. <i>Science Advances</i> , 2020 , 6, eaaz3180	14.3	12
300	Hierarchical Bi-doped BiOBr microspheres assembled from nanosheets with (001) facet exposed via crystal facet engineering toward highly efficient visible light photocatalysis. <i>Applied Surface Science</i> , 2020 , 514, 145927	6.7	30
299	Three-Dimensional CuO/TiO Hybrid Nanorod Arrays Prepared by Electrodeposition in AAO Membranes as an Excellent Fenton-Like Photocatalyst for Dye Degradation. <i>Nanoscale Research Letters</i> , 2020 , 15, 45	5	8
298	Deep Eutectic Solvent-Assisted Synthesis of Ternary Heterojunctions for the Oxygen Evolution Reaction and Photocatalysis. <i>ChemSusChem</i> , 2020 , 13, 2726-2738	8.3	8
297	Role of phase transformation in possible wear mechanisms in silicon microelectromechanical-system devices. <i>Materials Chemistry and Physics</i> , 2020 , 245, 122765	4.4	
296	The Photothermal Stability Study of Quantum Dots Embedded in Sodium Chlorides. <i>Crystals</i> , 2020 , 10, 2	2.3	1
295	Tunable valleytronics with symmetry-retaining high polarization degree in SnS _x Se _{1-x} model system. <i>Applied Physics Letters</i> , 2020 , 116, 061105	3.4	5
294	Platinum-Free Ternary Metallic Selenides as Nanostructured Counter Electrode for High-Efficiency Dye-Sensitized Solar Cell by Interface Engineering. <i>ACS Applied Energy Materials</i> , 2020 , 3, 3704-3713	6.1	11
293	Highly sensitive, selective and stable NO ₂ gas sensors with a ppb-level detection limit on 2D-platinum diselenide films. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 4851-4858	7.1	19
292	Enhancing Quantum Yield in Strained MoS ₂ Bilayers by Morphology-Controlled Plasmonic Nanostructures toward Superior Photodetectors. <i>Chemistry of Materials</i> , 2020 , 32, 2242-2252	9.6	13
291	Electrochemical Reduction of CO ₂ to Formate on Glacial Acetic Acid-Refluxed Pd Nanoclusters. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 126507	3.9	2
290	Vastly improved solar-light induced water splitting catalyzed by few-layer MoS ₂ on Au nanoparticles utilizing localized surface plasmon resonance. <i>Nano Energy</i> , 2020 , 77, 105267	17.1	6

289	Interface enhanced well-dispersed Co ₉ S ₈ nanocrystals as an efficient polysulfide host in lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , 2020 , 48, 109-115	12	41
288	Shape-controlled single-crystal growth of InP at low temperatures down to 220 °C. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 902-906	11.5	6
287	Effects of N ₂ O surface treatment on the electrical properties of the InAlN/GaN high electron mobility transistors. <i>Journal Physics D: Applied Physics</i> , 2020 , 53, 065103	3	5
286	NiMoS@NiP composite materials as binder-free electrodes for aqueous asymmetric supercapacitors with enhanced performance. <i>Journal of Power Sources</i> , 2020 , 477, 229022	8.9	16
285	Influence of gamma-ray irradiation and post-annealing studies on pentacene films: the anisotropic effects on structural and electronic properties.. <i>RSC Advances</i> , 2020 , 10, 21092-21099	3.7	5
284	In-situ synthesis of hybrid nickel cobalt sulfide/carbon nitrogen nanosheet composites as highly efficient bifunctional oxygen electrocatalyst for rechargeable Zn-air batteries. <i>Electrochimica Acta</i> , 2020 , 362, 136968	6.7	11
283	Design of suppressing optical and recombination losses in ultrathin CuInGaSe ₂ solar cells by Voronoi nanocavity arrays. <i>Nano Energy</i> , 2020 , 78, 105225	17.1	6
282	Antisymmetric Magnetoresistance in a van der Waals Antiferromagnetic/Ferromagnetic Layered MnPS/FeGeTe Stacking Heterostructure. <i>ACS Nano</i> , 2020 , 14, 12037-12044	16.7	20
281	A hybrid transition metal nanocrystal-embedded graphitic carbon nitride nanosheet system as a superior oxygen electrocatalyst for rechargeable Zn-air batteries. <i>Nanoscale</i> , 2020 , 12, 19644-19654	7.7	9
280	Design of Core-Shell Quantum Dots-3D WS Nanowall Hybrid Nanostructures with High-Performance Bifunctional Sensing Applications. <i>ACS Nano</i> , 2020 , 14, 12668-12678	16.7	23
279	2D Transition Metal Dichalcogenides: Hybridizing Plasmonic Materials with 2D-Transition Metal Dichalcogenides toward Functional Applications (Small 15/2020). <i>Small</i> , 2020 , 16, 2070081	11	
278	Enhanced wavelength-selective photoresponsivity with a MoS ₂ bilayer grown conformally on a patterned sapphire substrate. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 1622-1629	7.1	6
277	Enhanced Photocurrent Generation with Selectable Wavelengths by M-Decorated-CuInS Nanocrystals (M = Au and Pt) Synthesized in a Single Surfactant Process on MoS Bilayers. <i>Small</i> , 2019 , 15, e1803529	11	32
276	Non-layered Ti ₂ N synthesized by plasma process for the anodes of lithium-ion batteries. <i>Inorganic Chemistry Frontiers</i> , 2019 , 6, 172-175	6.8	2
275	Electrochemically active novel amorphous carbon (a-C)/Cu ₃ P peapod nanowires by low-temperature chemical vapor phosphorization reaction as high efficient electrocatalysts for hydrogen evolution reaction. <i>Electrochimica Acta</i> , 2019 , 318, 374-383	6.7	9
274	Gate-Tunable and Programmable n-InGaAs/Black Phosphorus Heterojunction Diodes. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 23382-23391	9.5	5
273	Highly stable nitrogen-doped carbon nanotubes derived from carbon dots and metal-organic frameworks toward excellent efficient electrocatalyst for oxygen reduction reaction. <i>Nano Energy</i> , 2019 , 63, 103788	17.1	55
272	A Critical Review on Enhancement of Photocatalytic Hydrogen Production by Molybdenum Disulfide: From Growth to Interfacial Activities. <i>Small</i> , 2019 , 15, e1900578	11	49

271	A critical review on flexible Cu(In, Ga)Se ₂ (CIGS) solar cells. <i>Materials Chemistry and Physics</i> , 2019 , 234, 329-344	4.4	27
270	Dynamic pH Sensor with Embedded Calibration Scheme by Advanced CMOS FinFET Technology. <i>Sensors</i> , 2019 , 19,	3.8	4
269	New Simultaneous Exfoliation and Doping Process for Generating MX Nanosheets for Electrocatalytic Hydrogen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 14786-14795	2.5	31
268	Enhanced Power Conversion Efficiency in Solution-Processed Rigid CuIn(S,Se) ₂ and Flexible Cu(In,Ga)Se ₂ Solar Cells Utilizing Plasmonic Au-SiO ₂ Core-Shell Nanoparticles. <i>Solar Rrl</i> , 2019 , 3, 1800343	7.1	4
267	A review of rechargeable batteries for portable electronic devices. <i>Information Materials</i> , 2019 , 1, 6-32	23.1	400
266	Recent Challenges in Perovskite Solar Cells Toward Enhanced Stability, Less Toxicity, and Large-Area Mass Production. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1801758	4.6	36
265	Ultra-fast photodetectors based on high-mobility indium gallium antimonide nanowires. <i>Nature Communications</i> , 2019 , 10, 1664	17.4	39
264	Design of novel TiO ₂ /BiO ₂ core-shell helical nanostructured anti-reflective coatings on Cu(In,Ga)Se ₂ solar cells with enhanced power conversion efficiency. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 11452-11459	13	8
263	Tunable nitrogen-doped graphene sheets produced with in situ electrochemical cathodic plasma at room temperature for lithium-ion batteries. <i>Materials Today Energy</i> , 2019 , 12, 336-347	7	14
262	An indoor light-activated 3D cone-shaped MoS bilayer-based NO gas sensor with PPb-level detection at room-temperature. <i>Nanoscale</i> , 2019 , 11, 10410-10419	7.7	28
261	MoS ₂ -Based Photodetectors: Enhanced Photocarrier Generation with Selectable Wavelengths by M-Decorated-CuInS ₂ Nanocrystals (M = Au and Pt) Synthesized in a Single Surfactant Process on MoS ₂ Bilayers (Small 8/2019). <i>Small</i> , 2019 , 15, 1970045	11	
260	Hierarchically Interconnected Ni ₃ S ₂ Nanofibers as Binder-Free Electrodes for High-Performance Sodium-Ion Energy-Storage Devices. <i>ACS Applied Nano Materials</i> , 2019 , 2, 2634-2641	5.6	30
259	Highly Stable Three-Dimensional Nickel-Cobalt Hydroxide Hierarchical Heterostructures Hybridized with Carbon Nanotubes for High-Performance Energy Storage Devices. <i>ACS Nano</i> , 2019 , 13, 11235-11248	16.7	44
258	A critical review on two-dimensional quantum dots (2D QDs): From synthesis toward applications in energy and optoelectronics. <i>Progress in Quantum Electronics</i> , 2019 , 68, 100226	9.1	53
257	Phase-modulated 3D-hierarchical 1T/2H WSe ₂ nanoscrews by a plasma-assisted selenization process as high performance NO gas sensors with a ppb-level detection limit. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 22314-22322	13	24
256	Rear-Passivated Ultrathin Cu(In,Ga)Se ₂ Films by Al ₂ O ₃ Nanostructures Using Glancing Angle Deposition Toward Photovoltaic Devices with Enhanced Efficiency. <i>Advanced Functional Materials</i> , 2019 , 29, 1905040	15.6	15
255	Direct Synthesis of Large-Scale Multilayer TaSe on SiO/Si Using Ion Beam Technology. <i>ACS Omega</i> , 2019 , 4, 17536-17541	3.9	1
254	Design of Lamellar Mo ₂ C Nanosheets Assembled by Mo ₂ C Nanoparticles as an Anode Material toward Excellent Sodium-Ion Capacitors. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 18375-18383	8.3	29

253	3D CoMoSe Nanosheet Arrays Converted Directly from Hydrothermally Processed CoMoO Nanosheet Arrays by Plasma-Assisted Selenization Process Toward Excellent Anode Material in Sodium-Ion Battery. <i>Nanoscale Research Letters</i> , 2019 , 14, 213	5	9
252	Three-Dimensional Interconnected Reticular Porous Carbon From Corn Starch By a Simple Sol-Gel Method Toward High-Performance Supercapacitors With Aqueous and Ionic Liquid Electrolytes. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 18690-18699	8.3	27
251	Nearly lattice-matched molybdenum disulfide/gallium nitride heterostructure enabling high-performance phototransistors. <i>Photonics Research</i> , 2019 , 7, 311	6	19
250	Seeing pressure in color based on integration of highly sensitive pressure sensor and emission tunable light emitting diode. <i>Optics Express</i> , 2019 , 27, 35448-35467	3.3	1
249	Coffee grounds-derived carbon as high performance anode materials for energy storage applications. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2019 , 97, 178-188	5.3	19
248	Bioinspired networks consisting of spongy carbon wrapped by graphene sheath for flexible transparent supercapacitors. <i>Communications Chemistry</i> , 2019 , 2,	6.3	10
247	Van der Waals heteroepitaxial AZO/NiO/AZO/muscovite (ANA/muscovite) transparent flexible memristor. <i>Nano Energy</i> , 2019 , 56, 322-329	17.1	93
246	Hollow NiCo ₂ S ₄ Nanospheres Hybridized with 3D Hierarchical Porous rGO/Fe ₂ O ₃ Composites toward High-Performance Energy Storage Device. <i>Advanced Energy Materials</i> , 2018 , 8, 1703453	21.8	125
245	Phase-Engineered PtSe ₂ -Layered Films by a Plasma-Assisted Selenization Process toward All PtSe ₂ -Based Field Effect Transistor to Highly Sensitive, Flexible, and Wide-Spectrum Photoresponse Photodetectors. <i>Small</i> , 2018 , 14, e1800032	11	54
244	Photoluminescence Characteristics of Multilayer HfSe ₂ Synthesized on Sapphire Using Ion Implantation. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1701619	4.6	10
243	Quantum Dots: Perovskite Quantum Dots with Near Unity Solution and Neat-Film Photoluminescent Quantum Yield by Novel Spray Synthesis (Adv. Mater. 7/2018). <i>Advanced Materials</i> , 2018 , 30, 1870048	24	4
242	Perovskite Quantum Dots with Near Unity Solution and Neat-Film Photoluminescent Quantum Yield by Novel Spray Synthesis. <i>Advanced Materials</i> , 2018 , 30, 1705532	24	61
241	Selection Role of Metal Oxides into Transition Metal Dichalcogenide Monolayers by a Direct Selenization Process. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 9645-9652	9.5	12
240	Phase-Engineered Type-II Multimetal-Selenide Heterostructures toward Low-Power Consumption, Flexible, Transparent, and Wide-Spectrum Photoresponse Photodetectors. <i>Small</i> , 2018 , 14, e1704052	11	25
239	An ultrasensitive flexible pressure sensor for multimodal wearable electronic skins based on large-scale polystyrene ball@reduced graphene-oxide core-shell nanoparticles. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 5514-5520	7.1	63
238	Thermal hysteresis in phase-change materials: Encapsulated metal alloy core-shell microparticles. <i>Nano Energy</i> , 2018 , 51, 563-570	17.1	25
237	Polarization-resolved black phosphorus/molybdenum disulfide mid-wave infrared photodiodes with high detectivity at room temperature. <i>Nature Photonics</i> , 2018 , 12, 601-607	33.9	226
236	Hybridizing Strong Quadrupole Gap Plasmons Using Optimized Nanoantennas with Bilayer MoS ₂ for Excellent Photo-Electrochemical Hydrogen Evolution. <i>Advanced Energy Materials</i> , 2018 , 8, 1801184	21.8	17

235	Electrostatically Charged MoS/Graphene Oxide Hybrid Composites for Excellent Electrochemical Energy Storage Devices. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 35571-35579	9.5	86
234	Environmentally and Mechanically Stable Selenium 1D/2D Hybrid Structures for Broad-Range Photoresponse from Ultraviolet to Infrared Wavelengths. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 35477-35486	9.5	34
233	Pressure Welding of Silver Nanowires Networks at Room Temperature as Transparent Electrodes for Efficient Organic Light-Emitting Diodes. <i>Small</i> , 2018 , 14, e1800541	11	40
232	Energy Storage: Hollow NiCo ₂ S ₄ Nanospheres Hybridized with 3D Hierarchical Porous rGO/Fe ₂ O ₃ Composites toward High-Performance Energy Storage Device (Adv. Energy Mater. 16/2018). <i>Advanced Energy Materials</i> , 2018 , 8, 1870076	21.8	3
231	Phase-engineered SnSex toward SnSe ₂ /SnSe heterostructure with improved thermal conductance by a low-temperature plasma-assisted chemical vapor reaction. <i>Nano Energy</i> , 2018 , 44, 419-429	17.1	23
230	Few-Layer Graphene Sheet-Passivated Porous Silicon Toward Excellent Electrochemical Double-Layer Supercapacitor Electrode. <i>Nanoscale Research Letters</i> , 2018 , 13, 242	5	14
229	Quadrupole Gap Plasmons: Hybridizing Strong Quadrupole Gap Plasmons Using Optimized Nanoantennas with Bilayer MoS ₂ for Excellent Photo-Electrochemical Hydrogen Evolution (Adv. Energy Mater. 29/2018). <i>Advanced Energy Materials</i> , 2018 , 8, 1870127	21.8	1
228	A superior dye adsorbent towards the hydrogen evolution reaction combining active sites and phase-engineering of (1T/2H) MoS ₂ /MoO ₃ hybrid heterostructured nanoflowers. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 15320-15329	13	63
227	Crystalline Engineering Toward Large-Scale High-Efficiency Printable Cu(In,Ga)Se Thin Film Solar Cells on Flexible Substrate by Femtosecond Laser Annealing Process. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 14006-14012	9.5	8
226	Vertical Al ₂ Se ₃ /MoSe ₂ heterojunction on sapphire synthesized using ion beam. <i>RSC Advances</i> , 2017 , 7, 10154-10157	3.7	6
225	Graphene-coated copper nanowire networks as a highly stable transparent electrode in harsh environments toward efficient electrocatalytic hydrogen evolution reactions. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 13320-13328	13	71
224	Tunable defect engineering in TiON thin films by multi-step sputtering processes: from a Schottky diode to resistive switching memory. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 6319-6327	7.1	16
223	Self-Selecting Resistive Switching Scheme Using TiO Nanorod Arrays. <i>Scientific Reports</i> , 2017 , 7, 2066	4.9	30
222	Room temperature multiplexed gas sensing using chemical-sensitive 3.5-nm-thin silicon transistors. <i>Science Advances</i> , 2017 , 3, e1602557	14.3	98
221	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017 , 23, 1-9	3.8	18
220	Resistive switching of Sn-doped InO/HfO core-shell nanowire: geometry architecture engineering for nonvolatile memory. <i>Nanoscale</i> , 2017 , 9, 6920-6928	7.7	26
219	Wafer-Scale Growth of WSe ₂ Monolayers Toward Phase-Engineered Hybrid WO _x /WSe ₂ Films with Sub-ppb NO _x Gas Sensing by a Low-Temperature Plasma-Assisted Selenization Process. <i>Chemistry of Materials</i> , 2017 , 29, 1587-1598	9.6	66
218	Lead-Free Perovskite Nanowire Array Photodetectors with Drastically Improved Stability in Nanoengineering Templates. <i>Nano Letters</i> , 2017 , 17, 523-530	11.5	177

217	Low-Temperature Growth of Hydrogenated Amorphous Silicon Carbide Solar Cell by Inductively Coupled Plasma Deposition Toward High Conversion Efficiency in Indoor Lighting. <i>Scientific Reports</i> , 2017 , 7, 12706	4.9	13
216	High Performance and Low power Monolithic Three-Dimensional Sub-50 nm Poly Si Thin film transistor (TFTs) Circuits. <i>Scientific Reports</i> , 2017 , 7, 1368	4.9	15
215	Thermally Strained Band Gap Engineering of Transition-Metal Dichalcogenide Bilayers with Enhanced Light-Matter Interaction toward Excellent Photodetectors. <i>ACS Nano</i> , 2017 , 11, 8768-8776	16.7	47
214	Femtosecond Laser Crystallization for Boosting the Conversion Efficiency of Flexible Ink-Printing Cu(In,Ga)Se ₂ Thin Film Solar Cells 2017 ,		1
213	InGaAs Nanomembrane/Si van der Waals Heterojunction Photodiodes with Broadband and High Photoresponsivity. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 26105-26111	9.5	23
212	Facile Growth of Cu ₂ ZnSnS ₄ Thin-Film by One-Step Pulsed Hybrid Electrophoretic and Electroplating Deposition. <i>Scientific Reports</i> , 2016 , 6, 19102	4.9	18
211	Electrocatalysis: Wafer Scale Phase-Engineered 1T- and 2H-MoSe ₂ /Mo Core/Shell 3D-Hierarchical Nanostructures toward Efficient Electrocatalytic Hydrogen Evolution Reaction (Adv. Mater. 44/2016). <i>Advanced Materials</i> , 2016 , 28, 9658-9658	24	2
210	Low-Temperature Chemical Synthesis of CoWO ₄ Nanospheres for Sensitive Nonenzymatic Glucose Sensor. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 17024-17028	3.8	51
209	3000 cm ² flexible Cu(In,Ga)Se ₂ solar panel by low temperature plasma enhanced selenization process. <i>Nano Energy</i> , 2016 , 24, 45-55	17.1	12
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194	MoS ₂ U-shape MOSFET with 10 nm channel length and poly-Si source/drain serving as seed for full wafer CVD MoS ₂ availability 2016 ,		7
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