

Ali Javey

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308
papers

45,136
citations

104
h-index

209
g-index

361
ext. papers

51,419
ext. citations

13.3
avg, IF

7.54
L-index

#	Paper	IF	Citations
308	Ballistic carbon nanotube field-effect transistors. <i>Nature</i> , 2003 , 424, 654-7	50.4	2544
307	Fully integrated wearable sensor arrays for multiplexed in situ perspiration analysis. <i>Nature</i> , 2016 , 529, 509-514	50.4	2526
306	High-performance single layered WSe ₂ -FETs with chemically doped contacts. <i>Nano Letters</i> , 2012 , 12, 3788-92	11.5	1322
305	Nanowire active-matrix circuitry for low-voltage macroscale artificial skin. <i>Nature Materials</i> , 2010 , 9, 821-6	16.7	1013
304	User-interactive electronic skin for instantaneous pressure visualization. <i>Nature Materials</i> , 2013 , 12, 899-904	9.04	911
303	Three-dimensional nanopillar-array photovoltaics on low-cost and flexible substrates. <i>Nature Materials</i> , 2009 , 8, 648-53	27	909
302	Toward Large Arrays of Multiplex Functionalized Carbon Nanotube Sensors for Highly Sensitive and Selective Molecular Detection. <i>Nano Letters</i> , 2003 , 3, 347-351	11.5	859
301	MoS ₂ transistors with 1-nanometer gate lengths. <i>Science</i> , 2016 , 354, 99-102	33.3	812
300	Hysteresis Caused by Water Molecules in Carbon Nanotube Field-Effect Transistors. <i>Nano Letters</i> , 2003 , 3, 193-198	11.5	808
299	Strong interlayer coupling in van der Waals heterostructures built from single-layer chalcogenides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 6198-202	11.5	803
298	High-kappa dielectrics for advanced carbon-nanotube transistors and logic gates. <i>Nature Materials</i> , 2002 , 1, 241-6	27	796
297	Near-unity photoluminescence quantum yield in MoS ₂ . <i>Science</i> , 2015 , 350, 1065-8	33.3	792
296	Wearable sweat sensors. <i>Nature Electronics</i> , 2018 , 1, 160-171	28.4	588
295	Degenerate n-doping of few-layer transition metal dichalcogenides by potassium. <i>Nano Letters</i> , 2013 , 13, 1991-5	11.5	567
294	Polymer functionalization for air-stable n-type carbon nanotube field-effect transistors. <i>Journal of the American Chemical Society</i> , 2001 , 123, 11512-3	16.4	524
293	Layer-by-layer assembly of nanowires for three-dimensional, multifunctional electronics. <i>Nano Letters</i> , 2007 , 7, 773-7	11.5	518
292	Field-effect transistors built from all two-dimensional material components. <i>ACS Nano</i> , 2014 , 8, 6259-64	16.7	496

291	Air-stable surface charge transfer doping of MoS ₂ by benzyl viologen. <i>Journal of the American Chemical Society</i> , 2014 , 136, 7853-6	16.4	485
290	High-field quasiballistic transport in short carbon nanotubes. <i>Physical Review Letters</i> , 2004 , 92, 106804	7.4	476
289	Wafer-scale assembly of highly ordered semiconductor nanowire arrays by contact printing. <i>Nano Letters</i> , 2008 , 8, 20-5	11.5	471
288	Dual-gated MoS ₂ /WSe ₂ van der Waals tunnel diodes and transistors. <i>ACS Nano</i> , 2015 , 9, 2071-9	16.7	441
287	Self-Aligned Ballistic Molecular Transistors and Electrically Parallel Nanotube Arrays. <i>Nano Letters</i> , 2004 , 4, 1319-1322	11.5	435
286	Carbon Nanotube Field-Effect Transistors with Integrated Ohmic Contacts and High- κ Gate Dielectrics. <i>Nano Letters</i> , 2004 , 4, 447-450	11.5	430
285	MoS ₂ -type transistors and diodes enabled by high work function MoO _x contacts. <i>Nano Letters</i> , 2014 , 14, 1337-42	11.5	419
284	Preferential Growth of Semiconducting Single-Walled Carbon Nanotubes by a Plasma Enhanced CVD Method. <i>Nano Letters</i> , 2004 , 4, 317-321	11.5	416
283	Strain-induced indirect to direct bandgap transition in multilayer WSe ₂ . <i>Nano Letters</i> , 2014 , 14, 4592-7	11.5	415
282	Optically- and thermally-responsive programmable materials based on carbon nanotube-hydrogel polymer composites. <i>Nano Letters</i> , 2011 , 11, 3239-44	11.5	411
281	Autonomous sweat extraction and analysis applied to cystic fibrosis and glucose monitoring using a fully integrated wearable platform. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 4625-4630	11.5	404
280	Hole selective MoO _x contact for silicon solar cells. <i>Nano Letters</i> , 2014 , 14, 967-71	11.5	392
279	Direct chemical vapor deposition of graphene on dielectric surfaces. <i>Nano Letters</i> , 2010 , 10, 1542-8	11.5	387
278	Germanium nanowire field-effect transistors with SiO ₂ and high- κ HfO ₂ gate dielectrics. <i>Applied Physics Letters</i> , 2003 , 83, 2432-2434	3.4	386
277	High performance n-type carbon nanotube field-effect transistors with chemically doped contacts. <i>Nano Letters</i> , 2005 , 5, 345-8	11.5	379
276	Flexible Electronics toward Wearable Sensing. <i>Accounts of Chemical Research</i> , 2019 , 52, 523-533	24.3	378
275	Ultra-high-yield growth of vertical single-walled carbon nanotubes: Hidden roles of hydrogen and oxygen. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 16141-5	11.5	365
274	Enabling unassisted solar water splitting by iron oxide and silicon. <i>Nature Communications</i> , 2015 , 6, 7447	17.4	359

273	Efficient silicon solar cells with dopant-free asymmetric heterocontacts. <i>Nature Energy</i> , 2016 , 1, 62.3	351
272	Ballistic Transport in Metallic Nanotubes with Reliable Pd Ohmic Contacts. <i>Nano Letters</i> , 2003 , 3, 1541-1544	350
271	Toward the Development of Printable Nanowire Electronics and Sensors. <i>Advanced Materials</i> , 2009 , 21, 3730-3743	336
270	Fully printed, high performance carbon nanotube thin-film transistors on flexible substrates. <i>Nano Letters</i> , 2013 , 13, 3864-9	334
269	Diameter-dependent electron mobility of InAs nanowires. <i>Nano Letters</i> , 2009 , 9, 360-5	328
268	Ultrathin compound semiconductor on insulator layers for high-performance nanoscale transistors. <i>Nature</i> , 2010 , 468, 286-9	327
267	A Wearable Electrochemical Platform for Noninvasive Simultaneous Monitoring of Ca(2+) and pH. <i>ACS Nano</i> , 2016 , 10, 7216-24	324
266	Silicon heterojunction solar cell with passivated hole selective MoOx contact. <i>Applied Physics Letters</i> , 2014 , 104, 113902	307
265	2D materials advances: from large scale synthesis and controlled heterostructures to improved characterization techniques, defects and applications. <i>2D Materials</i> , 2016 , 3, 042001	297
264	Printed Carbon Nanotube Electronics and Sensor Systems. <i>Advanced Materials</i> , 2016 , 28, 4397-414	284
263	Carbon Nanotube Transistor Arrays for Multistage Complementary Logic and Ring Oscillators. <i>Nano Letters</i> , 2002 , 2, 929-932	284
262	Controlled nanoscale doping of semiconductors via molecular monolayers. <i>Nature Materials</i> , 2008 , 7, 62-7	262
261	Extremely bendable, high-performance integrated circuits using semiconducting carbon nanotube networks for digital, analog, and radio-frequency applications. <i>Nano Letters</i> , 2012 , 12, 1527-33	258
260	Wearable Microfluidic Diaphragm Pressure Sensor for Health and Tactile Touch Monitoring. <i>Advanced Materials</i> , 2017 , 29, 1701985	254
259	High-gain inverters based on WSe2 complementary field-effect transistors. <i>ACS Nano</i> , 2014 , 8, 4948-53	249
258	Ordered arrays of dual-diameter nanopillars for maximized optical absorption. <i>Nano Letters</i> , 2010 , 10, 3823-7	249
257	Carbon nanotube active-matrix backplanes for conformal electronics and sensors. <i>Nano Letters</i> , 2011 , 11, 5408-13	245
256	Carbon nanotube electronics--moving forward. <i>Chemical Society Reviews</i> , 2013 , 42, 2592-609	243

255	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
254	p-Type InP nanopillar photocathodes for efficient solar-driven hydrogen production. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 10760-4	16.4	226
253	Photoactuators and motors based on carbon nanotubes with selective chirality distributions. <i>Nature Communications</i> , 2014 , 5, 2983	17.4	223
252	High Photoluminescence Quantum Yield in Band Gap Tunable Bromide Containing Mixed Halide Perovskites. <i>Nano Letters</i> , 2016 , 16, 800-6	11.5	218
251	Wearable Microsensor Array for Multiplexed Heavy Metal Monitoring of Body Fluids. <i>ACS Sensors</i> , 2016 , 1, 866-874	9.2	216
250	2D-2D tunneling field-effect transistors using WSe ₂ /SnSe ₂ heterostructures. <i>Applied Physics Letters</i> , 2016 , 108, 083111	3.4	212
249	Dramatic reduction of surface recombination by in situ surface passivation of silicon nanowires. <i>Nano Letters</i> , 2011 , 11, 2527-32	11.5	211
248	Metal-catalyzed crystallization of amorphous carbon to graphene. <i>Applied Physics Letters</i> , 2010 , 96, 063110	3.4	208
247	Gold-Mediated Exfoliation of Ultralarge Optoelectronically-Perfect Monolayers. <i>Advanced Materials</i> , 2016 , 28, 4053-8	24	206
246	Large-scale, heterogeneous integration of nanowire arrays for image sensor circuitry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 11066-70	11.5	205
245	Integration of suspended carbon nanotube arrays into electronic devices and electromechanical systems. <i>Applied Physics Letters</i> , 2002 , 81, 913-915	3.4	205
244	Challenges and prospects of nanopillar-based solar cells. <i>Nano Research</i> , 2009 , 2, 829-843	10	199
243	Highly sensitive electronic whiskers based on patterned carbon nanotube and silver nanoparticle composite films. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 1703-7	11.5	191
242	Passivating contacts for crystalline silicon solar cells. <i>Nature Energy</i> , 2019 , 4, 914-928	62.3	190
241	Recombination Kinetics and Effects of Superacid Treatment in Sulfur- and Selenium-Based Transition Metal Dichalcogenides. <i>Nano Letters</i> , 2016 , 16, 2786-91	11.5	187
240	Electrical contacts to carbon nanotubes down to 1nm in diameter. <i>Applied Physics Letters</i> , 2005 , 87, 173101	3.4	187
239	A Wearable Microfluidic Sensing Patch for Dynamic Sweat Secretion Analysis. <i>ACS Sensors</i> , 2018 , 3, 944-952	9.2	183
238	Patterned growth of single-walled carbon nanotubes on full 4-inch wafers. <i>Applied Physics Letters</i> , 2001 , 79, 4571-4573	3.4	182

237	Air stable p-doping of WSe ₂ by covalent functionalization. <i>ACS Nano</i> , 2014 , 8, 10808-14	16.7	180
236	Highly deformable liquid-state heterojunction sensors. <i>Nature Communications</i> , 2014 , 5, 5032	17.4	176
235	Large-area compliant tactile sensors using printed carbon nanotube active-matrix backplanes. <i>Advanced Materials</i> , 2015 , 27, 1561-6	24	176
234	Solution-Synthesized High-Mobility Tellurium Nanoflakes for Short-Wave Infrared Photodetectors. <i>ACS Nano</i> , 2018 , 12, 7253-7263	16.7	175
233	A biomimetic eye with a hemispherical perovskite nanowire array retina. <i>Nature</i> , 2020 , 581, 278-282	50.4	172
232	Efficient and sustained photoelectrochemical water oxidation by cobalt oxide/silicon photoanodes with nanotextured interfaces. <i>Journal of the American Chemical Society</i> , 2014 , 136, 6191-4	16.4	171
231	Miniature organic transistors with carbon nanotubes as quasi-one-dimensional electrodes. <i>Journal of the American Chemical Society</i> , 2004 , 126, 11774-5	16.4	165
230	Roll-to-Roll Gravure Printed Electrochemical Sensors for Wearable and Medical Devices. <i>ACS Nano</i> , 2018 , 12, 6978-6987	16.7	163
229	Strain-engineered growth of two-dimensional materials. <i>Nature Communications</i> , 2017 , 8, 608	17.4	162
228	Methylxanthine Drug Monitoring with Wearable Sweat Sensors. <i>Advanced Materials</i> , 2018 , 30, e170744224		159
227	Hole contacts on transition metal dichalcogenides: interface chemistry and band alignments. <i>ACS Nano</i> , 2014 , 8, 6265-72	16.7	149
226	Air-Stable n-Doping of WSe ₂ by Anion Vacancy Formation with Mild Plasma Treatment. <i>ACS Nano</i> , 2016 , 10, 6853-60	16.7	147
225	Regional and correlative sweat analysis using high-throughput microfluidic sensing patches toward decoding sweat. <i>Science Advances</i> , 2019 , 5, eaaw9906	14.3	143
224	Reactive Sputtering of Bismuth Vanadate Photoanodes for Solar Water Splitting. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 21635-21642	3.8	140
223	Electrical suppression of all nonradiative recombination pathways in monolayer semiconductors. <i>Science</i> , 2019 , 364, 468-471	33.3	139
222	Ballistic InAs nanowire transistors. <i>Nano Letters</i> , 2013 , 13, 555-8	11.5	138
221	Magnesium Fluoride Electron-Selective Contacts for Crystalline Silicon Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 14671-7	9.5	134
220	Amorphous Si thin film based photocathodes with high photovoltage for efficient hydrogen production. <i>Nano Letters</i> , 2013 , 13, 5615-8	11.5	134

219	Flexible Electrochemical Bioelectronics: The Rise of In Situ Bioanalysis. <i>Advanced Materials</i> , 2020 , 32, e1902083	24	128
218	Application of 3D Printing for Smart Objects with Embedded Electronic Sensors and Systems. <i>Advanced Materials Technologies</i> , 2016 , 1, 1600013	6.8	124
217	Wafer-scale, sub-5 nm junction formation by monolayer doping and conventional spike annealing. <i>Nano Letters</i> , 2009 , 9, 725-30	11.5	123
216	Defective TiO ₂ with high photoconductive gain for efficient and stable planar heterojunction perovskite solar cells. <i>Nature Communications</i> , 2016 , 7, 12446	17.4	117
215	Mid-Wave Infrared Photoconductors Based on Black Phosphorus-Arsenic Alloys. <i>ACS Nano</i> , 2017 , 11, 11724-11731	16.7	116
214	Stable Dopant-Free Asymmetric Heterocontact Silicon Solar Cells with Efficiencies above 20%. <i>ACS Energy Letters</i> , 2018 , 3, 508-513	20.1	115
213	High Luminescence Efficiency in MoS ₂ Grown by Chemical Vapor Deposition. <i>ACS Nano</i> , 2016 , 10, 6535-416.7	16.7	115
212	Conductive and Stable Magnesium Oxide Electron-Selective Contacts for Efficient Silicon Solar Cells. <i>Advanced Energy Materials</i> , 2017 , 7, 1601863	21.8	114
211	Ten- to 50-nm-long quasi-ballistic carbon nanotube devices obtained without complex lithography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 13408-10	11.5	114
210	ELECTRICAL TRANSPORT PROPERTIES AND FIELD EFFECT TRANSISTORS OF CARBON NANOTUBES. <i>Nano</i> , 2006 , 01, 1-13	1.1	113
209	Smart Actuators and Adhesives for Reconfigurable Matter. <i>Accounts of Chemical Research</i> , 2017 , 50, 691-703	7.03	109
208	Role of TiO ₂ Surface Passivation on Improving the Performance of p-InP Photocathodes. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 2308-2313	3.8	109
207	Palladium/silicon nanowire Schottky barrier-based hydrogen sensors. <i>Sensors and Actuators B: Chemical</i> , 2010 , 145, 232-238	8.5	109
206	Engineering light outcoupling in 2D materials. <i>Nano Letters</i> , 2015 , 15, 1356-61	11.5	105
205	Monolithic Integration of Carbon Nanotube Devices with Silicon MOS Technology. <i>Nano Letters</i> , 2004 , 4, 123-127	11.5	105
204	Efficient solar-driven electrochemical CO ₂ reduction to hydrocarbons and oxygenates. <i>Energy and Environmental Science</i> , 2017 , 10, 2222-2230	35.4	104
203	Electrical properties and devices of large-diameter single-walled carbon nanotubes. <i>Applied Physics Letters</i> , 2002 , 80, 1064-1066	3.4	104
202	Large scale, highly ordered assembly of nanowire parallel arrays by differential roll printing. <i>Applied Physics Letters</i> , 2007 , 91, 203104	3.4	103

201	Nanopillar photovoltaics: Materials, processes, and devices. <i>Nano Energy</i> , 2012 , 1, 132-144	17.1	100
200	Room temperature multiplexed gas sensing using chemical-sensitive 3.5-nm-thin silicon transistors. <i>Science Advances</i> , 2017 , 3, e1602557	14.3	98
199	Uncovering the intrinsic size dependence of hydriding phase transformations in nanocrystals. <i>Nature Materials</i> , 2013 , 12, 905-12	27	96
198	Lithium Fluoride Based Electron Contacts for High Efficiency n-Type Crystalline Silicon Solar Cells. <i>Advanced Energy Materials</i> , 2016 , 6, 1600241	21.8	95
197	. <i>IEEE Transactions on Electron Devices</i> , 2012 , 59, 12-19	2.9	94
196	Parallel array InAs nanowire transistors for mechanically bendable, ultrahigh frequency electronics. <i>ACS Nano</i> , 2010 , 4, 5855-60	16.7	94
195	Large-area and bright pulsed electroluminescence in monolayer semiconductors. <i>Nature Communications</i> , 2018 , 9, 1229	17.4	93
194	19.2% Efficient InP Heterojunction Solar Cell with Electron-Selective TiO Contact. <i>ACS Photonics</i> , 2014 , 1, 1245-1250	6.3	93
193	Regular arrays of 2 nm metal nanoparticles for deterministic synthesis of nanomaterials. <i>Journal of the American Chemical Society</i> , 2005 , 127, 11942-3	16.4	92
192	A Fully Integrated and Self-Powered Smartwatch for Continuous Sweat Glucose Monitoring. <i>ACS Sensors</i> , 2019 , 4, 1925-1933	9.2	91
191	Quantum confinement effects in nanoscale-thickness InAs membranes. <i>Nano Letters</i> , 2011 , 11, 5008-12	11.5	88
190	General Thermal Texturization Process of MoS ₂ for Efficient Electrocatalytic Hydrogen Evolution Reaction. <i>Nano Letters</i> , 2016 , 16, 4047-53	11.5	84
189	Extremely reduced dielectric confinement in two-dimensional hybrid perovskites with large polar organics. <i>Communications Physics</i> , 2018 , 1,	5.4	84
188	Tantalum Oxide Electron-Selective Heterocontacts for Silicon Photovoltaics and Photoelectrochemical Water Reduction. <i>ACS Energy Letters</i> , 2018 , 3, 125-131	20.1	83
187	Highly uniform and stable n-type carbon nanotube transistors by using positively charged silicon nitride thin films. <i>Nano Letters</i> , 2015 , 15, 392-7	11.5	82
186	A fully roll-to-roll gravure-printed carbon nanotube-based active matrix for multi-touch sensors. <i>Scientific Reports</i> , 2015 , 5, 17707	4.9	82
185	Efficient Formation of Iron Nanoparticle Catalysts on Silicon Oxide by Hydroxylamine for Carbon Nanotube Synthesis and Electronics. <i>Nano Letters</i> , 2003 , 3, 157-161	11.5	81
184	Band Tailing and Deep Defect States in CH ₃ NH ₃ Pb(I _{1-x} Br _x) ₃ Perovskites As Revealed by Sub-Bandgap Photocurrent. <i>ACS Energy Letters</i> , 2017 , 2, 709-715	20.1	80

183	Highly stable hysteresis-free carbon nanotube thin-film transistors by fluorocarbon polymer encapsulation. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 8441-6	9.5	79
182	Chemical Bath Deposition of p-Type Transparent, Highly Conducting (CuS) _x :(ZnS) _{1-x} Nanocomposite Thin Films and Fabrication of Si Heterojunction Solar Cells. <i>Nano Letters</i> , 2016 , 16, 1925-32	11.5	77
181	A Low Resistance Calcium/Reduced Titania Passivated Contact for High Efficiency Crystalline Silicon Solar Cells. <i>Advanced Energy Materials</i> , 2017 , 7, 1602606	21.8	76
180	Carbon nanotube active-matrix backplanes for mechanically flexible visible light and X-ray imagers. <i>Nano Letters</i> , 2013 , 13, 5425-30	11.5	76
179	Nanoscale InGaSb heterostructure membranes on Si substrates for high hole mobility transistors. <i>Nano Letters</i> , 2012 , 12, 2060-6	11.5	74
178	III-V complementary metal-oxide-semiconductor electronics on silicon substrates. <i>Nano Letters</i> , 2012 , 12, 3592-5	11.5	74
177	Wearable Sweat Band for Noninvasive Levodopa Monitoring. <i>Nano Letters</i> , 2019 , 19, 6346-6351	11.5	73
176	Monolithic 3D CMOS Using Layered Semiconductors. <i>Advanced Materials</i> , 2016 , 28, 2547-54	24	72
175	Nanoscale Bipolar and Complementary Resistive Switching Memory Based on Amorphous Carbon. <i>IEEE Transactions on Electron Devices</i> , 2011 , 58, 3933-3939	2.9	72
174	Porous Enzymatic Membrane for Nanotextured Glucose Sweat Sensors with High Stability toward Reliable Noninvasive Health Monitoring. <i>Advanced Functional Materials</i> , 2019 , 29, 1902521	15.6	71
173	MoS ₂ Heterojunctions by Thickness Modulation. <i>Scientific Reports</i> , 2015 , 5, 10990	4.9	71
172	3D Printed "Earable" Smart Devices for Real-Time Detection of Core Body Temperature. <i>ACS Sensors</i> , 2017 , 2, 990-997	9.2	69
171	Ultrathin body InAs tunneling field-effect transistors on Si substrates. <i>Applied Physics Letters</i> , 2011 , 98, 113105	3.4	69
170	BiVO ₄ thin film photoanodes grown by chemical vapor deposition. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 1651-7	3.6	68
169	Short-channel transistors constructed with solution-processed carbon nanotubes. <i>ACS Nano</i> , 2013 , 7, 798-803	16.7	68
168	Defect passivation of transition metal dichalcogenides via a charge transfer van der Waals interface. <i>Science Advances</i> , 2017 , 3, e1701661	14.3	67
167	Artificial Photosynthesis on TiO ₂ -Passivated InP Nanopillars. <i>Nano Letters</i> , 2015 , 15, 6177-81	11.5	67
166	Self-aligned, extremely high frequency III-V metal-oxide-semiconductor field-effect transistors on rigid and flexible substrates. <i>Nano Letters</i> , 2012 , 12, 4140-5	11.5	67

165	Design constraints and guidelines for CdS/CdTe nanopillar based photovoltaics. <i>Applied Physics Letters</i> , 2010 , 96, 103116	3.4	67
164	Synthesis, contact printing, and device characterization of Ni-catalyzed, crystalline InAs nanowires. <i>Nano Research</i> , 2008 , 1, 32-39	10	67
163	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
162	Black Ge based on crystalline/amorphous core/shell nanoneedle arrays. <i>Nano Letters</i> , 2010 , 10, 520-3	11.5	65
161	Highly Stable Near-Unity Photoluminescence Yield in Monolayer MoS ₂ by Fluoropolymer Encapsulation and Superacid Treatment. <i>ACS Nano</i> , 2017 , 11, 5179-5185	16.7	64
160	Near-ideal electrical properties of InAs/WSe ₂ van der Waals heterojunction diodes. <i>Applied Physics Letters</i> , 2013 , 102, 242101	3.4	64
159	Monolayer resist for patterned contact printing of aligned nanowire arrays. <i>Journal of the American Chemical Society</i> , 2009 , 131, 2102-3	16.4	64
158	Air stable n-doping of WSe ₂ by silicon nitride thin films with tunable fixed charge density. <i>APL Materials</i> , 2014 , 2, 092504	5.7	63
157	Nanoscale doping of InAs via sulfur monolayers. <i>Applied Physics Letters</i> , 2009 , 95, 072108	3.4	63
156	Evaporated tellurium thin films for p-type field-effect transistors and circuits. <i>Nature Nanotechnology</i> , 2020 , 15, 53-58	28.7	63
155	Quantum of optical absorption in two-dimensional semiconductors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 11688-91	11.5	61
154	Observation of degenerate one-dimensional sub-bands in cylindrical InAs nanowires. <i>Nano Letters</i> , 2012 , 12, 1340-3	11.5	60
153	Si photocathode with Ag-supported dendritic Cu catalyst for CO ₂ reduction. <i>Energy and Environmental Science</i> , 2019 , 12, 1068-1077	35.4	58
152	Electrical Properties of Synthesized Large-Area MoS ₂ Field-Effect Transistors Fabricated with Inkjet-Printed Contacts. <i>ACS Nano</i> , 2016 , 10, 2819-26	16.7	58
151	A wearable patch for continuous analysis of thermoregulatory sweat at rest. <i>Nature Communications</i> , 2021 , 12, 1823	17.4	57
150	Hybrid core-shell nanowire forests as self-selective chemical connectors. <i>Nano Letters</i> , 2009 , 9, 2054-8	11.5	56
149	Formation and characterization of Ni _x InAs/InAs nanowire heterostructures by solid source reaction. <i>Nano Letters</i> , 2008 , 8, 4528-33	11.5	56
148	Design of surfactant-substrate interactions for roll-to-roll assembly of carbon nanotubes for thin-film transistors. <i>Journal of the American Chemical Society</i> , 2014 , 136, 11188-94	16.4	55

147	Fully printed flexible and disposable wireless cyclic voltammetry tag. <i>Scientific Reports</i> , 2015 , 5, 8105	4.9	55
146	Contact printing of compositionally graded CdS(x)Se(1-x) nanowire parallel arrays for tunable photodetectors. <i>Nanotechnology</i> , 2012 , 23, 045201	3.4	54
145	Patterned p-doping of InAs nanowires by gas-phase surface diffusion of Zn. <i>Nano Letters</i> , 2010 , 10, 509-113.5	13.5	54
144	Cation-Dependent Light-Induced Halide Demixing in Hybrid Organic-Inorganic Perovskites. <i>Nano Letters</i> , 2018 , 18, 3473-3480	11.5	52
143	A direct thin-film path towards low-cost large-area III-V photovoltaics. <i>Scientific Reports</i> , 2013 , 3, 2275	4.9	52
142	Calcium contacts to n-type crystalline silicon solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2017 , 25, 636-644	6.8	50
141	Room Temperature Oxide Deposition Approach to Fully Transparent, All-Oxide Thin-Film Transistors. <i>Advanced Materials</i> , 2015 , 27, 6090-5	24	49
140	Roll-to-roll anodization and etching of aluminum foils for high-throughput surface nanotexturing. <i>Nano Letters</i> , 2011 , 11, 3425-30	11.5	49
139	Synthetic WSe monolayers with high photoluminescence quantum yield. <i>Science Advances</i> , 2019 , 5, eaau4728	47.8	48
138	Prospect of tunneling green transistor for 0.1V CMOS 2010,		47
137	Dopant-Free Partial Rear Contacts Enabling 23% Silicon Solar Cells. <i>Advanced Energy Materials</i> , 2019 , 9, 1803367	21.8	47
136	Molecular monolayers for conformal, nanoscale doping of InP nanopillar photovoltaics. <i>Applied Physics Letters</i> , 2011 , 98, 203101	3.4	46
135	Optical and electrical properties of two-dimensional palladium diselenide. <i>Applied Physics Letters</i> , 2019 , 114, 253102	3.4	44
134	Increasing Photoluminescence Quantum Yield by Nanophotonic Design of Quantum-Confined Halide Perovskite Nanowire Arrays. <i>Nano Letters</i> , 2019 , 19, 2850-2857	11.5	44
133	Electron-Selective TiO ₂ Contact for Cu(In,Ga)Se ₂ Solar Cells. <i>Scientific Reports</i> , 2015 , 5, 16028	4.9	43
132	Temperature-adaptive radiative coating for all-season household thermal regulation.. <i>Science</i> , 2021 , 374, 1504-1509	33.3	43
131	Solution-Processed Transparent Self-Powered p-CuS-ZnS/n-ZnO UV Photodiode. <i>Physica Status Solidi - Rapid Research Letters</i> , 2018 , 12, 1700381	2.5	42
130	Enhanced Photocatalytic Reduction of CO ₂ to CO through TiO ₂ Passivation of InP in Ionic Liquids. <i>Chemistry - A European Journal</i> , 2015 , 21, 13502-7	4.8	41

129	Flexible carbon-nanofiber connectors with anisotropic adhesion properties. <i>Small</i> , 2010 , 6, 22-6	11	41
128	The 2008 Kavli Prize in Nanoscience: carbon nanotubes. <i>ACS Nano</i> , 2008 , 2, 1329-35	16.7	40
127	Glove-based sensors for multimodal monitoring of natural sweat. <i>Science Advances</i> , 2020 , 6, eabb8308	14.3	40
126	Nanoscale semiconductor "X" on substrate "Y"--processes, devices, and applications. <i>Advanced Materials</i> , 2011 , 23, 3115-27	24	39
125	Performance enhancement of a graphene-zinc phosphide solar cell using the electric field-effect. <i>Nano Letters</i> , 2014 , 14, 4280-5	11.5	38
124	Physical and Chemical Sensing With Electronic Skin. <i>Proceedings of the IEEE</i> , 2019 , 107, 2155-2167	14.3	37
123	Direct growth of single-crystalline III-V semiconductors on amorphous substrates. <i>Nature Communications</i> , 2016 , 7, 10502	17.4	37
122	Benchmarking the performance of ultrathin body InAs-on-insulator transistors as a function of body thickness. <i>Applied Physics Letters</i> , 2011 , 99, 103507	3.4	37
121	Quantum Size Effects on the Chemical Sensing Performance of Two-Dimensional Semiconductors. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 9750-9754	3.8	36
120	Strong optical response and light emission from a monolayer molecular crystal. <i>Nature Communications</i> , 2019 , 10, 5589	17.4	36
119	p-Type InP Nanopillar Photocathodes for Efficient Solar-Driven Hydrogen Production. <i>Angewandte Chemie</i> , 2012 , 124, 10918-10922	3.6	34
118	Superacid Passivation of Crystalline Silicon Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 24205-11	9.5	32
117	Multifunctional, flexible electronic systems based on engineered nanostructured materials. <i>Nanotechnology</i> , 2012 , 23, 344001	3.4	32
116	Nonepitaxial Thin-Film InP for Scalable and Efficient Photocathodes. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2177-82	6.4	31
115	Spin-On Organic Polymer Dopants for Silicon. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 3741-3746	6.4	31
114	Superacid-Treated Silicon Surfaces: Extending the Limit of Carrier Lifetime for Photovoltaic Applications. <i>IEEE Journal of Photovoltaics</i> , 2017 , 7, 1574-1583	3.7	31
113	Integrated Manufacture of Exoskeletons and Sensing Structures for Folded Millirobots. <i>Journal of Mechanisms and Robotics</i> , 2015 , 7,	2.2	31
112	Fermi level stabilization and band edge energies in CdxZn1-xO alloys. <i>Journal of Applied Physics</i> , 2014 , 115, 233708	2.5	31

111	Phosphine oxide monolayers on SiO ₂ surfaces. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 4440-44	2.4	31
110	Substrate-Dependent Exciton Diffusion and Annihilation in Chemically Treated MoS ₂ and WS ₂ . <i>Journal of Physical Chemistry C</i> , 2020 , 124, 12175-12184	3.8	31
109	Trace-Level, Multi-Gas Detection for Food Quality Assessment Based on Decorated Silicon Transistor Arrays. <i>Advanced Materials</i> , 2020 , 32, e1908385	24	31
108	A Wearable Nutrition Tracker. <i>Advanced Materials</i> , 2021 , 33, e2006444	24	31
107	Hierarchical polymer micropillar arrays decorated with ZnO nanowires. <i>Nanotechnology</i> , 2010 , 21, 295305-4	3.4	30
106	Fully R2R-Printed Carbon-Nanotube-Based Limitless Length of Flexible Active-Matrix for Electrophoretic Display Application. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901431	6.4	29
105	High quality interfaces of InAs-on-insulator field-effect transistors with ZrO ₂ gate dielectrics. <i>Applied Physics Letters</i> , 2013 , 102, 153513	3.4	29
104	Wet and Dry Adhesion Properties of Self-Selective Nanowire Connectors. <i>Advanced Functional Materials</i> , 2009 , 19, 3098-3102	15.6	29
103	A multi-modal sweat sensing patch for cross-verification of sweat rate, total ionic charge, and Na concentration. <i>Lab on A Chip</i> , 2019 , 19, 3179-3189	7.2	28
102	Shape-controlled synthesis of single-crystalline nanopillar arrays by template-assisted vapor-liquid-solid process. <i>Journal of the American Chemical Society</i> , 2010 , 132, 13972-4	16.4	28
101	Actively variable-spectrum optoelectronics with black phosphorus. <i>Nature</i> , 2021 , 596, 232-237	50.4	28
100	Nicotine Monitoring with a Wearable Sweat Band. <i>ACS Sensors</i> , 2020 , 5, 1831-1837	9.2	27
99	Highly Sensitive Bulk Silicon Chemical Sensors with Sub-5 nm Thin Charge Inversion Layers. <i>ACS Nano</i> , 2018 , 12, 2948-2954	16.7	27
98	Intrinsic Optoelectronic Characteristics of MoS Phototransistors a Fully Transparent van der Waals Heterostructure. <i>ACS Nano</i> , 2019 , 13, 9638-9646	16.7	27
97	Deterministic Nucleation of InP on Metal Foils with the Thin-Film Vapor-Liquid-Solid Growth Mode. <i>Chemistry of Materials</i> , 2014 , 26, 1340-1344	9.6	25
96	Thermoresponsive chemical connectors based on hybrid nanowire forests. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 616-9	16.4	25
95	Temperature and Humidity Stable Alkali/Alkaline-Earth Metal Carbonates as Electron Heterocontacts for Silicon Photovoltaics. <i>Advanced Energy Materials</i> , 2018 , 8, 1800743	21.8	25
94	Comparative study of solution-processed carbon nanotube network transistors. <i>Applied Physics Letters</i> , 2012 , 101, 112104	3.4	23

93	Neutral Exciton Diffusion in Monolayer MoS. <i>ACS Nano</i> , 2020 , 14, 13433-13440	16.7	23
92	Wearable Biosensors for Body Computing. <i>Advanced Functional Materials</i> , 2020 , 31, 2008087	15.6	22
91	Ultrathin-Body High-Mobility InAsSb-on-Insulator Field-Effect Transistors. <i>IEEE Electron Device Letters</i> , 2012 , 33, 504-506	4.4	22
90	Rationally Designed, Three-Dimensional Carbon Nanotube Back-Contacts for Efficient Solar Devices. <i>Advanced Energy Materials</i> , 2011 , 1, 1040-1045	21.8	22
89	Evaporated Se Te Thin Films with Tunable Bandgaps for Short-Wave Infrared Photodetectors. <i>Advanced Materials</i> , 2020 , 32, e2001329	24	22
88	Hybrid core-multishell nanowire forests for electrical connector applications. <i>Applied Physics Letters</i> , 2009 , 94, 263110	3.4	21
87	Improved photoswitching response times of MoS ₂ field-effect transistors by stacking p-type copper phthalocyanine layer. <i>Applied Physics Letters</i> , 2016 , 109, 183502	3.4	21
86	Dip Coating Passivation of Crystalline Silicon by Lewis Acids. <i>ACS Nano</i> , 2019 , 13, 3723-3729	16.7	20
85	Vertically aligned tungsten oxide nanorod film with enhanced performance in photoluminescence humidity sensing. <i>Sensors and Actuators B: Chemical</i> , 2014 , 202, 708-713	8.5	20
84	Nanoscale structural engineering via phase segregation: Au-Ge system. <i>Nano Letters</i> , 2010 , 10, 393-7	11.5	20
83	Generic nanomaterial positioning by carrier and stationary phase design. <i>Nano Letters</i> , 2007 , 7, 2764-8	11.5	20
82	Highly Reliable Superhydrophobic Protection for Organic Field-Effect Transistors by Fluoroalkylsilane-Coated TiO Nanoparticles. <i>ACS Nano</i> , 2018 , 12, 11062-11069	16.7	20
81	Polymeric Electron-Selective Contact for Crystalline Silicon Solar Cells with an Efficiency Exceeding 19%. <i>ACS Energy Letters</i> , 2020 , 5, 897-902	20.1	19
80	Strain engineering of epitaxially transferred, ultrathin layers of III-V semiconductor on insulator. <i>Applied Physics Letters</i> , 2011 , 98, 012111	3.4	19
79	Quantum Well InAs/AlSb/GaSb Vertical Tunnel FET With HSQ Mechanical Support. <i>IEEE Nanotechnology Magazine</i> , 2015 , 14, 580-584	2.6	18
78	Oriented Growth of Gold Nanowires on MoS ₂ . <i>Advanced Functional Materials</i> , 2015 , 25, 6257-6264	15.6	18
77	Origin of multi-level switching and telegraphic noise in organic nanocomposite memory devices. <i>Scientific Reports</i> , 2016 , 6, 33967	4.9	18
76	Determining Atomic-Scale Structure and Composition of Organo-Lead Halide Perovskites by Combining High-Resolution X-ray Absorption Spectroscopy and First-Principles Calculations. <i>ACS Energy Letters</i> , 2017 , 2, 1183-1189	20.1	17

75	Nanoscale Junction Formation by Gas-Phase Monolayer Doping. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 20648-20655	9.5	17
74	Fully gravure printed complementary carbon nanotube TFTs for a clock signal generator using an epoxy-imine based cross-linker as an n-dopant and encapsulant. <i>Nanoscale</i> , 2016 , 8, 19876-19881	7.7	17
73	Scanning Probe Lithography Patterning of Monolayer Semiconductors and Application in Quantifying Edge Recombination. <i>Advanced Materials</i> , 2019 , 31, e1900136	24	17
72	Surface Charge Transfer Doping of III-V Nanostructures. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 17845-17849	3.8	17
71	High optical quality polycrystalline indium phosphide grown on metal substrates by metalorganic chemical vapor deposition. <i>Journal of Applied Physics</i> , 2012 , 111, 123112	2.5	17
70	Zirconium oxide surface passivation of crystalline silicon. <i>Applied Physics Letters</i> , 2018 , 112, 201604	3.4	17
69	Influence of catalyst choices on transport behaviors of InAs NWs for high-performance nanoscale transistors. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 2654-9	3.6	16
68	Enhanced Near-Bandgap Response in InP Nanopillar Solar Cells. <i>Advanced Energy Materials</i> , 2014 , 4, 1400061	3.1	16
67	Compliant substrate epitaxy: Au on MoS ₂ . <i>Physical Review B</i> , 2016 , 93,	3.3	15
66	Morphological and spatial control of InP growth using closed-space sublimation. <i>Journal of Applied Physics</i> , 2012 , 112, 123102	2.5	15
65	Analysis of the interface characteristics of CVD-grown monolayer MoS by noise measurements. <i>Nanotechnology</i> , 2017 , 28, 145702	3.4	13
64	Elimination of Response to Relative Humidity Changes in Chemical-Sensitive Field-Effect Transistors. <i>ACS Sensors</i> , 2019 , 4, 1857-1863	9.2	13
63	Mid- to long-wave infrared computational spectroscopy with a graphene metasurface modulator. <i>Scientific Reports</i> , 2020 , 10, 5377	4.9	13
62	Electrodeposition of High-Purity Indium Thin Films and Its Application to Indium Phosphide Solar Cells. <i>Journal of the Electrochemical Society</i> , 2014 , 161, D794-D800	3.9	13
61	Development of a compact neutron source based on field ionization processes. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011 , 29, 02B107	1.3	13
60	Phosphine Oxide Monolayers on SiO ₂ Surfaces. <i>Angewandte Chemie</i> , 2008 , 120, 4512-4514	3.6	13
59	Spatially Precise Transfer of Patterned Monolayer WS ₂ and MoS ₂ with Features Larger than 104 nm Directly from Multilayer Sources. <i>ACS Applied Electronic Materials</i> , 2019 , 1, 407-416	4	13
58	Photovoltaic Material Characterization With Steady State and Transient Photoluminescence. <i>IEEE Journal of Photovoltaics</i> , 2015 , 5, 282-287	3.7	12

57	III-Vs at scale: a PV manufacturing cost analysis of the thin film vapor-liquid-solid growth mode. <i>Progress in Photovoltaics: Research and Applications</i> , 2016 , 24, 871-878	6.8	12
56	Ultrafast Spontaneous Emission from a Slot-Antenna Coupled WSe ₂ Monolayer. <i>ACS Photonics</i> , 2018 , 5, 2701-2705	6.3	12
55	Two-dimensional to three-dimensional tunneling in InAs/AlSb/GaSb quantum well heterojunctions. <i>Journal of Applied Physics</i> , 2013 , 114, 024502	2.5	12
54	Measuring the Edge Recombination Velocity of Monolayer Semiconductors. <i>Nano Letters</i> , 2017 , 17, 5356-5360	11.3	12
53	Inhibited nonradiative decay at all exciton densities in monolayer semiconductors. <i>Science</i> , 2021 , 373, 448-452	33.3	12
52	Wearable sweat biosensors 2016 ,		12
51	Transistor-Based Work-Function Measurement of Metal-Organic Frameworks for Ultra-Low-Power, Rationally Designed Chemical Sensors. <i>Chemistry - A European Journal</i> , 2019 , 25, 13176-13183	4.8	11
50	Thin-Film Solar Cells with InP Absorber Layers Directly Grown on Nonepitaxial Metal Substrates. <i>Advanced Energy Materials</i> , 2015 , 5, 1501337	21.8	11
49	A compact neutron generator using a field ionization source. <i>Review of Scientific Instruments</i> , 2012 , 83, 02B312	1.7	11
48	Integration of amorphous ferromagnetic oxides with multiferroic materials for room temperature magnetoelectric spintronics. <i>Scientific Reports</i> , 2020 , 10, 3583	4.9	10
47	Anomalously Suppressed Thermal Conduction by Electron-Phonon Coupling in Charge-Density-Wave Tantalum Disulfide. <i>Advanced Science</i> , 2020 , 7, 1902071	13.6	10
46	Thermal Stability of Hole-Selective Tungsten Oxide: In Situ Transmission Electron Microscopy Study. <i>Scientific Reports</i> , 2018 , 8, 12651	4.9	10
45	Effects of palladium coating on field-emission properties of carbon nanofibers in a hydrogen plasma. <i>Thin Solid Films</i> , 2013 , 534, 488-491	2.2	10
44	Carbon Nanotubes: From Growth, Placement and Assembly Control to 60mV/decade and Sub-60 mV/decade Tunnel Transistors 2006 ,		10
43	Survey of dopant-free carrier-selective contacts for silicon solar cells 2016 ,		10
42	Increased Optoelectronic Quality and Uniformity of Hydrogenated p-InP Thin Films. <i>Chemistry of Materials</i> , 2016 , 28, 4602-4607	9.6	9
41	Long-Wave Infrared Photodetectors Based on 2D Platinum Diselenide atop Optical Cavity Substrates. <i>ACS Nano</i> , 2021 , 15, 6573-6581	16.7	9
40	Light-Matter Interaction Enhancement in Anisotropic 2D Black Phosphorus via Polarization-Tailoring Nano-Optics. <i>ACS Photonics</i> , 2021 , 8, 1120-1128	6.3	9

39	Extreme In-Plane Thermal Conductivity Anisotropy in Titanium Trisulfide Caused by Heat-Carrying Optical Phonons. <i>Nano Letters</i> , 2020 , 20, 5221-5227	11.5	8
38	2D layered materials: From materials properties to device applications 2015 ,		8
37	Centimeter-Scale and Visible Wavelength Monolayer Light-Emitting Devices. <i>Advanced Functional Materials</i> , 2020 , 30, 1907941	15.6	8
36	PCBM-Grafted MWNT for Enhanced Electron Transport in Polymer Solar Cells. <i>Journal of the Electrochemical Society</i> , 2011 , 158, A237	3.9	7
35	Deterministic Assembly of Arrays of Lithographically Defined WS ₂ and MoS ₂ Monolayer Features Directly From Multilayer Sources Into Van Der Waals Heterostructures. <i>Journal of Micro and Nano-Manufacturing</i> , 2019 , 7,	1.3	7
34	Carbon Nanotubes: Printed Carbon Nanotube Electronics and Sensor Systems (Adv. Mater. 22/2016). <i>Advanced Materials</i> , 2016 , 28, 4396	24	7
33	Universal Inverse Scaling of Exciton-Exciton Annihilation Coefficient with Exciton Lifetime. <i>Nano Letters</i> , 2021 , 21, 424-429	11.5	7
32	InAs FinFETs Performance Enhancement by Superacid Surface Treatment. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 1856-1861	2.9	6
31	Microchannel contacting of crystalline silicon solar cells. <i>Scientific Reports</i> , 2017 , 7, 9085	4.9	6
30	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
29	A generic electroluminescent device for emission from infrared to ultraviolet wavelengths. <i>Nature Electronics</i> , 2020 , 3, 612-621	28.4	6
28	Bright electroluminescence in ambient conditions from WSe ₂ p-n diodes using pulsed injection. <i>Applied Physics Letters</i> , 2019 , 115, 011103	3.4	5
27	Graphitic interfacial layer to carbon nanotube for low electrical contact resistance 2010 ,		5
26	Tellurium Single-Crystal Arrays by Low-Temperature Evaporation and Crystallization. <i>Advanced Materials</i> , 2021 , 33, e2100860	24	5
25	Gate Quantum Capacitance Effects in Nanoscale Transistors. <i>Nano Letters</i> , 2019 , 19, 7130-7137	11.5	4
24	Photoluminescence imaging characterization of thin-film InP 2015 ,		4
23	Flexible Electronics: Flexible Electrochemical Bioelectronics: The Rise of In Situ Bioanalysis (Adv. Mater. 15/2020). <i>Advanced Materials</i> , 2020 , 32, 2070115	24	4
22	Nanoscience and Nanotechnology Cross Borders. <i>ACS Nano</i> , 2017 , 11, 1123-1126	16.7	3

21	In Situ Transmission Electron Microscopy Study of Molybdenum Oxide Contacts for Silicon Solar Cells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019 , 216, 1800998	1.6	3
20	Thermal stability for Te-based devices. <i>Applied Physics Letters</i> , 2020 , 117, 192104	3.4	3
19	High-gain monolithic 3D CMOS inverter using layered semiconductors. <i>Applied Physics Letters</i> , 2017 , 111, 222101	3.4	3
18	Resistive switching of carbon-based RRAM with CNT electrodes for ultra-dense memory 2010 ,		3
17	Monolayer doping and diameter-dependent electron mobility assessment of nanowires 2009 ,		3
16	Molecular Materials with Short Radiative Lifetime for High-Speed Light-Emitting Devices. <i>Matter</i> , 2020 , 3, 1832-1844	12.7	3
15	Copper Tetracyanoquinodimethane (CuTCNQ): A Metal-Organic Semiconductor for Room-Temperature Visible to Long-Wave Infrared Photodetection. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 38544-38552	9.5	3
14	Wearable Devices: Wearable Microfluidic Diaphragm Pressure Sensor for Health and Tactile Touch Monitoring (Adv. Mater. 39/2017). <i>Advanced Materials</i> , 2017 , 29,	24	2
13	Series resistance and mobility in mechanically-exfoliated layered transition metal dichalcogenide MOSFETs 2014 ,		2
12	Preface to Special Topic: Selected Papers from the International Conference on Flexible and Printed Electronics, Jeju Island, Korea, 2009. <i>Journal of Applied Physics</i> , 2010 , 108, 102701	2.5	2
11	Thermoresponsive Chemical Connectors Based on Hybrid Nanowire Forests. <i>Angewandte Chemie</i> , 2010 , 122, 626-629	3.6	2
10	Wearable Biosensors for Body Computing (Adv. Funct. Mater. 39/2021). <i>Advanced Functional Materials</i> , 2021 , 31, 2170290	15.6	2
9	Catalyst-dependent morphological evolution by interfacial stress in crystalline/morphous core/shell germanium nanowires. <i>RSC Advances</i> , 2015 , 5, 28454-28459	3.7	1
8	Carbon Nanotube Field-Effect Transistors. <i>Integrated Circuits and Systems</i> , 2009 , 63-86	0.2	1
7	Self-aligned 40-nm channel carbon nanotube field-effect transistors with subthreshold swings down to 70 mV/decade 2005 ,		1
6	Orientated Growth of Ultrathin Tellurium by van der Waals Epitaxy. <i>Advanced Materials Interfaces</i> , 2015 , 4, 1540	4.6	1
5	Improved Hydrogen Sensitivity and Selectivity in PdO with Metal-Organic Framework Membrane. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 147503	3.9	1
4	Enhanced Spontaneous Emission from an Optical Antenna Coupled WSe ₂ Monolayer 2015 ,		1

3	Performance Limits of an Alternating Current Electroluminescent Device. <i>Advanced Materials</i> , 2021 , 33, e2005635	24	1
2	A Resonantly Driven, Electroluminescent Metal Oxide Semiconductor Capacitor with High Power Efficiency. <i>ACS Nano</i> , 2021 , 15, 15210-15217	16.7	1
1	Monolayer Semiconductors: Scanning Probe Lithography Patterning of Monolayer Semiconductors and Application in Quantifying Edge Recombination (Adv. Mater. 48/2019). <i>Advanced Materials</i> , 2019 , 31, 1970340	24	