

# Kah-Wee Ang

## 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.

139 papers	3,249 citations	32 h-index	51 g-index
154 ext. papers	4,155 ext. citations	7.4 avg, IF	5.59 L-index

#	Paper	IF	Citations
139	Ferroelectric memory based on two-dimensional materials for neuromorphic computing. <i>Neuromorphic Computing and Engineering</i> , <b>2022</b> , 2, 022001		1
138	In-memory computing using memristor arrays with ultrathin 2D PdSeO /PdSe heterostructure.. <i>Advanced Materials</i> , <b>2022</b> , e2201488	24	6
137	Volatile Organic Compound Sensors Based on 2D Materials. <i>Advanced Electronic Materials</i> , <b>2021</b> , 7, 2001671	17.1	7
136	Suspended MoS Photodetector Using Patterned Sapphire Substrate. <i>Small</i> , <b>2021</b> , 17, e2100246	11	9
135	Anomalous resistive switching in memristors based on two-dimensional palladium diselenide using heterophase grain boundaries. <i>Nature Electronics</i> , <b>2021</b> , 4, 348-356	28.4	34
134	Self-Selective Multi-Terminal Memtransistor Crossbar Array for In-Memory Computing. <i>ACS Nano</i> , <b>2021</b> , 15, 1764-1774	16.7	23
133	Electron-beam-irradiated rhenium disulfide memristors with low variability for neuromorphic computing. <i>Npj 2D Materials and Applications</i> , <b>2021</b> , 5,	8.8	24
132	Charge Carrier Mobility and Series Resistance Extraction in 2D Field-Effect Transistors: Toward the Universal Technique. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2105003	15.6	
131	Gate-Defined Quantum Confinement in CVD 2D WS. <i>Advanced Materials</i> , <b>2021</b> , e2103907	24	3
130	Wafer-Scale 2D Hafnium Diselenide Based Memristor Crossbar Array for Energy-Efficient Neural Network Hardware. <i>Advanced Materials</i> , <b>2021</b> , e2103376	24	27
129	Mid-infrared modulators integrating silicon and black phosphorus photonics. <i>Materials Today Advances</i> , <b>2021</b> , 12, 100170	7.4	0
128	Hardware Implementation of Neuromorphic Computing Using Large-Scale Memristor Crossbar Arrays. <i>Advanced Intelligent Systems</i> , <b>2021</b> , 3, 2000137	6	25
127	Zero-bias mid-infrared graphene photodetectors with bulk photoresponse and calibration-free polarization detection. <i>Nature Communications</i> , <b>2020</b> , 11, 6404	17.4	37
126	An Electronic Synapse Based on 2D Ferroelectric CuInP2S6. <i>Advanced Electronic Materials</i> , <b>2020</b> , 6, 2000760	16.9	19
125	A van der Waals Synaptic Transistor Based on Ferroelectric Hf0.5Zr0.5O2 and 2D Tungsten Disulfide. <i>Advanced Electronic Materials</i> , <b>2020</b> , 6, 2000057	6.4	41
124	High-Responsivity Mid-Infrared Black Phosphorus Slow Light Waveguide Photodetector. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 2000337	8.1	27
123	Ultrasensitive and robust two-dimensional indium selenide flexible electronics and sensors for human motion detection. <i>Nano Energy</i> , <b>2020</b> , 76, 105020	17.1	13

122	Wearable Triboelectric-Human-Machine Interface (THMI) Using Robust Nanophotonic Readout. <i>ACS Nano</i> , <b>2020</b> , 14, 8915-8930	16.7	63
121	Beta-Ga2O3 MOSFET Device Optimization via TCAD <b>2020</b> ,		1
120	2D photonic memristor beyond graphene: progress and prospects. <i>Nanophotonics</i> , <b>2020</b> , 9, 1579-1599	6.3	32
119	Temperature-stable black phosphorus field-effect transistors through effective phonon scattering suppression on atomic layer deposited aluminum nitride. <i>Nanophotonics</i> , <b>2020</b> , 9, 2053-2062	6.3	0
118	Transition from trap-mediated to band-like transport in polycrystalline monolayer molybdenum disulfide memtransistors. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 223101	3.4	4
117	Two-dimensional materials toward future photovoltaic devices <b>2020</b> , 117-158		1
116	Recent advances in black phosphorus and transition metal dichalcogenideBased electronic and optoelectronics devices <b>2020</b> , 251-312		2
115	Black phosphorus photonics toward on-chip applications. <i>Applied Physics Reviews</i> , <b>2020</b> , 7, 031302	17.3	8
114	A Fully Printed Flexible MoS2 Memristive Artificial Synapse with Femtojoule Switching Energy. <i>Advanced Electronic Materials</i> , <b>2019</b> , 5, 1900740	6.4	71
113	Unipolar n-Type Conduction in Black Phosphorus Induced by Atomic Layer Deposited MgO. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 471-474	4.4	6
112	Electronic Devices and Circuits Based on Wafer-Scale Polycrystalline Monolayer MoS2 by Chemical Vapor Deposition. <i>Advanced Electronic Materials</i> , <b>2019</b> , 5, 1900393	6.4	38
111	Fabry-Perot cavity enhanced light-matter interactions in two-dimensional van der Waals heterostructure. <i>Nano Energy</i> , <b>2019</b> , 62, 667-673	17.1	16
110	A flexible InGaAs nanomembrane PhotoFET with tunable responsivities in near- and short-wave IR region for lightweight imaging applications. <i>APL Materials</i> , <b>2019</b> , 7, 031503	5.7	6
109	Artificial Synapses Based on Multiterminal Memtransistors for Neuromorphic Application. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1901106	15.6	121
108	First Demonstration of a Fully-Printed Mos2Rram on Flexible Substrate with Ultra-Low Switching Voltage and its Application as Electronic Synapse <b>2019</b> ,		5
107	A Compact Model for 2-D Poly-MoS2 FETs With Resistive Switching in Postsynaptic Simulation. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 4092-4100	2.9	2
106	Anomalous Broadband Spectrum Photodetection in 2D Rhenium Disulfide Transistor. <i>Advanced Optical Materials</i> , <b>2019</b> , 7, 1901115	8.1	26
105	Surface-Enhanced Infrared Absorption-Based CO2 Sensor using Photonic Crystal Slab <b>2019</b> ,		1

104	Thermal annealing study of the mid-infrared aluminum nitride on insulator (AlNOI) photonics platform. <i>Optics Express</i> , <b>2019</b> , 27, 19815-19826	3.3	10
103	Aluminum nitride on insulator (AlNOI) platform for mid-infrared photonics. <i>Optics Letters</i> , <b>2019</b> , 44, 73-76		25
102	Nearly lattice-matched molybdenum disulfide/gallium nitride heterostructure enabling high-performance phototransistors. <i>Photonics Research</i> , <b>2019</b> , 7, 311	6	19
101	Monolithic integration of MoS <sub>2</sub> -based visible detectors and GaN-based UV detectors. <i>Photonics Research</i> , <b>2019</b> , 7, 1127	6	25
100	First Demonstration of Waveguide-Integrated Black Phosphorus Electro-Optic Modulator for Mid-Infrared Beyond 4 $\mu$ m <b>2019</b> ,		1
99	Ultrasensitive Flexible Strain Sensor based on Two-Dimensional InSe for Human Motion Surveillance <b>2019</b> ,		2
98	TMD-Based Phototransistors: Anomalous Broadband Spectrum Photodetection in 2D Rhenium Disulfide Transistor (Advanced Optical Materials 23/2019). <i>Advanced Optical Materials</i> , <b>2019</b> , 7, 1970088 <sup>8.1</sup>		
97	Black Phosphorus Based Photodetectors. <i>ACS Symposium Series</i> , <b>2019</b> , 135-153	0.4	3
96	Waveguide-Integrated Black Phosphorus Photodetector for Mid-Infrared Applications. <i>ACS Nano</i> , <b>2019</b> , 13, 913-921	16.7	96
95	Recent Advances in Black Phosphorus-Based Electronic Devices. <i>Advanced Electronic Materials</i> , <b>2019</b> , 5, 1800666	6.4	20
94	Direct n- to p-Type Channel Conversion in Monolayer/Few-Layer WS Field-Effect Transistors by Atomic Nitrogen Treatment. <i>ACS Nano</i> , <b>2018</b> , 12, 2506-2513	16.7	67
93	Towards low-loss waveguides in SOI and Ge-on-SOI for mid-IR sensing. <i>Journal of Physics Communications</i> , <b>2018</b> , 2, 045029	1.2	7
92	2D Photovoltaic Devices: Progress and Prospects. <i>Small Methods</i> , <b>2018</b> , 2, 1700294	12.8	77
91	A Black Phosphorus Carbide Infrared Phototransistor. <i>Advanced Materials</i> , <b>2018</b> , 30, 1705039	24	75
90	Large-Scale Transparent Molybdenum Disulfide Plasmonic Photodetector Using Split Bull Eye Structure. <i>Advanced Optical Materials</i> , <b>2018</b> , 6, 1800461	8.1	12
89	A surface potential based compact model for two-dimensional field effect transistors with disorders induced transition behaviors. <i>Journal of Applied Physics</i> , <b>2018</b> , 124, 034302	2.5	3
88	Efficient and reliable surface charge transfer doping of black phosphorus via atomic layer deposited MgO toward high performance complementary circuits. <i>Nanoscale</i> , <b>2018</b> , 10, 17007-17014	7.7	27
87	Dispersion engineering and thermo-optic tuning in mid-infrared photonic crystal slow light waveguides on silicon-on-insulator. <i>Optics Letters</i> , <b>2018</b> , 43, 5504-5507	3	25

86	Pronounced Photovoltaic Effect in Electrically Tunable Lateral Black-Phosphorus Heterojunction Diode. <i>Advanced Electronic Materials</i> , <b>2018</b> , 4, 1700442	6.4	17
85	A Surface Potential- and Physics- Based Compact Model for 2D Polycrystalline-MoS <sub>2</sub> FET with Resistive Switching Behavior in Neuromorphic Computing <b>2018</b> ,		1
84	A Near- & Short-Wave IR Tunable InGaAs Nanomembrane PhotoFET on Flexible Substrate for Lightweight and Wide-Angle Imaging Applications <b>2018</b> ,		1
83	Integration of 2D Black Phosphorus Phototransistor and Silicon Photonics Waveguide System Towards Mid-Infrared On-Chip Sensing Applications <b>2018</b> ,		1
82	All-Dielectric Surface-Enhanced Infrared Absorption-Based Gas Sensor Using Guided Resonance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 38272-38279	9.5	52
81	High Mobility Anisotropic Black Phosphorus Nanoribbon Field-Effect Transistor. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1801524	15.6	53
80	Black Phosphorus Carbide as a Tunable Anisotropic Plasmonic Metasurface. <i>ACS Photonics</i> , <b>2018</b> , 5, 311663123	39	
79	Gigahertz Integrated Circuits Based on Complementary Black Phosphorus Transistors. <i>Advanced Electronic Materials</i> , <b>2018</b> , 4, 1800274	6.4	19
78	Tunable black phosphorus heterojunction transistors for multifunctional optoelectronics. <i>Nanoscale</i> , <b>2018</b> , 10, 14359-14367	7.7	19
77	Complementary Black Phosphorus Nanoribbons Field-Effect Transistors and Circuits. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 4122-4128	2.9	10
76	Impact and Origin of Interface States in MOS Capacitor with Monolayer MoS and HfO High-k Dielectric. <i>Scientific Reports</i> , <b>2017</b> , 7, 40669	4.9	61
75	Monolayer WxMo <sub>1-x</sub> S <sub>2</sub> Grown by Atmospheric Pressure Chemical Vapor Deposition: Bandgap Engineering and Field Effect Transistors. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1606469	15.6	34
74	Few-Layer Black Phosphorus Carbide Field-Effect Transistor via Carbon Doping. <i>Advanced Materials</i> , <b>2017</b> , 29, 1700503	24	95
73	Al-Doped Black Phosphorus p-n Homojunction Diode for High Performance Photovoltaic. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1604638	15.6	120
72	Band alignment of atomic layer deposited TiO <sub>2</sub> /multilayer MoS <sub>2</sub> interface determined by x-ray photoelectron spectroscopy. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 698, 141-146	5.7	9
71	Infrared Black Phosphorus Phototransistor with Tunable Responsivity and Low Noise Equivalent Power. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 36130-36136	9.5	57
70	AlGa <sub>N</sub> /Ga <sub>N</sub> high electron mobility transistors with a low sub-threshold swing on free-standing Ga <sub>N</sub> wafer. <i>AIP Advances</i> , <b>2017</b> , 7, 095305	1.5	15
69	Monolithically Integrated Flexible Black Phosphorus Complementary Inverter Circuits. <i>ACS Nano</i> , <b>2017</b> , 11, 7416-7423	16.7	43

68	Black Phosphorus N-Type Field-Effect Transistor with Ultrahigh Electron Mobility via Aluminum Adatoms Doping. <i>Small</i> , <b>2017</b> , 13, 1602909	11	56
67	High temperature study on the thermal properties of few-layer Mo <sub>0.5</sub> W <sub>0.5</sub> S <sub>2</sub> and effects of capping layers. <i>Results in Physics</i> , <b>2017</b> , 7, 4394-4397	3.7	4
66	A unified surface potential based physical compact model for both unipolar and ambipolar 2D-FET: Experimental verification and circuit demonstration <b>2017</b> ,		10
65	Germanium-on-SOI waveguides for mid-infrared wavelengths. <i>Optics Express</i> , <b>2016</b> , 24, 11987-93	3.3	27
64	Interface Engineering for the Enhancement of Carrier Transport in Black Phosphorus Transistor with Ultra-Thin High-k Gate Dielectric. <i>Scientific Reports</i> , <b>2016</b> , 6, 26609	4.9	26
63	Mid-infrared waveguides in Ge-on-SOI <b>2016</b> ,		1
62	Towards Low-loss Mid-infrared Waveguides in Ge-on-SOI <b>2016</b> ,		2
61	Anomalously enhanced thermal stability of phosphorene via metal adatom doping: An experimental and first-principles study. <i>Nano Research</i> , <b>2016</b> , 9, 2687-2695	10	25
60	Black Phosphorus Based Field Effect Transistors with Simultaneously Achieved Near Ideal Subthreshold Swing and High Hole Mobility at Room Temperature. <i>Scientific Reports</i> , <b>2016</b> , 6, 24920	4.9	31
59	Band alignment of ZnO/multilayer MoS <sub>2</sub> interface determined by x-ray photoelectron spectroscopy. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 071602	3.4	7
58	Effects of Al <sub>2</sub> O <sub>3</sub> capping layers on the thermal properties of thin black phosphorus. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 261901	3.4	18
57	Propagation Loss Improvement in Ge-on-SOI Mid-Infrared Waveguides Using Rapid Thermal Annealing. <i>IEEE Photonics Technology Letters</i> , <b>2016</b> , 28, 2447-2450	2.2	5
56	Black phosphorus transistors with enhanced hole transport and subthreshold swing using ultra-thin HfO <sub>2</sub> high-k gate dielectric <b>2016</b> ,		7
55	Nickel-phosphide contact for effective Schottky barrier modulation in black phosphorus p-channel transistors <b>2016</b> ,		2
54	Band alignment of atomic layer deposited high-k Al <sub>2</sub> O <sub>3</sub> /multilayer MoS <sub>2</sub> interface determined by X-ray photoelectron spectroscopy. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 650, 502-507	5.7	13
53	Band alignment of HfO <sub>2</sub> /multilayer MoS <sub>2</sub> interface determined by x-ray photoelectron spectroscopy: Effect of CHF <sub>3</sub> treatment. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 101601	3.4	20
52	Next generation field-effect transistors based on 2D black phosphorus crystal <b>2015</b> ,		1
51	Black Phosphorus Transistors with Near Band Edge Contact Schottky Barrier. <i>Scientific Reports</i> , <b>2015</b> , 5, 18000	4.9	29

50	Low temperature carrier transport study of monolayer MoS <sub>2</sub> field effect transistors prepared by chemical vapor deposition under an atmospheric pressure. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 124506	2.5	17
49	Thermal effects on the Raman phonon of few-layer phosphorene. <i>APL Materials</i> , <b>2015</b> , 3, 126104	5.7	9
48	Second-order surface-plasmon assisted responsivity enhancement in germanium nano-photodetectors with bullseye antennas. <i>Optics Express</i> , <b>2014</b> , 22, 15949-56	3.3	9
47	(Invited) Electrical Characterization and Reliability Assessment of Double-Gate FinFETs. <i>ECS Transactions</i> , <b>2013</b> , 50, 201-206	1	2
46	. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 631-633	4.4	5
45	Impact of Fin Doping and Gate Stack on FinFET (110) and (100) Electron and Hole Mobilities. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 351-353	4.4	16
44	Characterization of Strain-Engineered Si:C Epitaxial Layers on Si Substrates. <i>ECS Transactions</i> , <b>2012</b> , 45, 23-29	1	2
43	Split Bullseye shaped aluminum antenna for plasmon-enhanced nanometer scale germanium photodetector. <i>Nano Letters</i> , <b>2011</b> , 11, 1289-93	11.5	60
42	Waveguide-Integrated Ge/Si Avalanche Photodetector with 105GHz Gain-Bandwidth Product <b>2010</b> ,		2
41	Surface plasmon enhanced responsivity in a waveguided germanium metal-semiconductor-metal photodetector. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 091102	3.4	33
40	(Invited) Silicon Photonics Technologies for Monolithic Electronic-Photonic Integrated Circuit. <i>ECS Transactions</i> , <b>2010</b> , 28, 3-11	1	10
39	WDM multi-channel silicon photonic receiver with 320 Gbps data transmission capability. <i>Optics Express</i> , <b>2010</b> , 18, 5106-13	3.3	102
38	Monolithic Polarization and Phase Diversity Coherent Receiver in Silicon. <i>Journal of Lightwave Technology</i> , <b>2010</b> , 28, 520-525	4	109
37	Nanometer germanium photodetector with aluminum surface plasmon antenna for enhanced photo-response <b>2010</b> ,		2
36	Monolithic Silicon Photonic DWDM Receiver for Terabit Data Communications <b>2010</b> ,		2
35	Silicon Modulators and Germanium Photodetectors on SOI: Monolithic Integration, Compatibility, and Performance Optimization. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2010</b> , 16, 307-315	3.8	179
34	Low Thermal Budget Monolithic Integration of Evanescent-Coupled Ge-on-SOI Photodetector on Si CMOS Platform. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2010</b> , 16, 106-113	3.8	36
33	Impact of field-enhanced band-traps-band tunneling on the dark current generation in germanium p-i-n photodetector. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 223515	3.4	30



32	80 GHz bandwidth-gain-product Ge/Si avalanche photodetector by selective Ge growth <b>2009</b> ,		3
31	Contact Resistance Reduction Technology Using Selenium Segregation for N-MOSFETs With Silicon-Carbon Source/Drain. <i>IEEE Transactions on Electron Devices</i> , <b>2009</b> , 56, 1128-1134	2.9	6
30	Waveguided Ge/Si Avalanche Photodiode With Separate Vertical SEG-Ge Absorption, Lateral Si Charge, and Multiplication Configuration. <i>IEEE Electron Device Letters</i> , <b>2009</b> , 30, 934-936	4.4	16
29	Strained $\text{Si-Ge}$ -MOSFET With Embedded Source/Drain Stressors and Strain-Transfer Structure (STS) for Enhanced Transistor Performance. <i>IEEE Transactions on Electron Devices</i> , <b>2008</b> , 55, 850-857	2.9	23
28	Novel Silicon-Carbon (Si:C) Schottky Barrier Enhancement Layer for Dark-Current Suppression in Ge-on-SOI MSM Photodetectors. <i>IEEE Electron Device Letters</i> , <b>2008</b> , 29, 704-707	4.4	38
27	High-Performance Waveguided Ge-on-SOI Metal-Semiconductor-Metal Photodetectors With Novel Silicon-Carbon (Si : C) Schottky Barrier Enhancement Layer. <i>IEEE Photonics Technology Letters</i> , <b>2008</b> , 20, 754-756	2.2	28
26	A new source/drain germanium-enrichment process comprising Ge deposition and laser-induced local melting and recrystallization for P-FET performance enhancement <b>2008</b> ,		1
25	Silicon-Carbon Stressors With High Substitutional Carbon Concentration and In Situ Doping Formed in Source/Drain Extensions of n-Channel Transistors. <i>IEEE Electron Device Letters</i> , <b>2008</b> , 29, 460-463	4.4	13
24	Novel NiGe MSM Photodetector Featuring Asymmetrical Schottky Barriers Using Sulfur Co-Implantation and Segregation. <i>IEEE Electron Device Letters</i> , <b>2008</b> , 29, 708-710	4.4	21
23	Novel Nickel Silicide Contact Technology Using Selenium Segregation for SOI N-FETs With Silicon-Carbon Source/Drain Stressors. <i>IEEE Electron Device Letters</i> , <b>2008</b> , 29, 841-844	4.4	12
22	Low-Voltage and High-Responsivity Germanium Bipolar Phototransistor for Optical Detections in the Near-Infrared Regime. <i>IEEE Electron Device Letters</i> , <b>2008</b> , 29, 1124-1127	4.4	30
21	Laser Annealing of Amorphous Germanium on Silicon-Germanium Source/Drain for Strain and Performance Enhancement in pMOSFETs. <i>IEEE Electron Device Letters</i> , <b>2008</b> , 29, 885-888	4.4	8
20	Nickel-Silicide:Carbon Contact Technology for N-Channel MOSFETs With Silicon-Carbon Source/Drain. <i>IEEE Electron Device Letters</i> , <b>2008</b> , 29, 89-92	4.4	41
19	Beneath-The-Channel Strain-Transfer-Structure (STS) and Embedded Source/Drain Stressors for Strain and Performance Enhancement of Nanoscale MOSFETs <b>2007</b> ,		6
18	Hot Carrier Reliability of Strained N-Mosfet with Lattice Mismatched Source/Drain Stressors <b>2007</b> ,		2
17	Enhanced Strain Effects in 25-nm Gate-Length Thin-Body nMOSFETs With Silicon-Carbon Source/Drain and Tensile-Stress Liner. <i>IEEE Electron Device Letters</i> , <b>2007</b> , 28, 301-304	4.4	17
16	Strained n-Channel Transistors With Silicon Source and Drain Regions and Embedded Silicon/Germanium as Strain-Transfer Structure. <i>IEEE Electron Device Letters</i> , <b>2007</b> , 28, 609-612	4.4	27
15	Strained Thin-Body p-MOSFET With Condensed Silicon-Germanium Source/Drain for Enhanced Drive Current Performance. <i>IEEE Electron Device Letters</i> , <b>2007</b> , 28, 509-512	4.4	13



14	Carrier backscattering characteristics of strained silicon-on-insulator n-MOSFETs featuring silicon-carbon source/drain regions. <i>Solid-State Electronics</i> , <b>2007</b> , 51, 1444-1449	1.7	5
13	n-MOSFET With Silicon-Carbon Source/Drain for Enhancement of Carrier Transport. <i>IEEE Transactions on Electron Devices</i> , <b>2007</b> , 54, 249-256	2.9	43
12	Performance Enhancement in Uniaxial Strained Silicon-on-Insulator N-MOSFETs Featuring Silicon-Carbon Source/Drain Regions. <i>IEEE Transactions on Electron Devices</i> , <b>2007</b> , 54, 2910-2917	2.9	25
11	Hot-Carrier Effects in Strained n-Channel Transistor With Silicon-Carbon $\text{Si}_{1-y}\text{C}_y$ Source/Drain Stressors and Its Orientation Dependence. <i>IEEE Electron Device Letters</i> , <b>2007</b> , 28, 996-999	4.4	1
10	Material and Electrical Characterization of Nickel Silicide-Carbon as Contact Metal to Silicon-Carbon Source and Drain Stressors. <i>Materials Research Society Symposia Proceedings</i> , <b>2007</b> , 995, 1		
9	Strain-Transfer Structure Beneath the Transistor Channel for Increasing the Strain Effects of Lattice-Mismatched Source and Drain Stressors. <i>Materials Research Society Symposia Proceedings</i> , <b>2007</b> , 995, 1		2
8	Integrated process of photoresist trimming and dielectric hard mask etching for sub-50 nm gate patterning. <i>Thin Solid Films</i> , <b>2006</b> , 504, 117-120	2.2	1
7	Process-Induced Strained P-MOSFET Featuring Nickel-Platinum Silicided Source/Drain. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 913, 1		2
6	Carrier Backscattering Characteristics of Strained N-MOSFET Featuring Silicon-Carbon Source/Drain Regions. <i>Solid-State Device Research Conference, 2008 ESSDERC 2008 38th European</i> , <b>2006</b> ,		6
5	Lattice strain analysis of transistor structures with silicon-germanium and silicon-carbon source-drain stressors. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 093102	3.4	89
4	Enhanced performance in 50 nm N-MOSFETs with silicon-carbon source/drain regions		11
3	Thin body silicon-on-insulator N-MOSFET with silicon-carbon source/drain regions for performance enhancement		
2	Recent progress on 2D materials-based artificial synapses. <i>Critical Reviews in Solid State and Materials Sciences</i> , 1-26	10.1	5
1	Interface Modulated Resistive Switching in Mo-irradiated ReS <sub>2</sub> for Neuromorphic Computing. <i>Advanced Materials</i> , 2202722	24	3