

# Muhammad Mustafa Hussain

## List of Publications by Year in descending order

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278  
papers

6,161  
citations

66343

42  
h-index

95266

68  
g-index

298  
all docs

298  
docs citations

298  
times ranked

6939  
citing authors

#	ARTICLE	IF	CITATIONS
1	Memristor-based memory: The sneak paths problem and solutions. <i>Microelectronics Journal</i> , 2013, 44, 176-183.	2.0	347
2	Soft Actuators for Soft Robotic Applications: A Review. <i>Advanced Intelligent Systems</i> , 2020, 2, 2000128.	6.1	244
3	CMOS-Enabled Flexible and Stretchable Electronics for Internet of Everything Applications. <i>Advanced Materials</i> , 2016, 28, 4219-4249.	21.0	179
4	Dipole model explaining high-k/metal gate field effect transistor threshold voltage tuning. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	161
5	Silicon Nanotube Field Effect Transistor with Core-Shell Gate Stacks for Enhanced High-Performance Operation and Area Scaling Benefits. <i>Nano Letters</i> , 2011, 11, 4393-4399.	9.1	142
6	Metal/Polymer Based Stretchable Antenna for Constant Frequency Far-Field Communication in Wearable Electronics. <i>Advanced Functional Materials</i> , 2015, 25, 6565-6575.	14.9	134
7	Flexible Nanoporous Template for the Design and Development of Reusable Anti-COVID-19 Hydrophobic Face Masks. <i>ACS Nano</i> , 2020, 14, 7659-7665.	14.6	133
8	Recent Progress on Flexible Capacitive Pressure Sensors: From Design and Materials to Applications. <i>Advanced Materials Technologies</i> , 2021, 6, 2001023.	5.8	131
9	Vertically Grown Multiwalled Carbon Nanotube Anode and Nickel Silicide Integrated High Performance Microsized (1.25 $\mu$ m) Microbial Fuel Cell. <i>Nano Letters</i> , 2012, 12, 791-795.	9.1	125
10	Paper-based origami flexible and foldable thermoelectric nanogenerator. <i>Nano Energy</i> , 2017, 31, 296-301.	16.0	125
11	Compliant plant wearables for localized microclimate and plant growth monitoring. <i>Npj Flexible Electronics</i> , 2018, 2, .	10.7	119
12	Review on Physically Flexible Nonvolatile Memory for Internet of Everything Electronics. <i>Electronics (Switzerland)</i> , 2015, 4, 424-479.	3.1	118
13	High-Performance Silicon Nanotube Tunneling FET for Ultralow-Power Logic Applications. <i>IEEE Transactions on Electron Devices</i> , 2013, 60, 1034-1039.	3.0	102
14	The 2021 flexible and printed electronics roadmap. <i>Flexible and Printed Electronics</i> , 2021, 6, 023001.	2.7	100
15	Thin PZT-Based Ferroelectric Capacitors on Flexible Silicon for Nonvolatile Memory Applications. <i>Advanced Electronic Materials</i> , 2015, 1, 1500045.	5.1	99
16	Paper Skin Multisensory Platform for Simultaneous Environmental Monitoring. <i>Advanced Materials Technologies</i> , 2016, 1, 1600004.	5.8	93
17	Are Nanotube Architectures More Advantageous Than Nanowire Architectures For Field Effect Transistors?. <i>Scientific Reports</i> , 2012, 2, 475.	3.3	86
18	Large-scale graphitic thin films synthesized on Ni and transferred to insulators: Structural and electronic properties. <i>Journal of Applied Physics</i> , 2010, 107, .	2.5	83

#	ARTICLE	IF	CITATIONS
19	Transformational Silicon Electronics. ACS Nano, 2014, 8, 1468-1474.	14.6	80
20	InAs/Si Hetero-Junction Nanotube Tunnel Transistors. Scientific Reports, 2015, 5, 9843.	3.3	78
21	Sustainable Design of High-Performance Microsized Microbial Fuel Cell with Carbon Nanotube Anode and Air Cathode. ACS Nano, 2013, 7, 6921-6927.	14.6	71
22	Flexible and Semi-Transparent Thermoelectric Energy Harvesters from Low Cost Bulk Silicon (100). Small, 2013, 9, 3916-3921.	10.0	70
23	Soft Actuators for Soft Robotic Applications: A Review. Advanced Intelligent Systems, 2020, 2, 2070102.	6.1	70
24	Energy harvesting from organic liquids in micro-sized microbial fuel cells. NPC Asia Materials, 2014, 6, e89-e89.	7.9	68
25	A Robust Wearable Point-of-Care CNT-Based Strain Sensor for Wirelessly Monitoring Throat-Related Illnesses. Advanced Functional Materials, 2021, 31, 2103375.	14.9	67
26	Ultrastretchable and Flexible Copper Interconnect-Based Smart Patch for Adaptive Thermotherapy. Advanced Healthcare Materials, 2015, 4, 665-673.	7.6	66
27	Flexible Nanoscale High-Performance FinFETs. ACS Nano, 2014, 8, 9850-9856.	14.6	65
28	Flexible and biocompatible high-performance solid-state micro-battery for implantable orthodontic system. Npj Flexible Electronics, 2017, 1, .	10.7	65
29	Recyclable Nonfunctionalized Paper-Based Ultralow-Cost Wearable Health Monitoring System. Advanced Materials Technologies, 2017, 2, 1600228.	5.8	63
30	Can We Build a Truly High Performance Computer Which is Flexible and Transparent?. Scientific Reports, 2013, 3, 2609.	3.3	60
31	Si/Ge hetero-structure nanotube tunnel field effect transistor. Journal of Applied Physics, 2015, 117, .	2.5	60
32	Design and characterization of ultra-stretchable monolithic silicon fabric. Applied Physics Letters, 2014, 105, .	3.3	56
33	Stretchable helical architecture inorganic-organic hetero thermoelectric generator. Nano Energy, 2016, 30, 691-699.	16.0	55
34	Review- Micro and Nano-Engineering Enabled New Generation of Thermoelectric Generator Devices and Applications. ECS Journal of Solid State Science and Technology, 2017, 6, N3036-N3044.	1.8	54
35	From stretchable to reconfigurable inorganic electronics. Extreme Mechanics Letters, 2016, 9, 245-268.	4.1	52
36	Enhanced Performance of MoS <sub>2</sub> Photodetectors by Inserting an ALD-Processed TiO <sub>2</sub> Interlayer. Small, 2018, 14, 1703176.	10.0	51

#	ARTICLE	IF	CITATIONS
37	Flexible and Stretchable Electronics for Harsh Environmental Applications. <i>Advanced Materials Technologies</i> , 2019, 4, 1900145.	5.8	51
38	Compliant lightweight non-invasive standalone "Marine Skin" tagging system. <i>Npj Flexible Electronics</i> , 2018, 2, .	10.7	50
39	Flexible and Transparent Silicon Polymer Based Sub 20 nm Non Planar 3D FinFET for Brain Architecture Inspired Computation. <i>Advanced Materials</i> , 2014, 26, 2794-2799.	21.0	49
40	Noninvasive Featherlight Wearable Compliant "Marine Skin" Standalone Multisensory System for Deep Sea Environmental Monitoring. <i>Small</i> , 2019, 15, e1804385.	10.0	49
41	Concentrator photovoltaic module architectures with capabilities for capture and conversion of full global solar radiation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E8210-E8218.	7.1	48
42	Paper as a Substrate and an Active Material in Paper Electronics. <i>ACS Applied Electronic Materials</i> , 2021, 3, 30-52.	4.3	48
43	CMOS Enabled Microfluidic Systems for Healthcare Based Applications. <i>Advanced Materials</i> , 2018, 30, e1705759.	21.0	46
44	Study of harsh environment operation of flexible ferroelectric memory integrated with PZT and silicon fabric. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	40
45	Integration of Dual Metal Gate CMOS on High-k Dielectrics Utilizing a Metal Wet Etch Process. <i>Electrochemical and Solid-State Letters</i> , 2005, 8, G271.	2.2	39
46	Structural and electrical characteristics of high-k/metal gate metal oxide semiconductor capacitors fabricated on flexible, semi-transparent silicon (100) fabric. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	37
47	Acceleration Sensors: Sensing Mechanisms, Emerging Fabrication Strategies, Materials, and Applications. <i>ACS Applied Electronic Materials</i> , 2021, 3, 504-531.	4.3	35
48	Flexible High- $\kappa$ /Metal Gate Metal/Insulator/Metal Capacitors on Silicon (100) Fabric. <i>IEEE Transactions on Electron Devices</i> , 2013, 60, 3305-3309.	3.0	33
49	Printed Organic and Inorganic Electronics: Devices To Systems. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2017, 7, 147-160.	3.6	33
50	Design Analysis and Human Tests of Foil-Based Wheezing Monitoring System for Asthma Detection. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 249-257.	3.0	32
51	A thermoelectric generator using loop heat pipe and design match for maximum-power generation. <i>Applied Thermal Engineering</i> , 2015, 91, 1082-1091.	6.0	31
52	Simulation Study of a 3-D Device Integrating FinFET and UTBFET. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 83-87.	3.0	31
53	Corrugation Enabled Asymmetrically Ultrastretchable (95%) Monocrystalline Silicon Solar Cells with High Efficiency (19%). <i>Advanced Energy Materials</i> , 2019, 9, 1902883.	19.5	31
54	Nano-materials Enabled Thermoelectricity from Window Glasses. <i>Scientific Reports</i> , 2012, 2, 841.	3.3	30

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55	Simplistic graphene transfer process and its impact on contact resistance. Applied Physics Letters, 2013, 102, 183115.	3.3	30
56	(110) and (100) Sidewall-oriented FinFETs: A performance and reliability investigation. Solid-State Electronics, 2012, 78, 2-10.	1.4	29
57	Corrugation Architecture Enabled Ultraflexible Wafer-Scale High-Efficiency Monocrystalline Silicon Solar Cell. Advanced Energy Materials, 2018, 8, 1702221.	19.5	29
58	Mechanical anomaly impact on metal-oxide-semiconductor capacitors on flexible silicon fabric. Applied Physics Letters, 2014, 104, 234104.	3.3	27
59	Porous Nanomaterials for Ultrabroadband Omnidirectional Anti-Reflection Surfaces with Applications in High Concentration Photovoltaics. Advanced Energy Materials, 2017, 7, 1601992.	19.5	27
60	Diaphragm shape effect on the performance of foil-based capacitive pressure sensors. AIP Advances, 2020, 10, .	1.3	27
61	Nonplanar Nanoscale Fin Field Effect Transistors on Textile, Paper, Wood, Stone, and Vinyl <i>via</i> Soft Material-Enabled Double-Transfer Printing. ACS Nano, 2015, 9, 5255-5263.	14.6	26
62	Gate-First Integration of Tunable Work Function Metal Gates of Different Thicknesses Into High- $k$ /Metal Gates CMOS FinFETs for Multi- $\mu\text{m}$ Th Engineering. IEEE Transactions on Electron Devices, 2010, 57, 626-631.	3.0	25
63	Three-terminal nanoelectromechanical switch based on tungsten nitride—an amorphous metallic material. Nanotechnology, 2016, 27, 035202.	2.6	25
64	Mechanical response of spiral interconnect arrays for highly stretchable electronics. Applied Physics Letters, 2017, 111, 214102.	3.3	25
65			

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73	Towards neuromorphic electronics: Memristors on foldable silicon fabric. <i>Microelectronics Journal</i> , 2014, 45, 1392-1395.	2.0	22
74	Room to High Temperature Measurements of Flexible SOI FinFETs With Sub-20-nm Fins. <i>IEEE Transactions on Electron Devices</i> , 2014, 61, 3978-3984.	3.0	21
75	Impact of scaling on the performance and reliability degradation of metal-contacts in NEMS devices. , 2011, , .		20
76	Wavy channel transistor for area efficient high performance operation. <i>Applied Physics Letters</i> , 2013, 102, 134109.	3.3	20
77	Stretchable and foldable silicon-based electronics. <i>Applied Physics Letters</i> , 2017, 110, .	3.3	20
78	Expandable Polymer Enabled Wirelessly Destructible High-Performance Solid State Electronics. <i>Advanced Materials Technologies</i> , 2017, 2, 1600264.	5.8	20
79	Ultraflexible Corrugated Monocrystalline Silicon Solar Cells with High Efficiency (19%), Improved Thermal Performance, and Reliability Using Low-Cost Laser Patterning. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 2269-2275.	8.0	20
80	Hot carrier degradation in HfSiON/TiN fin shaped field effect transistor with different substrate orientations. <i>Journal of Vacuum Science &amp; Technology B</i> , 2009, 27, 468.	1.3	19
81	A Review of the Real-Time Monitoring of Fluid-Properties in Tubular Architectures for Industrial Applications. <i>Sensors</i> , 2020, 20, 3907.	3.8	19
82	Plasma-Induced Damage in High-k/Metal Gate Stack Dry Etch. <i>IEEE Electron Device Letters</i> , 2006, 27, 972-974.	3.9	18
83	Effects of metal gate-induced strain on the performance of metal-oxide-semiconductor field effect transistors with titanium nitride gate electrode and hafnium oxide dielectric. <i>Applied Physics Letters</i> , 2007, 91, .	3.3	18
84	The progress and challenges of threshold voltage control of high-k/metal-gated devices for advanced technologies (Invited Paper). <i>Microelectronic Engineering</i> , 2009, 86, 1722-1727.	2.4	18
85	Functional integrity of flexible n-channel metal-oxide-semiconductor field-effect transistors on a reversibly bistable platform. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	18
86	Flexible semi-transparent silicon (100) fabric with high-k/metal gate devices. <i>Physica Status Solidi - Rapid Research Letters</i> , 2013, 7, 187-191.	2.4	17
87	Deterministic Integration of Out-of-Plane Sensor Arrays for Flexible Electronic Applications. <i>Small</i> , 2016, 12, 5141-5145.	10.0	17
88	Freeform Compliant CMOS Electronic Systems for Internet of Everything Applications. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 1894-1905.	3.0	17
89	Enhanced Photoresponse of WS <sub>2</sub> Photodetectors through Interfacial Defect Engineering Using a TiO <sub>2</sub> Interlayer. <i>ACS Applied Electronic Materials</i> , 2020, 2, 838-845.	4.3	17
90	Flexible and Stretchable Electronics – Progress, Challenges, and Prospects. <i>Electrochemical Society Interface</i> , 2018, 27, 65-69.	0.4	16

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91	Flexible and stretchable inorganic solar cells: Progress, challenges, and opportunities. MRS Energy & Sustainability, 2020, 7, 1.	3.0	16
92	Electrical Analysis of High Dielectric Constant Insulator and Metal Gate Metal Oxide Semiconductor Capacitors on Flexible Bulk Mono-Crystalline Silicon. IEEE Transactions on Reliability, 2015, 64, 579-585.	4.6	15
93	High performance high- $\mu$ /metal gate complementary metal oxide semiconductor circuit element on flexible silicon. Applied Physics Letters, 2016, 108, .	3.3	15
94	Water soluble nano-scale transient material germanium oxide for zero toxic waste based environmentally benign nano-manufacturing. Applied Physics Letters, 2017, 110, .	3.3	15
95	Wavy Architecture Thin-Film Transistor for Ultrahigh Resolution Flexible Displays. Small, 2018, 14, 1703200.	10.0	15
96	In-plane and out-of-plane structural response of spiral interconnects for highly stretchable electronics. Journal of Applied Physics, 2018, 124, .	2.5	15
97	Graphene-Based Flexible Micrometer-Sized Microbial Fuel Cell. Energy Technology, 2013, 1, 648-652.	3.8	14
98	Low-Voltage Back-Gated Atmospheric Pressure Chemical Vapor Deposition Based Graphene-Striped Channel Transistor with High- $\mu$ Dielectric Showing Room-Temperature Mobility $> 11 \times 10^4$ $\text{cm}^2/\text{Vs}$ . ACS Nano, 2013, 7, 5818-5823.	14.6	14
99	Energy reversible switching from amorphous metal based nanoelectromechanical switch. , 2013, , .		14
100	Additive advantage in characteristics of MIMCAPs on flexible silicon (100) fabric with release-first process. Physica Status Solidi - Rapid Research Letters, 2014, 8, 163-166.	2.4	14
101	Stable $\text{MoS}_2$ Field-Effect Transistors Using $\text{TiO}_2$ Interfacial Layer at Metal/ $\text{MoS}_2$ Contact. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700534.	1.8	14
102	Strain-Induced Rolled Thin Films for Lightweight Tubular Thermoelectric Generators. Advanced Materials Technologies, 2018, 3, 1700192.	5.8	14
103	Ultra-stretchable Archimedean interconnects for stretchable electronics. Extreme Mechanics Letters, 2018, 24, 6-13.	4.1	14
104	Toward nanotechnology-enabled face masks against SARS-CoV-2 and pandemic respiratory diseases. Nanotechnology, 2022, 33, 062006.	2.6	14
105	Metal Wet Etch Issues and Effects in Dual Metal Gate Stack Integration. Journal of the Electrochemical Society, 2006, 153, G389.	2.9	13
106	Nuclear Magnetic Resonance Study of Nanoscale Ionic Materials. Electrochemical and Solid-State Letters, 2010, 13, K87.	2.2	13
107	Out-of-Plane Strain Effects on Physically Flexible FinFET CMOS. IEEE Transactions on Electron Devices, 2016, 63, 2657-2664.	3.0	13
108	Impact of Physical Deformation on Electrical Performance of Paper-Based Sensors. IEEE Transactions on Electron Devices, 2017, 64, 2022-2029.	3.0	13

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109	2D materials show brain-like learning. Nature Electronics, 2018, 1, 436-437.	26.0	13
110	Solar Powered Small Unmanned Aerial Vehicles: A Review. Energy Technology, 2021, 9, 2100587.	3.8	13
111	High Performance pMOSFETs Using Si/Si <sub>1-x</sub> Ge <sub>x</sub> /Si Quantum Wells with High-k/Metal Gate Stacks and Additive Uniaxial Strain for 22 nm Technology Node. , 2007, , .		12
112	Measurement of high-k and metal film thickness on FinFET sidewalls using scatterometry. Proceedings of SPIE, 2008, , .	0.8	12
113	Highly Manufacturable Deep (Sub-Millimeter) Etching Enabled High Aspect Ratio Complex Geometry Lego-Like Silicon Electronics. Small, 2017, 13, 1601801.	10.0	12
114	Pressure-Driven Two-Input 3D Microfluidic Logic Gates. Advanced Science, 2020, 7, 1903027.	11.2	12
115	Low-cost foil/paper based touch mode pressure sensing element as artificial skin module for prosthetic hand. , 2020, , .		12
116	Design Criteria for Horseshoe and Spiral-Based Interconnects for Highly Stretchable Electronic Devices. Advanced Functional Materials, 2021, 31, 2007445.	14.9	12
117	Post-CMOS FinFET Integration of Bismuth Telluride and Antimony Telluride Thin-Film-Based Thermoelectric Devices on Si Substrate. IEEE Electron Device Letters, 2013, 34, 1334-1336.	3.9	11
118	Silicon fabric for multi-functional applications. , 2013, , .		11
119	Exploring SiSn as a performance enhancing semiconductor: A theoretical and experimental approach. Journal of Applied Physics, 2014, 116, .	2.5	11
120	Tin – an unlikely ally for silicon field effect transistors?. Physica Status Solidi - Rapid Research Letters, 2014, 8, 332-335.	2.4	11
121	In-Line Tunnel Field Effect Transistor: Drive Current Improvement. IEEE Journal of the Electron Devices Society, 2018, 6, 721-725.	2.1	11
122	Heterogeneous Cubic Multidimensional Integrated Circuit for Water and Food Security in Fish Farming Ponds. Small, 2020, 16, e1905399.	10.0	11
123	Metal coated polymer and paper-based cantilever design and analysis for acoustic pressure sensing. AIP Advances, 2020, 10, .	1.3	11
124	A new paradigm in the design of energy-efficient digital circuits using laterally-actuated double-gate NEMs. , 2010, , .		10
125	Acetic acid-confined synthesis of uniform three-dimensional (3D) bismuth telluride nanocrystals consisting of few-quintuple-layer nanoplatelets. Chemical Communications, 2011, 47, 12131.	4.1	10
126	Zinc oxide integrated area efficient high output low power wavy channel thin film transistor. Applied Physics Letters, 2013, 103, 224101.	3.3	10



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127	Low-cost high-quality crystalline germanium based flexible devices. Physica Status Solidi - Rapid Research Letters, 2014, 08, 794-800.	2.4	10
128	Enhanced cooling in mono-crystalline ultra-thin silicon by embedded micro-air channels. AIP Advances, 2015, 5, 127115.	1.3	10
129	Design criteria for XeF <sub>2</sub> enabled deterministic transformation of bulk silicon (100) into flexible silicon layer. AIP Advances, 2016, 6, .	1.3	10
130	3D Printed Robotic Assembly Enabled Reconfigurable Display with Higher Resolution. Advanced Materials Technologies, 2018, 3, 1800344.	5.8	10
131	Flexible Lightweight CMOS-Enabled Multisensory Platform for Plant Microclimate Monitoring. IEEE Transactions on Electron Devices, 2018, , 1-7.	3.0	10
132	IoT enabled Plant Sensing Systems for Small and Large Scale Automated Horticultural Monitoring. , 2019, , .		10
133	Biâ€Facial Substrates Enabled Heterogeneous Multiâ€Dimensional Integrated Circuits (MDâ€IC) for Internet of Things (IoT) Applications. Advanced Engineering Materials, 2019, 21, 1900043.	3.5	10
134	Manufacturing of Thermoelectric Nanomaterials (Bi <sub>0.4</sub> Sb <sub>1.6</sub> Te <sub>3</sub> /Bi <sub>1.75</sub> Te <sub>3.25</sub> ) and Integration into Window Glasses for Thermoelectricity Generation. Energy Technology, 2014, 2, 292-299.	3.8	9
135	Modular Legoâ€Electronics. Advanced Materials Technologies, 2018, 3, 1700147.	5.8	9
136	Fully spherical stretchable silicon photodiodes array for simultaneous 360 imaging. Applied Physics Letters, 2018, 113, .	3.3	9
137	Marine IoT: non-invasive wearable multisensory platform for oceanic environment monitoring. , 2019, , .		9
138	An inclinometer using movable electrode in a parallel plate capacitive structure. AIP Advances, 2019, 9, .	1.3	9
139	Mechanically flexible optically transparent porous mono-crystalline silicon substrate. , 2012, , .		8
140	Thermoelectricity from wasted heat of integrated circuits. Applied Nanoscience (Switzerland), 2013, 3, 175-178.	3.1	8
141	Decal Electronics: Printable Packaged with 3D Printing Highâ€Performance Flexible CMOS Electronic Systems. Advanced Materials Technologies, 2017, 2, 1600175.	5.8	8
142	Design, mechanics, and operation of spiral-interconnect based networked sensor for stretchable electronics. Applied Physics Letters, 2019, 115, .	3.3	8
143	AI Powered Unmanned Aerial Vehicle for Payload Transport Application. , 2019, , .		8
144	Nature-inspired spherical silicon solar cell for three-dimensional light harvesting, improved dust and thermal management. MRS Communications, 2020, 10, 391-397.	1.8	8

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145	Deposition Method-Induced Stress Effect on Ultrathin Titanium Nitride Etch Characteristics. <i>Electrochemical and Solid-State Letters</i> , 2006, 9, G361.	2.2	7
146	Atomic force microscope study of three-dimensional nanostructure sidewalls. <i>Nanotechnology</i> , 2007, 18, 335303.	2.6	7
147	Deposition thickness based high-throughput nano-imprint template. <i>Microelectronic Engineering</i> , 2007, 84, 594-598.	2.4	7
148	Thermal recrystallization of physical vapor deposition based germanium thin films on bulk silicon (100). <i>Physica Status Solidi - Rapid Research Letters</i> , 2013, 7, 966-970.	2.4	7
149	Area and Energy Efficient High-Performance ZnO Wavy Channel Thin-Film Transistor. <i>IEEE Transactions on Electron Devices</i> , 2014, 61, 3223-3228.	3.0	7
150	SiSn diodes: Theoretical analysis and experimental verification. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	7
151	Zinc Oxide Integrated Wavy Channel Thin-Film Transistor-Based High-Performance Digital Circuits. <i>IEEE Electron Device Letters</i> , 2016, 37, 193-196.	3.9	7
152	Wavy Channel TFT-Based Digital Circuits. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 1550-1556.	3.0	7
153	FDM 3D printed coffee glove embedded with flexible electronic. , 2017, , .		7
154	Contact resistance reduction of ZnO thin film transistors (TFTs) with saw-shaped electrode. <i>Nanotechnology</i> , 2018, 29, 325202.	2.6	7
155	Flexible tag design for semi-continuous wireless data acquisition from marine animals. <i>Flexible and Printed Electronics</i> , 2019, 4, 035006.	2.7	7
156	Honeycomb-serpentine silicon platform for reconfigurable electronics. <i>Applied Physics Letters</i> , 2019, 115, 112105.	3.3	7
157	Do-It-Yourself integration of a paper sensor in a smart lid for medication adherence. <i>Flexible and Printed Electronics</i> , 2019, 4, 025001.	2.7	7
158	Benchmarking Silicon FinFET With the Carbon Nanotube and 2D-FETs for Advanced Node CMOS Logic Application. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 3643-3648.	3.0	7
159	Effects of ALD TiN Metal Gate Thickness on Metal Gate /High-k Dielectric SOI FinFET Characteristics. <i>SOI Conference, Proceedings of the IEEE International</i> , 2006, , .	0.0	6
160	Enhanced Performance and SRAM Stability in FinFET with Reduced Process Steps for Source/Drain Doping. <i>International Power Modulator Symposium and High-Voltage Workshop</i> , 2008, , .	0.0	6
161	A novel damage-free high-k etch technique using neutral beam-assisted atomic layer etching (NBALE) for sub-32nm technology node low power metal gate/high-k dielectric CMOSFETs. , 2009, , .		6
162	Contact materials for nanowire devices and nanoelectromechanical switches. <i>MRS Bulletin</i> , 2011, 36, 106-111.	3.5	6

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163	Chemical vapor deposition based tungsten disulfide (WS <sub>2</sub> ) thin film transistor. , 2013, , .		6
164	Wavy channel thin film transistor architecture for area efficient, high performance and low power displays. Physica Status Solidi - Rapid Research Letters, 2014, 8, 248-251.	2.4	6
165	High temperature study of flexible silicon-on-insulator fin field-effect transistors. Applied Physics Letters, 2014, 105, .	3.3	6
166	A CMOS-compatible large-scale monolithic integration of heterogeneous multi-sensors on flexible silicon for IoT applications. , 2016, , .		6
167	In-plane deformation mechanics of highly stretchable Archimedean interconnects. AIP Advances, 2019, 9, .	1.3	6
168	Expandable Polymer Assisted Wearable Personalized Medicinal Platform. Advanced Materials Technologies, 2020, 5, 2000411.	5.8	6
169	Mechanically flexible viscosity sensor for <scp>realâ€time</scp> monitoring of tubular architectures for industrial applications. Engineering Reports, 2021, 3, e12315.	1.7	6
170	Polymer/paper-based double touch mode capacitive pressure sensing element for wireless control of robotic arm. , 2020, , .		6
171	Role of metal/silicon semiconductor contact engineering for enhanced output current in microâ€sized microbial fuel cells. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 551-554.	1.8	5
172	Solid state MEMS devices on flexible and semi-transparent silicon (100) platform. , 2014, , .		5
173	Out-of-plane strain effect on silicon-based flexible FinFETs. , 2015, , .		5
174	(Invited) Wavy Channel TFT Architecture for High Performance Oxide Based Displays. ECS Transactions, 2015, 67, 191-198.	0.5	5
175	Transformational electronics are now reconfiguring. , 2015, , .		5
176	Nano-scale transistors for interfacing with brain: design criteria, progress and prospect. Nanotechnology, 2019, 30, 442001.	2.6	5
177	Contact engineering for nanoâ€scale CMOS. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 1954-1959.	1.8	4
178	Amorphous metal based nanoelectromechanical switch. , 2013, , .		4
179	CMOS compatible fabrication of flexible and semi-transparent FeRAM on ultra-thin bulk monocrystalline silicon (100) fabric. , 2014, , .		4
180	The Role of Microfabrication and Nanotechnology in the Development of Microbial Fuel Cells. Energy Technology, 2015, 3, 996-1006.	3.8	4

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181	Impact of Nickel Silicide Rear Metallization on the Series Resistance of Crystalline Silicon Solar Cells. Energy Technology, 2018, 6, 1627-1632.	3.8	4
182	Personalized Healthcare: CMOS Enabled Microfluidic Systems for Healthcare Based Applications (Adv.) Tj ETQq0 0 0 r gBT /Overlock 10 T	2.1	4
183	Solution processes for ultrabroadband and omnidirectional graded-index glass lenses with near-zero reflectivity in high concentration photovoltaics. Scientific Reports, 2018, 8, 14907.	3.3	4
184	Flexible High-Efficiency Corrugated Monocrystalline Silicon Solar Cells for Application in Small Unmanned Aerial Vehicles for Payload Transportation. Energy Technology, 2020, 8, 2000670.	3.8	4
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