

Nae-Eung Lee

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211
papers

9,337
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49
h-index

92
g-index

226
ext. papers

10,857
ext. citations

6.6
avg, IF

6.93
L-index

#	Paper	IF	Citations
211	Flexible and Stretchable Physical Sensor Integrated Platforms for Wearable Human-Activity Monitoring and Personal Healthcare. <i>Advanced Materials</i> , 2016 , 28, 4338-72	24	1219
210	Stretchable, Transparent, Ultrasensitive, and Patchable Strain Sensor for Human-Machine Interfaces Comprising a Nanohybrid of Carbon Nanotubes and Conductive Elastomers. <i>ACS Nano</i> , 2015 , 9, 6252-61	16.7	662
209	An All-Elastomeric Transparent and Stretchable Temperature Sensor for Body-Attachable Wearable Electronics. <i>Advanced Materials</i> , 2016 , 28, 502-9	24	536
208	Transparent Stretchable Self-Powered Patchable Sensor Platform with Ultrasensitive Recognition of Human Activities. <i>ACS Nano</i> , 2015 , 9, 8801-10	16.7	369
207	A flexible bimodal sensor array for simultaneous sensing of pressure and temperature. <i>Advanced Materials</i> , 2014 , 26, 796-804	24	312
206	Recent Progress on Stretchable Electronic Devices with Intrinsically Stretchable Components. <i>Advanced Materials</i> , 2017 , 29, 1603167	24	281
205	Highly sensitive stretchable transparent piezoelectric nanogenerators. <i>Energy and Environmental Science</i> , 2013 , 6, 169-175	35.4	179
204	Amine-modified single-walled carbon nanotubes protect neurons from injury in a rat stroke model. <i>Nature Nanotechnology</i> , 2011 , 6, 121-125	28.7	178
203	Reduced graphene oxide field-effect transistor for label-free femtomolar protein detection. <i>Biosensors and Bioelectronics</i> , 2013 , 41, 621-6	11.8	158
202	High-performance flexible lead-free nanocomposite piezoelectric nanogenerator for biomechanical energy harvesting and storage. <i>Nano Energy</i> , 2015 , 15, 177-185	17.1	156
201	Transparent, stretchable, and rapid-response humidity sensor for body-attachable wearable electronics. <i>Nano Research</i> , 2017 , 10, 2021-2033	10	144
200	High Performance Three-Dimensional Chemical Sensor Platform Using Reduced Graphene Oxide Formed on High Aspect-Ratio Micro-Pillars. <i>Advanced Functional Materials</i> , 2015 , 25, 883-890	15.6	138
199	Ultra-high Responsivity in Graphene-ZnO Nanorod Hybrid UV Photodetector. <i>Small</i> , 2015 , 11, 3054-65	11	136
198	Recent progress, challenges, and prospects of fully integrated mobile and wearable point-of-care testing systems for self-testing. <i>Chemical Society Reviews</i> , 2020 , 49, 1812-1866	58.5	135
197	Nanocomposite nanofibers of poly(D, L-lactic-co-glycolic acid) and graphene oxide nanosheets. <i>Composites Part A: Applied Science and Manufacturing</i> , 2011 , 42, 1978-1984	8.4	129
196	Organic electrochemical transistor based immunosensor for prostate specific antigen (PSA) detection using gold nanoparticles for signal amplification. <i>Biosensors and Bioelectronics</i> , 2010 , 25, 2477-82	11.8	123
195	Stretchable, Transparent Zinc Oxide Thin Film Transistors. <i>Advanced Functional Materials</i> , 2010 , 20, 3577-3582	13.8	119

194	A Flexible Reduced Graphene Oxide Field-Effect Transistor for Ultrasensitive Strain Sensing. <i>Advanced Functional Materials</i> , 2014 , 24, 117-124	15.6	110
193	Freestanding, Fiber-Based, Wearable Temperature Sensor with Tunable Thermal Index for Healthcare Monitoring. <i>Advanced Healthcare Materials</i> , 2018 , 7, e1800074	10.1	108
192	Deep dry etching of borosilicate glass using SF6 and SF6/Ar inductively coupled plasmas. <i>Microelectronic Engineering</i> , 2005 , 82, 119-128	2.5	108
191	Stretchable, Transparent, and Stretch-Unresponsive Capacitive Touch Sensor Array with Selectively Patterned Silver Nanowires/Reduced Graphene Oxide Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 18022-18030	9.5	102
190	Methylammonium lead iodide perovskite-graphene hybrid channels in flexible broadband phototransistors. <i>Carbon</i> , 2016 , 105, 353-361	10.4	98
189	Gas sensing with heterostructures based on two-dimensional nanostructured materials: a review. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 13367-13383	7.1	98
188	Materials and devices for transparent stretchable electronics. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 2202-2222	7.1	96
187	Field-effect transistor with a chemically synthesized MoS2 sensing channel for label-free and highly sensitive electrical detection of DNA hybridization. <i>Nano Research</i> , 2015 , 8, 2340-2350	10	94
186	Flexible and Transparent Nanocomposite of Reduced Graphene Oxide and P(VDF-TrFE) Copolymer for High Thermal Responsivity in a Field-Effect Transistor. <i>Advanced Functional Materials</i> , 2014 , 24, 3438-3445	15.6	92
185	Fully Stretchable Capillary Microfluidics-Integrated Nanoporous Gold Electrochemical Sensor for Wearable Continuous Glucose Monitoring. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 14567-14573	8.5	89
184	A durable and stable piezoelectric nanogenerator with nanocomposite nanofibers embedded in an elastomer under high loading for a self-powered sensor system. <i>Nano Energy</i> , 2016 , 30, 434-442	17.1	88
183	Flexible Transparent Reduced Graphene Oxide Sensor Coupled with Organic Dye Molecules for Rapid Dual-Mode Ammonia Gas Detection. <i>Advanced Functional Materials</i> , 2016 , 26, 4329-4338	15.6	84
182	An Omnidirectionally Stretchable Piezoelectric Nanogenerator Based on Hybrid Nanofibers and Carbon Electrodes for Multimodal Straining and Human Kinematics Energy Harvesting. <i>Advanced Energy Materials</i> , 2018 , 8, 1701520	21.8	80
181	pH sensing characteristics and biosensing application of solution-gated reduced graphene oxide field-effect transistors. <i>Biosensors and Bioelectronics</i> , 2013 , 45, 70-6	11.8	79
180	Nanocomposites of reduced graphene oxide nanosheets and conducting polymer for stretchable transparent conducting electrodes. <i>Journal of Materials Chemistry</i> , 2012 , 22, 23759		79
179	Mogul-Patterned Elastomeric Substrate for Stretchable Electronics. <i>Advanced Materials</i> , 2016 , 28, 3069-77		73
178	A Sensor Array Using Multi-functional Field-effect Transistors with Ultrahigh Sensitivity and Precision for Bio-monitoring. <i>Scientific Reports</i> , 2015 , 5, 12705	4.9	70
177	Highly sensitive, tunable, and durable gold nanosheet strain sensors for human motion detection. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 5642-5647	7.1	70

176	A Stretchable Strain-Insensitive Temperature Sensor Based on Free-Standing Elastomeric Composite Fibers for On-Body Monitoring of Skin Temperature. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 2317-2327	9.5	69
175	Transparent and flexible organic field-effect transistor for multi-modal sensing. <i>Organic Electronics</i> , 2012 , 13, 533-540	3.5	64
174	Highly Electrocatalytic, Durable, and Stretchable Nanohybrid Fiber for On-Body Sweat Glucose Detection. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 10707-10717	9.5	63
173	High-Performance Flexible Ultraviolet (UV) Phototransistor Using Hybrid Channel of Vertical ZnO Nanorods and Graphene. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 11032-40	9.5	62
172	A wearable lab-on-a-patch platform with stretchable nanostructured biosensor for non-invasive immunodetection of biomarker in sweat. <i>Biosensors and Bioelectronics</i> , 2020 , 156, 112133	11.8	62
171	Culture-free, highly sensitive, quantitative detection of bacteria from minimally processed samples using fluorescence imaging by smartphone. <i>Biosensors and Bioelectronics</i> , 2018 , 109, 90-97	11.8	62
170	Utilizing Highly Crystalline Pyroelectric Material as Functional Gate Dielectric in Organic Thin-Film Transistors. <i>Advanced Materials</i> , 2009 , 21, 910-915	24	59
169	High thermal responsiveness of a reduced graphene oxide field-effect transistor. <i>Advanced Materials</i> , 2012 , 24, 5254-60	24	58
168	A smartphone imaging-based label-free and dual-wavelength fluorescent biosensor with high sensitivity and accuracy. <i>Biosensors and Bioelectronics</i> , 2017 , 94, 643-650	11.8	57
167	High-Performance Schottky Diode Gas Sensor Based on the Heterojunction of Three-Dimensional Nanohybrids of Reduced Graphene Oxide-Vertical ZnO Nanorods on an AlGaN/GaN Layer. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 30722-30732	9.5	56
166	A Solution-Processable, Omnidirectionally Stretchable, and High-Pressure-Sensitive Piezoresistive Device. <i>Advanced Materials</i> , 2017 , 29, 1703004	24	52
165	Electrical graphene aptasensor for ultra-sensitive detection of anthrax toxin with amplified signal transduction. <i>Small</i> , 2013 , 9, 3352-60	11	51
164	Enhanced exciton-phonon interactions in photoluminescence of ZnO nanopencils. <i>Applied Physics Letters</i> , 2009 , 94, 261904	3.4	51
163	Physically responsive field-effect transistors with giant electromechanical coupling induced by nanocomposite gate dielectrics. <i>ACS Nano</i> , 2011 , 5, 7069-76	16.7	50
162	A flexible artificial intrinsic-synaptic tactile sensory organ. <i>Nature Communications</i> , 2020 , 11, 2753	17.4	46
161	Atomic layer deposition ZnO:N flexible thin film transistors and the effects of bending on device properties. <i>Applied Physics Letters</i> , 2011 , 98, 142113	3.4	42
160	Fabrication of the ZnO thin films using wet-chemical etching processes on application for organic light emitting diode (OLED) devices. <i>Surface and Coatings Technology</i> , 2008 , 202, 5476-5479	4.4	41
159	Etching characteristics of ZnO thin films in chlorine-containing inductively coupled plasmas. <i>Microelectronic Engineering</i> , 2006 , 83, 328-335	2.5	41

158	Mechanical bending of flexible complementary inverters based on organic and oxide thin film transistors. <i>Organic Electronics</i> , 2012 , 13, 2401-2405	3.5	39
157	An Omnidirectionally Stretchable Photodetector Based on Organic-Inorganic Heterojunctions. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 35958-35967	9.5	38
156	Hydrogel Encapsulation of Cells in Core-Shell Microcapsules for Cell Delivery. <i>Advanced Healthcare Materials</i> , 2015 , 4, 1537-44	10.1	38
155	A stretchable and highly sensitive chemical sensor using multilayered network of polyurethane nanofibres with self-assembled reduced graphene oxide. <i>2D Materials</i> , 2017 , 4, 025062	5.9	37
154	$\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ Ferroelectric Thin-Film Capacitors for Flexible Nonvolatile Memory Applications. <i>IEEE Electron Device Letters</i> , 2010 , 31, 1017-1019	4.4	37
153	. <i>Proceedings of the IEEE</i> , 2019 , 107, 2065-2083	14.3	35
152	Enhancement of thermomechanical properties of poly(D,L-lactic-co-glycolic acid) and graphene oxide composite films for scaffolds. <i>Macromolecular Research</i> , 2012 , 20, 789-794	1.9	34
151	A transparent stretchable sensor for distinguishable detection of touch and pressure by capacitive and piezoresistive signal transduction. <i>NPG Asia Materials</i> , 2019 , 11,	10.3	33
150	Micro-scale metallization of high aspect-ratio Cu and Au lines on flexible polyimide substrate by electroplating using SU-8 photoresist mask. <i>Microelectronic Engineering</i> , 2005 , 77, 116-124	2.5	33
149	Role of ultrathin Al ₂ O ₃ layer in organic/inorganic hybrid gate dielectrics for flexibility improvement of InGaZnO thin film transistors. <i>Organic Electronics</i> , 2014 , 15, 1458-1464	3.5	32
148	Recent Advancements in Development of Wearable Gas Sensors. <i>Advanced Materials Technologies</i> , 2021 , 6, 2000883	6.8	32
147	Effect of doping elements on ZnO etching characteristics with CH ₄ /H ₂ /Ar plasma. <i>Thin Solid Films</i> , 2007 , 515, 4950-4954	2.2	31
146	Infrared Detection Using Transparent and Flexible Field-Effect Transistor Array with Solution Processable Nanocomposite Channel of Reduced Graphene Oxide and P(VDF-TrFE). <i>Advanced Functional Materials</i> , 2015 , 25, 1745-1754	15.6	30
145	Stretchable, Transparent, Tough, Ultrathin, and Self-limiting Skin-like Substrate for Stretchable Electronics. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 27297-27307	9.5	29
144	Effects of different electroplated gate electrodes on electrical performances of flexible organic thin film transistor and flexibility improvement. <i>Organic Electronics</i> , 2007 , 8, 513-521	3.5	29
143	Porous MoS ₂ @C heteroshell with a Si yolk structure with improved lithium transport properties and superior cycle stability. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 14906-14913	13	28
142	An effective passive microfluidic mixer utilizing chaotic advection. <i>Sensors and Actuators B: Chemical</i> , 2008 , 132, 172-181	8.5	27
141	Effects of CH ₂ F ₂ and H ₂ flow rates on process window for infinite etch selectivity of silicon nitride to ArF PR in dual-frequency CH ₂ F ₂ /H ₂ /Ar capacitively coupled plasmas. <i>Microelectronic Engineering</i> , 2008 , 85, 375-387	2.5	27

140	The Pine-Needle-Inspired Structure of Zinc Oxide Nanorods Grown on Electrospun Nanofibers for High-Performance Flexible Supercapacitors. <i>Small</i> , 2017 , 13, 1702142	11	26
139	Improved performance and stability of field-effect transistors with polymeric residue-free graphene channel transferred by gold layer. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 4098-105	3.6	24
138	Physical properties and etching characteristics of metal (Al, Ag, Li) doped ZnO films grown by RF magnetron sputtering. <i>Thin Solid Films</i> , 2008 , 516, 6598-6603	2.2	24
137	Room-temperature-operated fast and reversible vertical-heterostructure-diode gas sensor composed of reduced graphene oxide and AlGaN/GaN. <i>Sensors and Actuators B: Chemical</i> , 2019 , 296, 126684	8.5	23
136	Ultrahigh Selective Etching of SiO ₂ Using an Amorphous Carbon Mask in Dual-Frequency Capacitively Coupled C ₄ F ₈ /CH ₂ F ₂ /O ₂ /Ar Plasmas. <i>Journal of the Electrochemical Society</i> , 2010 , 157, D135	3.9	23
135	Improvement of mechanical and electrical stabilities of flexible organic thin film transistor by using adhesive organic interlayer. <i>Organic Electronics</i> , 2008 , 9, 413-417	3.5	23
134	Dry Etching of TaN/HfO ₂ Gate Stack Structure by Cl ₂ /SF ₆ /Ar Inductively Coupled Plasma. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 5811-5818	1.4	22
133	A durable, stretchable, and disposable electrochemical biosensor on three-dimensional micro-patterned stretchable substrate. <i>Sensors and Actuators B: Chemical</i> , 2019 , 283, 312-320	8.5	22
132	Chlorine-trapped CVD bilayer graphene for resistive pressure sensor with high detection limit and high sensitivity. <i>2D Materials</i> , 2017 , 4, 025049	5.9	21
131	Organic field-effect transistor with extended indium tin oxide gate structure for selective pH sensing. <i>Organic Electronics</i> , 2011 , 12, 1815-1821	3.5	21
130	Toxicity analysis of graphene nanoflakes by cell-based electrochemical sensing using an electrode modified with nanocomposite of graphene and Nafion. <i>Sensors and Actuators B: Chemical</i> , 2013 , 188, 454-461	8.5	20
129	Toxicity of graphene nanoflakes evaluated by cell-based electrochemical impedance biosensing. <i>Journal of Biomedical Materials Research - Part A</i> , 2014 , 102, 2288-94	5.4	20
128	Micro-scale metallization on flexible polyimide substrate by Cu electroplating using SU-8 photoresist mask. <i>Thin Solid Films</i> , 2005 , 475, 68-71	2.2	20
127	Nanocomposites of Electrospun Poly[(D,L-lactic)-co-(glycolic acid)] and Plasma-Functionalized Single-Walled Carbon Nanotubes for Biomedical Applications. <i>Plasma Processes and Polymers</i> , 2009 , 6, 101-109	3.4	19
126	Mechanically Flexible Low-Leakage Nanocomposite Gate Dielectrics for Flexible Organic Thin-Film Transistors. <i>Electrochemical and Solid-State Letters</i> , 2008 , 11, H218		19
125	Polymer thin film transistor with electroplated source and drain electrodes on a flexible substrate. <i>Thin Solid Films</i> , 2006 , 515, 805-809	2.2	19
124	Piezoelectric coupling in a field-effect transistor with a nanohybrid channel of ZnO nanorods grown vertically on graphene. <i>Nanoscale</i> , 2014 , 6, 15144-50	7.7	18
123	Evaluation of cytotoxicity, biophysics and biomechanics of cells treated with functionalized hybrid nanomaterials. <i>Journal of the Royal Society Interface</i> , 2013 , 10, 20130694	4.1	18

122	METAL-DOPED ZnO THIN FILMS: SYNTHESIS, ETCHING CHARACTERISTIC, AND APPLICATION TEST FOR ORGANIC LIGHT EMITTING DIODE (OLED) DEVICES. <i>Surface Review and Letters</i> , 2010 , 17, 121-127	1.1	18
121	Single-Chain Atomic Crystals as Extracellular Matrix-Mimicking Material with Exceptional Biocompatibility and Bioactivity. <i>Nano Letters</i> , 2018 , 18, 7619-7627	11.5	18
120	Ultrarapid and ultrasensitive electrical detection of proteins in a three-dimensional biosensor with high capture efficiency. <i>Nanoscale</i> , 2015 , 7, 9844-51	7.7	17
119	Seesawed fluorescence nano-aptasensor based on highly vertical ZnO nanorods and three-dimensional quantitative fluorescence imaging for enhanced detection accuracy of ATP. <i>Biosensors and Bioelectronics</i> , 2017 , 90, 450-458	11.8	17
118	Real-time label-free quantitative fluorescence microscopy-based detection of ATP using a tunable fluorescent nano-aptasensor platform. <i>Nanoscale</i> , 2015 , 7, 19663-72	7.7	16
117	Neurite Outgrowth on Nanocomposite Scaffolds Synthesized from PLGA and Carboxylated Carbon Nanotubes. <i>Advanced Engineering Materials</i> , 2010 , 11, B261-B266	3.5	16
116	Electrical characteristics of poly(3-hexylthiophene) organic thin film transistor with electroplated metal gate electrodes on polyimide. <i>Thin Solid Films</i> , 2007 , 515, 5065-5069	2.2	16
115	ArF Photoresist Deformation in Dual Frequency Superimposed Capacitively Coupled Plasma (DFS-CCP) with Different Frequency Combinations. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 5856-5865	1.4	16
114	Stretchable and transparent nanofiber-networked electrodes based on nanocomposites of polyurethane/reduced graphene oxide/silver nanoparticles with high dispersion and fused junctions. <i>Nanoscale</i> , 2019 , 11, 3916-3924	7.7	15
113	A flexible magnetoelectric field-effect transistor with magnetically responsive nanohybrid gate dielectric layer. <i>Nano Research</i> , 2015 , 8, 3421-3429	10	15
112	Reduced graphene oxide field-effect transistor with indium tin oxide extended gate for proton sensing. <i>Current Applied Physics</i> , 2014 , 14, 738-743	2.6	15
111	Enhancement of protein detection performance in field-effect transistors with polymer residue-free graphene channel. <i>Carbon</i> , 2013 , 62, 312-321	10.4	15
110	Toward a Stretchable Organic Light-Emitting Diode on 3D Microstructured Elastomeric Substrate and Transparent Hybrid Anode. <i>Advanced Materials Technologies</i> , 2020 , 5, 1900995	6.8	15
109	A Skin-Inspired Substrate with Spaghetti-Like Multi-Nanofiber Network of Stiff and Elastic Components for Stretchable Electronics. <i>Advanced Functional Materials</i> , 2020 , 30, 2003540	15.6	15
108	Infinitely high etch selectivity during CH ₄ /H ₂ /Ar inductively coupled plasma (ICP) etching of indium tin oxide (ITO) with photoresist mask. <i>Thin Solid Films</i> , 2008 , 516, 3512-3516	2.2	14
107	Characterization of Ru layer for capping/buffer application in EUVL mask. <i>Microelectronic Engineering</i> , 2006 , 83, 688-691	2.5	14
106	Gas Sensor Application of Piezoelectric Cantilever Nanobalance; Electrical Signal Read-Out. <i>Ferroelectrics</i> , 2005 , 328, 59-65	0.6	14
105	A smartphone fluorescence imaging-based mobile biosensing system integrated with a passive fluidic control cartridge for minimal user intervention and high accuracy. <i>Lab on A Chip</i> , 2019 , 19, 1502-1511	7.2	13

104	Reduction of Electrical Hysteresis in Cyclically Bent Organic Field Effect Transistors by Incorporating Multistack Hybrid Gate Dielectrics. <i>Journal of the Electrochemical Society</i> , 2010 , 157, H1046 ^{3.9}	3.9	13
103	Flexible SiInZnO thin film transistor with organic/inorganic hybrid gate dielectric processed at 150 °C. <i>Semiconductor Science and Technology</i> , 2016 , 31, 125007	1.8	13
102	Scalable production of water-dispersible reduced graphene oxide and its integration in a field effect transistor. <i>Journal of Industrial and Engineering Chemistry</i> , 2018 , 63, 19-26	6.3	12
101	A fully integrated bacterial pathogen detection system based on count-on-a-cartridge platform for rapid, ultrasensitive, highly accurate and culture-free assay. <i>Biosensors and Bioelectronics</i> , 2020 , 152, 112007	11.8	12
100	Self-Connected Ag Nanoporous Sponge Embedded in Sputtered Polytetrafluoroethylene for Highly Stretchable and Semi-Transparent Electrodes. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1801936	4.6	12
99	Three-dimensional out-of-plane geometric engineering of thin films for stretchable electronics: a brief review. <i>Thin Solid Films</i> , 2019 , 688, 137435	2.2	11
98	Head-disk interface design in magnetic data storage. <i>Journal of Applied Physics</i> , 2012 , 111, 07B721	2.5	11
97	Etching Characteristics of ZnO and Al-Doped ZnO in Inductively Coupled Cl ₂ /CH ₄ /H ₂ /Ar and BCl ₃ /CH ₄ /H ₂ /Ar Plasmas. <i>Japanese Journal of Applied Physics</i> , 2008 , 47, 6960-6964	1.4	11
96	Infinitely High Etch Selectivity of Si ₃ N ₄ Layer to ArF Photoresist in Dual-Frequency Superimposed Capacitively Coupled Plasmas. <i>Electrochemical and Solid-State Letters</i> , 2007 , 10, H11		11
95	Highly stretchable metal-polymer hybrid conductors for wearable and self-cleaning sensors. <i>NPG Asia Materials</i> , 2021 , 13,	10.3	11
94	A stretchable, room-temperature operable, chemiresistive gas sensor using nanohybrids of reduced graphene oxide and zinc oxide nanorods. <i>Sensors and Actuators B: Chemical</i> , 2021 , 345, 130373	8.5	11
93	Silicon nitride etch characteristics in SF ₆ /O ₂ and C ₃ F ₆ O/O ₂ plasmas and evaluation of their global warming effects. <i>Microelectronics Reliability</i> , 2012 , 52, 2970-2974	1.2	10
92	Effects of O ₂ and N ₂ /H ₂ plasma treatments on the neuronal cell growth on single-walled carbon nanotube paper scaffolds. <i>Applied Surface Science</i> , 2011 , 257, 8535-8541	6.7	10
91	Improvement of Mechanical and Electrical Stability of Flexible Organic Field-Effect Transistors by Multistack Hybrid Encapsulation. <i>Journal of the Electrochemical Society</i> , 2011 , 158, H931	3.9	10
90	Electrochemical evaluation of the reliability of plasma-polymerized methylcyclohexane films. <i>Materials Research Bulletin</i> , 2010 , 45, 269-274	5.1	10
89	Effects of various additive gases on chemical dry etching rate enhancement of low-k SiOCH layer in F ₂ /Ar remote plasmas. <i>Thin Solid Films</i> , 2008 , 516, 3549-3553	2.2	10
88	Comparative study of global warming effects during silicon nitride etching using C ₃ F ₆ O/O ₂ and C ₃ F ₆ /O ₂ gas mixtures. <i>Electronic Materials Letters</i> , 2015 , 11, 93-99	2.9	9
87	Effects of piezoresistivity of pentacene channel in organic thin film transistors under mechanical bending. <i>Electronic Materials Letters</i> , 2012 , 8, 11-16	2.9	9

86	Formation of Nickel Silicide Layer on Strained-Si _{0.83} Ge _{0.17} /Si(001) using a Sacrificial Si Layer and its Morphological Instability. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 4805-4813	1.4	9
85	Investigation of the W ₁₀₀ N metal gate for metaloxide semiconductor devices. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2001 , 19, 1591-1594	2.9	9
84	Hollow Microfibers of Elastomeric Nanocomposites for Fully Stretchable and Highly Sensitive Microfluidic Immunobiosensor Patch. <i>Advanced Functional Materials</i> , 2020 , 30, 2004684	15.6	9
83	Low temperature fabrication of hybrid solar cells using co-sensitizer of perovskite and lead sulfide nanoparticles. <i>Organic Electronics</i> , 2017 , 50, 247-254	3.5	8
82	Comparison of etching characteristics of SiO ₂ with ArF photoresist in C ₄ F ₆ and C ₄ F ₈ based dual-frequency superimposed capacitively coupled plasmas. <i>Microelectronic Engineering</i> , 2007 , 84, 165-172	2.5	8
81	Novel absorber stack for minimizing shadow effect in extreme ultraviolet mask. <i>Journal of Vacuum Science & Technology B</i> , 2006 , 24, 2820		8
80	Large Etch Rate Enhancement by NO-Induced Surface Chemical Reaction during Chemical Dry Etching of Silicon Oxide in F ₂ Remote Plasmas. <i>Journal of the Electrochemical Society</i> , 2007 , 154, D267	3.9	8
79	Selective Activation and Electroless Plating of Cu on a Polyimide Substrate by Using a Pre-Patterned Inhibitor Layer and Plasma Treatments. <i>Journal of the Korean Physical Society</i> , 2008 , 52, 318-323	0.6	8
78	Nanocomposites of polyimide and mixed oxide nanoparticles for high performance nanohybrid gate dielectrics in flexible thin film transistors. <i>Electronic Materials Letters</i> , 2017 , 13, 214-221	2.9	7
77	A numerical study on the mechanical characteristics of zinc oxide-based transparent thin film transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 5870-5	1.3	7
76	Study on Ohmic contact improvement of organic Schottky diode utilizing self-assembled monolayer and PEDOT:PSS layers. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2010 , 28, 879-885	2.9	7
75	Effect of N ₂ O/SiH ₄ flow ratio on properties of SiO _x thin films deposited by low-temperature remote plasma-enhanced chemical deposition. <i>Surface and Coatings Technology</i> , 2007 , 201, 5354-5357	4.4	7
74	Role of N ₂ during chemical dry etching of silicon oxide layers using NF ₃ /N ₂ /Ar remote plasmas. <i>Microelectronic Engineering</i> , 2007 , 84, 560-566	2.5	7
73	Very High-Rate Chemical Dry Etching of Si in F ₂ Remote Plasmas with Nitrogen-Containing Additive Gases. <i>Journal of the Electrochemical Society</i> , 2007 , 154, D489	3.9	7
72	Sputter deposition modeling of Ti thin film on a sharp tip. <i>Thin Solid Films</i> , 2005 , 475, 144-149	2.2	7
71	Characteristics of Copper Diffusion into Low Dielectric Constant Plasma Polymerized Cyclohexane Thin Films. <i>Japanese Journal of Applied Physics</i> , 2000 , 39, L1327-L1329	1.4	7
70	Deep Reactive Ion Etching of Polyimide for Microfluidic Applications. <i>Journal of the Korean Physical Society</i> , 2007 , 51, 984	0.6	7
69	Sensors: An All-Elastomeric Transparent and Stretchable Temperature Sensor for Body-Attachable Wearable Electronics (Adv. Mater. 3/2016). <i>Advanced Materials</i> , 2016 , 28, 394-394	24	7

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