

Tu-Pei Chen

List of Publications by Year in descending order

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341
papers

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70961

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344
all docs

344
docs citations

344
times ranked

8482
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanofabrication by scanning probe microscope lithography: A review. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 877.	1.6	404
2	Non-volatile Organic Memory Applications Enabled by In Situ Synthesis of Gold Nanoparticles in a Self-Assembled Block Copolymer. Advanced Materials, 2008, 20, 2325-2331.	11.1	186
3	Associative memory realized by a reconfigurable memristive Hopfield neural network. Nature Communications, 2015, 6, 7522.	5.8	182
4	Hexagonal Boron Nitride Thin Film for Flexible Resistive Memory Applications. Advanced Functional Materials, 2016, 26, 2176-2184.	7.8	167
5	A light-stimulated synaptic transistor with synaptic plasticity and memory functions based on InGaZnOx/Al2O3 thin film structure. Journal of Applied Physics, 2016, 119, .	1.1	153
6	3D hierarchical Co ₃ O ₄ @Co ₃ S ₄ nanoarrays as cathode materials for asymmetric pseudocapacitors. Journal of Materials Chemistry A, 2016, 4, 3287-3296.	5.2	147
7	Charging phenomena in pentacene-gold nanoparticle memory device. Applied Physics Letters, 2007, 90, 042906.	1.5	141
8	Bond-order-bond-length-bond-strength (bond-OLS) correlation mechanism for the shape-and-size dependence of a nanosolid. Journal of Physics Condensed Matter, 2002, 14, 7781-7795.	0.7	125
9	Emulating the paired-pulse facilitation of a biological synapse with a NiOx-based memristor. Applied Physics Letters, 2013, 102, .	1.5	119
10	Thickness effect on the band gap and optical properties of germanium thin films. Journal of Applied Physics, 2010, 107, .	1.1	117
11	3D hierarchical defect-rich NiMo3S4 nanosheet arrays grown on carbon textiles for high-performance sodium-ion batteries and hydrogen evolution reaction. Nano Energy, 2018, 49, 460-470.	8.2	107
12	Ultrahigh Performance of Novel Capacitive Deionization Electrodes based on A Three-Dimensional Graphene Architecture with Nanopores. Scientific Reports, 2016, 6, 18966.	1.6	105
13	Bifunctional porous iron phosphide/carbon nanostructure enabled high-performance sodium-ion battery and hydrogen evolution reaction. Energy Storage Materials, 2018, 15, 98-107.	9.5	102
14	Optical properties of silicon nanocrystals embedded in aSiO2matrix. Physical Review B, 2005, 72, .	1.1	99
15	Micellar poly(styrene-b-4-vinylpyridine)-nanoparticle hybrid system for non-volatile organic transistor memory. Journal of Materials Chemistry, 2009, 19, 7354.	6.7	99
16	Low energy consumption dual-ion electrochemical deionization system using NaTi2(PO4)3-AgNPs electrodes. Desalination, 2019, 451, 241-247.	4.0	99
17	Fabrication of n-ZnO:Al-p-SiC(4H) heterojunction light-emitting diodes by filtered cathodic vacuum arc technique. Applied Physics Letters, 2005, 86, 241111.	1.5	97
18	A Deformable and Highly Robust Ethyl Cellulose Transparent Conductor with a Scalable Silver Nanowires Bundle Micromesh. Advanced Materials, 2018, 30, e1802803.	11.1	95

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19	Emulating the Ebbinghaus forgetting curve of the human brain with a NiO-based memristor. Applied Physics Letters, 2013, 103, .	1.5	90
20	Two dimensional layered Co _{0.85} Se nanosheets as a high-capacity anode for lithium-ion batteries. Nanoscale, 2016, 8, 14992-15000.	2.8	90
21	Ultraviolet and visible electroluminescence from n-ZnO ⁺ SiO _x ⁻ (n,p)-Si heterostructured light-emitting diodes. Applied Physics Letters, 2008, 93, .	1.5	88
22	Direct Observation of Indium Conductive Filaments in Transparent, Flexible, and Transferable Resistive Switching Memory. ACS Nano, 2017, 11, 1712-1718.	7.3	83
23	Surface modification of Na ₂ Ti ₃ O ₇ nanofibre arrays using N-doped graphene quantum dots as advanced anodes for sodium-ion batteries with ultra-stable and high-rate capability. Journal of Materials Chemistry A, 2019, 7, 12751-12762.	5.2	83
24	An extended 'quantum confinement' theory: surface-coordination imperfection modifies the entire band structure of a nanosolid. Journal Physics D: Applied Physics, 2001, 34, 3470-3479.	1.3	82
25	Synthesis and Electrical Transport of Novel Channel-Structured δ^2 -AgVO ₃ . Small, 2007, 3, 1174-1177.	5.2	82
26	Direct Observation of Conducting Filaments in Tungsten Oxide Based Transparent Resistive Switching Memory. ACS Applied Materials & Interfaces, 2016, 8, 27885-27891.	4.0	80
27	Recent Developments in Tip-Based Nanofabrication and Its Roadmap. Journal of Nanoscience and Nanotechnology, 2008, 8, 2167-2186.	0.9	76
28	Review of Nanostructured Resistive Switching Memristor and Its Applications. Nanoscience and Nanotechnology Letters, 2014, 6, 729-757.	0.4	76
29	Refractive indices of textured indium tin oxide and zinc oxide thin films. Thin Solid Films, 2006, 510, 95-101.	0.8	74
30	Multiferroic properties of sputtered BiFeO ₃ thin films. Applied Physics Letters, 2008, 92, .	1.5	67
31	Nitrogen-enhanced negative bias temperature instability: An insight by experiment and first-principle calculations. Applied Physics Letters, 2003, 82, 1881-1883.	1.5	66
32	A study on Si nanocrystal formation in Si-implanted SiO ₂ films by x-ray photoelectron spectroscopy. Journal Physics D: Applied Physics, 2003, 36, L97-L100.	1.3	66
33	Evolution of Si suboxides into Si nanocrystals during rapid thermal annealing as revealed by XPS and Raman studies. Journal of Crystal Growth, 2009, 311, 1296-1301.	0.7	61
34	Novel concepts in functional resistive switching memories. Journal of Materials Chemistry C, 2016, 4, 9637-9645.	2.7	59
35	A simple technique to determine barrier height change in gate oxide caused by electrical stress. IEEE Transactions on Electron Devices, 2002, 49, 1493-1496.	1.6	54
36	Synaptic long-term potentiation realized in Pavlov's dog model based on a NiO _x -based memristor. Journal of Applied Physics, 2014, 116, .	1.1	52

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37	Hydrothermally synthesized graphene and Fe ₃ O ₄ nanocomposites for high performance capacitive deionization. RSC Advances, 2016, 6, 11967-11972.	1.7	52
38	Dielectric functions of Si nanocrystals embedded in aSiO ₂ matrix. Physical Review B, 2003, 68, .	1.1	49
39	Memory characteristics of MOSFETs with densely stacked silicon nanocrystal layers in the gate oxide synthesized by low-energy ion beam. IEEE Electron Device Letters, 2006, 27, 231-233.	2.2	47
40	Visualizing charge transport in silicon nanocrystals embedded in SiO ₂ films with electrostatic force microscopy. Applied Physics Letters, 2004, 85, 2941-2943.	1.5	45
41	Microstructure of Magnetron Sputtered Amorphous SiO _x Films: Formation of Amorphous Si Core-Shell Nanoclusters. Journal of Physical Chemistry C, 2010, 114, 2414-2420.	1.5	45
42	Photoluminescence of Si Nanosolids near the Lower End of the Size Limit. Journal of Physical Chemistry B, 2002, 106, 11725-11727.	1.2	43
43	Upper limit of blue shift in the photoluminescence of CdSe and CdS nanosolids. Acta Materialia, 2002, 50, 4687-4693.	3.8	43
44	Recent developments on microablation of glass materials using excimer lasers. Optics and Lasers in Engineering, 2007, 45, 975-992.	2.0	41
45	Dielectric suppression of nanosolid silicon. Nanotechnology, 2004, 15, 1802-1806.	1.3	40
46	High-Temperature Lasing Characteristics of ZnO Epilayers. Advanced Materials, 2006, 18, 771-774.	11.1	40
47	Influence of nanocrystal size on optical properties of Si nanocrystals embedded in SiO ₂ synthesized by Si ion implantation. Journal of Applied Physics, 2007, 101, 103525.	1.1	40
48	Relationship between interfacial nitrogen concentration and activation energies of fixed-charge trapping and interface state generation under bias-temperature stress condition. Applied Physics Letters, 2003, 82, 269-271.	1.5	39
49	Predicting House Price With a Memristor-Based Artificial Neural Network. IEEE Access, 2018, 6, 16523-16528.	2.6	39
50	Resistive switching in aluminum/anodized aluminum film structure without forming process. Journal of Applied Physics, 2009, 106, .	1.1	38
51	Length, Strength, Extensibility, and Thermal Stability of a Au-Au Bond in the Gold Monatomic Chain. Journal of Physical Chemistry B, 2004, 108, 2162-2167.	1.2	37
52	Highly spectrum-selective ultraviolet photodetector based on p-NiO/n-IGZO thin film heterojunction structure. Optics Express, 2015, 23, 27683.	1.7	37
53	Strong violet and green-yellow electroluminescence from silicon nitride thin films multiply implanted with Si ions. Applied Physics Letters, 2009, 94, .	1.5	35
54	Conduction mechanisms at low- and high-resistance states in aluminum/anodic aluminum oxide/aluminum thin film structure. Journal of Applied Physics, 2012, 112, .	1.1	35

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55	Effects of free electrons and quantum confinement in ultrathin ZnO films: a comparison between undoped and Al-doped ZnO. <i>Optics Express</i> , 2013, 21, 14131.	1.7	35
56	Mechanism of nitrogen-enhanced negative bias temperature instability in pMOSFET. <i>Microelectronics Reliability</i> , 2005, 45, 19-30.	0.9	34
57	Handwritten-Digit Recognition by Hybrid Convolutional Neural Network based on HfO ₂ Memristive Spiking-Neuron. <i>Scientific Reports</i> , 2018, 8, 12546.	1.6	34
58	Impact of programming mechanisms on the performance and reliability of nonvolatile memory devices based on Si nanocrystals. <i>IEEE Transactions on Electron Devices</i> , 2006, 53, 663-667.	1.6	33
59	Interface trap generation by FN injection under dynamic oxide field stress. <i>IEEE Transactions on Electron Devices</i> , 1998, 45, 1920-1926.	1.6	32
60	Influence of localized surface plasmon resonance and free electrons on the optical properties of ultrathin Au films: a study of the aggregation effect. <i>Optics Express</i> , 2014, 22, 5124.	1.7	32
61	Current transport and its effect on the determination of the Schottky-barrier height in a typical system: Gold on silicon. <i>Solid-State Electronics</i> , 1993, 36, 949-954.	0.8	31
62	Core-Level Shift of Si Nanocrystals Embedded in a SiO ₂ Matrix. <i>Journal of Physical Chemistry B</i> , 2004, 108, 16609-16612.	1.2	30
63	Static dielectric constant of isolated silicon nanocrystals embedded in a SiO ₂ thin film. <i>Applied Physics Letters</i> , 2006, 88, 063103.	1.5	30
64	WS ₂ 3D graphene nano-architecture networks for high performance anode materials of lithium ion batteries. <i>RSC Advances</i> , 2016, 6, 107768-107775.	1.7	29
65	Electrical properties of TaN/Cu nanocomposite thin films. <i>Ceramics International</i> , 2004, 30, 1879-1883.	2.3	28
66	Charging effect on current conduction in aluminum nitride thin films containing Al nanocrystals. <i>Applied Physics Letters</i> , 2006, 89, 123101.	1.5	28
67	Analytical reaction-diffusion model and the modeling of nitrogen-enhanced negative bias temperature instability. <i>Applied Physics Letters</i> , 2006, 88, 172109.	1.5	28
68	Scratch properties of nickel thin films using atomic force microscopy. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, 202-210.	0.6	28
69	Electrically tunable white-color electroluminescence from Si-implanted silicon nitride thin film. <i>Optics Express</i> , 2010, 18, 20439.	1.7	28
70	Effect of Exposure to Ultraviolet-Activated Oxygen on the Electrical Characteristics of Amorphous Indium Gallium Zinc Oxide Thin Film Transistors. <i>ECS Solid State Letters</i> , 2013, 2, Q21-Q24.	1.4	28
71	A study on the evolution of dielectric function of ZnO thin films with decreasing film thickness. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	27
72	Charging Effect on Electrical Characteristics of MOS Structures with Si Nanocrystal Distribution in Gate Oxide. <i>Electrochemical and Solid-State Letters</i> , 2004, 7, G134.	2.2	26

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73	Memory effect of Al-rich AlN films synthesized with rf magnetron sputtering. Applied Physics Letters, 2005, 87, 033112.	1.5	26
74	Unlocking the potential of SnS ₂ : Transition metal catalyzed utilization of reversible conversion and alloying reactions. Scientific Reports, 2017, 7, 41015.	1.6	26
75	Temperature dependence of the ideality factor of GaAs and Si schottky diodes. Physica Status Solidi A, 1995, 152, 563-571.	1.7	25
76	Negative Bias Temperature Instability on Plasma-Nitrided Silicon Dioxide Film. Japanese Journal of Applied Physics, 2002, 41, L314-L316.	0.8	25
77	Discriminating Crystal Binding from the Atomic Trapping of a Core Electron at Energy Levels Shifted by Surface Relaxation or Nanosolid Formation. Journal of Physical Chemistry B, 2003, 107, 411-414.	1.2	25
78	Thermal annealing effect on the band gap and dielectric functions of silicon nanocrystals embedded in SiO ₂ matrix. Applied Physics Letters, 2005, 87, 121903.	1.5	25
79	Room temperature deposition of p-type arsenic doped ZnO polycrystalline films by laser-assist filtered cathodic vacuum arc technique. Journal of Applied Physics, 2007, 101, 094905.	1.1	25
80	Effect of annealing on charge transfer in Ge nanocrystal based nonvolatile memory structure. Journal of Applied Physics, 2009, 106, .	1.1	24
81	Split of surface plasmon resonance of gold nanoparticles on silicon substrate: a study of dielectric functions. Optics Express, 2010, 18, 21926.	1.7	24
82	Snapback behavior of the postbreakdown I-V characteristics in ultrathin SiO ₂ films. Applied Physics Letters, 2001, 78, 492-494.	1.5	23
83	Influence of charge trapping on electroluminescence from Si-nanocrystal light emitting structure. Journal of Applied Physics, 2007, 101, 104306.	1.1	23
84	Amorphous Si ₃ N ₄ -Based Resistive Switching Memories with Highly Reduced Electroforming Voltage and Enlarged Memory Window. Advanced Electronic Materials, 2016, 2, 1500370.	2.6	23
85	Linear relationship between H ⁺ -trapping reaction energy and defect generation: Insight into nitrogen-enhanced negative bias temperature instability. Applied Physics Letters, 2003, 83, 530-532.	1.5	22
86	Modeling of a selective solar absorber thin film structure based on double TiN _x O _y layers for concentrated solar power applications. Solar Energy, 2017, 142, 33-38.	2.9	21
87	Atomic Modeling of Nitrogen Neighboring Effect on Negative Bias Temperature Instability of pMOSFETs. IEEE Electron Device Letters, 2004, 25, 504-506.	2.2	20
88	Charging dynamics of discrete gold nanoparticle arrays self-assembled within a poly(styrene-b-4-vinylpyridine) diblock copolymer template. Applied Physics Letters, 2008, 93, 222908.	1.5	20
89	Evolution of dielectric function of Al-doped ZnO thin films with thermal annealing: effect of band gap expansion and free-electron absorption. Optics Express, 2014, 22, 23086.	1.7	20
90	Investigation of localized surface plasmon resonance of TiN nanoparticles in TiN _x O _y thin films. Optical Materials Express, 2016, 6, 2422.	1.6	20

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91	Smart electronic skin having gesture recognition function by LSTM neural network. Applied Physics Letters, 2018, 113, .	1.5	20
92	Interface chemistry and band bending induced by Pt deposition onto GaP(110). Surface Science, 1991, 251-252, 472-477.	0.8	19
93	The influence of the implantation dose and energy on the electroluminescence of Si ⁺ -implanted amorphous SiO ₂ thin films. Nanotechnology, 2007, 18, 455306.	1.3	19
94	Effect of O ₂ plasma immersion on electrical properties and transistor performance of indium gallium zinc oxide thin films. Thin Solid Films, 2013, 545, 533-536.	0.8	19
95	STBNN: Hardware-friendly spatio-temporal binary neural network with high pattern recognition accuracy. Neurocomputing, 2020, 409, 351-360.	3.5	19
96	The interaction of platinum with GaP(110): band bending and surface photovoltage effects. Applied Surface Science, 1992, 56-58, 233-241.	3.1	18
97	Depth profiling of Si nanocrystals in Si-implanted SiO ₂ films by spectroscopic ellipsometry. Applied Physics Letters, 2002, 81, 4724-4726.	1.5	18
98	Influence of silicon-nanocrystal distribution in SiO ₂ matrix on charge injection and charge decay. Applied Physics Letters, 2005, 86, 152110.	1.5	18
99	Fabrication of thin-film organic transistor on flexible substrate via ultraviolet transfer embossing. Applied Physics Letters, 2007, 90, 243502.	1.5	18
100	Bottom-contact poly(3,3'-didodecylquaterthiophene) thin-film transistors with reduced contact resistance. Organic Electronics, 2008, 9, 14-20.	1.4	18
101	Influence of oxygen partial pressure on magnetron sputtered Sr _{0.8} Nd _{0.3} Bi _{2.5} Ta ₂ O _{9+x} ferroelectric thin films. Journal of Alloys and Compounds, 2008, 457, 549-554.	2.8	18
102	Annealing effect on the optical properties of implanted silicon in a silicon nitride matrix. Applied Physics Letters, 2008, 93, .	1.5	18
103	Electroluminescence of as-sputtered silicon-rich SiO _x films. Vacuum, 2010, 84, 1043-1048.	1.6	18
104	A Neuromorphic-Hardware Oriented Bio-Plausible Online-Learning Spiking Neural Network Model. IEEE Access, 2019, 7, 71730-71740.	2.6	18
105	Influence of nitrogen on tunneling barrier heights and effective masses of electrons and holes at lightly-nitrided SiO ₂ -Si interface. Journal of Applied Physics, 2004, 96, 5912-5914.	1.1	17
106	Effects of annealing on the microstructure and electrical properties of TaN-Cu nanocomposite thin films. Surface and Coatings Technology, 2005, 193, 173-177.	2.2	17
107	Charging-Induced Changes in Reverse Current-Voltage Characteristics of Al/Al-Rich Al ₂ O ₃ /p-Si Diodes. IEEE Transactions on Electron Devices, 2009, 56, 2060-2064.	1.6	17
108	Laterally-current-injected light-emitting diodes based on nanocrystalline-Si/SiO ₂ superlattice. Optics Express, 2011, 19, 2729.	1.7	17

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109	Optical-reconfigurable carbon nanotube and indium-tin-oxide complementary thin-film transistor logic gates. <i>Nanoscale</i> , 2018, 10, 13122-13129.	2.8	17
110	Uncovering the Indium Filament Revolution in Transparent Bipolar ITO/SiO _x /ITO Resistive Switching Memories. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 4579-4585.	4.0	17
111	Quantized STDP-based online-learning spiking neural network. <i>Neural Computing and Applications</i> , 2021, 33, 12317-12332.	3.2	17
112	Silicon nanocrystal-based non-volatile memory devices. <i>Thin Solid Films</i> , 2006, 504, 25-27.	0.8	16
113	Evolution of electroluminescence from multiple Si-implanted silicon nitride films with thermal annealing. <i>Journal of Applied Physics</i> , 2009, 105, 123101.	1.1	16
114	High temperature excitonic lasing characteristics of randomly assembled SnO ₂ nanowires. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	16
115	Flexible Write-Once“Read-Many-Times Memory Device Based on a Nickel Oxide Thin Film. <i>IEEE Transactions on Electron Devices</i> , 2012, 59, 858-862.	1.6	16
116	HfO _x -Based RRAM Device With Sandwich-Like Electrode for Thermal Budget Requirement. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 4193-4200.	1.6	16
117	Defect-induced photoluminescence from tetraethylorthosilicate thin films containing mechanically milled silicon nanocrystals. <i>Journal of Applied Physics</i> , 2005, 97, 104307.	1.1	15
118	Distinguishing the effect of crystal-field screening from the effect of valence recharging on the 2p _{3/2} and 3d _{5/2} level energies of nanostructured copper. <i>Applied Surface Science</i> , 2006, 252, 2101-2107.	3.1	15
119	Charge trapping and retention behaviors of Ge nanocrystals distributed in the gate oxide near the gate synthesized by low-energy ion implantation. <i>Journal of Applied Physics</i> , 2007, 101, 124313.	1.1	15
120	Bandgap expansion and dielectric suppression of self-assembled Ge nanocrystals. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	15
121	Resistive Switching Behavior of Partially Anodized Aluminum Thin Film at Elevated Temperatures. <i>IEEE Transactions on Electron Devices</i> , 2012, 59, 2363-2367.	1.6	15
122	Winner-takes-all mechanism realized by memristive neural network. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	15
123	Reverse I“V characteristics of Au/semi-insulating GaAs(1 0 0). <i>Solid State Communications</i> , 1997, 101, 715-720.	0.9	14
124	Charging mechanism in a SiO ₂ matrix embedded with Si nanocrystals. <i>Journal of Applied Physics</i> , 2006, 100, 096111.	1.1	14
125	A quantitative modeling of the contributions of localized surface plasmon resonance and interband transitions to absorbance of gold nanoparticles. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	0.8	14
126	Development of optically transparent ZnS/poly(vinylpyrrolidone) nanocomposite films with high refractive indices and high Abbe numbers. <i>Journal of Applied Polymer Science</i> , 2013, 129, 1793-1798.	1.3	14

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127	Design of an electronic synapse with spike time dependent plasticity based on resistive memory device. Journal of Applied Physics, 2013, 113, .	1.1	14
128	Study of electrochromic characteristics in the near-infrared region of electrochromic devices based on solution-processed amorphous WO ₃ films. Materials Science in Semiconductor Processing, 2018, 88, 73-78.	1.9	14
129	Influence of Si nanocrystal distributed in the gate oxide on the MOS capacitance. IEEE Transactions on Electron Devices, 2006, 53, 730-736.	1.6	13
130	Charging effect of Al ₂ O ₃ thin films containing Al nanocrystals. Applied Physics Letters, 2008, 93, 142106.	1.5	13
131	Ultraviolet Random Lasing Action from Highly Disordered n-AlN/p-GaN Heterojunction. ACS Applied Materials & Interfaces, 2011, 3, 1726-1730.	4.0	13
132	Controlled electroluminescence of n-ZnMgO/p-GaN light-emitting diodes. Applied Physics Letters, 2012, 101, .	1.5	13
133	Strong green emission in ZnO films after H ₂ surface treatment. Journal Physics D: Applied Physics, 2012, 45, 185102.	1.3	13
134	Magnetron Sputtered Ni-Rich Nickel Oxide Nano-Films for Resistive Switching Memory Applications. International Journal of Applied Ceramic Technology, 2013, 10, 20-25.	1.1	13
135	Realization of write-once-read-many-times memory device with O ₂ plasma-treated indium gallium zinc oxide thin film. Applied Physics Letters, 2014, 104, 033505.	1.5	13
136	¹³ Ray Radiation Effects on an HfO ₂ -Based Resistive Memory Device. IEEE Nanotechnology Magazine, 2018, 17, 61-64.	1.1	13
137	Effect of Surface Scattering of Electrons on Ratios of Optical Absorption and Scattering to Extinction of Gold Nanoshell. Nanoscale Research Letters, 2018, 13, 299.	3.1	13
138	A photovoltaic study of current transport and its influence on the determination of the Schottky barrier height in Schottky diodes. Semiconductor Science and Technology, 1993, 8, 2085-2091.	1.0	12
139	The effect of the temperature dependence of the ideality factor on metal-semiconductor solar devices. Semiconductor Science and Technology, 1993, 8, 1357-1360.	1.0	12
140	Influence of Nitrogen Proximity from the Si/SiO ₂ Interface on Negative Bias Temperature Instability. Japanese Journal of Applied Physics, 2002, 41, L1031-L1033.	0.8	12
141	Depth Profiling of Charging Effect of Si Nanocrystals Embedded in SiO ₂ : A Study of Charge Diffusion among Si Nanocrystals. Journal of Physical Chemistry B, 2006, 110, 16499-16502.	1.2	12
142	Dependence of barrier height and effective mass on nitrogen concentration at SiO _x N _y /Si interface and gate oxide thickness. Smart Materials and Structures, 2006, 15, S39-S42.	1.8	12
143	Evolution of Photoluminescence Mechanisms of Si ⁺ -Implanted SiO ₂ Films with Thermal Annealing. Journal of Nanoscience and Nanotechnology, 2008, 8, 3555-3560.	0.9	12
144	Two-Terminal Write-Once-Read-Many-Times Memory Device Based on Charging-Controlled Current Modulation in Al/Al-Rich Al ₂ O ₃ /p-Si Diode. IEEE Transactions on Electron Devices, 2011, 58, 960-965.	1.6	12

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145	Influence of implantation dose on electroluminescence from $\hat{\text{A}}\text{Si}$ -implanted silicon nitride thin films. Applied Physics A: Materials Science and Processing, 2011, 104, 239-245.	1.1	12
146	A MoS_2 -based coplanar neuron transistor for logic applications. Nanotechnology, 2017, 28, 214001.	1.3	12
147	Thickness effect of nickel oxide thin films on associated solution-processed write-once-read-many-times memory devices. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	12
148	Investigation of Schottky barrier formation for transition metal overlayers on InP and GaP(110) surfaces. Surface Science, 1992, 269-270, 979-987.	0.8	11
149	Snapback behaviour and its similarity to the switching behaviour in ultra-thin silicon dioxide films after hard breakdown. Journal Physics D: Applied Physics, 2001, 34, L95-L98.	1.3	11
150	Electroluminescence from n-In ₂ O ₃ :Sn randomly assembled nanorods/p-SiC heterojunction. Optics Express, 2010, 18, 15585.	1.7	11
151	Temperature-Dependent Charge Transport in Al/Al Nanocrystal Embedded Al ₂ O ₃ Nanocomposite/p-Si Diodes. ECS Solid State Letters, 2012, 1, Q4-Q7.	1.4	11
152	Thickness Dependence of Optical Properties of Amorphous Indium Gallium Zinc Oxide Thin Films: Effects of Free-Electrons and Quantum Confinement. ECS Solid State Letters, 2015, 4, P29-P32.	1.4	11
153	Study of Multilevel High-Resistance States in HfO _x -Based Resistive Switching Random Access Memory by Impedance Spectroscopy. IEEE Transactions on Electron Devices, 2015, 62, 2684-2688.	1.6	11
154	Resonant scattering of green light enabled by Ag@TiO ₂ and its application in a green light projection screen. Nanoscale, 2018, 10, 2438-2446.	2.8	11
155	Study of Recall Time of Associative Memory in a Memristive Hopfield Neural Network. IEEE Access, 2019, 7, 58876-58882.	2.6	11
156	Toward transparent projection display: recent progress in frequency-selective scattering of RGB light based on metallic nanoparticle's localized surface plasmon resonance. Opto-Electronic Advances, 2019, 2, 19002001-19002015.	6.4	11
157	Post-stress interface trap generation induced by oxide-field stress with FN injection. IEEE Transactions on Electron Devices, 1998, 45, 1972-1977.	1.6	10
158	On the switching behaviour of post-breakdown conduction in ultra-thin SiO ₂ films. Semiconductor Science and Technology, 2001, 16, 793-797.	1.0	10
159	Charging/discharging of silicon nanocrystals embedded in an SiO ₂ matrix inducing reduction/recovery in the total capacitance and tunneling current. Smart Materials and Structures, 2006, 15, S43-S46.	1.8	10
160	Photon-induced conduction modulation in SiO ₂ thin films embedded with Ge nanocrystals. Applied Physics Letters, 2007, 90, 103102.	1.5	10
161	Tunable Surface Plasmon Resonance of Gold Nanoparticles Self-Assembled on Fused Silica Substrate. Electrochemical and Solid-State Letters, 2010, 13, K96.	2.2	10
162	The charge trapping and memory effect in SiO ₂ thin films containing Ge nanocrystals. Journal Physics D: Applied Physics, 2010, 43, 015102.	1.3	10

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163	Recovery from ultraviolet-induced threshold voltage shift in indium gallium zinc oxide thin film transistors by positive gate bias. Applied Physics Letters, 2013, 103, .	1.5	10
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165	Application of Deep Compression Technique in Spiking Neural Network Chip. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 274-282.	2.7	10
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