

Christoph Adelman

List of Publications by Year in descending order

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290
papers

9,526
citations

61687

45
h-index

53065

89
g-index

316
all docs

316
docs citations

316
times ranked

8382
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrical detection of spin transport in lateral ferromagnet-semiconductor devices. Nature Physics, 2007, 3, 197-202.	6.5	732
2	Opportunities and challenges for spintronics in the microelectronics industry. Nature Electronics, 2020, 3, 446-459.	13.1	471
3	Stabilizing the ferroelectric phase in doped hafnium oxide. Journal of Applied Physics, 2015, 118, .	1.1	424
4	Impact of different dopants on the switching properties of ferroelectric hafniumoxide. Japanese Journal of Applied Physics, 2014, 53, 08LE02.	0.8	318
5	Imaging Spin Transport in Lateral Ferromagnet/Semiconductor Structures. Science, 2005, 309, 2191-2195.	6.0	298
6	The 2021 Magnonics Roadmap. Journal of Physics Condensed Matter, 2021, 33, 413001.	0.7	287
7	Ferroelectricity in Gd-Doped HfO ₂ Thin Films. ECS Journal of Solid State Science and Technology, 2012, 1, N123-N126.	0.9	224
8	High-k dielectrics for future generation memory devices (Invited Paper). Microelectronic Engineering, 2009, 86, 1789-1795.	1.1	218
9	Identification of the ferroelectric switching process and dopant-dependent switching properties in orthorhombic HfO ₂ : A first principles insight. Applied Physics Letters, 2014, 104, .	1.5	183
10	Introduction to spin wave computing. Journal of Applied Physics, 2020, 128, .	1.1	179
11	Advances in Magnetism Roadmap on Spin-Wave Computing. IEEE Transactions on Magnetics, 2022, 58, 1-72.	1.2	179
12	Electrical Detection of Spin Accumulation at a Ferromagnet-Semiconductor Interface. Physical Review Letters, 2006, 96, 176603.	2.9	173
13	Dynamically stable gallium surface coverages during plasma-assisted molecular-beam epitaxy of (0001) GaN. Journal of Applied Physics, 2002, 91, 9638.	1.1	164
14	Experimental prototype of a spin-wave majority gate. Applied Physics Letters, 2017, 110, .	1.5	158
15	Spin injection from the Heusler alloy Co ₂ MnGe into Al _{0.1} Ga _{0.9} As [±] -GaAs heterostructures. Applied Physics Letters, 2005, 86, 102107.	1.5	153
16	Direct comparison of recombination dynamics in cubic and hexagonal GaN/AlN quantum dots. Physical Review B, 2003, 68, .	1.1	152
17	Self-assembled InGa _N quantum dots grown by molecular-beam epitaxy. Applied Physics Letters, 2000, 76, 1570-1572.	1.5	151
18	Spin injection and relaxation in ferromagnet-semiconductor heterostructures. Physical Review B, 2005, 71, .	1.1	141

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19	A magnonic directional coupler for integrated magnonic half-adders. Nature Electronics, 2020, 3, 765-774.	13.1	139
20	Surfactant effect of gallium during molecular-beam epitaxy of GaN on AlN (0001). Physical Review B, 2001, 64, .	1.1	131
21	Gallium adsorption on (0001) GaN surfaces. Physical Review B, 2003, 67, .	1.1	131
22	Thickness dependence of the resistivity of platinum-group metal thin films. Journal of Applied Physics, 2017, 122, .	1.1	128
23	Strain relaxation in (0001) AlN/GaN heterostructures. Physical Review B, 2001, 63, .	1.1	107
24	Advanced Interconnects: Materials, Processing, and Reliability. ECS Journal of Solid State Science and Technology, 2015, 4, Y1-Y4.	0.9	104
25	Shape memory and ferromagnetic shape memory effects in single-crystal Ni ₂ MnGa thin films. Journal of Applied Physics, 2004, 95, 2593-2600.	1.1	102
26	Hafnium Oxide Based CMOS Compatible Ferroelectric Materials. ECS Journal of Solid State Science and Technology, 2013, 2, N69-N72.	0.9	101
27	Atomic Layer Deposition of Ruthenium with TiN Interface for Sub-10 nm Advanced Interconnects beyond Copper. ACS Applied Materials & Interfaces, 2016, 8, 26119-26125.	4.0	87
28	Self-assembled zinc blende GaN quantum dots grown by molecular-beam epitaxy. Applied Physics Letters, 2000, 77, 809-811.	1.5	84
29	Strontium doped hafnium oxide thin films: Wide process window for ferroelectric memories. , 2013, , .		84
30	Effect of Annealing Ferroelectric HfO ₂ Thin Films: In Situ, High Temperature X-ray Diffraction. Advanced Electronic Materials, 2018, 4, 1800091.	2.6	81
31	Dielectric properties of dysprosium- and scandium-doped hafnium dioxide thin films. Applied Physics Letters, 2007, 91, .	1.5	79
32	Growth and optical properties of GaN/AlN quantum wells. Applied Physics Letters, 2003, 82, 4154-4156.	1.5	76
33	Metal-Insulator Transition in ALD VO ₂ Ultrathin Films and Nanoparticles: Morphological Control. Advanced Functional Materials, 2015, 25, 679-686.	7.8	70
34	Highly Scaled Ruthenium Interconnects. IEEE Electron Device Letters, 2017, 38, 949-951.	2.2	69
35	Plastic strain relaxation of nitride heterostructures. Journal of Applied Physics, 2004, 95, 1127-1133.	1.1	66
36	All electrical propagating spin wave spectroscopy with broadband wavevector capability. Applied Physics Letters, 2016, 109, .	1.5	64

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37	Indium incorporation during the growth of InGaN by molecular-beam epitaxy studied by reflection high-energy electron diffraction intensity oscillations. Applied Physics Letters, 1999, 75, 3518-3520.	1.5	60
38	Alternative metals for advanced interconnects. , 2014, , .		59
39	GaN islanding by spontaneous rearrangement of a strained two-dimensional layer on (0001) AlN. Applied Physics Letters, 2002, 81, 3064-3066.	1.5	55
40	Capacitance-Voltage Characterization of GaAs-Oxide Interfaces. Journal of the Electrochemical Society, 2008, 155, H945.	1.3	55
41	Nanoscale solid-state quantum computing. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 1473-1485.	1.6	52
42	Sub-100 nm ² Cobalt Interconnects. IEEE Electron Device Letters, 2018, 39, 731-734.	2.2	51
43	Nucleation and growth of GaN-AlN quantum dots. Physical Review B, 2004, 70, .	1.1	50
44	Reliability study on cobalt and ruthenium as alternative metals for advanced interconnects. , 2017, , .		50
45	Reconfigurable submicrometer spin-wave majority gate with electrical transducers. Science Advances, 2020, 6, .	4.7	50
46	Vacancy-modulated conductive oxide resistive RAM (VMCO-RRAM): An area-scalable switching current, self-compliant, highly nonlinear and wide on/off-window resistive switching cell. , 2013, , .		49
47	Strain distribution in nitride quantum dot multilayers. Physical Review B, 2004, 69, .	1.1	48
48	Insights into Ni-filament formation in unipolar-switching Ni/HfO ₂ /TiN resistive random access memory device. Applied Physics Letters, 2012, 100, .	1.5	48
49	Process Study and Characterization of VO ₂ Thin Films Synthesized by ALD Using TEMAV and O ₃ Precursors. ECS Journal of Solid State Science and Technology, 2012, 1, P169-P174.	0.9	48
50	Finite Size Effects in Highly Scaled Ruthenium Interconnects. IEEE Electron Device Letters, 2018, 39, 268-271.	2.2	46
51	Spin injection from perpendicular magnetized ferromagnetic $\hat{\Gamma}$ -MnGa into (Al,Ga)As heterostructures. Applied Physics Letters, 2006, 89, 112511.	1.5	45
52	Atomic Layer Deposition of Gd-Doped HfO ₂ Thin Films. Journal of the Electrochemical Society, 2010, 157, G105.	1.3	45
53	High-Performance Metal-Insulator-Metal Tunnel Diode Selectors. IEEE Electron Device Letters, 2014, 35, 63-65.	2.2	43
54	Atomic Layer Deposition of Ruthenium Thin Films from (Ethylbenzyl) (1-Ethyl-1,4-cyclohexadienyl) Ru: Process Characteristics, Surface Chemistry, and Film Properties. Chemistry of Materials, 2017, 29, 4654-4666.	3.2	41

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55	Silicate formation and thermal stability of ternary rare earth oxides as high-k dielectrics. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 724-730.	0.9	40
56	Spin injection across the Fe/GaAs interface: Role of interfacial ordering. Physical Review B, 2009, 80, .	1.1	40
57	Band alignment and electron traps in Y2O3 layers on (100)Si. Applied Physics Letters, 2009, 95, .	1.5	40
58	Ultrathin Metal/Amorphous-Silicon/Metal Diode for Bipolar RRAM Selector Applications. IEEE Electron Device Letters, 2014, 35, 199-201.	2.2	39
59	High-Aspect-Ratio Ruthenium Lines for Buried Power Rail. , 2018, , .		39
60	Surface chemistry and Fermi level movement during the self-cleaning of GaAs by trimethyl-aluminum. Applied Physics Letters, 2011, 99, .	1.5	37
61	Study of interfacial reactions and phase stabilization of mixed Sc, Dy, Hf high-k oxides by attenuated total reflectance infrared spectroscopy. Applied Surface Science, 2009, 255, 7812-7817.	3.1	35
62	Towards barrier height modulation in HfO2/TiN by oxygen scavenging â€“ Dielectric defects or metal induced gap states?. Microelectronic Engineering, 2011, 88, 1251-1254.	1.1	35
63	TiN x / HfO 2 interface dipole induced by oxygen scavenging. Applied Physics Letters, 2011, 98, .	1.5	34
64	Surface Chemistry and Interface Formation during the Atomic Layer Deposition of Alumina from Trimethylaluminum and Water on Indium Phosphide. Chemistry of Materials, 2013, 25, 1078-1091.	3.2	33
65	A-VMCO: A novel forming-free, self-rectifying, analog memory cell with low-current operation, nonfilamentary switching and excellent variability. , 2015, , .		33
66	Experimental Realization of a Passive Gigahertz Frequencyâ€“Division Demultiplexer for Magnonic Logic Networks. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900695.	1.2	33
67	Electron spin dynamics and hyperfine interactions inFeâˆ•Al0.1Ga0.9Asâˆ•GaAsspin injection heterostructures. Physical Review B, 2005, 72, .	1.1	30
68	Structure and ordering of GaN quantum dot multilayers. Applied Physics Letters, 2001, 79, 1971-1973.	1.5	29
69	Hydrogen-Induced Resistive Switching in TiN/ALD \$ \hbox{HfO}_{2} \$/PEALD TiN RRAM Device. IEEE Electron Device Letters, 2012, 33, 483-485.	2.2	28
70	Thermal stability of dysprosium scandate thin films. Applied Physics Letters, 2008, 92, .	1.5	27
71	Micromagnetic simulations of magnetoelastic spin wave excitation in scaled magnetic waveguides. Applied Physics Letters, 2017, 111, .	1.5	27
72	Epitaxial Growth of GaN, AlN and InN: 2D/3D Transition and Surfactant Effects. Physica Status Solidi A, 1999, 176, 621-627.	1.7	26

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73	Ruthenium metallization for advanced interconnects. , 2016, , .		26
74	Signature of GaN ^δ AlN quantum dots by nonresonant Raman scattering. Applied Physics Letters, 2000, 77, 2174-2176.	1.5	25
75	Growth of Dysprosium ^δ , Scandium ^δ , and Hafnium ^δ -based Third Generation High ^δ Dielectrics by Atomic Vapor Deposition. Chemical Vapor Deposition, 2007, 13, 567-573.	1.4	25
76	NiO Thin Films Synthesized by Atomic Layer Deposition using Ni(dmamb) ₂ and Ozone as Precursors. Chemical Vapor Deposition, 2012, 18, 61-69.	1.4	25
77	Study of InP Surfaces after Wet Chemical Treatments. ECS Journal of Solid State Science and Technology, 2014, 3, N3016-N3022.	0.9	25
78	Impact of Process Optimizations on the Electrical Performance of High-k Layers Deposited by Aqueous Chemical Solution Deposition. Journal of the Electrochemical Society, 2008, 155, G91.	1.3	24
79	Flexible and robust capping-metal gate integration technology enabling multiple-VT CMOS in MuGFETs. , 2008, , .		24
80	Low Temperature Compatible Hafnium Oxide Based Ferroelectrics. Ferroelectrics, 2015, 480, 16-23.	0.3	24
81	Fan-out enabled spin wave majority gate. AIP Advances, 2020, 10, .	0.6	24
82	Effects of doping profile and post-growth annealing on spin injection from Fe into (Al,Ga)As heterostructures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 1747.	1.6	23
83	Aqueous solution ^δ gel preparation of ultrathin ZrO ₂ films for gate dielectric application. Thin Solid Films, 2008, 516, 8343-8351.	0.8	23
84	Growth and characterisation of self-assembled cubic GaN quantum dots. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 82, 212-214.	1.7	22
85	Graphene oxide monolayers as atomically thin seeding layers for atomic layer deposition of metal oxides. Nanoscale, 2015, 7, 10781-10789.	2.8	22
86	Self-Assembled GaN Quantum Dots Grown by Plasma-Assisted Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2001, 40, 1892-1895.	0.8	21
87	Spin-Wave Emission by Spin-Orbit-Torque Antennas. Physical Review Applied, 2018, 10, .	1.5	21
88	Aqueous chemical solution deposition of ultrathin lanthanide oxide dielectric films. Journal of Materials Research, 2007, 22, 3484-3493.	1.2	20
89	Optical and electrical spin injection and spin transport in hybrid Fe/GaAs devices. Journal of Applied Physics, 2007, 101, 081716.	1.1	20
90	Atomic Layer Deposition of Gadolinium Aluminate using Gd(ⁱ PrCp) ₃ , TMA, and O ₃ or H ₂ O. Chemical Vapor Deposition, 2010, 16, 170-178.	1.4	20

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91	Sacrificial Self-Assembled Monolayers for the Passivation of GaAs (100) Surfaces and Interfaces. Chemistry of Materials, 2016, 28, 5689-5701.	3.2	20
92	Growth and Optical Characterization of InGaN Quantum Dots Resulting from a 2D→3D Transition. Physica Status Solidi A, 1999, 176, 639-642.	1.7	19
93	Reaction Chemistry during the Atomic Layer Deposition of Sc ₂ O ₃ and Gd ₂ O ₃ from Sc(MeCp) ₃ , Gd(ⁱ PrCp) ₃ , and H ₂ O. Chemistry of Materials, 2014, 26, 1404-1412.	3.2	19
94	Spintronic majority gates. , 2015, , .		19
95	Metallorganic Chemical Vapor Deposition of Dysprosium Scandate High-k Layers Using mmp-Type Precursors. Journal of the Electrochemical Society, 2006, 153, F219.	1.3	18
96	Phase formation in the thin film Fe ^x GaAs system. Applied Physics Letters, 2008, 92, .	1.5	18
97	Large-area, catalyst-free heteroepitaxy of InAs nanowires on Si by MOVPE. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 129-135.	0.8	17
98	Atomic-layer-deposited tantalum silicate as a gate dielectric for III-V MOS devices. Microelectronic Engineering, 2011, 88, 1098-1100.	1.1	17
99	Exchange-driven Magnetic Logic. Scientific Reports, 2017, 7, 12154.	1.6	17
100	Magnonic Band Structure in Vertical Meander-Shaped $\text{Co}_{40}\text{Fe}_{40}$	1.5	17
101	On the driving forces for the vertical alignment in nitride quantum dot multilayers. Europhysics Letters, 2003, 63, 268-274.	0.7	16
102	Aqueous Chemical Solution Deposition. Electrochemical and Solid-State Letters, 2007, 10, G15.	2.2	16
103	A comparative study of the microstructure→dielectric properties of crystalline SrTiO ₃ ALD films obtained via seed layer approach. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1920-1924.	0.8	16
104	(Invited) Vanadium Oxide as a Memory Material. ECS Transactions, 2011, 35, 233-243.	0.3	16
105	Backward volume vs Damon→Eshbach: A traveling spin wave spectroscopy comparison. Journal of Applied Physics, 2020, 127, .	1.1	16
106	Magnonic band structure in CoFeB/Ta/NiFe meander-shaped magnetic bilayers. Applied Physics Letters, 2021, 118, .	1.5	16
107	Interdiffusion and crystallization in HfO ₂ /Al ₂ O ₃ superlattices. Applied Physics Letters, 2009, 95, 091911.	1.5	15
108	Confined magnetoelastic waves in thin waveguides. Physical Review B, 2021, 103, .	1.1	15

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109	Properties of ultrathin molybdenum films for interconnect applications. <i>Materialia</i> , 2022, 24, 101511.	1.3	15
110	Time-Resolved Photoluminescence Studies of Cubic and Hexagonal GaN Quantum Dots. <i>Physica Status Solidi (B): Basic Research</i> , 2001, 224, 13-16.	0.7	14
111	Low V_{T} CMOS using doped Hf-based oxides, TaC-based Metals and Laser-only Anneal. , 2007, , .		14
112	Atomic Layer Deposition of Tantalum Oxide and Tantalum Silicate from Chloride Precursors. <i>Chemical Vapor Deposition</i> , 2012, 18, 225-238.	1.4	14
113	Mechanism of Modification of Fluorocarbon Polymer by Ultraviolet Irradiation in Oxygen Atmosphere. <i>ECS Journal of Solid State Science and Technology</i> , 2013, 2, N93-N98.	0.9	14
114	High-drive current ($\approx 1\text{MA/cm}^2$) and highly nonlinear ($\approx 10^3$) TiN/amorphous-Silicon/TiN scalable bidirectional selector with excellent reliability and its variability impact on the 1S1R array performance. , 2014, , .		14
115	Spin Wave Normalization Toward All Magnonic Circuits. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2021, 68, 536-549.	3.5	14
116	2D/3D growth of GaN by molecular beam epitaxy: towards GaN quantum dots. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1997, 50, 8-11.	1.7	13
117	Atomic-layer epitaxy of GaN quantum wells and quantum dots on (0001) AlN. <i>Journal of Applied Physics</i> , 2002, 91, 5498-5500.	1.1	13
118	The Impact of Stacked Cap Layers on Effective Work Function With HfSiON and SiON Gate Dielectrics. <i>IEEE Electron Device Letters</i> , 2008, 29, 743-745.	2.2	13
119	Development of ALD HfZrO _x with TDEAH/TDEAZ and H ₂ O. <i>Journal of the Electrochemical Society</i> , 2011, 158, H69.	1.3	13
120	Roughness evolution during the atomic layer deposition of metal oxides. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013, 31, 061501.	0.9	13
121	<i>Ab initio</i> screening of metallic MAX ceramics for advanced interconnect applications. <i>Physical Review Materials</i> , 2021, 5, .	0.9	13
122	Recent progress in growth and physics of GaN/AlN quantum dots. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004, 1, 1445-1450.	0.8	12
123	Seed Layer and Multistack Approaches to Reduce Leakage in SrTiO ₃ -Based Metal-Insulator-Metal Capacitors Using TiN Bottom Electrode. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 04DD01.	0.8	12
124	Understanding the EOT degradation in Ru/SrTiO _x /Ru metal-insulator-metal capacitors formed with Ru atomic layer deposition. <i>Microelectronic Engineering</i> , 2015, 147, 108-112.	1.1	12
125	On the extraction of resistivity and area of nanoscale interconnect lines by temperature-dependent resistance measurements. <i>Solid-State Electronics</i> , 2019, 152, 72-80.	0.8	12
126	Excitation and propagation of spin waves in non-uniformly magnetized waveguides. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 495006.	1.3	12

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127	Low V_t&t</t>/inf>t</inf> Ni-FUSI CMOS Technology using a DyO cap layer with either single or dual Ni-phases. , 2007, , .		11
128	Equivalent Oxide Thickness Reduction for High-k Gate Stacks by Optimized Rare-Earth Silicate Reactions. Electrochemical and Solid-State Letters, 2009, 12, G17.	2.2	11
129	Thermally stable high effective work function TaCN thin films for metal gate electrode applications. Journal of Applied Physics, 2009, 105, .	1.1	11
130	Alternative high-k dielectrics for semiconductor applications. Journal of Vacuum Science & Technology B, 2009, 27, 209-213.	1.3	11
131	Stabilization of ambient sensitive atomic layer deposited lanthanum aluminates by annealing and <i>in situ</i> capping. Applied Physics Letters, 2011, 98, .	1.5	11
132	Selective chemical vapor synthesis of Cu ₃ Ge: Process optimization and film properties. Intermetallics, 2013, 34, 35-42.	1.8	11
133	Phase Formation and Morphology of Nickel Silicide Thin Films Synthesized by Catalyzed Chemical Vapor Reaction of Nickel with Silane. Chemistry of Materials, 2015, 27, 245-254.	3.2	11
134	Ruthenium interconnects with 58 nm² cross-section area using a metal-spacer process. , 2017, , .		11
135	A majority gate with chiral magnetic solitons. Journal of Physics Condensed Matter, 2018, 30, 375801.	0.7	11
136	n-bit Data Parallel Spin Wave Logic Gate. , 2020, , .		11
137	Fully resonant magneto-elastic spin-wave excitation by surface acoustic waves under conservation of energy and linear momentum. Applied Physics Letters, 2022, 120, .	1.5	11
138	Transistor threshold voltage modulation by Dy ₂ O ₃ rare-earth oxide capping: The role of bulk dielectrics charge. Applied Physics Letters, 2008, 93, .	1.5	10
139	High-k Dielectrics and Metal Gates for Future Generation Memory Devices. ECS Transactions, 2009, 19, 29-40.	0.3	10
140	Strontium niobate high-k dielectrics: Film deposition and material properties. Acta Materialia, 2010, 58, 216-225.	3.8	10
141	Switching by Ni Filaments in a HfO ₂ Matrix: A New Pathway to Improved Unipolar Switching RRAM. , 2011, , .		10
142	On-chip interconnect trends, challenges and solutions: How to keep RC and reliability under control. , 2016, , .		10
143	Novel membrane solutions for the EUV pellicle: better or not?. Proceedings of SPIE, 2017, , .	0.8	10
144	Ferroelectric Control of Magnetism in Ultrathin HfO ₂ /CoPt Layers. ACS Applied Materials & Interfaces, 2019, 11, 34385-34393.	4.0	10

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145	Finite difference magnetoelastic simulator. Open Research Europe, 0, 1, 35.	2.0	10
146	Molecular-Beam Epitaxy of GaN: A Phase Diagram. Physica Status Solidi A, 2001, 188, 575-578.	1.7	9
147	GaN quantum dots by molecular beam epitaxy. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 540-545.	1.3	9
148	The unexpected effects of crystallization on Ta2O5 as studied by HRTEM and C-AFM. Microelectronic Engineering, 2013, 109, 318-321.	1.1	9
149	Engineering of Hf _{1-x} Al _x O _y amorphous dielectrics for high-performance RRAM applications. , 2014, , .		9
150	EUV lithography imaging using novel pellicle membranes. Proceedings of SPIE, 2016, , .	0.8	9
151	Demonstration of $2 \times 10^{12} \text{ cm}^{-2}$ 2D-oxide interface trap density on back-gated MoS ₂ flake devices with 2.5 nm EOT. Microelectronic Engineering, 2017, 178, 145-149.	1.1	9
152	The first observation of p-type electromigration failure in full ruthenium interconnects. , 2018, , .		9
153	2-Output Spin Wave Programmable Logic Gate. , 2020, , .		9
154	Compact tunable YIG-based RF resonators. Applied Physics Letters, 2021, 118, .	1.5	9
155	Suppression of nuclear polarization near the surface of optically pumped GaAs. Physical Review B, 2007, 76, .	1.1	8
156	Electrical Properties of Low- V_{T} Metal-Gated n-MOSFETs Using $\text{La}_2\text{O}_3/\text{SiO}_x$ as Interfacial Layer Between HfLaO High- κ Dielectrics and Si Channel. IEEE Electron Device Letters, 2008, 29, 430-433.	2.2	8
157	Novel process to pattern selectively dual dielectric capping layers using soft-mask only. , 2008, , .		8
158	Capacitance-Voltage (CV) Characterization of GaAs-Oxide Interfaces. ECS Transactions, 2008, 16, 507-519.	0.3	8
159	Impact of thermal treatment upon morphology and crystallinity of strontium titanate films deposited by atomic layer deposition. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2011, 29, .	0.6	8
160	Implementing cubic-phase HfO ₂ with ≈ 30 in low- V_T replacement gate pMOS devices for improved EOT-Scaling and reliability. , 2012, , .		8
161	Understanding the Interface Reactions of Rutile TiO ₂ Grown by Atomic Layer Deposition on Oxidized Ruthenium. ECS Journal of Solid State Science and Technology, 2013, 2, N23-N27.	0.9	8
162	Exploring alternative metals to Cu and W for interconnects: An ab initio insight. , 2014, , .		8

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163	Microwave Characterization of Ba-Substituted PZT and ZnO Thin Films. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 881-888.	1.7	8
164	Strain coupling optimization in magnetoelectric transducers. Microelectronic Engineering, 2018, 187-188, 144-147.	1.1	8
165	First experimental demonstration of a scalable linear majority gate based on spin waves. , 2018, , .		8
166	Amorphous Gadolinium Aluminate as a Dielectric and Sulfur for Indium Phosphide Passivation. ACS Applied Electronic Materials, 2019, 1, 2190-2201.	2.0	8
167	Electrical spin-wave spectroscopy in nanoscale waveguides with nonuniform magnetization. Applied Physics Letters, 2021, 118, .	1.5	8
168	Multifrequency Data Parallel Spin Wave Logic Gates. IEEE Transactions on Magnetics, 2021, 57, 1-12.	1.2	8
169	Lumped circuit model for inductive antenna spin-wave transducers. Scientific Reports, 2022, 12, 3796.	1.6	8
170	Low VT metal-gate/high-k nMOSFETs — PBTI dependence and V<inf>T</inf>T</inf> Tune-ability on La/Dy-capping layer locations and Laser annealing conditions. , 2008, , .		7
171	Strain enhanced low-V<inf>T</inf> CMOS featuring La/Al-doped HfSiO/TaC and 10ps invertor delay. , 2008, , .		7
172	Properties of Ultrathin High Permittivity (Nb[sub 1⊃x]Ta[sub x])[sub 2]O[sub 5] Films Prepared by Aqueous Chemical Solution Deposition. Journal of the Electrochemical Society, 2010, 157, G13.	1.3	7
173	Optimization of the crystallization phase of Rare-Earth aluminates For blocking dielectric application in TANOS type flash memories. , 2010, , .		7
174	Advanced PBTI reliability with 0.69nm EOT GdHfO gate dielectric. Solid-State Electronics, 2011, 63, 5-7.	0.8	7
175	Lanthanide Aluminates as Dielectrics for Non-Volatile Memory Applications: Material Aspects. Journal of the Electrochemical Society, 2011, 158, H778-H784.	1.3	7
176	An X-ray photoelectron spectroscopy study of strontium-titanate-based high-k film stacks. Microelectronic Engineering, 2012, 90, 138-140.	1.1	7
177	Low temperature chemical vapour synthesis of Cu3Ge thin films for interconnect applications. Microelectronic Engineering, 2014, 120, 246-250.	1.1	7
178	Advanced a-VMCO resistive switching memory through inner interface engineering with wide (>10²) on/off window, tunable 1/4A-range switching current and excellent variability. , 2016, , .		7
179	Resistivity scaling model for metals with conduction band anisotropy. Physical Review Materials, 2018, 2, .	0.9	7
180	Incorporation kinetics of indium in indium gallium nitride at low temperature. Applied Physics Letters, 2001, 79, 1614-1615.	1.5	6

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181	Screening of High-k Layers in MIS and MIM Capacitors Using Aqueous Chemical Solution Deposition. ECS Transactions, 2007, 11, 299-310.	0.3	6
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