Christoph Adelmann

List of Publications by Year
in descending order

290	9,526	53794 45	46799 89
papers	citations	h-index	g-index

316	316	316	7496
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electrical detection of spin transport in lateral ferromagnetâ€“semiconductor devices. Nature Physics, 2007, 3, 197-202.	16.7	732
2	Opportunities and challenges for spintronics in the microelectronics industry. Nature Electronics, 2020, 3, 446-459.	26.0	471
3	Stabilizing the ferroelectric phase in doped hafnium oxide. Journal of Applied Physics, 2015, 118, .	2.5	424
4	Impact of different dopants on the switching properties of ferroelectric hafniumoxide. Japanese Journal of Applied Physics, 2014, 53, 08LE02.	1.5	318
5	Imaging Spin Transport in Lateral Ferromagnet/Semiconductor Structures. Science, 2005, 309, 2191-2195.	12.6	298
6	The 2021 Magnonics Roadmap. Journal of Physics Condensed Matter, 2021, 33, 413001.	1.8	287
7	Ferroelectricity in Gd-Doped HfO₂Thin Films. ECS Journal of Solid State Science and Technology, 2012, 1, N123-N126.	1.8	224
8	High-k dielectrics for future generation memory devices (Invited Paper). Microelectronic Engineering, 2009, 86, 1789-1795.	2.4	218
9	Identification of the ferroelectric switching process and dopant-dependent switching properties in orthorhombic HfO2: A first principles insight. Applied Physics Letters, 2014, 104, .	3.3	183
10	Introduction to spin wave computing. Journal of Applied Physics, 2020, 128, .	2.5	179
11	Advances in Magnetics Roadmap on Spin-Wave Computing. IEEE Transactions on Magnetics, 2022, 58, 1-72.	2.1	179
12	Electrical Detection of Spin Accumulation at a Ferromagnet-Semiconductor Interface. Physical Review Letters, 2006, 96, 176603.	7.8	173
13	Dynamically stable gallium surface coverages during plasma-assisted molecular-beam epitaxy of (0001) GaN. Journal of Applied Physics, 2002, 91, 9638.	2.5	164
14	Experimental prototype of a spin-wave majority gate. Applied Physics Letters, 2017, 110, .	3.3	158
15	Spin injection from the Heusler alloy Co2MnGe into Al0.1Ga0.9Asâ•GaAs heterostructures. Applied Physics Letters, 2005, 86, 102107.	3.3	153
16	Direct comparison of recombination dynamics in cubic and hexagonal GaN/AlN quantum dots. Physical Review B, 2003, 68, .	3.2	152
17	Self-assembled InGaN quantum dots grown by molecular-beam epitaxy. Applied Physics Letters, 2000, 76, 1570-1572.	3.3	151
18	Spin injection and relaxation in ferromagnet-semiconductor heterostructures. Physical Review B, 2005, 71, .	3.2	141

#	Article	IF	Citations
19	A magnonic directional coupler for integrated magnonic half-adders. Nature Electronics, 2020, 3, 765-774.	26.0	139
20	Surfactant effect of gallium during molecular-beam epitaxy of GaN on AlN (0001). Physical Review B, 2001, 64, .	3.2	131
21	Gallium adsorption on (0001) GaN surfaces. Physical Review B, 2003, 67, .	3.2	131
22	Thickness dependence of the resistivity of platinum-group metal thin films. Journal of Applied Physics, 2017, 122, .	2.5	128
23	Strain relaxation in (0001) AlN/GaN heterostructures. Physical Review B, 2001, 63, .	3.2	107
24	Advanced Interconnects: Materials, Processing, and Reliability. ECS Journal of Solid State Science and Technology, 2015, 4, Y1-Y4.	1.8	104
25	Shape memory and ferromagnetic shape memory effects in single-crystal Ni2MnGa thin films. Journal of Applied Physics, 2004, 95, 2593-2600.	2.5	102
26	Hafnium Oxide Based CMOS Compatible Ferroelectric Materials. ECS Journal of Solid State Science and Technology, 2013, 2, N69-N72.	1.8	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.	8.0	87
28	Self-assembled zinc blende GaN quantum dots grown by molecular-beam epitaxy. Applied Physics Letters, 2000, 77, 809-811.	3.3	84
29	Strontium doped hafnium oxide thin films: Wide process window for ferroelectric memories. , 2013, , .		84
30	Effect of Annealing Ferroelectric HfO₂ Thin Films: In Situ, High Temperature Xâ€Ray Diffraction. Advanced Electronic Materials, 2018, 4, 1800091.	5.1	81
31	Dielectric properties of dysprosium- and scandium-doped hafnium dioxide thin films. Applied Physics Letters, 2007, 91, .	3.3	79
32	Growth and optical properties of GaN/AlN quantum wells. Applied Physics Letters, 2003, 82, 4154-4156.	3.3	76
33	Metalâ€Insulator Transition in ALD VO₂ Ultrathin Films and Nanoparticles: Morphological Control. Advanced Functional Materials, 2015, 25, 679-686.	14.9	70
34	Highly Scaled Ruthenium Interconnects. IEEE Electron Device Letters, 2017, 38, 949-951.	3.9	69
35	Plastic strain relaxation of nitride heterostructures. Journal of Applied Physics, 2004, 95, 1127-1133.	2.5	66
36	All electrical propagating spin wave spectroscopy with broadband wavevector capability. Applied Physics Letters, 2016, 109, .	3.3	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.	3.3	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.	3.3	55
40	Capacitanceâ€“Voltage Characterization of GaAsâ€“Oxide Interfaces. Journal of the Electrochemical Society, 2008, 155, H945.	2.9	55
41	Nanoscale solid-state quantum computing. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 1473-1485.	3.4	52
42	Sub-100 nm² Cobalt Interconnects. IEEE Electron Device Letters, 2018, 39, 731-734.	3.9	51
43	Nucleation and growth ofGaNâˆ•AlNquantum dots. Physical Review B, 2004, 70, .	3.2	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, .	10.3	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, .	3.2	48
48	Insights into Ni-filament formation in unipolar-switching Ni/HfO2/TiN resistive random access memory device. Applied Physics Letters, 2012, 100, .	3.3	48
49	Process Study and Characterization of VO₂Thin Films Synthesized by ALD Using TEMAV and O₃Precursors. ECS Journal of Solid State Science and Technology, 2012, 1, P169-P174.	1.8	48
50	Finite Size Effects in Highly Scaled Ruthenium Interconnects. IEEE Electron Device Letters, 2018, 39, 268-271.	3.9	46
51	Spin injection from perpendicular magnetized ferromagnetic Î´-MnGa into (Al,Ga)As heterostructures. Applied Physics Letters, 2006, 89, 112511.	3.3	45
52	Atomic Layer Deposition of Gd-Doped HfO[sub 2] Thin Films. Journal of the Electrochemical Society, 2010, 157, G105.	2.9	45
53	High-Performance Metal-Insulator-Metal Tunnel Diode Selectors. IEEE Electron Device Letters, 2014, 35, 63-65.	3.9	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.	6.7	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.	2.1	40
56	Spin injection across the Fe/GaAs interface: Role of interfacial ordering. Physical Review B, 2009, 80, .	3.2	40
57	Band alignment and electron traps in Y2O3 layers on (100)Si. Applied Physics Letters, 2009, 95, .	3.3	40
58	Ultrathin Metal/Amorphous-Silicon/Metal Diode for Bipolar RRAM Selector Applications. IEEE Electron Device Letters, 2014, 35, 199-201.	3.9	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, .	3.3	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.	6.1	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.	2.4	35
63	TiN x / HfO 2 interface dipole induced by oxygen scavenging. Applied Physics Letters, 2011, 98, .	3.3	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.	6.7	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 FrequencyâĐDivision Demultiplexer for Magnonic Logic Networks. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900695.	2.4	33
67	Electron spin dynamics and hyperfine interactions inFeâ•Al0.1Ga0.9Asâ•GaAsspin injection heterostructures. Physical Review B, 2005, 72, .	3.2	30
68	Structure and ordering of GaN quantum dot multilayers. Applied Physics Letters, 2001, 79, 1971-1973.	3.3	29
69	Hydrogen-Induced Resistive Switching in TiN/ALD $ hbox{HfO}_{2}$/PEALD TiN RRAM Device. IEEE Electron Device Letters, 2012, 33, 483-485.	3.9	28
70	Thermal stability of dysprosium scandate thin films. Applied Physics Letters, 2008, 92, .	3.3	27
71	Micromagnetic simulations of magnetoelastic spin wave excitation in scaled magnetic waveguides. Applied Physics Letters, 2017, 111, .	3.3	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 GaNâ€“AlN quantum dots by nonresonant Raman scattering. Applied Physics Letters, 2000, 77, 2174-2176.	3.3	25
75	Growth of Dysprosiumâ€, Scandiumâ€, and Hafniumâ€based Third Generation Highâ€Î¹ Dielectrics by Atomic Vapor Deposition. Chemical Vapor Deposition, 2007, 13, 567-573.	1.3	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.	1.3	25
77	Study of InP Surfaces after Wet Chemical Treatments. ECS Journal of Solid State Science and Technology, 2014, 3, N3016-N3022.	1.8	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.	2.9	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.	0.6	24
81	Fan-out enabled spin wave majority gate. AIP Advances, 2020, 10, .	1.3	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 solutionâ€“gel preparation of ultrathin ZrO2 films for gate dielectric application. Thin Solid Films, 2008, 516, 8343-8351.	1.8	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.	3.5	22
85	Graphene oxide monolayers as atomically thin seeding layers for atomic layer deposition of metal oxides. Nanoscale, 2015, 7, 10781-10789.	5.6	22
86	Self-Assembled GaN Quantum Dots Grown by Plasma-Assisted Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2001, 40, 1892-1895.	1.5	21
87	Spin-Wave Emission by Spin-Orbit-Torque Antennas. Physical Review Applied, 2018, 10, .	3.8	21
88	Aqueous chemical solution deposition of ultrathin lanthanide oxide dielectric films. Journal of Materials Research, 2007, 22, 3484-3493.	2.6	20
89	Optical and electrical spin injection and spin transport in hybrid Fe/GaAs devices. Journal of Applied Physics, 2007, 101, 081716.	2.5	20
90	Atomic Layer Deposition of Gadolinium Aluminate using Gd(ⁱPrCp)₃, TMA, and O₃ or H₂O. Chemical Vapor Deposition, 2010, 16, 170-178.	1.3	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.	6.7	20
92	Growth and Optical Characterization of InGaN Quantum Dots Resulting from a 2Dâ€“3D Transition. Physica Status Solidi A, 1999, 176, 639-642.	1.7	19
93	Reaction Chemistry during the Atomic Layer Deposition of Sc₂O₃ and Gd₂O₃ from Sc(MeCp)₃, Gd(ⁱPrCp)₃, and H₂O. Chemistry of Materials, 2014, 26, 1404-1412.	6.7	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.	2.9	18
96	Phase formation in the thin film Feâ•GaAs system. Applied Physics Letters, 2008, 92, .	3.3	18
97	Largeâ€area, catalystâ€free heteroepitaxy of InAs nanowires on Si by MOVPE. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 129-135.	1.8	17
98	Atomic-layer-deposited tantalum silicate as a gate dielectric for IIIâ€“V MOS devices. Microelectronic Engineering, 2011, 88, 1098-1100.	2.4	17
99	Exchange-driven Magnetic Logic. Scientific Reports, 2017, 7, 12154.	3.3	17
100	Magnonic Band Structure in Vertical Meander-Shaped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>Co</mml:mi><mml:mn>40</mml:mn></mml:msub></mml:math> <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>Fe</mml:mi><mml:mn>40</mml:mn></mml:msub></mml:math> <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><m	3.8	17
101	On the driving forces for the vertical alignment in nitride quantum dot multilayers. Europhysics Letters, 2003, 63, 268-274.	2.0	16
102	Aqueous Chemical Solution Deposition. Electrochemical and Solid-State Letters, 2007, 10, G15.	2.2	16
103	A comparative study of the microstructureâ€“dielectric properties of crystalline SrTiO₃ ALD films obtained via seed layer approach. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1920-1924.	1.8	16
104	(Invited) Vanadium Oxide as a Memory Material. ECS Transactions, 2011, 35, 233-243.	0.5	16
105	Backward volume vs Damonâ€“Eshbach: A traveling spin wave spectroscopy comparison. Journal of Applied Physics, 2020, 127, .	2.5	16
106	Magnonic band structure in CoFeB/Ta/NiFe meander-shaped magnetic bilayers. Applied Physics Letters, 2021, 118, .	3.3	16
107	Interdiffusion and crystallization in HfO2/Al2O3 superlattices. Applied Physics Letters, 2009, 95, 091911.	3.3	15
108	Confined magnetoelastic waves in thin waveguides. Physical Review B, 2021, 103, .	3.2	15

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109	Properties of ultrathin molybdenum films for interconnect applications. Materialia, 2022, 24, 101511.	2.7	15
110	Time-Resolved Photoluminescence Studies of Cubic and Hexagonal GaN Quantum Dots. Physica Status Solidi (B): Basic Research, 2001, 224, 13-16.	1.5	14
111	Low V<inf>T</inf> 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. Chemical Vapor Deposition, 2012, 18, 225-238.	1.3	14
113	Mechanism of Modification of Fluorocarbon Polymer by Ultraviolet Irradiation in Oxygen Atmosphere. ECS Journal of Solid State Science and Technology, 2013, 2, N93-N98.	1.8	14
114	High-drive current (>1MA/cm²) and highly nonlinear (>10³) 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. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 536-549.	5.4	14
116	2D/3D growth of GaN by molecular beam epitaxy: towards GaN quantum dots. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 50, 8-11.	3.5	13
117	Atomic-layer epitaxy of GaN quantum wells and quantum dots on (0001) AlN. Journal of Applied Physics, 2002, 91, 5498-5500.	2.5	13
118	The Impact of Stacked Cap Layers on Effective Work Function With HfSiON and SiON Gate Dielectrics. IEEE Electron Device Letters, 2008, 29, 743-745.	3.9	13
119	Development of ALD HfZrO[sub x] with TDEAH/TDEAZ and H[sub 2]O. Journal of the Electrochemical Society, 2011, 158, H69.	2.9	13
120	Roughness evolution during the atomic layer deposition of metal oxides. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, 061501.	2.1	13
121	Ab initio screening of metallic MAX ceramics for advanced interconnect applications. Physical Review Materials, 2021, 5, .	2.4	13
122	Recent progress in growth and physics of GaN/AlN quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 1445-1450.	0.8	12
123	Seed Layer and Multistack Approaches to Reduce Leakage in SrTiO3-Based Metalâ€“Insulatorâ€“Metal Capacitors Using TiN Bottom Electrode. Japanese Journal of Applied Physics, 2010, 49, 04DD01.	1.5	12
124	Understanding the EOTâ€“Jg degradation in Ru/SrTiOx/Ru metalâ€“insulatorâ€“metal capacitors formed with Ru atomic layer deposition. Microelectronic Engineering, 2015, 147, 108-112.	2.4	12
125	On the extraction of resistivity and area of nanoscale interconnect lines by temperature-dependent resistance measurements. Solid-State Electronics, 2019, 152, 72-80.	1.4	12
126	Excitation and propagation of spin waves in non-uniformly magnetized waveguides. Journal Physics D: Applied Physics, 2020, 53, 495006.	2.8	12

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127	Low V<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, .	2.5	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 in situ capping. Applied Physics Letters, 2011, 98, .	3.3	11
132	Selective chemical vapor synthesis of Cu3Ge: Process optimization and film properties. Intermetallics, 2013, 34, 35-42.	3.9	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.	6.7	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.	1.8	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, .	3.3	11
138	Transistor threshold voltage modulation by Dy2O3 rare-earth oxide capping: The role of bulk dielectrics charge. Applied Physics Letters, 2008, 93, .	3.3	10
139	High-k Dielectrics and Metal Gates for Future Generation Memory Devices. ECS Transactions, 2009, 19, 29-40.	0.5	10
140	Strontium niobate high-k dielectrics: Film deposition and material properties. Acta Materialia, 2010, 58, 216-225.	7.9	10
141	Switching by Ni Filaments in a HfO2 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 HfO₂CoPt Layers. ACS Applied Materials & Interfaces, 2019, 11, 34385-34393.	8.0	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.	2.7	9
148	The unexpected effects of crystallization on Ta2O5 as studied by HRTEM and C-AFM. Microelectronic Engineering, 2013, 109, 318-321.	2.4	9
149	Engineering of Hf<inf>1−x</inf>Al<inf>x</inf>O<inf>y</inf> 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 2e12 cmâ˜'2eVâ˜'1 2D-oxide interface trap density on back-gated MoS2 flake devices with 2.5 nm EOT. Microelectronic Engineering, 2017, 178, 145-149.	2.4	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, .	3.3	9
155	Suppression of nuclear polarization near the surface of optically pumped GaAs. Physical Review B, 2007, 76, .	3.2	8
156	Electrical Properties of Low-V_{T} Metal-Gated n-MOSFETs Using $hbox{La}_{2}hbox{O}_{3}/hbox{SiO}_{x}$ as Interfacial Layer Between HfLaO High-$kappa$ Dielectrics and Si Channel. IEEE Electron Device Letters, 2008, 29, 430-433.	3.9	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.	0.5	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, .	1.2	8
160	Implementing cubic-phase HfO<inf>2</inf> with κ-value ∼ 30 in low-V<inf>T</inf> replacement gate pMOS devices for improved EOT-Scaling and reliability. , 2012, , .		8
161	Understanding the Interface Reactions of Rutile TiO₂Grown by Atomic Layer Deposition on Oxidized Ruthenium. ECS Journal of Solid State Science and Technology, 2013, 2, N23-N27.	1.8	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.	3.0	8
164	Strain coupling optimization in magnetoelectric transducers. Microelectronic Engineering, 2018, 187-188, 144-147.	2.4	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.	4.3	8
167	Electrical spin-wave spectroscopy in nanoscale waveguides with nonuniform magnetization. Applied Physics Letters, 2021, 118, .	3.3	8
168	Multifrequency Data Parallel Spin Wave Logic Gates. IEEE Transactions on Magnetics, 2021, 57, 1-12.	2.1	8
169	Lumped circuit model for inductive antenna spin-wave transducers. Scientific Reports, 2022, 12, 3796.	3.3	8
170	Low VT metal-gate/high-k nMOSFETs — PBTI dependence and V<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 1â^'x]Ta[sub x])[sub 2]O[sub 5] Films Prepared by Aqueous Chemical Solution Deposition. Journal of the Electrochemical Society, 2010, 157, G13.	2.9	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.	1.4	7
175	Lanthanide Aluminates as Dielectrics for Non-Volatile Memory Applications: Material Aspects. Journal of the Electrochemical Society, 2011, 158, H778-H784.	2.9	7
176	An X-ray photoelectron spectroscopy study of strontium-titanate-based high-k film stacks. Microelectronic Engineering, 2012, 90, 138-140.	2.4	7
177	Low temperature chemical vapour synthesis of Cu3Ge thin films for interconnect applications. Microelectronic Engineering, 2014, 120, 246-250.	2.4	7
178	Advanced a-VMCO resistive switching memory through inner interface engineering with wide (>10²) on/off window, tunable Î¼A-range switching current and excellent variability. , 2016, , .		7
179	Resistivity scaling model for metals with conduction band anisotropy. Physical Review Materials, 2018, 2, .	2.4	7
180	Incorporation kinetics of indium in indium gallium nitride at low temperature. Applied Physics Letters, 2001, 79, 1614-1615.	3.3	6

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