

Iuliana P Radu

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

186
papers

5,251
citations

38
h-index

67
g-index

201
ext. papers

6,309
ext. citations

5.4
avg, IF

5.28
L-index

#	Paper	IF	Citations
186	Ab initio study of ultrafast spin dynamics in Gdx(FeCo) 1x alloys. <i>Applied Physics Letters</i> , 2022 , 120, 042401	5.14	0
185	Magnetic field sensitivity of the photoelectrically read nitrogen-vacancy centers in diamond. <i>Applied Physics Letters</i> , 2022 , 120, 162402	3.4	0
184	Linking Room- and Low-Temperature Electrical Performance of MOS Gate Stacks for Cryogenic Applications. <i>IEEE Electron Device Letters</i> , 2022 , 43, 674-677	4.4	
183	Efficient Modeling of Charge Trapping at Cryogenic Temperatures Part I: Theory. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 6365-6371	2.9	1
182	Efficient Modeling of Charge Trapping at Cryogenic Temperatures Part II: Experimental. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 6372-6378	2.9	1
181	Graphene based Van der Waals contacts on MoS2 field effect transistors. <i>2D Materials</i> , 2021 , 8, 015003	5.9	10
180	Fabrication and room temperature characterization of trilayer junctions for the development of superconducting qubits on 300 mm wafers. <i>Japanese Journal of Applied Physics</i> , 2021 , 60, SBB104	1.4	0
179	Electrical spin-wave spectroscopy in nanoscale waveguides with nonuniform magnetization. <i>Applied Physics Letters</i> , 2021 , 118, 152410	3.4	3
178	All-Electrical Control of Scaled Spin Logic Devices Based on Domain Wall Motion. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 2116-2122	2.9	2
177	Magnonic band structure in CoFeB/Ta/NiFe meander-shaped magnetic bilayers. <i>Applied Physics Letters</i> , 2021 , 118, 162405	3.4	7
176	Measurement of direct and indirect bandgaps in synthetic ultrathin MoS2 and WS2 films from photoconductivity spectra. <i>Journal of Applied Physics</i> , 2021 , 129, 155302	2.5	2
175	Processing Stability of Monolayer WS2 on SiO2. <i>Nano Express</i> , 2021 , 2, 024004	2	1
174	Internal photoemission of electrons from 2D semiconductor/3D metal barrier structures. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 295101	3	0
173	Engineering Wafer-Scale Epitaxial Two-Dimensional Materials through Sapphire Template Screening for Advanced High-Performance Nanoelectronics. <i>ACS Nano</i> , 2021 , 15, 9482-9494	16.7	6
172	Nanoscale domain wall devices with magnetic tunnel junction read and write. <i>Nature Electronics</i> , 2021 , 4, 392-398	28.4	9
171	Impact of device scaling on the electrical properties of MoS field-effect transistors. <i>Scientific Reports</i> , 2021 , 11, 6610	4.9	4
170	The 2021 ultrafast spectroscopic probes of condensed matter roadmap. <i>Journal of Physics Condensed Matter</i> , 2021 , 33,	1.8	8

169	Low dephasing and robust micromagnet designs for silicon spin qubits. <i>Applied Physics Letters</i> , 2021 , 119, 094001	3.4	2
168	Interface admittance measurement and simulation of dual gated CVD WS ₂ MOSCAPs: Mapping the DIT(E) profile. <i>Solid-State Electronics</i> , 2021 , 183, 108035	1.7	
167	Magnonic Band Structure in Vertical Meander-Shaped Co ₄₀ Fe ₄₀ B ₂₀ Thin Films. <i>Physical Review Applied</i> , 2021 , 15,	4.3	10
166	High mobility SiMOSFETs fabricated in a full 300mm CMOS process. <i>Materials for Quantum Technology</i> , 2021 , 1, 041001		2
165	Back hopping in spin transfer torque switching of perpendicularly magnetized tunnel junctions. <i>Physical Review B</i> , 2020 , 102,	3.3	7
164	An Integrated Silicon MOS Single-Electron Transistor Charge Sensor for Spin-Based Quantum Information Processing. <i>IEEE Electron Device Letters</i> , 2020 , 41, 1253-1256	4.4	0
163	A MOS capacitor model for ultra-thin 2D semiconductors: the impact of interface defects and channel resistance. <i>2D Materials</i> , 2020 , 7, 035018	5.9	7
162	Analysis of Transferred MoS ₂ Layers Grown by MOCVD: Evidence of Mo Vacancy Related Defect Formation. <i>ECS Journal of Solid State Science and Technology</i> , 2020 , 9, 093001	2	5
161	Sources of variability in scaled MoS ₂ FETs 2020 ,		6
160	A flexible 300 mm integrated Si MOS platform for electron- and hole-spin qubits exploration 2020 ,		6
159	Future Logic Scaling: Towards Atomic Channels and Deconstructed Chips 2020 ,		8
158	3D Sequential Low Temperature Top Tier Devices using Dopant Activation with Excimer Laser Anneal and Strained Silicon as Performance Boosters 2020 ,		5
157	Two-dimensional WS ₂ crystals at predetermined locations by anisotropic growth during atomic layer deposition. <i>Journal of Applied Physics</i> , 2020 , 128, 175302	2.5	1
156	Electronic voltage control of magnetic anisotropy at room temperature in high- ϵ_r TiO ₃ /Co/Pt trilayer. <i>Physical Review Materials</i> , 2020 , 4,	3.2	2
155	MoS ₂ /MoTe ₂ Heterostructure Tunnel FETs Using Gated Schottky Contacts. <i>Advanced Functional Materials</i> , 2020 , 30, 1905970	15.6	21
154	Quantum Mechanical Charge Trap Modeling to Explain BTI at Cryogenic Temperatures 2020 ,		4
153	Reliability and Variability of Advanced CMOS Devices at Cryogenic Temperatures 2020 ,		11
152	Reconfigurable submicrometer spin-wave majority gate with electrical transducers. <i>Science Advances</i> , 2020 , 6,	14.3	18

151	Understanding Ambipolar Transport in MoS ₂ Field Effect Transistors: the Substrate is the Key. <i>Nanotechnology</i> , 2020 ,	3.4	4
150	Ferroelectric Control of Magnetism in Ultrathin HfO ₂ /CoPt Layers. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 34385-34393	9.5	6
149	Evaluation of the effective work-function of monolayer graphene on silicon dioxide by internal photoemission spectroscopy. <i>Thin Solid Films</i> , 2019 , 674, 39-43	2.2	3
148	Spin-on-diffusants for doping in transition metal dichalcogenide semiconductors. <i>Applied Physics Letters</i> , 2019 , 114, 212102	3.4	1
147	Performance Comparison of s-Si, In _{0.53} Ga _{0.47} As, Monolayer BP, and WS ₂ -Based n-MOSFETs for Future Technology Nodes Part I: Device-Level Comparison. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 3608-3613	2.9	3
146	Analysis of admittance measurements of MOS capacitors on CVD grown bilayer MoS ₂ . <i>2D Materials</i> , 2019 , 6, 035035	5.9	14
145	A route towards the fabrication of 2D heterostructures using atomic layer etching combined with selective conversion. <i>2D Materials</i> , 2019 , 6, 035030	5.9	3
144	Chemical vapor deposition of monolayer-thin WS ₂ crystals from the WF and HS precursors at low deposition temperature. <i>Journal of Chemical Physics</i> , 2019 , 150, 104703	3.9	7
143	Performance Comparison of s-Si, In _{0.53} Ga _{0.47} As, Monolayer BP- and WS ₂ -Based n-MOSFETs for Future Technology Nodes Part II: Circuit-Level Comparison. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 3614-3619	2.9	
142	Device and Circuit Level Gate Configuration Optimization for 2D Material Field-Effect Transistors 2019 ,		2
141	Ultra-scaled MOCVD MoS ₂ MOSFETs with 42nm contact pitch and 250 μ A/ μ m drain current 2019 ,		17
140	The Growing Application Field of Laser Debonding: From Advanced Packaging to Future Nanoelectronics 2019 ,		3
139	Impact of MoS ₂ layer transfer on electrostatics of MoS ₂ /SiO ₂ interface. <i>Nanotechnology</i> , 2019 , 30, 055702	3.4	10
138	Selective THz control of magnetic order: new opportunities from superradiant undulator sources. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 114007	3	16
137	Relation between film thickness and surface doping of MoS ₂ based field effect transistors. <i>APL Materials</i> , 2018 , 6, 058301	5.7	8
136	MoS ₂ synthesis by gas source MBE for transition metal dichalcogenides integration on large scale substrates. <i>Journal of Applied Physics</i> , 2018 , 123, 135702	2.5	15
135	Fabrication of magnetic tunnel junctions connected through a continuous free layer to enable spin logic devices. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 04FN01	1.4	8
134	Wide operating window spin-torque majority gate towards large-scale integration of logic circuits. <i>AIP Advances</i> , 2018 , 8, 055920	1.5	4

133	Interconnected magnetic tunnel junctions for spin-logic applications. <i>AIP Advances</i> , 2018 , 8, 055921	1.5	6
132	Material-Device-Circuit Co-Design of 2-D Materials-Based Lateral Tunnel FETs. <i>IEEE Journal of the Electron Devices Society</i> , 2018 , 6, 979-986	2.3	4
131	Towards high-performance polarity-controllable FETs with 2D materials 2018 ,		3
130	Tunneling Transistors Based on MoS ₂ /MoTe ₂ Van der Waals Heterostructures. <i>IEEE Journal of the Electron Devices Society</i> , 2018 , 6, 1048-1055	2.3	26
129	Nucleation and growth mechanism of 2D SnS ₂ by chemical vapor deposition: initial 3D growth followed by 2D lateral growth. <i>2D Materials</i> , 2018 , 5, 035006	5.9	15
128	The conversion mechanism of amorphous silicon to stoichiometric WS ₂ . <i>Journal of Materials Chemistry C</i> , 2018 , 6, 4122-4130	7.1	8
127	Microwave Characterization of Ba-Substituted PZT and ZnO Thin Films. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2018 , 65, 881-888	3.2	5
126	Doping-Free Complementary Logic Gates Enabled by Two-Dimensional Polarity-Controllable Transistors. <i>ACS Nano</i> , 2018 , 12, 7039-7047	16.7	69
125	Layer-controlled epitaxy of 2D semiconductors: bridging nanoscale phenomena to wafer-scale uniformity. <i>Nanotechnology</i> , 2018 , 29, 425602	3.4	41
124	Thermal recrystallization of short-range ordered WS ₂ films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2018 , 36, 05G501	2.9	4
123	Nucleation mechanism during WS ₂ plasma enhanced atomic layer deposition on amorphous Al ₂ O ₃ and sapphire substrates. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2018 , 36, 01A105	2.9	24
122	First experimental demonstration of a scalable linear majority gate based on spin waves 2018 ,		7
121	Scaled spintronic logic device based on domain wall motion in magnetically interconnected tunnel junctions 2018 ,		5
120	Instant-On Spin Torque in Noncollinear Magnetic Tunnel Junctions. <i>Physical Review Applied</i> , 2018 , 10,	4.3	6
119	Interconnect-Device Co-Optimization for Field-Effect Transistors with Two-Dimensional Materials 2018 ,		1
118	. <i>IEEE Nanotechnology Magazine</i> , 2018 , 17, 1259-1269	2.6	52
117	Chain of magnetic tunnel junctions as a spintronic memristor. <i>Journal of Applied Physics</i> , 2018 , 124, 152116	11.6	12
116	3-D Sequential Stacked Planar Devices Featuring Low-Temperature Replacement Metal Gate Junctionless Top Devices With Improved Reliability. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 5165-5171	2.9	7

115	Spin-Wave Emission by Spin-Orbit-Torque Antennas. <i>Physical Review Applied</i> , 2018 , 10,	4.3	18
114	Two-Dimensional Crystal Grain Size Tuning in WS ₂ Atomic Layer Deposition: An Insight in the Nucleation Mechanism. <i>Chemistry of Materials</i> , 2018 , 30, 7648-7663	9.6	32
113	The Role of Nonidealities in the Scaling of MoS ₂ FETs. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 4635-4640	2.9	8
112	Spin-torque-driven MTJs with extended free layer for logic applications. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 275002	3	3
111	Formation mechanism of 2D SnS ₂ and SnS by chemical vapor deposition using SnCl ₄ and H ₂ S. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 6172-6178	7.1	33
110	Two-dimensional WS nanoribbon deposition by conversion of pre-patterned amorphous silicon. <i>Nanotechnology</i> , 2017 , 28, 04LT01	3.4	17
109	On the electrostatic control achieved in transistors based on multilayered MoS ₂ : A first-principles study. <i>Journal of Applied Physics</i> , 2017 , 121, 044505	2.5	14
108	Non-volatile spin wave majority gate at the nanoscale. <i>AIP Advances</i> , 2017 , 7, 056020	1.5	24
107	Toward an Understanding of the Electric Field-Induced Electrostatic Doping in van der Waals Heterostructures: A First-Principles Study. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 7725-7734	9.5	15
106	Scaling trends and performance evaluation of 2-dimensional polarity-controllable FETs. <i>Scientific Reports</i> , 2017 , 7, 45556	4.9	9
105	Paramagnetic Intrinsic Defects in Polycrystalline Large-Area 2D MoS Films Grown on SiO by Mo Sulfurization. <i>Nanoscale Research Letters</i> , 2017 , 12, 283	5	12
104	Highly efficient and stable MoS FETs with reversible n-doping using a dehydrated poly(vinyl-alcohol) coating. <i>Nanoscale</i> , 2017 , 9, 258-265	7.7	30
103	. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 2970-2976	2.9	3
102	(Invited) Electrical Atomic Force Microscopy for 2D Transition Metal Dichalcogenide Materials. <i>ECS Transactions</i> , 2017 , 77, 41-47	1	
101	Low Energy Phosphorus Plasma Implantation for Isolation of MoS ₂ Devices. <i>ECS Transactions</i> , 2017 , 77, 3-8	1	1
100	Demonstration of $2 \times 10^{12} \text{ cm}^{-2} \text{ eV}^{-1}$ 2D-oxide interface trap density on back-gated MoS ₂ flake devices with 2.5 nm EOT. <i>Microelectronic Engineering</i> , 2017 , 178, 145-149	2.5	8
99	Operating conditions and stability of spin torque majority gates: Analytical understanding and numerical evidence. <i>Journal of Applied Physics</i> , 2017 , 121, 043902	2.5	7
98	Plasma-Enhanced Atomic Layer Deposition of Two-Dimensional WS ₂ from WF ₆ , H ₂ Plasma, and H ₂ S. <i>Chemistry of Materials</i> , 2017 , 29, 2927-2938	9.6	57

97	Nucleation and growth mechanisms of AlO atomic layer deposition on synthetic polycrystalline MoS. <i>Journal of Chemical Physics</i> , 2017 , 146, 052810	3.9	31
96	Electrically Driven Unidirectional Optical Nanoantennas. <i>Nano Letters</i> , 2017 , 17, 7433-7439	11.5	40
95	(Invited) Internal Photoemission of Electrons from 2-Dimensional Semiconductors. <i>ECS Transactions</i> , 2017 , 80, 191-201	1	12
94	Exchange-driven Magnetic Logic. <i>Scientific Reports</i> , 2017 , 7, 12154	4.9	14
93	Terahertz Spin Currents and Inverse Spin Hall Effect in Thin-Film Heterostructures Containing Complex Magnetic Compounds. <i>Spin</i> , 2017 , 07, 1740010	1.3	52
92	From the metal to the channel: a study of carrier injection through the metal/2D MoS interface. <i>Nanoscale</i> , 2017 , 9, 10869-10879	7.7	40
91	MoS ₂ Functionalization with a Sub-nm Thin SiO ₂ Layer for Atomic Layer Deposition of High- κ Dielectrics. <i>Chemistry of Materials</i> , 2017 , 29, 6772-6780	9.6	19
90	Improving MOCVD MoS ₂ Electrical Performance: Impact of Minimized Water and Air Exposure Conditions. <i>IEEE Electron Device Letters</i> , 2017 , 38, 1606-1609	4.4	28
89	Micromagnetic simulations of magnetoelastic spin wave excitation in scaled magnetic waveguides. <i>Applied Physics Letters</i> , 2017 , 111, 192411	3.4	21
88	Material-Device-Circuit Co-optimization of 2D Material based FETs for Ultra-Scaled Technology Nodes. <i>Scientific Reports</i> , 2017 , 7, 5016	4.9	13
87	Transistors on two-dimensional semiconductors: contact resistance limited by the contact edges 2017 ,		4
86	Spin waves for interconnect applications 2017 ,		2
85	Modulating the resistivity of MoS ₂ through low energy phosphorus plasma implantation. <i>Applied Physics Letters</i> , 2017 , 110, 262102	3.4	12
84	Doping of graphene for the application in nano-interconnect. <i>Microelectronic Engineering</i> , 2017 , 167, 42-46	2.5	10
83	Evaluation of multilayer graphene for advanced interconnects. <i>Microelectronic Engineering</i> , 2017 , 167, 1-5	2.5	7
82	Benchmarking of monolithic 3D integrated MX ₂ FETs with Si FinFETs 2017 ,		3
81	Perpendicular magnetic anisotropy of CoFeBTa bilayers on ALD HfO ₂ . <i>AIP Advances</i> , 2017 , 7, 055933	1.5	6
80	Proposal for nanoscale cascaded plasmonic majority gates for non-Boolean computation. <i>Scientific Reports</i> , 2017 , 7, 17866	4.9	11

79	Tunneling transistors based on MoS ₂ /MoTe ₂ Van der Waals heterostructures 2017 ,		1
78	WS ₂ transistors on 300 mm wafers with BEOL compatibility 2017 ,		18
77	Demonstration of Direction Dependent Conduction through MoS ₂ Films Prepared by Tunable Mass Transport Fabrication. <i>ECS Journal of Solid State Science and Technology</i> , 2016 , 5, Q3046-Q3049	2	4
76	High-Field High-Repetition-Rate Sources for the Coherent THz Control of Matter. <i>Scientific Reports</i> , 2016 , 6, 22256	4.9	89
75	Effect of material parameters on two-dimensional materials based TFETs: An energy-delay perspective 2016 ,		7
74	Overview of spin-based majority gates and interconnect implications 2016 ,		1
73	Single- and multilayer graphene wires as alternative interconnects. <i>Microelectronic Engineering</i> , 2016 , 156, 131-135	2.5	15
72	Multilayer MoS ₂ growth by metal and metal oxide sulfurization. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 1295-1304	7.1	45
71	Controlled Sulfurization Process for the Synthesis of Large Area MoS ₂ Films and MoS ₂ /WS ₂ Heterostructures. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1500635	4.6	53
70	Structural and magnetic characterization of large area, free-standing thin films of magnetic ion intercalated dichalcogenides Mn _{0.25} TaS ₂ and Fe _{0.25} TaS ₂ . <i>Journal of Physics Condensed Matter</i> , 2016 , 28, 356002	1.8	7
69	Insight on the Characterization of MoS ₂ Based Devices and Requirements for Logic Device Integration. <i>ECS Journal of Solid State Science and Technology</i> , 2016 , 5, Q3072-Q3081	2	26
68	Origin of the performances degradation of two-dimensional-based metal-oxide-semiconductor field effect transistors in the sub-10 nm regime: A first-principles study. <i>Applied Physics Letters</i> , 2016 , 108, 043504	3.4	4
67	Comparison of short-channel effects in monolayer MoS ₂ based junctionless and inversion-mode field-effect transistors. <i>Applied Physics Letters</i> , 2016 , 108, 023506	3.4	13
66	Molecular doping of MoS ₂ transistors by self-assembled oleylamine networks. <i>Applied Physics Letters</i> , 2016 , 109, 253112	3.4	37
65	Transport properties of chemically synthesized MoS ₂ [Dielectric effects and defects scattering. <i>Applied Physics Letters</i> , 2016 , 109, 233102	3.4	11
64	All electrical propagating spin wave spectroscopy with broadband wavevector capability. <i>Applied Physics Letters</i> , 2016 , 109, 012403	3.4	45
63	Perpendicular magnetic anisotropy of CoPt bilayers on ALD HfO ₂ . <i>Journal of Applied Physics</i> , 2016 , 120, 163903	2.5	7
62	Polarity control in WSe ₂ double-gate transistors. <i>Scientific Reports</i> , 2016 , 6, 29448	4.9	45

61	Toward error-free scaled spin torque majority gates. <i>AIP Advances</i> , 2016 , 6, 065304	1.5	10
60	Efficient metallic spintronic emitters of ultrabroadband terahertz radiation. <i>Nature Photonics</i> , 2016 , 10, 483-488	33.9	324
59	(Invited) Heterogeneous Nano- to Wide-Scale Co-Integration of Beyond-Si and Si CMOS Devices to Enhance Future Electronics. <i>ECS Transactions</i> , 2015 , 66, 3-14	1	6
58	High-quality, large-area MoSe ₂ and MoSe ₂ /Bi ₂ Se ₃ heterostructures on AlN(0001)/Si(111) substrates by molecular beam epitaxy. <i>Nanoscale</i> , 2015 , 7, 7896-905	7.7	107
57	Band alignment at interfaces of few-monolayer MoS ₂ with SiO ₂ and HfO ₂ . <i>Microelectronic Engineering</i> , 2015 , 147, 294-297	2.5	27
56	Switching mechanism in two-terminal vanadium dioxide devices. <i>Nanotechnology</i> , 2015 , 26, 165202	3.4	40
55	In situ X-ray diffraction study of the controlled oxidation and reduction in the VO ₂ system for the synthesis of VO ₂ and V ₂ O ₃ thin films. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 11357-11365	7.1	44
54	High Cycling Stability and Extreme Rate Performance in Nanoscaled LiMn ₂ O ₄ Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 22413-20	9.5	48
53	Dynamical influence of vortex-antivortex pairs in magnetic vortex oscillators. <i>Journal of Magnetism and Magnetic Materials</i> , 2015 , 394, 292-298	2.8	5
52	Characterization of thin films of the solid electrolyte Li _x Mg _(1-2x) Al _(2+x) O ₄ (x = 0, 0.05, 0.15, 0.25). <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 29045-56	3.6	5
51	ALICE: An advanced reflectometer for static and dynamic experiments in magnetism at synchrotron radiation facilities. <i>Review of Scientific Instruments</i> , 2015 , 86, 063902	1.7	21
50	Low temperature deposition of 2D WS ₂ layers from WF ₆ and H ₂ S precursors: impact of reducing agents. <i>Chemical Communications</i> , 2015 , 51, 15692-5	5.8	56
49	Deducing the apparent flat-band position V _{fb} and the doping level of large area single layer graphene MOS capacitors. <i>Microelectronic Engineering</i> , 2015 , 147, 314-317	2.5	3
48	Ultrafast and Distinct Spin Dynamics in Magnetic Alloys. <i>Spin</i> , 2015 , 05, 1550004	1.3	69
47	Metal-Insulator Transition in ALD VO ₂ Ultrathin Films and Nanoparticles: Morphological Control. <i>Advanced Functional Materials</i> , 2015 , 25, 679-686	15.6	60
46	Band alignment and effective work function of atomic-layer deposited VO ₂ and V ₂ O ₅ films on SiO ₂ and Al ₂ O ₃ . <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2015 , 12, 238-241		5
45	Spintronic majority gates 2015 ,		14
44	Probing ultrafast spin dynamics with high-harmonic magnetic circular dichroism spectroscopy. <i>Physical Review B</i> , 2015 , 92,	3.3	49

43	Transition metal contacts to graphene. <i>Applied Physics Letters</i> , 2015 , 107, 153104	3.4	31
42	Influence of the Magnetization Compensation Point on the All-Optical Magnetization Switching. <i>Springer Proceedings in Physics</i> , 2015 , 30-31	0.2	
41	Benchmarking of MoS ₂ FETs With Multigate Si-FET Options for 5 nm and Beyond. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 4051-4056	2.9	22
40	Graphene wires as alternative interconnects 2015 ,		3
39	Area and routing efficiency of SWD circuits compared to advanced CMOS 2015 ,		2
38	Design and benchmarking of hybrid CMOS-Spin Wave Device Circuits compared to 10nm CMOS 2015 ,		25
37	Engineering Ultrafast Magnetism. <i>Springer Proceedings in Physics</i> , 2015 , 297-299	0.2	1
36	Large Area Carbon Nanosheet Capacitors. <i>ECS Solid State Letters</i> , 2014 , 3, N8-N10		5
35	Low leakage Ru-strontium titanate-Ru metal-insulator-metal capacitors for sub-20 nm technology node in dynamic random access memory. <i>Applied Physics Letters</i> , 2014 , 104, 082908	3.4	28
34	Ultrathin Metal/Amorphous-Silicon/Metal Diode for Bipolar RRAM Selector Applications. <i>IEEE Electron Device Letters</i> , 2014 , 35, 199-201	4.4	36
33	System-level assessment and area evaluation of Spin Wave logic circuits 2014 ,		9
32	Crystallization and semiconductor-metal switching behavior of thin VO ₂ layers grown by atomic layer deposition. <i>Thin Solid Films</i> , 2014 , 550, 59-64	2.2	27
31	Bilayer Graphene Tunneling FET for Sub-0.2 V Digital CMOS Logic Applications. <i>IEEE Electron Device Letters</i> , 2014 , 35, 1308-1310	4.4	6
30	Nanoscale spin reversal by non-local angular momentum transfer following ultrafast laser excitation in ferrimagnetic GdFeCo. <i>Nature Materials</i> , 2013 , 12, 293-8	27	225
29	(Invited) Vanadium Dioxide for Selector Applications. <i>ECS Transactions</i> , 2013 , 58, 249-258	1	12
28	Synthesis of large area carbon nanosheets for energy storage applications. <i>Carbon</i> , 2013 , 58, 59-65	10.4	44
27	Terahertz spin current pulses controlled by magnetic heterostructures. <i>Nature Nanotechnology</i> , 2013 , 8, 256-60	28.7	303
26	Complementary Role of Field and Temperature in Triggering ON/OFF Switching Mechanisms in Hf/HfO_2 Resistive RAM Cells. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 2471-2478	2.9	34

25	Coupling of spin and vibrational degrees of freedom of adsorbates at metal surfaces probed by vibrational sum-frequency generation. <i>Applied Physics Letters</i> , 2013 , 103, 132403	3.4	1
24	The VO ₂ interface, the metal-insulator transition tunnel junction, and the metal-insulator transition switch On-Off resistance. <i>Journal of Applied Physics</i> , 2012 , 112, 124501	2.5	42
23	Process Study and Characterization of VO ₂ Thin Films Synthesized by ALD Using TEMAV and O ₃ Precursors. <i>ECS Journal of Solid State Science and Technology</i> , 2012 , 1, P169-P174	2	39
22	Perpendicular exchange bias in ferrimagnetic spin valves. <i>Nature Communications</i> , 2012 , 3, 715	17.4	99
21	VO ₂ , a Metal-Insulator Transition Material for Nanoelectronic Applications. <i>ECS Transactions</i> , 2012 , 45, 151-158	1	5
20	Transient ferromagnetic-like state mediating ultrafast reversal of antiferromagnetically coupled spins. <i>Nature</i> , 2011 , 472, 205-8	50.4	641
19	(Invited) Vanadium Oxide as a Memory Material. <i>ECS Transactions</i> , 2011 , 35, 233-243	1	12
18	Laser-induced generation and quenching of magnetization on FeRh studied with time-resolved x-ray magnetic circular dichroism. <i>Physical Review B</i> , 2010 , 81,	3.3	49
17	(Invited) First-Principles Investigation of High-k Dielectrics for Nonvolatile Memories. <i>ECS Transactions</i> , 2010 , 33, 393-407	1	3
16	Laser-induced magnetization dynamics of lanthanide-doped permalloy thin films. <i>Physical Review Letters</i> , 2009 , 102, 117201	7.4	74
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7	Femtosecond electron and spin dynamics in Gd(0001) studied by time-resolved photoemission and magneto-optics. <i>Physical Review Letters</i> , 2005 , 95, 137402	7.4	77
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