# Iuliana P Radu

## List of Publications by Citations



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|---|---|---|---|
| 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 | Transient ferromagnetic-like state mediating ultrafast reversal of antiferromagnetically coupled spins. *Nature*, **2011**, 472, 205-8 | 50.4 | 641 |
| 185 | Efficient metallic spintronic emitters of ultrabroadband terahertz radiation. *Nature Photonics*, **2016**, 10, 483-488 | 33.9 | 324 |
| 184 | Terahertz spin current pulses controlled by magnetic heterostructures. *Nature Nanotechnology*, **2013**, 8, 256-60 | 28.7 | 303 |
| 183 | Quasi-particle properties from tunneling in the v = 5/2 fractional quantum Hall state. *Science*, **2008**, 320, 899-902 | 33.3 | 253 |
| 182 | Nanoscale spin reversal by non-local angular momentum transfer following ultrafast laser excitation in ferrimagnetic GdFeCo. *Nature Materials*, **2013**, 12, 293-8 | 27 | 225 |
| 181 | Electrical control of spin relaxation in a quantum dot. *Physical Review Letters*, **2008**, 100, 046803 | 7.4 | 193 |
| 180 | High-quality, large-area MoSe2 and MoSe2/Bi2Se3 heterostructures on AlN(0001)/Si(111) substrates by molecular beam epitaxy. *Nanoscale*, **2015**, 7, 7896-905 | 7.7 | 107 |
| 179 | Perpendicular exchange bias in ferrimagnetic spin valves. *Nature Communications*, **2012**, 3, 715 | 17.4 | 99 |
| 178 | High-Field High-Repetition-Rate Sources for the Coherent THz Control of Matter. *Scientific Reports*, **2016**, 6, 22256 | 4.9 | 89 |
| 177 | Coherent optical phonons and parametrically coupled magnons induced by femtosecond laser excitation of the Gd(0001) surface. *Physical Review Letters*, **2003**, 91, 227403 | 7.4 | 84 |
| 176 | Femtosecond electron and spin dynamics in Gd(0001) studied by time-resolved photoemission and magneto-optics. *Physical Review Letters*, **2005**, 95, 137402 | 7.4 | 77 |
| 175 | Laser-induced magnetization dynamics of lanthanide-doped permalloy thin films. *Physical Review Letters*, **2009**, 102, 117201 | 7.4 | 74 |
| 174 | Antiferromagnetic-ferromagnetic phase transition in FeRh probed by x-ray magnetic circular dichroism. *Physical Review B*, **2008**, 77, | 3.3 | 71 |
| 173 | Fractional quantum Hall effect in a quantum point contact at filling fraction 5/2. *Nature Physics*, **2007**, 3, 561-565 | 16.2 | 70 |
| 172 | Ultrafast and Distinct Spin Dynamics in Magnetic Alloys. *Spin*, **2015**, 05, 1550004 | 1.3 | 69 |
| 171 | Doping-Free Complementary Logic Gates Enabled by Two-Dimensional Polarity-Controllable Transistors. *ACS Nano*, **2018**, 12, 7039-7047 | 16.7 | 69 |
| 170 | Metal-Insulator Transition in ALD VO2 Ultrathin Films and Nanoparticles: Morphological Control. *Advanced Functional Materials*, **2015**, 25, 679-686 | 15.6 | 60 |

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|---|---|---|---|
| 169 | Energy-dependent tunneling in a quantum dot. *Physical Review Letters*, **2007**, 98, 036802 | 7.4 | 58 |
| 168 | Plasma-Enhanced Atomic Layer Deposition of Two-Dimensional WS2 from WF6, H2 Plasma, and H2S. *Chemistry of Materials*, **2017**, 29, 2927-2938 | 9.6 | 57 |
| 167 | Low temperature deposition of 2D WS2 layers from WF6 and H2S precursors: impact of reducing agents. *Chemical Communications*, **2015**, 51, 15692-5 | 5.8 | 56 |
| 166 | Controlled Sulfurization Process for the Synthesis of Large Area MoS2 Films and MoS2/WS2 Heterostructures. *Advanced Materials Interfaces*, **2016**, 3, 1500635 | 4.6 | 53 |
| 165 | Terahertz Spin Currents and Inverse Spin Hall Effect in Thin-Film Heterostructures Containing Complex Magnetic Compounds. *Spin*, **2017**, 07, 1740010 | 1.3 | 52 |
| 164 | . *IEEE Nanotechnology Magazine*, **2018**, 17, 1259-1269 | 2.6 | 52 |
| 163 | Magnetic-field asymmetry of nonlinear transport in carbon nanotubes. *Physical Review Letters*, **2005**, 95, 256601 | 7.4 | 51 |
| 162 | Probing ultrafast spin dynamics with high-harmonic magnetic circular dichroism spectroscopy. *Physical Review B*, **2015**, 92, | 3.3 | 49 |
| 161 | Laser-induced generation and quenching of magnetization on FeRh studied with time-resolved x-ray magnetic circular dichroism. *Physical Review B*, **2010**, 81, | 3.3 | 49 |
| 160 | High Cycling Stability and Extreme Rate Performance in Nanoscaled LiMn2O4 Thin Films. *ACS Applied Materials & Interfaces*, **2015**, 7, 22413-20 | 9.5 | 48 |
| 159 | Multilayer MoS2 growth by metal and metal oxide sulfurization. *Journal of Materials Chemistry C*, **2016**, 4, 1295-1304 | 7.1 | 45 |
| 158 | All electrical propagating spin wave spectroscopy with broadband wavevector capability. *Applied Physics Letters*, **2016**, 109, 012403 | 3.4 | 45 |
| 157 | Polarity control in WSe2 double-gate transistors. *Scientific Reports*, **2016**, 6, 29448 | 4.9 | 45 |
| 156 | In situ X-ray diffraction study of the controlled oxidation and reduction in the V□O system for the synthesis of VO2 and V2O3 thin films. *Journal of Materials Chemistry C*, **2015**, 3, 11357-11365 | 7.1 | 44 |
| 155 | Synthesis of large area carbon nanosheets for energy storage applications. *Carbon*, **2013**, 58, 59-65 | 10.4 | 44 |
| 154 | The VO2 interface, the metal-insulator transition tunnel junction, and the metal-insulator transition switch On-Off resistance. *Journal of Applied Physics*, **2012**, 112, 124501 | 2.5 | 42 |
| 153 | Layer-controlled epitaxy of 2D semiconductors: bridging nanoscale phenomena to wafer-scale uniformity. *Nanotechnology*, **2018**, 29, 425602 | 3.4 | 41 |
| 152 | Electrically Driven Unidirectional Optical Nanoantennas. *Nano Letters*, **2017**, 17, 7433-7439 | 11.5 | 40 |

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|---|---|---|---|
| 151 | Switching mechanism in two-terminal vanadium dioxide devices. *Nanotechnology*, **2015**, 26, 165202 | 3.4 | 40 |
| 150 | From the metal to the channel: a study of carrier injection through the metal/2D MoS interface. *Nanoscale*, **2017**, 9, 10869-10879 | 7.7 | 40 |
| 149 | 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 | 2 | 39 |
| 148 | Molecular doping of MoS2 transistors by self-assembled oleylamine networks. *Applied Physics Letters*, **2016**, 109, 253112 | 3.4 | 37 |
| 147 | Ultrathin Metal/Amorphous-Silicon/Metal Diode for Bipolar RRAM Selector Applications. *IEEE Electron Device Letters*, **2014**, 35, 199-201 | 4.4 | 36 |
| 146 | Complementary Role of Field and Temperature in Triggering ON/OFF Switching Mechanisms in ${rm Hf}/{rm HfO}_{2}$ Resistive RAM Cells. *IEEE Transactions on Electron Devices*, **2013**, 60, 2471-2478 | 2.9 | 34 |
| 145 | Two-stage Kondo effect in a four-electron artificial atom. *Physical Review B*, **2005**, 72, | 3.3 | 33 |
| 144 | Formation mechanism of 2D SnS2 and SnS by chemical vapor deposition using SnCl4 and H2S. *Journal of Materials Chemistry C*, **2018**, 6, 6172-6178 | 7.1 | 33 |
| 143 | Two-Dimensional Crystal Grain Size Tuning in WS2 Atomic Layer Deposition: An Insight in the Nucleation Mechanism. *Chemistry of Materials*, **2018**, 30, 7648-7663 | 9.6 | 32 |
| 142 | Nucleation and growth mechanisms of AlO atomic layerdeposition on synthetic polycrystalline MoS. *Journal of Chemical Physics*, **2017**, 146, 052810 | 3.9 | 31 |
| 141 | Transition metal contacts to graphene. *Applied Physics Letters*, **2015**, 107, 153104 | 3.4 | 31 |
| 140 | Highly efficient and stable MoS FETs with reversible n-doping using a dehydrated poly(vinyl-alcohol) coating. *Nanoscale*, **2017**, 9, 258-265 | 7.7 | 30 |
| 139 | Spin-dependent tunneling of single electrons into an empty quantum dot. *Physical Review B*, **2008**, 78, | 3.3 | 30 |
| 138 | Low leakage Ru-strontium titanate-Ru metal-insulator-metal capacitors for sub-20 nm technology node in dynamic random access memory. *Applied Physics Letters*, **2014**, 104, 082908 | 3.4 | 28 |
| 137 | Improving MOCVD MoS2 Electrical Performance: Impact of Minimized Water and Air Exposure Conditions. *IEEE Electron Device Letters*, **2017**, 38, 1606-1609 | 4.4 | 28 |
| 136 | Band alignment at interfaces of few-monolayer MoS2 with SiO2 and HfO2. *Microelectronic Engineering*, **2015**, 147, 294-297 | 2.5 | 27 |
| 135 | Crystallization and semiconductor-metal switching behavior of thin VO2 layers grown by atomic layer deposition. *Thin Solid Films*, **2014**, 550, 59-64 | 2.2 | 27 |
| 134 | Tunneling Transistors Based on MoS2/MoTe2 Van der Waals Heterostructures. *IEEE Journal of the Electron Devices Society*, **2018**, 6, 1048-1055 | 2.3 | 26 |

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| 133 | Insight on the Characterization of MoS2Based Devices and Requirements for Logic Device Integration. *ECS Journal of Solid State Science and Technology*, **2016**, 5, Q3072-Q3081 | 2 | 26 |
| 132 | Design and benchmarking of hybrid CMOS-Spin Wave Device Circuits compared to 10nm CMOS **2015**, | | 25 |
| 131 | Non-volatile spin wave majority gate at the nanoscale. *AIP Advances*, **2017**, 7, 056020 | 1.5 | 24 |
| 130 | Nucleation mechanism during WS2 plasma enhanced atomic layer deposition on amorphous Al2O3 and sapphire substrates. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2018**, 36, 01A105 | 2.9 | 24 |
| 129 | Benchmarking of MoS2 FETs With Multigate Si-FET Options for 5 nm and Beyond. *IEEE Transactions on Electron Devices*, **2015**, 62, 4051-4056 | 2.9 | 22 |
| 128 | ALICE—An advanced reflectometer for static and dynamic experiments in magnetism at synchrotron radiation facilities. *Review of Scientific Instruments*, **2015**, 86, 063902 | 1.7 | 21 |
| 127 | Micromagnetic simulations of magnetoelastic spin wave excitation in scaled magnetic waveguides. *Applied Physics Letters*, **2017**, 111, 192411 | 3.4 | 21 |
| 126 | MoS2/MoTe2 Heterostructure Tunnel FETs Using Gated Schottky Contacts. *Advanced Functional Materials*, **2020**, 30, 1905970 | 15.6 | 21 |
| 125 | MoS2 Functionalization with a Sub-nm Thin SiO2 Layer for Atomic Layer Deposition of High-□ Dielectrics. *Chemistry of Materials*, **2017**, 29, 6772-6780 | 9.6 | 19 |
| 124 | WS2 transistors on 300 mm wafers with BEOL compatibility **2017**, | | 18 |
| 123 | Reconfigurable submicrometer spin-wave majority gate with electrical transducers. *Science Advances*, **2020**, 6, | 14.3 | 18 |
| 122 | Spin-Wave Emission by Spin-Orbit-Torque Antennas. *Physical Review Applied*, **2018**, 10, | 4.3 | 18 |
| 121 | Two-dimensional WS nanoribbon deposition by conversion of pre-patterned amorphous silicon. *Nanotechnology*, **2017**, 28, 04LT01 | 3.4 | 17 |
| 120 | Ultra-scaled MOCVD MoS2 MOSFETs with 42nm contact pitch and 250□A/□m drain current **2019**, | | 17 |
| 119 | Selective THz control of magnetic order: new opportunities from superradiant undulator sources. *Journal Physics D: Applied Physics*, **2018**, 51, 114007 | 3 | 16 |
| 118 | Toward an Understanding of the Electric Field-Induced Electrostatic Doping in van der Waals Heterostructures: A First-Principles Study. *ACS Applied Materials & Interfaces*, **2017**, 9, 7725-7734 | 9.5 | 15 |
| 117 | MoS2 synthesis by gas source MBE for transition metal dichalcogenides integration on large scale substrates. *Journal of Applied Physics*, **2018**, 123, 135702 | 2.5 | 15 |
| 116 | Nucleation and growth mechanism of 2D SnS 2 by chemical vapor deposition: initial 3D growth followed by 2D lateral growth. *2D Materials*, **2018**, 5, 035006 | 5.9 | 15 |

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| 115 | Single- and multilayer graphene wires as alternative interconnects. *Microelectronic Engineering*, **2016**, 156, 131-135 | 2.5 | 15 |
| 114 | On the electrostatic control achieved in transistors based on multilayered MoS2: A first-principles study. *Journal of Applied Physics*, **2017**, 121, 044505 | 2.5 | 14 |
| 113 | Exchange-driven Magnetic Logic. *Scientific Reports*, **2017**, 7, 12154 | 4.9 | 14 |
| 112 | Analysis of admittance measurements of MOS capacitors on CVD grown bilayer MoS 2. *2D Materials* , **2019**, 6, 035035 | 5.9 | 14 |
| 111 | Spintronic majority gates **2015**, | | 14 |
| 110 | Material-Device-Circuit Co-optimization of 2D Material based FETs for Ultra-Scaled Technology Nodes. *Scientific Reports*, **2017**, 7, 5016 | 4.9 | 13 |
| 109 | Comparison of short-channel effects in monolayer MoS2 based junctionless and inversion-mode field-effect transistors. *Applied Physics Letters*, **2016**, 108, 023506 | 3.4 | 13 |
| 108 | Paramagnetic Intrinsic Defects in Polycrystalline Large-Area 2D MoS Films Grown on SiO by Mo Sulfurization. *Nanoscale Research Letters*, **2017**, 12, 283 | 5 | 12 |
| 107 | (Invited) Internal Photoemission of Electrons from 2-Dimensional Semiconductors. *ECS Transactions* , **2017**, 80, 191-201 | 1 | 12 |
| 106 | (Invited) Vanadium Dioxide for Selector Applications. *ECS Transactions*, **2013**, 58, 249-258 | 1 | 12 |
| 105 | Modulating the resistivity of MoS2 through low energy phosphorus plasma implantation. *Applied Physics Letters*, **2017**, 110, 262102 | 3.4 | 12 |
| 104 | (Invited) Vanadium Oxide as a Memory Material. *ECS Transactions*, **2011**, 35, 233-243 | 1 | 12 |
| 103 | Chain of magnetic tunnel junctions as a spintronic memristor. *Journal of Applied Physics*, **2018**, 124, 152116 | 2.5 | 12 |
| 102 | Proposal for nanoscale cascaded plasmonic majority gates for non-Boolean computation. *Scientific Reports*, **2017**, 7, 17866 | 4.9 | 11 |
| 101 | Ultrafast dynamics at lanthanide surfaces: microscopic interaction of the charge, lattice and spin subsystems. *Journal Physics D: Applied Physics*, **2008**, 41, 164004 | 3 | 11 |
| 100 | Oriented growth of single-wall carbon nanotubes using alumina patterns. *Nanotechnology*, **2004**, 15, 473-476 | 3.4 | 11 |
| 99 | Reliability and Variability of Advanced CMOS Devices at Cryogenic Temperatures **2020**, | | 11 |
| 98 | Transport properties of chemically synthesized MoS2 Dielectric effects and defects scattering. *Applied Physics Letters*, **2016**, 109, 233102 | 3.4 | 11 |

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|---|---|---|---|
| 97 | Doping of graphene for the application in nano-interconnect. *Microelectronic Engineering*, **2017**, 167, 42-46 | 2.5 | 10 |
| 96 | Graphene based Van der Waals contacts on MoS2 field effect transistors. *2D Materials*, **2021**, 8, 015003 | 5.9 | 10 |
| 95 | Toward error-free scaled spin torque majority gates. *AIP Advances*, **2016**, 6, 065304 | 1.5 | 10 |
| 94 | Impact of MoS layer transfer on electrostatics of MoS/SiO interface. *Nanotechnology*, **2019**, 30, 055702 | 3.4 | 10 |
| 93 | Magnonic Band Structure in Vertical Meander-Shaped Co40Fe40B20 Thin Films. *Physical Review Applied*, **2021**, 15, | 4.3 | 10 |
| 92 | Scaling trends and performance evaluation of 2-dimensional polarity-controllable FETs. *Scientific Reports*, **2017**, 7, 45556 | 4.9 | 9 |
| 91 | System-level assessment and area evaluation of Spin Wave logic circuits **2014**, | | 9 |
| 90 | Nanoscale domain wall devices with magnetic tunnel junction read and write. *Nature Electronics*, **2021**, 4, 392-398 | 28.4 | 9 |
| 89 | Demonstration of 2e12 cm⁻²eV⁻¹ 2D-oxide interface trap density on back-gated MoS2 flake devices with 2.5 nm EOT. *Microelectronic Engineering*, **2017**, 178, 145-149 | 2.5 | 8 |
| 88 | Relation between film thickness and surface doping of MoS2 based field effect transistors. *APL Materials*, **2018**, 6, 058301 | 5.7 | 8 |
| 87 | Fabrication of magnetic tunnel junctions connected through a continuous free layer to enable spin logic devices. *Japanese Journal of Applied Physics*, **2018**, 57, 04FN01 | 1.4 | 8 |
| 86 | The conversion mechanism of amorphous silicon to stoichiometric WS2. *Journal of Materials Chemistry C*, **2018**, 6, 4122-4130 | 7.1 | 8 |
| 85 | Future Logic Scaling: Towards Atomic Channels and Deconstructed Chips **2020**, | | 8 |
| 84 | The Role of Nonidealities in the Scaling of MoS2 FETs. *IEEE Transactions on Electron Devices*, **2018**, 65, 4635-4640 | 2.9 | 8 |
| 83 | The 2021 ultrafast spectroscopic probes of condensed matter roadmap. *Journal of Physics Condensed Matter*, **2021**, 33, | 1.8 | 8 |
| 82 | Operating conditions and stability of spin torque majority gates: Analytical understanding and numerical evidence. *Journal of Applied Physics*, **2017**, 121, 043902 | 2.5 | 7 |
| 81 | Chemical vapor deposition of monolayer-thin WS crystals from the WF and HS precursors at low deposition temperature. *Journal of Chemical Physics*, **2019**, 150, 104703 | 3.9 | 7 |
| 80 | Back hopping in spin transfer torque switching of perpendicularly magnetized tunnel junctions. *Physical Review B*, **2020**, 102, | 3.3 | 7 |

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| 79 | A MOS capacitor model for ultra-thin 2D semiconductors: the impact of interface defects and channel resistance. *2D Materials*, **2020**, 7, 035018 | 5.9 | 7 |
| 78 | Effect of material parameters on two-dimensional materials based TFETs: An energy-delay perspective **2016**, | | 7 |
| 77 | Evaluation of multilayer graphene for advanced interconnects. *Microelectronic Engineering*, **2017**, 167, 1-5 | 2.5 | 7 |
| 76 | Magnonic band structure in CoFeB/Ta/NiFe meander-shaped magnetic bilayers. *Applied Physics Letters*, **2021**, 118, 162405 | 3.4 | 7 |
| 75 | Structural and magnetic characterization of large area, free-standing thin films of magnetic ion intercalated dichalcogenides Mn0.25TaS2 and Fe0.25TaS2. *Journal of Physics Condensed Matter*, **2016**, 28, 356002 | 1.8 | 7 |
| 74 | Perpendicular magnetic anisotropy of CoPt bilayers on ALD HfO2. *Journal of Applied Physics*, **2016**, 120, 163903 | 2.5 | 7 |
| 73 | First experimental demonstration of a scalable linear majority gate based on spin waves **2018**, | | 7 |
| 72 | 3-D Sequential Stacked Planar Devices Featuring Low-Temperature Replacement Metal Gate Junctionless Top Devices With Improved Reliability. *IEEE Transactions on Electron Devices*, **2018**, 65, 5165-5171 | 2.9 | 7 |
| 71 | Ferroelectric Control of Magnetism in Ultrathin HfOCoPt Layers. *ACS Applied Materials & Interfaces*, **2019**, 11, 34385-34393 | 9.5 | 6 |
| 70 | (Invited) Heterogeneous Nano- to Wide-Scale Co-Integration of Beyond-Si and Si CMOS Devices to Enhance Future Electronics. *ECS Transactions*, **2015**, 66, 3-14 | 1 | 6 |
| 69 | Interconnected magnetic tunnel junctions for spin-logic applications. *AIP Advances*, **2018**, 8, 055921 | 1.5 | 6 |
| 68 | Perpendicular magnetic anisotropy of CoFeBTa bilayers on ALD HfO2. *AIP Advances*, **2017**, 7, 055933 | 1.5 | 6 |
| 67 | Bilayer Graphene Tunneling FET for Sub-0.2 V Digital CMOS Logic Applications. *IEEE Electron Device Letters*, **2014**, 35, 1308-1310 | 4.4 | 6 |
| 66 | Sources of variability in scaled MoS2 FETs **2020**, | | 6 |
| 65 | A flexible 300 mm integrated Si MOS platform for electron- and hole-spin qubits exploration **2020**, | | 6 |
| 64 | Engineering Wafer-Scale Epitaxial Two-Dimensional Materials through Sapphire Template Screening for Advanced High-Performance Nanoelectronics. *ACS Nano*, **2021**, 15, 9482-9494 | 16.7 | 6 |
| 63 | Instant-On Spin Torque in Noncollinear Magnetic Tunnel Junctions. *Physical Review Applied*, **2018**, 10, | 4.3 | 6 |
| 62 | Dynamical influence of vortex□ntivortex pairs in magnetic vortex oscillators. *Journal of Magnetism and Magnetic Materials*, **2015**, 394, 292-298 | 2.8 | 5 |

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|---|---|---|---|
| 61 | Characterization of thin films of the solid electrolyte Li(x)Mg(1-2x)Al(2+x)O4 (x = 0, 0.05, 0.15, 0.25). *Physical Chemistry Chemical Physics*, **2015**, 17, 29045-56 | 3.6 | 5 |
| 60 | Band alignment and effective work function of atomic-layer deposited VO2 and V2O5 films on SiO2 and Al2O3. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2015**, 12, 238-241 | | 5 |
| 59 | Analysis of Transferred MoS2 Layers Grown by MOCVD: Evidence of Mo Vacancy Related Defect Formation. *ECS Journal of Solid State Science and Technology*, **2020**, 9, 093001 | 2 | 5 |
| 58 | Microwave Characterization of Ba-Substituted PZT and ZnO Thin Films. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 881-888 | 3.2 | 5 |
| 57 | Large Area Carbon Nanosheet Capacitors. *ECS Solid State Letters*, **2014**, 3, N8-N10 | | 5 |
| 56 | VO2, a Metal-Insulator Transition Material for Nanoelectronic Applications. *ECS Transactions*, **2012**, 45, 151-158 | 1 | 5 |
| 55 | 3D Sequential Low Temperature Top Tier Devices using Dopant Activation with Excimer Laser Anneal and Strained Silicon as Performance Boosters **2020**, | | 5 |
| 54 | Scaled spintronic logic device based on domain wall motion in magnetically interconnected tunnel junctions **2018**, | | 5 |
| 53 | Wide operating window spin-torque majority gate towards large-scale integration of logic circuits. *AIP Advances*, **2018**, 8, 055920 | 1.5 | 4 |
| 52 | Material-Device-Circuit Co-Design of 2-D Materials-Based Lateral Tunnel FETs. *IEEE Journal of the Electron Devices Society*, **2018**, 6, 979-986 | 2.3 | 4 |
| 51 | Demonstration of Direction Dependent Conduction through MoS2Films Prepared by Tunable Mass Transport Fabrication. *ECS Journal of Solid State Science and Technology*, **2016**, 5, Q3046-Q3049 | 2 | 4 |
| 50 | Thermal recrystallization of short-range ordered WS2 films. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2018**, 36, 05G501 | 2.9 | 4 |
| 49 | Transistors on two-dimensional semiconductors: contact resistance limited by the contact edges **2017**, | | 4 |
| 48 | Quantum Mechanical Charge Trap Modeling to Explain BTI at Cryogenic Temperatures **2020**, | | 4 |
| 47 | 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. *Applied Physics Letters*, **2016**, 108, 043504 | 3.4 | 4 |
| 46 | Understanding Ambipolar Transport in MoSField Effect Transistors: the Substrate is the Key. *Nanotechnology*, **2020**, | 3.4 | 4 |
| 45 | Impact of device scaling on the electrical properties of MoS field-effect transistors. *Scientific Reports*, **2021**, 11, 6610 | 4.9 | 4 |
| 44 | . *IEEE Transactions on Electron Devices*, **2017**, 64, 2970-2976 | 2.9 | 3 |

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|---|---|---|---|
| 43 | Evaluation of the effective work-function of monolayer graphene on silicon dioxide by internal photoemission spectroscopy. *Thin Solid Films*, **2019**, 674, 39-43 | 2.2 | 3 |
| 42 | Performance Comparison of s-Si, In0.53Ga0.47As, Monolayer BP, and WS2-Based n-MOSFETs for Future Technology Nodes—Part I: Device-Level Comparison. *IEEE Transactions on Electron Devices*, **2019**, 66, 3608-3613 | 2.9 | 3 |
| 41 | A route towards the fabrication of 2D heterostructures using atomic layer etching combined with selective conversion. *2D Materials*, **2019**, 6, 035030 | 5.9 | 3 |
| 40 | Deducing the apparent flat-band position Vafb and the doping level of large area single layer graphene MOS capacitors. *Microelectronic Engineering*, **2015**, 147, 314-317 | 2.5 | 3 |
| 39 | Towards high-performance polarity-controllable FETs with 2D materials **2018**, | | 3 |
| 38 | Benchmarking of monolithic 3D integrated MX2 FETs with Si FinFETs **2017**, | | 3 |
| 37 | Graphene wires as alternative interconnects **2015**, | | 3 |
| 36 | (Invited) First-Principles Investigation of High-k Dielectrics for Nonvolatile Memories. *ECS Transactions*, **2010**, 33, 393-407 | 1 | 3 |
| 35 | Toward the manipulation of a single spin in an AlGaAs/GaAs single-electron transistor **2006**, | | 3 |
| 34 | Electrical spin-wave spectroscopy in nanoscale waveguides with nonuniform magnetization. *Applied Physics Letters*, **2021**, 118, 152410 | 3.4 | 3 |
| 33 | The Growing Application Field of Laser Debonding: From Advanced Packaging to Future Nanoelectronics **2019**, | | 3 |
| 32 | Spin-torque-driven MTJs with extended free layer for logic applications. *Journal Physics D: Applied Physics*, **2018**, 51, 275002 | 3 | 3 |
| 31 | Device and Circuit Level Gate Configuration Optimization for 2D Material Field-Effect Transistors **2019**, | | 2 |
| 30 | Spin waves for interconnect applications **2017**, | | 2 |
| 29 | Area and routing efficiency of SWD circuits compared to advanced CMOS **2015**, | | 2 |
| 28 | Publisher's Note: Magnetic-Field Asymmetry of Nonlinear Transport in Carbon Nanotubes [Phys. Rev. Lett. 95, 256601 (2005)]. *Physical Review Letters*, **2005**, 95, | 7.4 | 2 |
| 27 | Electronic voltage control of magnetic anisotropy at room temperature in high-□SrTiO3/Co/Pt trilayer. *Physical Review Materials*, **2020**, 4, | 3.2 | 2 |
| 26 | All-Electrical Control of Scaled Spin Logic Devices Based on Domain Wall Motion. *IEEE Transactions on Electron Devices*, **2021**, 68, 2116-2122 | 2.9 | 2 |

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| 25 | Measurement of direct and indirect bandgaps in synthetic ultrathin MoS2 and WS2 films from photoconductivity spectra. *Journal of Applied Physics*, **2021**, 129, 155302 | 2.5 | 2 |
| 24 | Low dephasing and robust micromagnet designs for silicon spin qubits. *Applied Physics Letters*, **2021**, 119, 094001 | 3.4 | 2 |
| 23 | High mobility SiMOSFETs fabricated in a full 300□mm CMOS process. *Materials for Quantum Technology*, **2021**, 1, 041001 | | 2 |
| 22 | Low Energy Phosphorus Plasma Implantation for Isolation of MoS 2 Devices. *ECS Transactions*, **2017**, 77, 3-8 | 1 | 1 |
| 21 | Spin-on-diffussants for doping in transition metal dichalcogenide semiconductors. *Applied Physics Letters*, **2019**, 114, 212102 | 3.4 | 1 |
| 20 | Overview of spin-based majority gates and interconnect implications **2016**, | | 1 |
| 19 | Tunneling transistors based on MoS2/MoTe2 Van der Waals heterostructures **2017**, | | 1 |
| 18 | Coupling of spin and vibrational degrees of freedom of adsorbates at metal surfaces probed by vibrational sum-frequency generation. *Applied Physics Letters*, **2013**, 103, 132403 | 3.4 | 1 |
| 17 | Two-dimensional WS2 crystals at predetermined locations by anisotropic growth during atomic layer deposition. *Journal of Applied Physics*, **2020**, 128, 175302 | 2.5 | 1 |
| 16 | Efficient Modeling of Charge Trapping at Cryogenic TemperaturesPart I: Theory. *IEEE Transactions on Electron Devices*, **2021**, 68, 6365-6371 | 2.9 | 1 |
| 15 | Efficient Modeling of Charge Trapping at Cryogenic TemperaturesPart II: Experimental. *IEEE Transactions on Electron Devices*, **2021**, 68, 6372-6378 | 2.9 | 1 |
| 14 | Engineering Ultrafast Magnetism. *Springer Proceedings in Physics*, **2015**, 297-299 | 0.2 | 1 |
| 13 | Processing Stability of Monolayer WS2 on SiO2. *Nano Express*, **2021**, 2, 024004 | 2 | 1 |
| 12 | Interconnect-Device Co-Optimization for Field-Effect Transistors with Two-Dimensional Materials **2018**, | | 1 |
| 11 | An Integrated Silicon MOS Single-Electron Transistor Charge Sensor for Spin-Based Quantum Information Processing. *IEEE Electron Device Letters*, **2020**, 41, 1253-1256 | 4.4 | 0 |
| 10 | Ab initio study of ultrafast spin dynamics in Gdx(FeCo) 1□ alloys. *Applied Physics Letters*, **2022**, 120, 042401 | 3.4 | 0 |
| 9 | Fabrication and room temperature characterization of trilayer junctions for the development of superconducting qubits on 300 mm wafers. *Japanese Journal of Applied Physics*, **2021**, 60, SBBI04 | 1.4 | 0 |
| 8 | Internal photoemission of electrons from 2D semiconductor/3D metal barrier structures. *Journal Physics D: Applied Physics*, **2021**, 54, 295101 | 3 | 0 |

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|---|---|---|---|
| 7 | Magnetic field sensitivity of the photoelectrically read nitrogen-vacancy centers in diamond. *Applied Physics Letters*, **2022**, 120, 162402 | 3.4 | 0 |
| 6 | (Invited) Electrical Atomic Force Microscopy for 2D Transition Metal Dichalcogenide Materials. *ECS Transactions*, **2017**, 77, 41-47 | 1 | |
| 5 | Performance Comparison of s-Si, In0.53Ga0.47As, Monolayer BP- and WS2-Based n-MOSFETs for Future Technology Nodes—Part II: Circuit-Level Comparison. *IEEE Transactions on Electron Devices*, **2019**, 66, 3614-3619 | 2.9 | |
| 4 | Influence of the Magnetization Compensation Point on the All-Optical Magnetization Switching. *Springer Proceedings in Physics*, **2015**, 30-31 | 0.2 | |
| 3 | Beyond Silicon MOS: An Electrical Study on Interface and Gate Dielectrics with ac Admittance Techniques | 1-16 | |
| 2 | Interface admittance measurement and simulation of dual gated CVD WS2 MOSCAPs: Mapping the DIT(E) profile. *Solid-State Electronics*, **2021**, 183, 108035 | 1.7 | |
| 1 | Linking Room- and Low-Temperature Electrical Performance of MOS Gate Stacks for Cryogenic Applications. *IEEE Electron Device Letters*, **2022**, 43, 674-677 | 4.4 | |