Michel Bosman

List of Publications by Year
in descending order

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183 papers	7,468 citations	57631 44 h-index	58464 82 g-index
184 all docs	184 docs citations	184 times ranked	11253 citing authors

#	Article	IF	Citations
1	Three-dimensional tubular arrays of MnO₂â€“NiO nanoflakes with high areal pseudocapacitance. Journal of Materials Chemistry, 2012, 22, 2419-2426.	6.7	408
2	Nanoplasmonics: Classical down to the Nanometer Scale. Nano Letters, 2012, 12, 1683-1689.	4.5	389
3	Quantum Plasmon Resonances Controlled by Molecular Tunnel Junctions. Science, 2014, 343, 1496-1499.	6.0	388
4	Multistep nucleation of nanocrystals in aqueous solution. Nature Chemistry, 2017, 9, 77-82.	6.6	312
5	Au Nanoparticleâ€Modified MoS₂ Nanosheetâ€Based Photoelectrochemical Cells for Water Splitting. Small, 2014, 10, 3537-3543.	5.2	265
6	Mapping chemical and bonding information using multivariate analysis of electron energy-loss spectrum images. Ultramicroscopy, 2006, 106, 1024-1032.	0.8	261
7	Mapping surface plasmons at the nanometre scale with an electron beam. Nanotechnology, 2007, 18, 165505.	1.3	256
8	Two-Dimensional Mapping of Chemical Information at Atomic Resolution. Physical Review Letters, 2007, 99, 086102.	2.9	239
9	Stabilization of 4H hexagonal phase in gold nanoribbons. Nature Communications, 2015, 6, 7684.	5.8	215
10	Surface modification-induced phase transformation of hexagonal close-packed gold square sheets. Nature Communications, 2015, 6, 6571.	5.8	195
11	Direct observation of the nanoscale Kirkendall effect during galvanic replacement reactions. Nature Communications, 2017, 8, 1224.	5.8	175
12	Direct evidence of plasmon enhancement on photocatalytic hydrogen generation over Au/Pt-decorated TiO₂nanofibers. Nanoscale, 2014, 6, 5217-5222.	2.8	143
13	Colloidal Nanocrystals of Wurtziteâ€Type Cu₂ZnSnS₄: Facile Noninjection Synthesis and Formation Mechanism. Chemistry - A European Journal, 2012, 18, 3127-3131.	1.7	138
14	Surface Plasmon Damping Quantified with an Electron Nanoprobe. Scientific Reports, 2013, 3, 1312.	1.6	133
15	Gold Coating of Silver Nanoprisms. Advanced Functional Materials, 2012, 22, 849-854.	7.8	116
16	Fowlerâ€“Nordheim Tunneling Induced Charge Transfer Plasmons between Nearly Touching Nanoparticles. ACS Nano, 2013, 7, 707-716.	7.3	114
17	Anomalous resistive switching in memristors based on two-dimensional palladium diselenide using heterophase grain boundaries. Nature Electronics, 2021, 4, 348-356.	13.1	112
18	One-Pot Synthesis of Cu_{1.94}Sâ^'CdS and Cu_{1.94}Sâ^'Zn_xCd_{1â^'x}S Nanodisk Heterostructures. Journal of the American Chemical Society, 2011, 133, 2052-2055.	6.6	103

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19	Growth of Nb-Doped Monolayer WS₂ by Liquid-Phase Precursor Mixing. ACS Nano, 2019, 13, 10768-10775.	7.3	102
20	Encapsulated Annealing: Enhancing the Plasmon Quality Factor in Lithographicallyâ€“Defined Nanostructures. Scientific Reports, 2014, 4, 5537.	1.6	96
21	Heterophase fcc-2H-fcc gold nanorods. Nature Communications, 2020, 11, 3293.	5.8	92
22	Substitutional doping in 2D transition metal dichalcogenides. Nano Research, 2021, 14, 1668-1681.	5.8	92
23	An experimental and theoretical investigation of the anisotropic branching in gold nanocrosses. Nanoscale, 2016, 8, 543-552.	2.8	90
24	Visible Surface Plasmon Modes in Single Bi₂Te₃ Nanoplate. Nano Letters, 2015, 15, 8331-8335.	4.5	71
25	Optimizing EELS acquisition. Ultramicroscopy, 2008, 108, 837-846.	0.8	69
26	Intrinsic nanofilamentation in resistive switching. Journal of Applied Physics, 2013, 113, 114503.	1.1	69
27	Real-Time Dynamics of Galvanic Replacement Reactions of Silver Nanocubes and Au Studied by Liquid-Cell Transmission Electron Microscopy. ACS Nano, 2016, 10, 7689-7695.	7.3	67
28	Surfactantâ€Free Subâ€2 nm Ultrathin Triangular Gold Nanoframes. Small, 2013, 9, 2880-2886.	5.2	66
29	In Situ Kinetic and Thermodynamic Growth Control of Auâ€“Pd Coreâ€“Shell Nanoparticles. Journal of the American Chemical Society, 2018, 140, 11680-11685.	6.6	66
30	Interface and Surface Cation Stoichiometry Modified by Oxygen Vacancies in Epitaxial Manganite Films. Advanced Functional Materials, 2012, 22, 4312-4321.	7.8	65
31	Actively Tunable Visible Surface Plasmons in Bi₂Te₃ and their Energyâ€Harvesting Applications. Advanced Materials, 2016, 28, 3138-3144.	11.1	65
32	Intrinsic resistance switching in amorphous silicon oxide for high performance SiOx ReRAM devices. Microelectronic Engineering, 2017, 178, 98-103.	1.1	64
33	Electron-Energy Loss Study of Nonlocal Effects in Connected Plasmonic Nanoprisms. ACS Nano, 2013, 7, 6287-6296.	7.3	62
34	Room temperature stable CO _x -free H ₂ production from methanol with magnesium oxide nanophotocatalysts. Science Advances, 2016, 2, e1501425.	4.7	62
35	Interlayer interactions in 2D WS₂/MoS₂ heterostructures monolithically grown by in situ physical vapor deposition. Nanoscale, 2018, 10, 22927-22936.	2.8	62
36	An Epitaxial Ferroelectric Tunnel Junction on Silicon. Advanced Materials, 2014, 26, 7185-7189.	11.1	61

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37	Scrolling graphene into nanofluidic channels. Lab on A Chip, 2013, 13, 2874.	3.1	60
38	Multimodal plasmonics in fused colloidal networks. Nature Materials, 2015, 14, 87-94.	13.3	57
39	Edge-Gold-Coated Silver Nanoprisms: Enhanced Stability and Applications in Organic Photovoltaics and Chemical Sensing. Journal of Physical Chemistry C, 2014, 118, 12459-12468.	1.5	55
40	Real-Time Imaging of the Formation of Auâ€“Ag Coreâ€“Shell Nanoparticles. Journal of the American Chemical Society, 2016, 138, 5190-5193.	6.6	55
41	Conductive Atomic Force Microscope Study of Bipolar and Threshold Resistive Switching in 2D Hexagonal Boron Nitride Films. Scientific Reports, 2018, 8, 2854.	1.6	55
42	A circuit model for plasmonic resonators. Optics Express, 2014, 22, 9809.	1.7	54
43	Nanoscale Transformations in Metastable, Amorphous, Siliconâ€Rich Silica. Advanced Materials, 2016, 28, 7486-7493.	11.1	52
44	Study of preferential localized degradation and breakdown of HfO2/SiOx dielectric stacks at grain boundary sites of polycrystalline HfO2 dielectrics. Microelectronic Engineering, 2013, 109, 364-369.	1.1	45
45	Evidence for compliance controlled oxygen vacancy and metal filament based resistive switching mechanisms in RRAM. Microelectronic Engineering, 2011, 88, 1124-1128.	1.1	44
46	Light Splitting in Nanoporous Gold and Silver. ACS Nano, 2012, 6, 319-326.	7.3	44
47	Synthesis of Spiky Agâ€“Au Octahedral Nanoparticles and Their Tunable Optical Properties. Journal of Physical Chemistry C, 2013, 117, 16640-16649.	1.5	44
48	Role of oxygen vacancies in HfO2-based gate stack breakdown. Applied Physics Letters, 2010, 96, .	1.5	41
49	Ternary Cobaltâ€“Iron Phosphide Nanocrystals with Controlled Compositions, Properties, and Morphologies from Nanorods and Nanorice to Split Nanostructures. Chemistry - A European Journal, 2011, 17, 5982-5988.	1.7	41
50	Intrinsic Resistance Switching in Amorphous Silicon Suboxides: The Role of Columnar Microstructure. Scientific Reports, 2017, 7, 9274.	1.6	41
51	Dual phases of crystalline and electronic structures in the nanocrystalline perovskite CsPbBr3. NPG Asia Materials, 2019, 11, .	3.8	41
52	Sustainable Fuel Production from Ambient Moisture via Ferroelectrically Driven MoS₂ Nanosheets. Advanced Materials, 2020, 32, e2000971.	11.1	38
53	Evolution of Filament Formation in Ni/HfO₂/SiO_x/Siâ€Based RRAM Devices. Advanced Electronic Materials, 2015, 1, 1500130.	2.6	37
54	Plasma density induced formation of nanocrystals in physical vapor deposited carbon films. Carbon, 2011, 49, 1733-1744.	5.4	34

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55	Facile Synthesis of Luminescent AgInS₂â€“ZnS Solid Solution Nanorods. Small, 2013, 9, 2689-2695.	5.2	32
56	Direct visualization and in-depth physical study of metal filament formation in percolated high-Î¹ dielectrics. Applied Physics Letters, 2010, 96, .	1.5	31
57	Modified Percolation Model for Polycrystalline High-$ kappa$ Gate Stack With Grain Boundary Defects. IEEE Electron Device Letters, 2011, 32, 78-80.	2.2	30
58	Grain boundary assisted degradation and breakdown study in cerium oxide gate dielectric using scanning tunneling microscopy. Applied Physics Letters, 2011, 98, 072902.	1.5	30
59	Coherent Sb/CuTe Core/Shell Nanostructure with Large Strain Contrast Boosting the Thermoelectric Performance of nâ€Type PbTe. Advanced Functional Materials, 2021, 31, 2007340.	7.8	30
60	Field emission enhancement and microstructural changes of carbon films by single pulse laser irradiation. Carbon, 2011, 49, 1018-1024.	5.4	29
61	Silicon surface passivation by aluminium oxide studied with electron energy loss spectroscopy. Physica Status Solidi - Rapid Research Letters, 2013, 7, 937-941.	1.2	29
62	Atomic Scale Modulation of Selfâ€Rectifying Resistive Switching by Interfacial Defects. Advanced Science, 2018, 5, 1800096.	5.6	29
63	Photoactivity and Stability Coâ€Enhancement: When Localized Plasmons Meet Oxygen Vacancies in MgO. Small, 2018, 14, e1803233.	5.2	28
64	Nanoscale mapping of optically inaccessible bound-states-in-the-continuum. Light: Science and Applications, 2022, 11, 20.	7.7	28
65	Resistive switching in NiSi gate metal-oxide-semiconductor transistors. Applied Physics Letters, 2010, 97, 202904.	1.5	27
66	Very Low Reset Current for an RRAM Device Achieved in the Oxygen-Vacancy-Controlled Regime. IEEE Electron Device Letters, 2011, 32, 716-718.	2.2	27
67	Plasmon-Enhanced Resonant Photoemission Using Atomically Thick Dielectric Coatings. ACS Nano, 2020, 14, 8806-8815.	7.3	27
68	A scheme for simulating multi-level phase change photonics materials. Npj Computational Materials, 2021, 7, .	3.5	27
69	The distribution of chemical elements in Al- or La-capped high-Î¹ metal gate stacks. Applied Physics Letters, 2010, 97, 103504.	1.5	25
70	Quantitative, nanoscale mapping of sp2 percentage and crystal orientation in carbon multilayers. Carbon, 2009, 47, 94-101.	5.4	24
71	Uncorrelated multiple conductive filament nucleation and rupture in ultra-thin high-Î¹ dielectric based resistive random access memory. Applied Physics Letters, 2011, 99, 093502.	1.5	24
72	High Hardness B_aC_b-(B_xO_y/BN) Composites with 3D Mesh-Like Fine Grain-Boundary Structure by Reactive Spark Plasma Sintering. Journal of Nanoscience and Nanotechnology, 2012, 12, 959-965.	0.9	24

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73	Nanoscale band gap spectroscopy on ZnO and GaN-based compounds with a monochromated electron microscope. Applied Physics Letters, 2009, 95, .	1.5	23
74	Impurity-Induced Emission in Re-Doped WS₂ Monolayers. Nano Letters, 2021, 21, 5293-5300.	4.5	21
75	Oxygen-Soluble Gate Electrodes for Prolonged High-$ kappa$ Gate-Stack Reliability. IEEE Electron Device Letters, 2011, 32, 252-254.	2.2	20
76	Physical analysis of breakdown in high-Î°/metal gate stacks using TEM/EELS and STM for reliability enhancement (invited). Microelectronic Engineering, 2011, 88, 1365-1372.	1.1	19
77	Thermal conductivity of nanocrystalline carbon films studied by pulsed photothermal reflectance. Carbon, 2012, 50, 1428-1431.	5.4	19
78	Percolative Model and Thermodynamic Analysis of Oxygen-Ion-Mediated Resistive Switching. IEEE Electron Device Letters, 2012, 33, 712-714.	2.2	19
79	Nucleation Dynamics of Water Nanodroplets. Microscopy and Microanalysis, 2014, 20, 407-415.	0.2	19
80	Gateâ€Ðefined Quantum Confinement in CVD 2D WS₂. Advanced Materials, 2022, 34, e2103907.	11.1	18
81	Highly Luminescent Heterostructured Copperâ€Ðoped Zinc Sulfide Nanocrystals for Application in Cancer Cell Labeling. ChemPhysChem, 2016, 17, 2489-2495.	1.0	17
82	Charge transfer plasmon resonances across silverâ€“moleculeâ€“silver junctions: estimating the terahertz conductance of molecules at near-infrared frequencies. RSC Advances, 2016, 6, 70884-70894.	1.7	17
83	Spin-polarized Wide Electron Slabs in Functionally Graded Polar Oxide Heterostructures. Scientific Reports, 2012, 2, 533.	1.6	16
84	Fabrication of suspended metalâ€“dielectricâ€“metal plasmonic nanostructures. Nanotechnology, 2014, 25, 135303.	1.3	16
85	Boron Vacancies Causing Breakdown in 2D Layered Hexagonal Boron Nitride Dielectrics. IEEE Electron Device Letters, 2019, 40, 1321-1324.	2.2	16
86	An oxygen vacancy mediated Ag reduction and nucleation mechanism in SiO2 RRAM devices. Microelectronics Reliability, 2019, 98, 144-152.	0.9	16
87	Spontaneous Atomic Sites Formation in Wurtzite CoO Nanorods for Robust CO₂ Photoreduction. Advanced Functional Materials, 2022, 32, .	7.8	16
88	New developments in electron energy loss spectroscopy. Microscopy Research and Technique, 2007, 70, 211-219.	1.2	15
89	Role of grain boundary percolative defects and localized trap generation on the reliability statistics of high-κ gate dielectric stacks. , 2012, , .		15
90	Nanoscale phase domain structure and associated device performance of organic solar cells based on a diketopyrrolopyrrole polymer. RSC Advances, 2013, 3, 20113.	1.7	15

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91	Chemical insight into origin of forming-free resistive random-access memory devices. Applied Physics Letters, 2011, 99, 133504.	1.5	14
92	Fast Electrical Modulation in a Plasmonicâ€Enhanced, Vâ€Pitâ€Textured, Lightâ€Emitting Diode. Advanced Optical Materials, 2015, 3, 1703-1709.	3.6	14
93	Statistics of retention failure in the low resistance state for hafnium oxide RRAM using a Kinetic Monte Carlo approach. Microelectronics Reliability, 2015, 55, 1422-1426.	0.9	14
94	A plasmonic multi-logic gate platform based on sequence-specific binding of estrogen receptors and gold nanorods. Nanoscale, 2016, 8, 19973-19977.	2.8	14
95	Molecular Coatings for Stabilizing Silver and Gold Nanocubes under Electron Beam Irradiation. Langmuir, 2017, 33, 1189-1196.	1.6	14
96	Textured V-Pit Green Light Emitting Diode as a Wavelength-Selective Photodetector for Fast Phosphor-Based White Light Modulation. ACS Photonics, 2017, 4, 443-448.	3.2	14
97	Observation of switching behaviors in post-breakdown conduction in NiSi-gated stacks. , 2009, , .		13
98	$nhbox{-ZnO}/nhbox{-GaAs}$ Heterostructured White Light-Emitting Diode: Nanoscale Interface Analysis and Electroluminescence Studies. IEEE Transactions on Electron Devices, 2010, 57, 129-133.	1.6	13
99	Filamentation Mechanism of Resistive Switching in Fully Silicided High- $kappa$ Gate Stacks. IEEE Electron Device Letters, 2011, 32, 455-457.	2.2	13
100	Synthesis of Silver Nanoparticles with Monovalently Functionalized Self-Assembled Monolayers. Australian Journal of Chemistry, 2012, 65, 275.	0.5	13
101	Silica: Nanoscale Transformations in Metastable, Amorphous, Siliconâ€Rich Silica (Adv. Mater. 34/2016). Advanced Materials, 2016, 28, 7549-7549.	11.1	13
102	Compliance current dominates evolution of NiSi2 defect size in Ni/dielectric/Si RRAM devices. Microelectronics Reliability, 2016, 61, 71-77.	0.9	13
103	Controlling phase transition in WSe2 towards ideal n-type transistor. Nano Research, 2021, 14, 2703-2710.	5.8	13
104	Applications and theoretical simulation of low-loss electron energy-loss spectra. Materials Science and Technology, 2008, 24, 651-659.	0.8	12
105	Using post-breakdown conduction study in a MIS structure to better understand the resistive switching mechanism in an MIM stack. Nanotechnology, 2011, 22, 455702.	1.3	12
106	Conductive filament formation at grain boundary locations in polycrystalline HfO2 -based MIM stacks: Computational and physical insight. Microelectronics Reliability, 2016, 64, 204-209.	0.9	12
107	Germanium Nanowire Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistor Fabricated by Complementary-Metalâ€“Oxideâ€“Semiconductor-Compatible Process. IEEE Transactions on Electron Devices, 2011, 58, 74-79.	1.6	11
108	Impact of local structural and electrical properties of grain boundaries in polycrystalline HfO2 on reliability of SiOx interfacial layer. Microelectronics Reliability, 2014, 54, 1712-1717.	0.9	11

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109	Localized Probing of Dielectric Breakdown in Multilayer Hexagonal Boron Nitride. ACS Applied Materials & Interfaces, 2020, 12, 55000-55010.	4.0	11
110	Electrostatically Tunable Nearâ€Infrared Plasmonic Resonances in Solutionâ€Processed Atomically Thin NbSe₂. Advanced Materials, 2021, 33, e2101950.	11.1	11
111	Anisotropic point defects in rhenium diselenide monolayers. IScience, 2021, 24, 103456.	1.9	11
112	CAFM based spectroscopy of stress-induced defects in HfO<inf>2</inf> with experimental evidence of the clustering model and metastable vacancy defect state. , 2016, , .		10
113	Mechanism of soft and hard breakdown in hexagonal boron nitride 2D dielectrics. , 2018, , .		10
114	Light-Emitting V-Pits: An Alternative Approach toward Luminescent Indium-Rich InGaN Quantum Dots. ACS Photonics, 2021, 8, 2853-2860.	3.2	10
115	Crystallization of Sputter-Deposited Amorphous (FeSi2)1â€“xAlx Thin Films. Crystal Growth and Design, 2015, 15, 1692-1696.	1.4	9
116	Modeling of Diffusion and Incorporation of Interstitial Oxygen Ions at the TiN/SiO₂ Interface. ACS Applied Materials & Interfaces, 2019, 11, 36232-36243.	4.0	9
117	Particle simulation of plasmons. Nanophotonics, 2020, 9, 3303-3313.	2.9	9
118	Plasmon resonances and electron phase shifts near Au nanospheres. Applied Physics Letters, 2008, 93, .	1.5	8
119	New insight into the TDDB and breakdown reliability of novel high-к gate dielectric stacks. , 2010, , .		8
120	Feasibility of SILC Recovery in Sub-10-Ã... EOT Advanced Metal Gateâ€“High-$kappa$ Stacks. IEEE Electron Device Letters, 2013, 34, 1053-1055.	2.2	8
121	Resilience of ultra-thin oxynitride films to percolative wear-out and reliability implications for high-Î° stacks at low voltage stress. Journal of Applied Physics, 2013, 114, 094504.	1.1	8
122	New understanding of dielectric breakdown in advanced FinFET devices â€" physical, electrical, statistical and multiphysics study. , 2016, , .		8
123	Subthreshold characteristics of ballistic electron emission spectra. Journal of Applied Physics, 2012, 111, .	1.1	7
124	Stochastic failure model for endurance degradation in vacancy modulated HfO<inf>x</inf> RRAM using the percolation cell framework. , 2014, , .		7
125	Electron dynamics in plasmons. Nanoscale, 2021, 13, 2801-2810.	2.8	7
126	Unlocking the origin of compositional fluctuations in InGaN light emitting diodes. Physical Review Materials, 2021, 5, .	0.9	7

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127	Study of ion beam damage on FIB prepared TEM samples. , 2010, , .		6
128	The “buffering” role of high-к in post breakdown degradation immunity of advanced dual layer dielectric gate stacks. , 2013, , .		6
129	Stochastic Modeling of FinFET Degradation Based on a Resistor Network Embedded Metropolis Monte Carlo Method. IEEE Transactions on Electron Devices, 2018, 65, 440-447.	1.6	6
130	Localized degradation and breakdown study of cerium-oxide high-к gate dielectric material using scanning tunneling microscopy. , 2010, , .		5
131	Postbreakdown Gate-Current Low-Frequency Noise Spectrum as a Detection Tool for High- $kappa$ and Interfacial Layer Breakdown. IEEE Electron Device Letters, 2010, 31, 1035-1037.	2.2	5
132	Understanding the switching mechanism in RRAM using in-situ TEM. , 2016, , .		5
133	Threshold shift observed in resistive switching in metal-oxide-semiconductor transistors and the effect of forming gas anneal. Applied Physics Letters, 2011, 99, 232909.	1.5	4
134	Nanoscale electrical and physical study of polycrystalline high-κ dielectrics and proposed reliability enhancement techniques. , 2011, , .		4
135	Real-time analysis of ultra-thin gate dielectric breakdown and recovery - A reality. , 2013, , .		4
136	Leakage current and structural analysis of annealed HfO2/La2O3 and CeO2/La2O3 dielectric stacks: A nanoscopic study. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 03D125.	0.6	4
137	Variability model for forming process in oxygen vacancy modulated high-Î° based resistive switching memory devices. Microelectronics Reliability, 2014, 54, 2266-2271.	0.9	4
138	An SEM/STM based nanoprobing and TEM study of breakdown locations in HfO2/SiOx dielectric stacks for failure analysis. Microelectronics Reliability, 2015, 55, 1450-1455.	0.9	4
139	3D characterization of hard breakdown in RRAM device. Microelectronic Engineering, 2019, 216, 111042.	1.1	4
140	Accurate and Robust Calibration of the Uniform Affine Transformation Between Scan-Camera Coordinates for Atom-Resolved In-Focus 4D-STEM Datasets. Microscopy and Microanalysis, 2022, 28, 622-632.	0.2	4
141	Measurements of composition and electronic structure in an operating light-emitting diode using analytical electron microscopy. Applied Physics Letters, 2004, 84, 1371-1373.	1.5	3
142	Theoretical interpretation of electron energy-loss spectroscopic images. AIP Conference Proceedings, 2008, , .	0.3	3
143	Electronic properties of ultrathin high-Î° dielectrics studied by ballistic electron emission microscopy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, .	0.6	3
144	Random telegraph noise reduction in metal gate high-κ stacks by bipolar switching and the performance boosting technique. , 2011, , .		3

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145	Effect of surface contamination on electron tunneling in the high bias range. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, 041402.	0.9	3
146	Nanoscale physical analysis of localized breakdown events in HfO<inf>2</inf>/SiO<inf>X</inf> dielectric stacks: A correlation study of STM induced BD with C-AFM and TEM. , 2012, , .		3
147	Triggering voltage for post-breakdown random telegraph noise in HfLaO dielectric metal gate metal-oxide-semiconductor field effect transistors and its reliability implications. Journal of Applied Physics, 2012, 111, 024101.	1.1	3
148	The effect of high deposition energy of carbon overcoats on perpendicular magnetic recording media. Applied Physics Letters, 2013, 103, .	1.5	3
149	Spectroscopy of SILC trap locations and spatial correlation study of percolation path in the high-κ and interfacial layer. , 2015, , .		3
150	Monte Carlo model of reset stochastics and failure rate estimation of read disturb mechanism in HfO<inf>x</inf> RRAM. , 2015, , .		3
151	An overview of physical analysis of nanosize conductive path in ultrathin SiON and high-к gate dielectrics in nanoelectronic devices. , 2010, , .		2
152	Annular electron energy-loss spectroscopy in the scanning transmission electron microscope. Ultramicroscopy, 2011, 111, 1540-1546.	0.8	2
153	Barrier height determination of Au/Oxidized GaAs/n-GaAs using ballistic electron emission spectroscopy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	0.6	2
154	Dielectric breakdown — Recovery in logic and resistive switching in memory — Bridging the gap between the two phenomena. , 2012, , .		2
155	The electronic barrier height of silicon native oxides at different oxidation stages. Journal of Applied Physics, 2012, 111, .	1.1	2
156	Impact of local variations in high-k dielectric on breakdown and recovery characteristics of advanced gate stacks. , 2013, , .		2
157	Multiferroicity in manganite/titanate superlattices determined by oxygen pressure-mediated cation defects. Journal of Applied Physics, 2013, 113, 164302.	1.1	2
158	Impact of ionic drift and vacancy defect passivation on TDDB statistics and lifetime enhancement of metal gate high-κ stacks. , 2014, , .		2
159	Water Splitting: Au Nanoparticle-Modified MoS2Nanosheet-Based Photoelectrochemical Cells for Water Splitting (Small 17/2014). Small, 2014, 10, 3536-3536.	5.2	2
160	Nanoplasmonics in the TEM. Microscopy and Microanalysis, 2015, 21, 2219-2220.	0.2	2
161	Localized Random Telegraphic Noise Study in HfO<inf>2</inf> dielectric stacks using Scanning Tunneling Microscopy — Analysis of process and stress-induced traps. , 2015, , .		2
162	Multiphysics based 3D percolation framework model for multi-stage degradation and breakdown in high-Î² â€" Interfacial layer stacks. , 2016, , .		2

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163	Statistical basis and physical evidence for clustering model in FinFET degradation. , 2017, , .		2
164	Ultrasmall Designed Plasmon Resonators by Fused Colloidal Nanopatterning. ACS Applied Materials & Interfaces, 2019, 11, 45207-45213.	4.0	2
165	Giant Photoinduced Chirality in Thin Film Ge 2 Sb 2 Te 5. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900449.	1.2	2
166	Sustainable Fuel Production: Sustainable Fuel Production from Ambient Moisture via Ferroelectrically Driven MoS₂ Nanosheets (Adv. Mater. 25/2020). Advanced Materials, 2020, 32, 2070188.	11.1	2
167	Correlation of Dielectric Breakdown and Nanoscale Adhesion in Silicon Dioxide Thin Films. , 2020, , .		2
168	The nature of column boundaries in micro-structured silicon oxide nanolayers. APL Materials, 2021, 9, 121107.	2.2	2
169	Simulation of Atomic Resolution Images in STEM. Microscopy and Microanalysis, 2008, 14, 922-923.	0.2	1
170	Nanopatterning with the Helium Ion Microscope. Microscopy and Microanalysis, 2012, 18, 800-801.	0.2	1
171	Study of charge distribution and charge loss in dual-layer metal-nanocrystal-embedded high-Î¹/SiO2 gate stack. Applied Physics Letters, 2012, 100, 193109.	1.5	1
172	Multi-layered liposomes as optical resonators. , 2013, , .		1
173	C-Si surface passivation by aluminum oxide studied with electron energy loss spectroscopy. , 2013, , .		1
174	Spatial correlation of conductive filaments for multiple switching cycles in CBRAM. , 2014, , .		1
175	Theoretical Study of Ag Interactions in Amorphous Silica RRAM Devices. , 2018, , .		1
176	Assessment of read disturb immunity in conducting bridge memory devices â€“ A thermodynamic perspective. Microelectronics Reliability, 2014, 54, 2295-2299.	0.9	0
177	Probabilistic insight to possibility of new metal filament nucleation during repeated cycling of conducting bridge memory. Microelectronics Reliability, 2015, 55, 1412-1416.	0.9	0
178	Understanding defect kinetics in ultra-thin dielectric logic and memory devices using random telegraph noise analysis. , 2015, , .		0
179	Electrospun fabrication of one-dimensional composite nanofibres using colloidal gold/polymer aqueous blends. , 2015, , .		0
180	Observation of resistive switching by physical analysis techniques. , 2016, , .		0

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181	Ondrej Krivanek: A Research Life in EELS and Aberration Corrected STEM. Ultramicroscopy, 2017, 180, 1.	0.8	0
182	Revealing Electron Spill-Out in Plasmonic Nanostructures Using Particle Simulation. , 2020, , .		0
183	Particle-in-Cell Simulation of Plasmons. , 2020, , .		0