

# Michel Bosman

## 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.

173  
papers

5,935  
citations

40  
h-index

73  
g-index

184  
ext. papers

6,746  
ext. citations

7.7  
avg, IF

5.78  
L-index

#	Paper	IF	Citations
173	Nanoscale mapping of optically inaccessible bound-states-in-the-continuum.. <i>Light: Science and Applications</i> , <b>2022</b> , 11, 20	16.7	6
172	Accurate and Robust Calibration of the Uniform Affine Transformation Between Scan-Camera Coordinates for Atom-Resolved In-Focus 4D-STEM Datasets.. <i>Microscopy and Microanalysis</i> , <b>2022</b> , 1-11	0.5	0
171	A scheme for simulating multi-level phase change photonics materials. <i>Npj Computational Materials</i> , <b>2021</b> , 7,	10.9	3
170	Anisotropic point defects in rhenium diselenide monolayers. <i>IScience</i> , <b>2021</b> , 24, 103456	6.1	0
169	Anomalous resistive switching in memristors based on two-dimensional palladium diselenide using heterophase grain boundaries. <i>Nature Electronics</i> , <b>2021</b> , 4, 348-356	28.4	34
168	Electrostatically Tunable Near-Infrared Plasmonic Resonances in Solution-Processed Atomically Thin NbSe. <i>Advanced Materials</i> , <b>2021</b> , 33, e2101950	24	5
167	Impurity-Induced Emission in Re-Doped WS Monolayers. <i>Nano Letters</i> , <b>2021</b> , 21, 5293-5300	11.5	1
166	Coherent Sb/CuTe Core/Shell Nanostructure with Large Strain Contrast Boosting the Thermoelectric Performance of n-Type PbTe. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2007340	15.6	17
165	Substitutional doping in 2D transition metal dichalcogenides. <i>Nano Research</i> , <b>2021</b> , 14, 1668-1681	10	29
164	Electron dynamics in plasmons. <i>Nanoscale</i> , <b>2021</b> , 13, 2801-2810	7.7	4
163	Controlling phase transition in WSe2 towards ideal n-type transistor. <i>Nano Research</i> , <b>2021</b> , 14, 2703-2710	10	1
162	Unlocking the origin of compositional fluctuations in InGaN light emitting diodes. <i>Physical Review Materials</i> , <b>2021</b> , 5,	3.2	3
161	Gate-Defined Quantum Confinement in CVD 2D WS. <i>Advanced Materials</i> , <b>2021</b> , e2103907	24	3
160	The nature of column boundaries in micro-structured silicon oxide nanolayers. <i>APL Materials</i> , <b>2021</b> , 9, 121107	5.7	1
159	Sustainable Fuel Production from Ambient Moisture via Ferroelectrically Driven MoS Nanosheets. <i>Advanced Materials</i> , <b>2020</b> , 32, e2000971	24	24
158	Plasmon-Enhanced Resonant Photoemission Using Atomically Thick Dielectric Coatings. <i>ACS Nano</i> , <b>2020</b> , 14, 8806-8815	16.7	12
157	Sustainable Fuel Production: Sustainable Fuel Production from Ambient Moisture via Ferroelectrically Driven MoS2 Nanosheets (Adv. Mater. 25/2020). <i>Advanced Materials</i> , <b>2020</b> , 32, 2070188 <sup>24</sup>		1

156	Heterophase fcc-2H-fcc gold nanorods. <i>Nature Communications</i> , <b>2020</b> , 11, 3293	17.4	41
155	Correlation of Dielectric Breakdown and Nanoscale Adhesion in Silicon Dioxide Thin Films <b>2020</b> ,		1
154	Particle simulation of plasmons. <i>Nanophotonics</i> , <b>2020</b> , 9, 3303-3313	6.3	4
153	Localized Probing of Dielectric Breakdown in Multilayer Hexagonal Boron Nitride. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 55000-55010	9.5	6
152	Growth of Nb-Doped Monolayer WS by Liquid-Phase Precursor Mixing. <i>ACS Nano</i> , <b>2019</b> , 13, 10768-10775	16.7	54
151	Modeling of Diffusion and Incorporation of Interstitial Oxygen Ions at the TiN/SiO Interface. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 36232-36243	9.5	4
150	An oxygen vacancy mediated Ag reduction and nucleation mechanism in SiO <sub>2</sub> RRAM devices. <i>Microelectronics Reliability</i> , <b>2019</b> , 98, 144-152	1.2	10
149	3D characterization of hard breakdown in RRAM device. <i>Microelectronic Engineering</i> , <b>2019</b> , 216, 111042	2.5	3
148	Boron Vacancies Causing Breakdown in 2D Layered Hexagonal Boron Nitride Dielectrics. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 1321-1324	4.4	12
147	Ultrasmall Designed Plasmon Resonators by Fused Colloidal Nanopatterning. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 45207-45213	9.5	1
146	Giant Photoinduced Chirality in Thin Film Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2019</b> , 13, 1900449	2.5	1
145	Dual phases of crystalline and electronic structures in the nanocrystalline perovskite CsPbBr <sub>3</sub> . <i>NPG Asia Materials</i> , <b>2019</b> , 11,	10.3	20
144	Atomic Scale Modulation of Self-Rectifying Resistive Switching by Interfacial Defects. <i>Advanced Science</i> , <b>2018</b> , 5, 1800096	13.6	24
143	Conductive Atomic Force Microscope Study of Bipolar and Threshold Resistive Switching in 2D Hexagonal Boron Nitride Films. <i>Scientific Reports</i> , <b>2018</b> , 8, 2854	4.9	38
142	Stochastic Modeling of FinFET Degradation Based on a Resistor Network Embedded Metropolis Monte Carlo Method. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 440-447	2.9	3
141	In Situ Kinetic and Thermodynamic Growth Control of Au-Pd Core-Shell Nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 11680-11685	16.4	45
140	Mechanism of soft and hard breakdown in hexagonal boron nitride 2D dielectrics <b>2018</b> ,		9
139	Interlayer interactions in 2D WS <sub>2</sub> /MoS <sub>2</sub> heterostructures monolithically grown by in situ physical vapor deposition. <i>Nanoscale</i> , <b>2018</b> , 10, 22927-22936	7.7	38

138	Photoactivity and Stability Co-Enhancement: When Localized Plasmons Meet Oxygen Vacancies in MgO. <i>Small</i> , <b>2018</b> , 14, e1803233	11	18
137	Theoretical Study of Ag Interactions in Amorphous Silica RRAM Devices <b>2018</b> ,		1
136	Molecular Coatings for Stabilizing Silver and Gold Nanocubes under Electron Beam Irradiation. <i>Langmuir</i> , <b>2017</b> , 33, 1189-1196	4	12
135	Textured V-Pit Green Light Emitting Diode as a Wavelength-Selective Photodetector for Fast Phosphor-Based White Light Modulation. <i>ACS Photonics</i> , <b>2017</b> , 4, 443-448	6.3	10
134	Intrinsic resistance switching in amorphous silicon oxide for high performance SiO <sub>x</sub> ReRAM devices. <i>Microelectronic Engineering</i> , <b>2017</b> , 178, 98-103	2.5	45
133	Intrinsic Resistance Switching in Amorphous Silicon Suboxides: The Role of Columnar Microstructure. <i>Scientific Reports</i> , <b>2017</b> , 7, 9274	4.9	31
132	Direct observation of the nanoscale Kirkendall effect during galvanic replacement reactions. <i>Nature Communications</i> , <b>2017</b> , 8, 1224	17.4	107
131	Multistep nucleation of nanocrystals in aqueous solution. <i>Nature Chemistry</i> , <b>2017</b> , 9, 77-82	17.6	218
130	Quantitative Nanoplasmonics in the TEM <b>2016</b> , 777-778		
129	Conductive filament formation at grain boundary locations in polycrystalline HfO <sub>2</sub> -based MIM stacks: Computational and physical insight. <i>Microelectronics Reliability</i> , <b>2016</b> , 64, 204-209	1.2	10
128	Charge transfer plasmon resonances across silver-molecule-silver junctions: estimating the terahertz conductance of molecules at near-infrared frequencies. <i>RSC Advances</i> , <b>2016</b> , 6, 70884-70894	3.7	14
127	Room temperature stable CO-free H <sub>2</sub> production from methanol with magnesium oxide nanophotocatalysts. <i>Science Advances</i> , <b>2016</b> , 2, e1501425	14.3	49
126	Compliance current dominates evolution of NiSi <sub>2</sub> defect size in Ni/dielectric/Si RRAM devices. <i>Microelectronics Reliability</i> , <b>2016</b> , 61, 71-77	1.2	11
125	An experimental and theoretical investigation of the anisotropic branching in gold nanocrosses. <i>Nanoscale</i> , <b>2016</b> , 8, 543-52	7.7	84
124	Real-Time Dynamics of Galvanic Replacement Reactions of Silver Nanocubes and Au Studied by Liquid-Cell Transmission Electron Microscopy. <i>ACS Nano</i> , <b>2016</b> , 10, 7689-95	16.7	51
123	Actively Tunable Visible Surface Plasmons in Bi <sub>2</sub> Te <sub>3</sub> and their Energy-Harvesting Applications. <i>Advanced Materials</i> , <b>2016</b> , 28, 3138-44	24	53
122	Nanoscale Transformations in Metastable, Amorphous, Silicon-Rich Silica. <i>Advanced Materials</i> , <b>2016</b> , 28, 7486-93	24	43
121	Highly Luminescent Heterostructured Copper-Doped Zinc Sulfide Nanocrystals for Application in Cancer Cell Labeling. <i>ChemPhysChem</i> , <b>2016</b> , 17, 2489-95	3.2	12

120	Multiphysics based 3D percolation framework model for multi-stage degradation and breakdown in high- $\kappa$ interfacial layer stacks <b>2016</b> ,		1
119	<b>2016</b> ,		2
118	Real-Time Imaging of the Formation of Au-Ag Core-Shell Nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 5190-3	16.4	41
117	Silica: Nanoscale Transformations in Metastable, Amorphous, Silicon-Rich Silica (Adv. Mater. 34/2016). <i>Advanced Materials</i> , <b>2016</b> , 28, 7549-7549	24	9
116	Understanding the switching mechanism in RRAM using in-situ TEM <b>2016</b> ,		5
115	CAFM based spectroscopy of stress-induced defects in HfO <sub>2</sub> with experimental evidence of the clustering model and metastable vacancy defect state <b>2016</b> ,		8
114	A plasmonic multi-logic gate platform based on sequence-specific binding of estrogen receptors and gold nanorods. <i>Nanoscale</i> , <b>2016</b> , 8, 19973-19977	7.7	14
113	Stabilization of 4H hexagonal phase in gold nanoribbons. <i>Nature Communications</i> , <b>2015</b> , 6, 7684	17.4	165
112	Statistics of retention failure in the low resistance state for hafnium oxide RRAM using a Kinetic Monte Carlo approach. <i>Microelectronics Reliability</i> , <b>2015</b> , 55, 1422-1426	1.2	10
111	Crystallization of Sputter-Deposited Amorphous (FeSi <sub>2</sub> ) <sub>1-x</sub> Al <sub>x</sub> Thin Films. <i>Crystal Growth and Design</i> , <b>2015</b> , 15, 1692-1696	3.5	9
110	Surface modification-induced phase transformation of hexagonal close-packed gold square sheets. <i>Nature Communications</i> , <b>2015</b> , 6, 6571	17.4	157
109	An SEM/STM based nanoprobng and TEM study of breakdown locations in HfO <sub>2</sub> /SiO <sub>x</sub> dielectric stacks for failure analysis. <i>Microelectronics Reliability</i> , <b>2015</b> , 55, 1450-1455	1.2	3
108	Spectroscopy of SILC trap locations and spatial correlation study of percolation path in the high- $\kappa$ and interfacial layer <b>2015</b> ,		2
107	Monte Carlo model of reset stochastics and failure rate estimation of read disturb mechanism in HfO <sub>x</sub> RRAM <b>2015</b> ,		3
106	Visible Surface Plasmon Modes in Single BiTe <sub>2</sub> Nanoplate. <i>Nano Letters</i> , <b>2015</b> , 15, 8331-5	11.5	57
105	Multimodal plasmonics in fused colloidal networks. <i>Nature Materials</i> , <b>2015</b> , 14, 87-94	27	48
104	Probabilistic insight to possibility of new metal filament nucleation during repeated cycling of conducting bridge memory. <i>Microelectronics Reliability</i> , <b>2015</b> , 55, 1412-1416	1.2	
103	Evolution of Filament Formation in Ni/HfO <sub>2</sub> /SiO <sub>x</sub> /Si-Based RRAM Devices. <i>Advanced Electronic Materials</i> , <b>2015</b> , 1, 1500130	6.4	27

102	Nanoplasmonics in the TEM. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 2219-2220	0.5	2
101	Fast Electrical Modulation in a Plasmonic-Enhanced, V-Pit-Textured, Light-Emitting Diode. <i>Advanced Optical Materials</i> , <b>2015</b> , 3, 1703-1709	8.1	12
100	Localized Random Telegraphic Noise Study in HfO <sub>2</sub> dielectric stacks using Scanning Tunneling Microscopy [Analysis of process and stress-induced traps <b>2015</b> ,		1
99	Encapsulated annealing: enhancing the plasmon quality factor in lithographically-defined nanostructures. <i>Scientific Reports</i> , <b>2014</b> , 4, 5537	4.9	81
98	Quantum plasmon resonances controlled by molecular tunnel junctions. <i>Science</i> , <b>2014</b> , 343, 1496-9	33.3	335
97	Au nanoparticle-modified MoS <sub>2</sub> nanosheet-based photoelectrochemical cells for water splitting. <i>Small</i> , <b>2014</b> , 10, 3537-43	11	234
96	Direct evidence of plasmon enhancement on photocatalytic hydrogen generation over Au/Pt-decorated TiO <sub>2</sub> nanofibers. <i>Nanoscale</i> , <b>2014</b> , 6, 5217-22	7.7	130
95	Assessment of read disturb immunity in conducting bridge memory devices [A thermodynamic perspective. <i>Microelectronics Reliability</i> , <b>2014</b> , 54, 2295-2299	1.2	
94	Variability model for forming process in oxygen vacancy modulated high- $\kappa$ -based resistive switching memory devices. <i>Microelectronics Reliability</i> , <b>2014</b> , 54, 2266-2271	1.2	3
93	Impact of local structural and electrical properties of grain boundaries in polycrystalline HfO <sub>2</sub> on reliability of SiO <sub>x</sub> interfacial layer. <i>Microelectronics Reliability</i> , <b>2014</b> , 54, 1712-1717	1.2	11
92	Impact of ionic drift and vacancy defect passivation on TDDDB statistics and lifetime enhancement of metal gate high- $\kappa$ stacks <b>2014</b> ,		1
91	Fabrication of suspended metal-dielectric-metal plasmonic nanostructures. <i>Nanotechnology</i> , <b>2014</b> , 25, 135303	3.4	14
90	Edge-Gold-Coated Silver Nanoprisms: Enhanced Stability and Applications in Organic Photovoltaics and Chemical Sensing. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 12459-12468	3.8	45
89	Water Splitting: Au Nanoparticle-Modified MoS <sub>2</sub> Nanosheet-Based Photoelectrochemical Cells for Water Splitting (Small 17/2014). <i>Small</i> , <b>2014</b> , 10, 3536-3536	11	2
88	Stochastic failure model for endurance degradation in vacancy modulated HfO <sub>x</sub> RRAM using the percolation cell framework <b>2014</b> ,		5
87	Leakage current and structural analysis of annealed HfO <sub>2</sub> /La <sub>2</sub> O <sub>3</sub> and CeO <sub>2</sub> /La <sub>2</sub> O <sub>3</sub> dielectric stacks: A nanoscopic study. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2014</b> , 32, 03D125	1.3	4
86	A circuit model for plasmonic resonators. <i>Optics Express</i> , <b>2014</b> , 22, 9809-19	3.3	38
85	Nucleation dynamics of water nanodroplets. <i>Microscopy and Microanalysis</i> , <b>2014</b> , 20, 407-15	0.5	14

84	An epitaxial ferroelectric tunnel junction on silicon. <i>Advanced Materials</i> , <b>2014</b> , 26, 7185-9	24	55
83	Spatial correlation of conductive filaments for multiple switching cycles in CBRAM <b>2014</b> ,		1
82	Synthesis of Spiky AgAu Octahedral Nanoparticles and Their Tunable Optical Properties. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 16640-16649	3.8	42
81	Multi-layered liposomes as optical resonators <b>2013</b> ,		1
80	Scrolling graphene into nanofluidic channels. <i>Lab on A Chip</i> , <b>2013</b> , 13, 2874-8	7.2	51
79	Electron-energy loss study of nonlocal effects in connected plasmonic nanoprisms. <i>ACS Nano</i> , <b>2013</b> , 7, 6287-96	16.7	49
78	Nanoscale phase domain structure and associated device performance of organic solar cells based on a diketopyrrolopyrrole polymer. <i>RSC Advances</i> , <b>2013</b> , 3, 20113	3.7	14
77	Study of preferential localized degradation and breakdown of HfO <sub>2</sub> /SiO <sub>x</sub> dielectric stacks at grain boundary sites of polycrystalline HfO <sub>2</sub> dielectrics. <i>Microelectronic Engineering</i> , <b>2013</b> , 109, 364-369	2.5	34
76	Impact of local variations in high-k dielectric on breakdown and recovery characteristics of advanced gate stacks <b>2013</b> ,		2
75	Feasibility of SILC Recovery in Sub-10-nm EOT Advanced Metal Gate High- $\kappa$ Stacks. <i>IEEE Electron Device Letters</i> , <b>2013</b> , 34, 1053-1055	4.4	6
74	Resilience of ultra-thin oxynitride films to percolative wear-out and reliability implications for high- $\kappa$ stacks at low voltage stress. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 094504	2.5	7
73	Intrinsic nanofilamentation in resistive switching. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 114503	2.5	64
72	Facile synthesis of luminescent AgInS <sub>2</sub> /ZnS solid solution nanorods. <i>Small</i> , <b>2013</b> , 9, 2689-95	11	29
71	Fowler-Nordheim tunneling induced charge transfer plasmons between nearly touching nanoparticles. <i>ACS Nano</i> , <b>2013</b> , 7, 707-16	16.7	103
70	Multiferroicity in manganite/titanate superlattices determined by oxygen pressure-mediated cation defects. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 164302	2.5	2
69	Surfactant-free sub-2 nm ultrathin triangular gold nanoframes. <i>Small</i> , <b>2013</b> , 9, 2880-6	11	62
68	The effect of high deposition energy of carbon overcoats on perpendicular magnetic recording media. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 161604	3.4	2
67	Surface plasmon damping quantified with an electron nanoprobe. <i>Scientific Reports</i> , <b>2013</b> , 3, 1312	4.9	116



66	Real-time analysis of ultra-thin gate dielectric breakdown and recovery - A reality <b>2013</b> ,		4
65	Silicon surface passivation by aluminium oxide studied with electron energy loss spectroscopy. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2013</b> , 7, 937-941	2.5	22
64	Percolative Model and Thermodynamic Analysis of Oxygen-Ion-Mediated Resistive Switching. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 712-714	4.4	17
63	Colloidal nanocrystals of wurtzite-type Cu <sub>2</sub> ZnSnS <sub>4</sub> : facile noninjection synthesis and formation mechanism. <i>Chemistry - A European Journal</i> , <b>2012</b> , 18, 3127-31	4.8	130
62	Gold Coating of Silver Nanoprisms. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 849-854	15.6	108
61	Role of grain boundary percolative defects and localized trap generation on the reliability statistics of high- $\kappa$ gate dielectric stacks <b>2012</b> ,		10
60	Spin-polarized wide electron slabs in functionally graded polar oxide heterostructures. <i>Scientific Reports</i> , <b>2012</b> , 2, 533	4.9	12
59	Subthreshold characteristics of ballistic electron emission spectra. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 013701	2.5	6
58	Nanoscale physical analysis of localized breakdown events in HfO <sub>2</sub> /SiO <sub>x</sub> dielectric stacks: A correlation study of STM induced BD with C-AFM and TEM <b>2012</b> ,		1
57	Light splitting in nanoporous gold and silver. <i>ACS Nano</i> , <b>2012</b> , 6, 319-26	16.7	41
56	Three-dimensional tubular arrays of MnO <sub>2</sub> /NiO nanoflakes with high areal pseudocapacitance. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 2419-2426		382
55	Synthesis of Silver Nanoparticles with Monovalently Functionalized Self-Assembled Monolayers. <i>Australian Journal of Chemistry</i> , <b>2012</b> , 65, 275	1.2	9
54	The electronic barrier height of silicon native oxides at different oxidation stages. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 054111	2.5	2
53	Triggering voltage for post-breakdown random telegraph noise in HfLaO dielectric metal gate metal-oxide-semiconductor field effect transistors and its reliability implications. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 024101	2.5	2
52	Study of charge distribution and charge loss in dual-layer metal-nanocrystal-embedded high- $\kappa$ SiO <sub>2</sub> gate stack. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 193109	3.4	1
51	Nanoplasmonics: classical down to the nanometer scale. <i>Nano Letters</i> , <b>2012</b> , 12, 1683-9	11.5	326
50	Interface and Surface Cation Stoichiometry Modified by Oxygen Vacancies in Epitaxial Manganite Films. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 4312-4321	15.6	54
49	Thermal conductivity of nanocrystalline carbon films studied by pulsed photothermal reflectance. <i>Carbon</i> , <b>2012</b> , 50, 1428-1431	10.4	14



48	Barrier height determination of Au/Oxidized GaAs/n-GaAs using ballistic electron emission spectroscopy. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , <b>2012</b> , 30, 011805	1.3	2
47	Effect of surface contamination on electron tunneling in the high bias range. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2012</b> , 30, 041402	2.9	3
46	Dielectric breakdown [Recovery in logic and resistive switching in memory] Bridging the gap between the two phenomena <b>2012</b> ,		2
45	High hardness BaCb-(BxOy/BN) composites with 3D mesh-like fine grain-boundary structure by reactive spark plasma sintering. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2012</b> , 12, 959-65	1.3	22
44	Nanopatterning with the Helium Ion Microscope. <i>Microscopy and Microanalysis</i> , <b>2012</b> , 18, 800-801	0.5	
43	One-pot synthesis of Cu <sub>1.94S</sub> -CdS and Cu <sub>1.94S</sub> -Zn(x)Cd(1-x)S nanodisk heterostructures. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 2052-5	16.4	95
42	Annular electron energy-loss spectroscopy in the scanning transmission electron microscope. <i>Ultramicroscopy</i> , <b>2011</b> , 111, 1540-6	3.1	2
41	. <i>IEEE Transactions on Electron Devices</i> , <b>2011</b> , 58, 74-79	2.9	10
40	Ternary cobalt-iron phosphide nanocrystals with controlled compositions, properties, and morphologies from nanorods and nanorice to split nanostructures. <i>Chemistry - A European Journal</i> , <b>2011</b> , 17, 5982-8	4.8	39
39	Modified Percolation Model for Polycrystalline High- $\kappa$ Gate Stack With Grain Boundary Defects. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 78-80	4.4	28
38	Electronic properties of ultrathin high- $\epsilon$ dielectrics studied by ballistic electron emission microscopy. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , <b>2011</b> , 29, 052201	1.3	3
37	Very Low Reset Current for an RRAM Device Achieved in the Oxygen-Vacancy-Controlled Regime. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 716-718	4.4	25
36	Filamentation Mechanism of Resistive Switching in Fully Silicided High- $\kappa$ Gate Stacks. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 455-457	4.4	12
35	Oxygen-Soluble Gate Electrodes for Prolonged High- $\kappa$ Gate-Stack Reliability. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 252-254	4.4	17
34	Field emission enhancement and microstructural changes of carbon films by single pulse laser irradiation. <i>Carbon</i> , <b>2011</b> , 49, 1018-1024	10.4	26
33	Plasma density induced formation of nanocrystals in physical vapor deposited carbon films. <i>Carbon</i> , <b>2011</b> , 49, 1733-1744	10.4	30
32	Physical analysis of breakdown in high- $\kappa$ metal gate stacks using TEM/EELS and STM for reliability enhancement (invited). <i>Microelectronic Engineering</i> , <b>2011</b> , 88, 1365-1372	2.5	16
31	Evidence for compliance controlled oxygen vacancy and metal filament based resistive switching mechanisms in RRAM. <i>Microelectronic Engineering</i> , <b>2011</b> , 88, 1124-1128	2.5	40

30	Using post-breakdown conduction study in a MIS structure to better understand the resistive switching mechanism in an MIM stack. <i>Nanotechnology</i> , <b>2011</b> , 22, 455702	3-4	12
29	Uncorrelated multiple conductive filament nucleation and rupture in ultra-thin high- $\kappa$ dielectric based resistive random access memory. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 093502	3-4	23
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8	Optimizing EELS acquisition. <i>Ultramicroscopy</i> , <b>2008</b> , 108, 837-46	3.1	60
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