

Sonia Estrade

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.

170 papers	4,336 citations	34 h-index	59 g-index
174 ext. papers	4,785 ext. citations	5.3 avg, IF	4.9 L-index

#	Paper	IF	Citations
170	Strategies for EELS Data Analysis. Introducing UMAP and HDBSCAN for Dimensionality Reduction and Clustering.. <i>Microscopy and Microanalysis</i> , 2022 , 28, 109-122	0.5	0
169	WhatEELS. A python-based interactive software solution for ELNES analysis combining clustering and NLLS. <i>Ultramicroscopy</i> , 2022 , 232, 113403	3.1	1
168	Direct Measurement of Oxygen Mass Transport at the Nanoscale. <i>Advanced Materials</i> , 2021 , 33, e2105624	24	2
167	Support vector machine for EELS oxidation state determination. <i>Ultramicroscopy</i> , 2021 , 221, 113190	3.1	2
166	Electron Tomography. <i>Springer Series in Materials Science</i> , 2021 , 257-283	0.9	
165	Mapping the Magnetic Coupling of Self-Assembled FeO Nanocubes by Electron Holography. <i>Materials</i> , 2021 , 14,	3.5	1
164	Tailoring the Transport Properties of Mesoporous Doped Cerium Oxide for Energy Applications. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 16451-16463	3.8	1
163	Direct Evidence of a Graded Magnetic Interface in Bimagnetic Core/Shell Nanoparticles Using Electron Magnetic Circular Dichroism (EMCD). <i>Nano Letters</i> , 2021 , 21, 6923-6930	11.5	2
162	Insights into interface and bulk defects in a high efficiency kesterite-based device. <i>Energy and Environmental Science</i> , 2021 , 14, 507-523	35.4	15
161	Fast-ADT: A fast and automated electron diffraction tomography setup for structure determination and refinement. <i>Ultramicroscopy</i> , 2020 , 211, 112951	3.1	18
160	Structural and Magnetic Implications of Transition Metal Migration within Octahedral Core/Shell Nanocrystals. <i>Chemistry of Materials</i> , 2020 , 32, 10435-10446	9.6	8
159	Reliable Characterization of Organic & Pharmaceutical Compounds with High Resolution Monochromated EEL Spectroscopy. <i>Polymers</i> , 2020 , 12,	4.5	2
158	Grain Boundaries: Engineering Transport in Manganites by Tuning Local Nonstoichiometry in Grain Boundaries (Adv. Mater. 4/2019). <i>Advanced Materials</i> , 2019 , 31, 1970026	24	2
157	Size-Controlled Si Nanocrystals Fabricated by Electron Beam Evaporation. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019 , 216, 1800619	1.6	1
156	Low-loss EELS methods. <i>Advances in Imaging and Electron Physics</i> , 2019 , 49-77	0.2	0
155	Precise Size Control of the Growth of FeO Nanocubes over a Wide Size Range Using a Rationally Designed One-Pot Synthesis. <i>ACS Nano</i> , 2019 , 13, 7716-7728	16.7	41
154	Low-Power, High-Performance, Non-volatile Inkjet-Printed HfO-Based Resistive Random Access Memory: From Device to Nanoscale Characterization. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 23659-23666	9.5	9

153	Er-doped Si-nc/SiO ₂ multilayer. <i>Advances in Imaging and Electron Physics</i> , 2019 , 159-173	0.2	
152	DFT modeling of wurtzite III-nitride ternary alloys. <i>Advances in Imaging and Electron Physics</i> , 2019 , 79-99	0.2	1
151	Shape Determination in Lithium-Ion Battery Cathode Materials Using Electron Diffraction-Assisted Electron Tomography. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1824-1825	0.5	
150	Multiple InGaN QW heterostructure. <i>Advances in Imaging and Electron Physics</i> , 2019 , 135-158	0.2	
149	Independent Tuning of Optical Transparency Window and Electrical Properties of Epitaxial SrVO ₃ Thin Films by Substrate Mismatch. <i>Advanced Functional Materials</i> , 2019 , 29, 1904238	15.6	15
148	Facile and Efficient Atomic Hydrogenation Enabled Black TiO ₂ with Enhanced Photo-Electrochemical Activity via a Favorably Low-Energy-Barrier Pathway. <i>Advanced Energy Materials</i> , 2019 , 9, 1900725	21.8	13
147	Zinc blende and wurtzite CoO polymorph nanoparticles: Rational synthesis and commensurate and incommensurate magnetic order. <i>Applied Materials Today</i> , 2019 , 16, 322-331	6.6	3
146	Si-NCs embedded in dielectric matrices. <i>Advances in Imaging and Electron Physics</i> , 2019 , 175-203	0.2	
145	AlN/GaN and InAlN/GaN DBRs. <i>Advances in Imaging and Electron Physics</i> , 2019 , 209, 101-133	0.2	
144	Sphericity and roundness computation for particles using the extreme vertices model. <i>Journal of Computational Science</i> , 2019 , 30, 28-40	3.4	33
143	Engineering Transport in Manganites by Tuning Local Nonstoichiometry in Grain Boundaries. <i>Advanced Materials</i> , 2019 , 31, e1805360	24	16
142	Metal Oxide Aerogels with Controlled Crystallinity and Faceting from the Epoxide-Driven Cross-Linking of Colloidal Nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 16041-16048	9.5	9
141	Effects of electric current on individual graphene oxide sheets combining in situ transmission electron microscopy and Raman spectroscopy. <i>Nanotechnology</i> , 2018 , 29, 285702	3.4	5
140	Effect of Si ₃ N ₄ -Mediated Inversion Layer on the Electroluminescence Properties of Silicon Nanocrystal Superlattices. <i>Advanced Electronic Materials</i> , 2018 , 4, 1700666	6.4	8
139	Neural-network-based depth-resolved multiscale structural optimization using density functional theory and electron diffraction data. <i>Physical Review B</i> , 2018 , 97,	3.3	6
138	Green Electroluminescence of Al/Tb/Al/SiO ₂ Devices Fabricated by Electron Beam Evaporation. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018 , 215, 1700451	1.6	1
137	Unveiling GaN Polytypism in Distributed GaN/InAlN Bragg Reflectors Through HRTEM Image Simulation. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018 , 215, 1800218	1.6	1
136	CuGaS ₂ and CuGaS ₂ /ZnS Porous Layers from Solution-Processed Nanocrystals. <i>Nanomaterials</i> , 2018 , 8,	5.4	7

135	Quasi-parallel precession diffraction: Alignment method for scanning transmission electron microscopes. <i>Ultramicroscopy</i> , 2018 , 193, 39-51	3.1	5
134	Clustering analysis strategies for electron energy loss spectroscopy (EELS). <i>Ultramicroscopy</i> , 2018 , 185, 42-48	3.1	13
133	Photoelectrochemically Active N-Adsorbing Ultrathin TiO ₂ Layers for Water-Splitting Applications Prepared by Pyrolysis of Oleic Acid on Iron Oxide Nanoparticle Surfaces under Nitrogen Environment. <i>Advanced Materials Interfaces</i> , 2018 , 6, 1801286	4.6	9
132	Voltage-Controlled ON-OFF Ferromagnetism at Room Temperature in a Single Metal Oxide Film. <i>ACS Nano</i> , 2018 , 12, 10291-10300	16.7	47
131	Gradual Transformation of Ag ₂ S to Au ₂ S Nanoparticles by Sequential Cation Exchange Reactions: Binary, Ternary, and Hybrid Compositions. <i>Chemistry of Materials</i> , 2018 , 30, 6893-6902	9.6	8
130	Atomic-Scale Determination of Cation Inversion in Spinel-Based Oxide Nanoparticles. <i>Nano Letters</i> , 2018 , 18, 5854-5861	11.5	13
129	Surface Chemistry and Nano-/Microstructure Engineering on Photocatalytic InS Nanocrystals. <i>Langmuir</i> , 2018 , 34, 6470-6479	4	12
128	Simulation of STEM-HAADF Image Contrast of Ruddlesden-Popper Faulted LaNiO ₃ Thin Films. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 9300-9304	3.8	13
127	Tuning Branching in Ceria Nanocrystals. <i>Chemistry of Materials</i> , 2017 , 29, 4418-4424	9.6	14
126	Seeded Growth Synthesis of AuBe ₃ O ₄ Heterostructured Nanocrystals: Rational Design and Mechanistic Insights. <i>Chemistry of Materials</i> , 2017 , 29, 4022-4035	9.6	53
125	The effect of Sb-surfactant on GaInP CuPt type ordering: assessment through dark field TEM and aberration corrected HAADF imaging. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 9806-9810	3.6	3
124	Evidence of a minority monoclinic LaNiO phase in lanthanum nickelate thin films. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 9137-9142	3.6	8
123	Dense nanostructured calcium phosphate coating on titanium by cold spray. <i>Journal of the European Ceramic Society</i> , 2017 , 37, 1747-1755	6	24
122	Assessing Oxygen Vacancies in Bismuth Oxide through EELS Measurements and DFT Simulations. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 24809-24815	3.8	15
121	High Electrocatalytic Response of a Mechanically Enhanced NbC Nanocomposite Electrode Toward Hydrogen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 30872-30879	9.5	25
120	Acetate-Induced Disassembly of Spherical Iron Oxide Nanoparticle Clusters into Monodispersed Core-Shell Structures upon Nanoemulsion Fusion. <i>Langmuir</i> , 2017 , 33, 10351-10365	4	13
119	Atomistic modelling and high resolution electron microscopy simulations of CeO ₂ nanoparticles. <i>Applied Physics Letters</i> , 2017 , 111, 223107	3.4	
118	Enhanced Photoelectrochemical Behavior of H-TiO Nanorods Hydrogenated by Controlled and Local Rapid Thermal Annealing. <i>Nanoscale Research Letters</i> , 2017 , 12, 336	5	11

117	Determination of Shape and Sphericity of Silicon Quantum Dots Imaged by EFTEM-Tomography. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2017 , 14, 1700216		2
116	Precession-assisted Quasi-Parallel Illumination STEM on three condenser lenses TEMs 2016 , 439-440		
115	Density Functional Theory Modeling of Low-Loss Electron Energy-Loss Spectroscopy in Wurtzite III-Nitride Ternary Alloys. <i>Microscopy and Microanalysis</i> , 2016 , 22, 706-16	0.5	6
114	Untangling Electrostatic and Strain Effects on the Polarization of Ferroelectric Superlattices. <i>Advanced Functional Materials</i> , 2016 , 26, 6446-6453	15.6	20
113	Galvanic Replacement onto Complex Metal-Oxide Nanoparticles: Impact of Water or Other Oxidizers in the Formation of either Fully Dense Onion-like or Multicomponent Hollow MnOx/FeOx Structures. <i>Chemistry of Materials</i> , 2016 , 28, 8025-8031	9.6	22
112	Structural and optical properties of Al-Tb/SiO ₂ multilayers fabricated by electron beam evaporation. <i>Journal of Applied Physics</i> , 2016 , 120, 135302	2.5	4
111	A New Alternative for Obtaining Nanocrystalline Bioactive Coatings: Study of Hydroxyapatite Deposition Mechanisms by Cold Gas Spraying. <i>Journal of the American Ceramic Society</i> , 2016 , 99, 1420-1428	3.8	23
110	Electron energy loss spectroscopy on semiconductor heterostructures for optoelectronics and photonics applications. <i>Journal of Microscopy</i> , 2016 , 262, 142-50	1.9	1
109	Tailoring Staircase-like Hysteresis Loops in Electrodeposited Trisegmented Magnetic Nanowires: a Strategy toward Minimization of Interwire Interactions. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 4109-17	9.5	17
108	Insights into Interfacial Changes and Photoelectrochemical Stability of In(x)Ga(1-x)N (0001) Photoanode Surfaces in Liquid Environments. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 8232-8	9.5	20
107	3D Visualization of the Iron Oxidation State in FeO/Fe ₃ O ₄ Core-Shell Nanocubes from Electron Energy Loss Tomography. <i>Nano Letters</i> , 2016 , 16, 5068-73	11.5	47
106	Luminescence properties of Ce ³⁺ and Tb ³⁺ co-doped SiO _x N _y thin films: Prospects for color tunability in silicon-based hosts. <i>Journal of Applied Physics</i> , 2016 , 119, 113108	2.5	14
105	Advances towards 4J lattice-matched including dilute nitride subcell for terrestrial and space applications 2016 ,		5
104	Synthesis and Thermoelectric Properties of Noble Metal Ternary Chalcogenide Systems of Ag _{1-x} Au _x Se in the Forms of Alloyed Nanoparticles and Colloidal Nanoheterostructures. <i>Chemistry of Materials</i> , 2016 , 28, 7017-7028	9.6	18
103	Electron energy-loss spectroscopic tomography of Fe _x Co(3-x)O ₄ impregnated Co ₃ O ₄ mesoporous particles: unraveling the chemical information in three dimensions. <i>Analyst, The</i> , 2016 , 141, 4968-72	5	2
102	Quantitative parameters for the examination of InGa _N QW multilayers by low-loss EELS. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 23264-76	3.6	4
101	Multiple strain-induced phase transitions in LaNiO ₃ thin films. <i>Physical Review B</i> , 2016 , 94,	3.3	38
100	Growth of Ca ₃ Co ₄ O ₉ + δ thin film on sapphire substrate and CGO dense pellet by pulsed laser deposition. Structural, microstructural, surface and electrochemical characterizations. <i>Solid State Ionics</i> , 2015 , 273, 13-17	3.3	5

99	Rare Earth-Ion/Nanosilicon Ultrathin Layer: A Versatile Nanohybrid Light-Emitting Building Block for Active Optical Metamaterials. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 11800-11808	3.8	3
98	Hantzsch dihydropyridines: Privileged structures for the formation of well-defined gold nanostars. <i>Journal of Colloid and Interface Science</i> , 2015 , 453, 260-269	9.3	15
97	High-temperature anion and proton conduction in RE ₃ NbO ₇ (RE = La, Gd, Y, Yb, Lu) compounds. <i>Journal of the European Ceramic Society</i> , 2015 , 35, 3051-3061	6	27
96	Lead-Free Bi ₂ WO ₆ Ferroelectric Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 24409-18	9.5	8
95	Growth, structure, luminescence and mechanical resonance of Bi ₂ O ₃ nano- and microwires. <i>CrystEngComm</i> , 2015 , 17, 132-139	3.3	11
94	On the use of Sb to improve the performance of GaInP subcells of multijunction solar cells 2015 ,		2
93	Origin of the large dispersion of magnetic properties in nanostructured oxides: Fe(x)O/Fe ₃ O ₄ nanoparticles as a case study. <i>Nanoscale</i> , 2015 , 7, 3002-15	7.7	63
92	High-temperature long-term stable ordered mesoporous electrodes for IT-SOFC. <i>Ceramic Engineering and Science Proceedings</i> , 2015 , 111-116	0.1	
91	Au-Assisted Growth of Anisotropic and Epitaxial CdSe Colloidal Nanocrystals via in Situ Dismantling of Quantum Dots. <i>Chemistry of Materials</i> , 2015 , 27, 1656-1664	9.6	6
90	Amorphous sub-nanometre Tb-doped SiO(x)N(y)/SiO ₂ superlattices for optoelectronics. <i>Nanotechnology</i> , 2015 , 26, 085203	3.4	10
89	Oxide Wizard: an EELS application to characterize the white lines of transition metal edges. <i>Microscopy and Microanalysis</i> , 2014 , 20, 698-705	0.5	35
88	Retrieving the electronic properties of silicon nanocrystals embedded in a dielectric matrix by low-loss EELS. <i>Nanoscale</i> , 2014 , 6, 14971-83	7.7	14
87	Absence of quantum confinement effects in the photoluminescence of Si ₃ N ₄ embedded Si nanocrystals. <i>Journal of Applied Physics</i> , 2014 , 115, 204301	2.5	36
86	EELS tomography in multiferroic nanocomposites: from spectrum images to the spectrum volume. <i>Nanoscale</i> , 2014 , 6, 6646-50	7.7	9
85	Direct evidence for an interdiffused intermediate layer in bi-magnetic core-shell nanoparticles. <i>Nanoscale</i> , 2014 , 6, 11911-20	7.7	39
84	Determining the crystalline degree of silicon nanoclusters/SiO ₂ multilayers by Raman scattering. <i>Journal of Applied Physics</i> , 2014 , 115, 203504	2.5	36
83	High-surface-area ordered mesoporous oxides for continuous operation in high temperature energy applications. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 3134	13	17
82	A new approach for the characterization of proliferative cells in cestodes. <i>Experimental Parasitology</i> , 2014 , 138, 25-9	2.1	1

81	Band engineered epitaxial 3D GaN-InGaN core-shell rod arrays as an advanced photoanode for visible-light-driven water splitting. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 2235-40	9.5	61
80	Silicon nanocrystals in carbide matrix. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 128, 138-149	6.4	33
79	Precycled electron beam electron energy loss spectroscopy of graphene: Beyond channelling effects. <i>Applied Physics Letters</i> , 2014 , 105, 053117	3.4	2
78	Annealing temperature and barrier thickness effect on the structural and optical properties of silicon nanocrystals/SiO ₂ superlattices. <i>Journal of Applied Physics</i> , 2014 , 116, 133505	2.5	22
77	Silicon nanocrystals in SiN _x /SiO ₂ hetero-superlattices: The loss of size control after thermal annealing. <i>Journal of Applied Physics</i> , 2014 , 115, 244304	2.5	15
76	Influence of the particle morphology on the Cold Gas Spray deposition behaviour of titanium on aluminum light alloys. <i>Journal of Alloys and Compounds</i> , 2013 , 554, 89-96	5.7	32
75	High-temperature long-term stable ordered mesoporous NiO/GO as an anode for solid oxide fuel cells. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 4531	13	26
74	Structural investigation of strontium titanate nanoparticles and the core-shell model. <i>Physical Review B</i> , 2013 , 87,	3.3	12
73	Structural and compositional properties of Er-doped silicon nanoclusters/oxides for multilayered photonic devices studied by STEM-EELS. <i>Nanoscale</i> , 2013 , 5, 9963-70	7.7	3
72	Tetravalent manganese ferrihydrite: a novel nanoadsorbent equally selective for As(III) and As(V) removal from drinking water. <i>Environmental Science & Technology</i> , 2013 , 47, 9699-705	10.3	72
71	Orientation and phase mapping in the transmission electron microscope using precession-assisted diffraction spot recognition: state-of-the-art results. <i>Journal of Microscopy</i> , 2013 , 252, 23-34	1.9	102
70	Structural, optical and electrical properties of silicon nanocrystals embedded in SiC _{1-x} /SiC multilayer systems for photovoltaic applications. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2013 , 178, 639-644	3.1	18
69	Robust antiferromagnetic coupling in hard-soft bi-magnetic core/shell nanoparticles. <i>Nature Communications</i> , 2013 , 4, 2960	17.4	132
68	Ti diffusion in (001) SrTiO ₃ -CoFe ₂ O ₄ epitaxial heterostructures: blocking role of a MgAl ₂ O ₄ buffer. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 18274-80	3.6	11
67	Resolving material-specific structures within Fe ₃ O ₄ /MnO ₂ core/shell nanoparticles using anomalous small-angle X-ray scattering. <i>ACS Nano</i> , 2013 , 7, 921-31	16.7	35
66	Boron doping of silicon rich carbides: Electrical properties. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2013 , 178, 551-558	3.1	16
65	Learning from nature to improve the heat generation of iron-oxide nanoparticles for magnetic hyperthermia applications. <i>Scientific Reports</i> , 2013 , 3, 1652	4.9	369
64	Synthesis, Characterization, and Humidity Detection Properties of Nb ₂ O ₅ Nanorods and SnO ₂ /Nb ₂ O ₅ Heterostructures. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 10086-10094	3.8	34

63	Controlled 3D-coating of the pores of highly ordered mesoporous antiferromagnetic Co ₃ O ₄ replicas with ferrimagnetic Fe(x)Co(3-x)O ₄ nanolayers. <i>Nanoscale</i> , 2013 , 5, 5561-7	7.7	12
62	Tailoring the surface density of silicon nanocrystals embedded in SiO _x single layers. <i>Journal of Applied Physics</i> , 2013 , 114, 233101	2.5	8
61	Insight into the compositional and structural nano features of AlN/GaN DBRs by EELS-HAADF. <i>Microscopy and Microanalysis</i> , 2013 , 19, 698-705	0.5	10
60	Local Structure of Rare Earth Niobates (RE ₃ NbO ₇ , RE = Y, Er, Yb, Lu) for Proton Conduction Applications?. <i>Fuel Cells</i> , 2013 , 13, 29-33	2.9	22
59	Structural and optical properties of size controlled Si nanocrystals in Si ₃ N ₄ matrix: The nature of photoluminescence peak shift. <i>Journal of Applied Physics</i> , 2013 , 114, 184311	2.5	26
58	ORDERED GaN/InGaN NANORODS ARRAYS GROWN BY MOLECULAR BEAM EPITAXY FOR PHOSPHOR-FREE WHITE LIGHT EMISSION. <i>Selected Topics in Electronics and Systems</i> , 2013 , 109-132	0	
57	Distinguishing the core from the shell in MnO(x)/MnO(y) and FeO(x)/MnO(x) core/shell nanoparticles through quantitative electron energy loss spectroscopy (EELS) analysis. <i>Micron</i> , 2012 , 43, 30-6	2.3	33
56	Assessment of misorientation in metallic and semiconducting nanowires using precession electron diffraction. <i>Micron</i> , 2012 , 43, 910-5	2.3	8
55	EEL spectroscopic tomography: towards a new dimension in nanomaterials analysis. <i>Ultramicroscopy</i> , 2012 , 122, 12-8	3.1	32
54	Heteroepitaxial growth of MgO(111) thin films on Al ₂ O ₃ (0001): Evidence of a wurtzite to rocksalt transformation. <i>Physical Review B</i> , 2012 , 86,	3.3	12
53	EELS signal enhancement by means of beam precession in the TEM. <i>Ultramicroscopy</i> , 2012 , 116, 135-137	3.1	3
52	Selective area growth of a- and c-plane GaN nanocolumns by molecular beam epitaxy using colloidal nanolithography. <i>Journal of Crystal Growth</i> , 2012 , 353, 1-4	1.6	41
51	Surface Reactivity of Iron Oxide Nanoparticles by Microwave-Assisted Synthesis; Comparison with the Thermal Decomposition Route. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 15108-15116	3.8	77
50	Strongly exchange coupled inverse ferrimagnetic soft/hard, Mn(x)Fe(3-x)O ₄ /Fe(x)Mn(3-x)O ₄ , core/shell heterostructured nanoparticles. <i>Nanoscale</i> , 2012 , 4, 5138-47	7.7	66
49	Limit to the erbium ions emission in silicon-rich oxide films by erbium ion clustering. <i>Optical Materials Express</i> , 2012 , 2, 1278	2.6	21
48	ORDERED GaN/InGaN NANORODS ARRAYS GROWN BY MOLECULAR BEAM EPITAXY FOR PHOSPHOR-FREE WHITE LIGHT EMISSION. <i>International Journal of High Speed Electronics and Systems</i> , 2012 , 21, 1250010	0.5	7
47	Optoelectronic properties of InAlN/GaN distributed bragg reflector heterostructure examined by valence electron energy loss spectroscopy. <i>Microscopy and Microanalysis</i> , 2012 , 18, 1143-54	0.5	19
46	Effect of the capping on the local Mn oxidation state in buried (001) and (110) SrTiO ₃ /La ₂ /3Ca ₁ /3MnO ₃ interfaces. <i>Journal of Applied Physics</i> , 2011 , 110, 103903	2.5	6

45	Distinct magnetism in ultrathin epitaxial NiFe ₂ O ₄ films on MgAl ₂ O ₄ and SrTiO ₃ single crystalline substrates. <i>Physical Review B</i> , 2011 , 84,	3.3	19
44	Structural and optical characterization of size controlled silicon nanocrystals in SiO ₂ /SiO _x Ny multilayers. <i>Energy Procedia</i> , 2011 , 10, 43-48	2.3	13
43	Blue-green to near-IR switching electroluminescence from Si-rich silicon oxide/nitride bilayer structures. <i>Optics Letters</i> , 2011 , 36, 2617-9	3	9
42	(V)EELS Characterization of InAlN/GaN Distributed Bragg Reflectors. <i>Journal of Physics: Conference Series</i> , 2011 , 326, 012014	0.3	1
41	Formation of size-controlled silicon nanocrystals in plasma enhanced chemical vapor deposition grown SiO _x Ny/SiO ₂ superlattices. <i>Thin Solid Films</i> , 2011 , 520, 121-125	2.2	102
40	A new approach for 3D reconstruction from bright field TEM imaging: beam precession assisted electron tomography. <i>Ultramicroscopy</i> , 2011 , 111, 1504-11	3.1	29
39	Ultraviolet Raman scattering in ZnO nanowires: quasimode mixing and temperature effects. <i>Journal of Raman Spectroscopy</i> , 2011 , 42, 153-159	2.3	18
38	Substrate effects on the structural and photoresponse properties of CVD grown ZnO nanostructures: alumina vs. silica. <i>CrystEngComm</i> , 2011 , 13, 656-662	3.3	7
37	Synthesis and Magnetic Characterization of Coaxial Ge _{1-x} Mnx/a-Si Heterostructures. <i>Crystal Growth and Design</i> , 2011 , 11, 5253-5259	3.5	4
36	High quality InAlN single layers lattice-matched to GaN grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , 2011 , 99, 031103	3.4	25
35	Effectiveness of nitrogen incorporation to enhance the photoelectrochemical activity of nanostructured TiO ₂ :NH ₃ versus H ₂ -N ₂ annealing. <i>Nanotechnology</i> , 2011 , 22, 235403	3.4	19
34	Ferromagnetism in transparent thin films of MgO. <i>Physical Review B</i> , 2010 , 82,	3.3	84
33	Long-range order of Ni ²⁺ and Mn ⁴⁺ and ferromagnetism in multiferroic (Bi _{0.9} La _{0.1}) ₂ NiMnO ₆ thin films. <i>Journal of Applied Physics</i> , 2010 , 108, 123907	2.5	14
32	InAlN/GaN Bragg reflectors grown by plasma-assisted molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2010 , 108, 113117	2.5	18
31	Selectable spontaneous polarization direction and magnetic anisotropy in BiFeO ₃ -CoFe ₂ O ₄ epitaxial nanostructures. <i>ACS Nano</i> , 2010 , 4, 4955-61	16.7	81
30	Size-dependent passivation shell and magnetic properties in antiferromagnetic/ferrimagnetic core/shell MnO nanoparticles. <i>Journal of the American Chemical Society</i> , 2010 , 132, 9398-407	16.4	100
29	Epitaxial Integration of La _{2/3} Sr _{1/3} MnO ₃ and Fe Films by the Use of a MgO Spacer. <i>Crystal Growth and Design</i> , 2010 , 10, 1017-1020	3.5	12
28	Defect Formation in Ga-Catalyzed Silicon Nanowires. <i>Crystal Growth and Design</i> , 2010 , 10, 1534-1543	3.5	42

27	Growth study of indium-catalyzed silicon nanowires by plasma enhanced chemical vapor deposition. <i>Applied Physics A: Materials Science and Processing</i> , 2010 , 100, 287-296	2.6	46
26	Growth and magnetic characterization of Co nanoparticles obtained by femtosecond pulsed laser deposition. <i>Physical Review B</i> , 2009 , 79,	3.3	14
25	Gallium assisted plasma enhanced chemical vapor deposition of silicon nanowires. <i>Nanotechnology</i> , 2009 , 20, 155602	3.4	58
24	Single crystalline and core-shell indium-catalyzed germanium nanowires-a systematic thermal CVD growth study. <i>Nanotechnology</i> , 2009 , 20, 245608	3.4	24
23	History of cesarean before 32 weeksPgestation and trial of labor: what is the risk of uterine rupture?. <i>Acta Obstetricia Et Gynecologica Scandinavica</i> , 2009 , 88, 149-53	3.8	3
22	Studies on Surface Facets and Chemical Composition of Vapor Grown One-Dimensional Magnetite Nanostructures. <i>Crystal Growth and Design</i> , 2009 , 9, 1077-1081	3.5	33
21	Triple-twin domains in Mg doped GaN wurtzite nanowires: structural and electronic properties of this zinc-blende-like stacking. <i>Nanotechnology</i> , 2009 , 20, 145704	3.4	80
20	Structural and optical properties of high quality zinc-blende/wurtzite GaAs nanowire heterostructures. <i>Physical Review B</i> , 2009 , 80,	3.3	399
19	Effects of thickness on the cation segregation in epitaxial (001) and (110) La _{2/3} Ca _{1/3} MnO ₃ thin films. <i>Applied Physics Letters</i> , 2009 , 95, 072507	3.4	39
18	Nucleation and growth of GaN nanorods on Si (111) surfaces by plasma-assisted molecular beam epitaxy - The influence of Si- and Mg-doping. <i>Journal of Applied Physics</i> , 2008 , 104, 034309	2.5	127
17	Influence of the (111) twinning on the formation of diamond cubic/diamond hexagonal heterostructures in Cu-catalyzed Si nanowires. <i>Journal of Applied Physics</i> , 2008 , 104, 064312	2.5	77
16	Cationic and charge segregation in La _{2/3} Ca _{1/3} MnO ₃ thin films grown on (001) and (110) SrTiO ₃ . <i>Applied Physics Letters</i> , 2008 , 93, 112505	3.4	35
15	Effects of SrTiO ₃ capping in La _{2/3} Ca _{1/3} MnO ₃ electrodes of different orientations. <i>Journal of Applied Physics</i> , 2008 , 103, 07E302	2.5	5
14	Transport properties across the La _{2/3} Ca _{1/3} MnO ₃ /SrTiO ₃ heterointerface. <i>Journal of Applied Physics</i> , 2008 , 103, 07E303	2.5	2
13	Gadolinium doped Ceria nanocrystals synthesized from mesoporous silica. <i>Journal of Nanoparticle Research</i> , 2008 , 10, 369-375	2.3	18
12	Electronic effects in manganite/insulator interfaces: interfacial enhancement of the insulating tunneling barriers. <i>Small</i> , 2008 , 4, 365-71	1.1	9
11	A Versatile and Low-Toxicity Route for the Production of Electroceramic Oxide Nanopowders. <i>European Journal of Inorganic Chemistry</i> , 2008 , 2008, 954-960	2.3	
10	Anisotropic strain relaxation in (110) La _{2/3} Ca _{1/3} MnO ₃ thin films 2008 , 643-644		

- 9 Dissimilar cation migration in (001) and (110) $\text{La}_{2/3}\text{Ca}_{1/3}\text{MnO}_3$ thin films **2008**, 373-374
- 8 $\text{GdBaCo}_2\text{O}_{5+x}$ layered perovskite as an intermediate temperature solid oxide fuel cell cathode. *Journal of Power Sources*, **2007**, 174, 255-263 8.9 120
- 7 Epitaxial growth of biferroic $\text{YMnO}_3(0\ 0\ 0\ 1)$ on platinum electrodes. *Journal of Crystal Growth*, **2007**, 299, 288-294 1.6 14
- 6 Strain-induced stabilization of new magnetic spinel structures in epitaxial oxide heterostructures. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2007**, 144, 43-48 3.1 30
- 5 Cationic diffusion in $\text{La}_{2/3}\text{Ca}_{1/3}\text{MnO}_3$ thin films grown on LaAlO_3 (001) substrates. *Applied Physics Letters*, **2007**, 91, 252503 3.4 15
- 4 Structural and functional characterization of (110)-oriented epitaxial $\text{La}_{2/3}\text{Ca}_{1/3}\text{MnO}_3$ electrodes and SrTiO_3 tunnel barriers. *Journal of Applied Physics*, **2007**, 101, 093902 2.5 13
- 3 Elastic and orbital effects on thickness-dependent properties of manganite thin films. *Physical Review B*, **2007**, 76, 3.3 87
- 2 Perpendicular magnetic anisotropy in chemically disordered $\text{FePd}_{1-x}\text{V}_x(100)$ alloy thin films. *Journal of Applied Physics*, **2006**, 99, 073903 2.5 3
- 1 Poster: Electronic Structure, Lattice Dynamics, and Transport 471-522