Gianluigi A Botton

List of Publications by Year
in descending order

347 papers	26,936 citations	18436 62 h-index	6454 157 g-index
370 all docs	370 docs citations	370 times ranked	33145 citing authors

#	Article	IF	Citations
1	Electron-energy-loss spectra and the structural stability of nickel oxide:â€‚â€‚An LSDA+U study. Physical Review B, 1998, 57, 1505-1509.	1.1	10,657
2	Platinum single-atom and cluster catalysis of the hydrogen evolution reaction. Nature Communications, 2016, 7, 13638.	5.8	1,521
3	Single-atom Catalysis Using Pt/Graphene Achieved through Atomic Layer Deposition. Scientific Reports, 2013, 3, .	1.6	719
4	Size-Selected Synthesis of PtRu Nano-Catalysts:â€‰ Reaction and Size Control Mechanism. Journal of the American Chemical Society, 2004, 126, 8028-8037.	6.6	672
5	Polymerization from the Surface of Single-Walled Carbon Nanotubes â^' Preparation and Characterization of Nanocomposites. Journal of the American Chemical Society, 2003, 125, 16015-16024.	6.6	462
6	Nanocrystalline intermetallics on mesoporous carbon for direct formic acid fuel cell anodes. Nature Chemistry, 2010, 2, 286-293.	6.6	448
7	Atomic layer deposited Pt-Ru dual-metal dimers and identifying their active sites for hydrogen evolution reaction. Nature Communications, 2019, 10, 4936.	5.8	371
8	Comparison of Single Crystal and Polycrystalline LiNi_{0.5}Mn_{0.3}Co_{0.2}O₂Positive Electrode Materials for High Voltage Li-Ion Cells. Journal of the Electrochemical Society, 2017, 164, A1534-A1544.	1.3	280
9	p-Type Modulation Doped InGaN/GaN Dot-in-a-Wire White-Light-Emitting Diodes Monolithically Grown on Si(111). Nano Letters, 2011, 11, 1919-1924.	4.5	255
10	Multipolar Plasmonic Resonances in Silver Nanowire Antennas Imaged with a Subnanometer Electron Probe. Nano Letters, 2011, 11, 1499-1504.	4.5	240
11	Electronic Structure and Elastic Properties of Strongly Correlated Metal Oxides from First Principles: LSDA + U, SIC-LSDA and EELS Study of UO2 and NiO. Physica Status Solidi A, 1998, 166, 429-443.	1.7	203
12	Controlling Electron Overflow in Phosphor-Free InGaN/GaN Nanowire White Light-Emitting Diodes. Nano Letters, 2012, 12, 1317-1323.	4.5	178
13	A Model for the Ultrastructure of Bone Based on Electron Microscopy of Ion-Milled Sections. PLoS ONE, 2012, 7, e29258.	1.1	171
14	The role of vacancies and defects in Na0.44MnO2 nanowire catalysts for lithiumâ€“oxygen batteries. Energy and Environmental Science, 2012, 5, 9558.	15.6	169
15	The Impact of Electrolyte Additives and Upper Cut-off Voltage on the Formation of a Rocksalt Surface Layer in LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂Electrodes. Journal of the Electrochemical Society, 2017, 164, A655-A665.	1.3	161
16	Copper adparticle enabled selective electrosynthesis of n-propanol. Nature Communications, 2018, 9, 4614.	5.8	153
17	Full-Color Single Nanowire Pixels for Projection Displays. Nano Letters, 2016, 16, 4608-4615.	4.5	151
18	Mixed-quantum-dot solar cells. Nature Communications, 2017, 8, 1325.	5.8	148

#	Article	IF	Citations
19	Materials science applications of HREELS in near edge structure analysis and low-energy loss spectroscopy. Ultramicroscopy, 2003, 96, 535-546.	0.8	145
20	Controlled orientation of liquid-crystalline polythiophene semiconductors for high-performance organic thin-film transistors. Applied Physics Letters, 2005, 86, 142102.	1.5	130
21	Plasmonic Response of Bent Silver Nanowires for Nanophotonic Subwavelength Waveguiding. Physical Review Letters, 2013, 110, 066801.	2.9	127
22	Enhanced and tunable surface plasmons in two-dimensional<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ti</mml:mi><mml:mn>3</mml:mn></mml:m mathvariant="normal">C</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>stacks: Electronic structure versus boundary effects. Physical Review B, 2014, 89, .	1.1	122
23	Elucidating the Nature of the Active Phase in Copper/Ceria Catalysts for CO Oxidation. ACS Catalysis, 2016, 6, 1675-1679.	5.5	122
24	Chemical Structure of Nitrogen-Doped Graphene with Single Platinum Atoms and Atomic Clusters as a Platform for the PEMFC Electrode. Journal of Physical Chemistry C, 2014, 118, 3890-3900.	1.5	121
25	Soluble, Discrete Supramolecular Complexes of Single-Walled Carbon Nanotubes with Fluorene-Based Conjugated Polymers. Macromolecules, 2008, 41, 2304-2308.	2.2	120
26	Nanoscale Manipulation of Spinel Lithium Nickel Manganese Oxide Surface by Multisite Ti Occupation as Highâ€Performance Cathode. Advanced Materials, 2017, 29, 1703764.	11.1	119
27	Synthesis of Single Crystal LiNi_{0.88}Co_{0.09}Al_{0.03}O₂Âwith a Two-Step Lithiation Method. Journal of the Electrochemical Society, 2019, 166, A1956-A1963.	1.3	117
28	Encapsulation of Conjugated Oligomers in Singleâ€Walled Carbon Nanotubes: Towards Nanohybrids for Photonic Devices. Advanced Materials, 2010, 22, 1635-1639.	11.1	112
29	Engineering the Low Coordinated Pt Single Atom to Achieve the Superior Electrocatalytic Performance toward Oxygen Reduction. Small, 2020, 16, e2003096.	5.2	110
30	Electronic structure of possible 3d `heavy-fermion' compound. Journal of Physics Condensed Matter, 1998, 10, L119-L126.	0.7	108
31	Ptâ€“Auâ€“Co Alloy Electrocatalysts Demonstrating Enhanced Activity and Durability toward the Oxygen Reduction Reaction. ACS Catalysis, 2015, 5, 1513-1524.	5.5	106
32	Pt/Pd Single-Atom Alloys as Highly Active Electrochemical Catalysts and the Origin of Enhanced Activity. ACS Catalysis, 2019, 9, 9350-9358.	5.5	106
33	Chemical and biological integration of a mouldable bioactive ceramic material capable of forming apatite in vivo in teeth. Biomaterials, 2004, 25, 2781-2787.	5.7	105
34	Tunable Syngas Production from CO₂ and H₂O in an Aqueous Photoelectrochemical Cell. Angewandte Chemie - International Edition, 2016, 55, 14262-14266.	7.2	105
35	In Situ Liquid Cell TEM Study of Morphological Evolution and Degradation of Ptâ€“Fe Nanocatalysts During Potential Cycling. Journal of Physical Chemistry C, 2014, 118, 22111-22119.	1.5	103
36	Bonding and structure of a reconstructed (001) surface of SrTiO3 from TEM. Nature, 2012, 490, 384-387.	13.7	102

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37	Mapping Bright and Dark Modes in Gold Nanoparticle Chains using Electron Energy Loss Spectroscopy.. Nano Letters, 2014, 14, 3799-3808.	4.5	100
38	High Efficiency Solar-to-Hydrogen Conversion on a Monolithically Integrated InGaN/GaN/Si Adaptive Tunnel Junction Photocathode. Nano Letters, 2015, 15, 2721-2726.	4.5	98
39	Can magneto-plasmonic nanohybrids efficiently combine photothermia with magnetic hyperthermia?. Nanoscale, 2015, 7, 18872-18877.	2.8	97
40	Strained Lattice with Persistent Atomic Order in Pt₃Fe₂ Intermetallic Coreâ€“Shell Nanocatalysts. ACS Nano, 2013, 7, 6103-6110.	7.3	95
41	Engineering the Carrier Dynamics of InGaN Nanowire White Light-Emitting Diodes by Distributed p-AlGaN Electron Blocking Layers. Scientific Reports, 2015, 5, 7744.	1.6	93
42	Highly efficient binary copperâ"iron catalyst for photoelectrochemical carbon dioxide reduction toward methane. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1330-1338.	3.3	93
43	Intracellular Biodegradation of Ag Nanoparticles, Storage in Ferritin, and Protection by a Au Shell for Enhanced Photothermal Therapy. ACS Nano, 2018, 12, 6523-6535.	7.3	91
44	High-resolution EELS study of the vacancy-doped metal/insulator system, Nd1â"xTiO3, to 0.33.. Journal of Solid State Chemistry, 2005, 178, 1008-1016.	1.4	90
45	Controlled Coalescence of AlGaN Nanowire Arrays: An Architecture for Nearly Dislocationâ€Free Planar Ultraviolet Photonic Device Applications. Advanced Materials, 2016, 28, 8446-8454.	11.1	90
46	Experimental and theoretical study of the electronic structure of Fe, Co, and Ni aluminides with theB2 structure. Physical Review B, 1996, 54, 1682-1691.	1.1	89
47	Synthesis of Metal Alloy Nanoparticles in Solution by Laser Irradiation of a Metal Powder Suspension. Journal of Physical Chemistry B, 2003, 107, 6920-6923.	1.2	87
48	Elemental mapping at the atomic scale using low accelerating voltages. Ultramicroscopy, 2010, 110, 926-934.	0.8	87
49	Microscopic Studies on Liquid Crystal Poly(3,3â€Ââ€â€-dialkylquaterthiophene) Semiconductor. Macromolecules, 2004, 37, 8307-8312.	2.2	86
50	Dark-field transmission electron microscopy of cortical bone reveals details of extrafibrillar crystals. Journal of Structural Biology, 2014, 188, 240-248.	1.3	86
51	High Efficiency Si Photocathode Protected by Multifunctional GaN Nanostructures. Nano Letters, 2018, 18, 6530-6537.	4.5	83
52	Intergranular fracture in irradiated Inconel X-750 containing very high concentrations of helium and hydrogen. Journal of Nuclear Materials, 2015, 457, 165-172.	1.3	81
53	Three-Dimensional Quantum Confinement of Charge Carriers in Self-Organized AlGaN Nanowires: A Viable Route to Electrically Injected Deep Ultraviolet Lasers. Nano Letters, 2015, 15, 7801-7807.	4.5	80
54	AlN/h-BN Heterostructures for Mg Dopant-Free Deep Ultraviolet Photonics. Nano Letters, 2017, 17, 3738-3743.	4.5	78

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55	Quantification of the EELS nearâ€edge structures to study Mn doping in oxides. Journal of Microscopy, 1995, 180, 211-216.	0.8	75
56	A GaN:Sn nanoarchitecture integrated on a silicon platform for converting CO₂ to HCOOH by photoelectrocatalysis. Energy and Environmental Science, 2019, 12, 2842-2848.	15.6	75
57	The role of aluminum distribution on the local corrosion resistance of the microstructure in a sand-cast AM50 alloy. Corrosion Science, 2013, 77, 151-163.	3.0	74
58	Silver Nanorice Structures: Oriented Attachment-Dominated Growth, High Environmental Sensitivity, and Real-Space Visualization of Multipolar Resonances. Chemistry of Materials, 2012, 24, 2339-2346.	3.2	71
59	Equilibrium and stability of phase-separating Auâ€“Pt nanoparticles. Acta Materialia, 2008, 56, 5972-5983.	3.8	69
60	Cobalt-Free Nickel-Rich Positive Electrode Materials with a Coreâ€“Shell Structure. Chemistry of Materials, 2019, 31, 10150-10160.	3.2	69
61	Ternary Snâ€Tiâ€O Electrocatalyst Boosts the Stability and Energy Efficiency of CO₂ Reduction. Angewandte Chemie - International Edition, 2020, 59, 12860-12867.	7.2	68
62	Quantitative Evaluation of Radiation Damage to Polyethylene Terephthalate by Soft X-rays and High-energy Electrons. Journal of Physical Chemistry B, 2009, 113, 1869-1876.	1.2	66
63	High-resolution observations of an amorphous layer and subsurface damage formed by femtosecond laser irradiation of silicon. Journal of Applied Physics, 2008, 103, .	1.1	63
64	Unassisted solar water splitting with 9.8% efficiency and over 100 h stability based on Si solar cells and photoelectrodes catalyzed by bifunctional Niâ€“Mo/Ni. Journal of Materials Chemistry A, 2019, 7, 2200-2209.	5.2	63
65	Towards calibration-invariant spectroscopy using deep learning. Scientific Reports, 2019, 9, 2126.	1.6	63
66	Selective Electrooxidation of Glycerol to Formic Acid over Carbon Supported Ni_{1â€“x}M_x(M = Bi, Pd, and Au) Nanocatalysts and Coelectrolysis of CO₂. ACS Applied Energy Materials, 2020, 3, 8725-8738.	2.5	63
67	Phase formation of CaAl2O4 from CaCO3â€“Al2O3 powder mixtures. Journal of the European Ceramic Society, 2008, 28, 747-756.	2.8	62
68	Molecular beam epitaxy growth of Al-rich AlGaN nanowires for deep ultraviolet optoelectronics. APL Materials, 2016, 4, .	2.2	62
69	GaP/GaAsP/GaP coreâ€“multishell nanowire heterostructures on (111) silicon. Nanotechnology, 2007, 18, 445304.	1.3	61
70	Structure and chemistry of the Si(111)/AlN interface. Applied Physics Letters, 2012, 100, .	1.5	61
71	Corrosion of engineering materials in a supercritical water cooled reactor: Characterization of oxide scales on Alloy 800H and stainless steel 316. Corrosion Science, 2015, 100, 222-230.	3.0	60
72	Photochemical Carbon Dioxide Reduction on Mg-Doped Ga(In)N Nanowire Arrays under Visible Light Irradiation. ACS Energy Letters, 2016, 1, 246-252.	8.8	60

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73	Three-dimensional investigation of cycling-induced microstructural changes in lithium-ion battery cathodes using focused ion beam/scanning electron microscopy. Journal of Power Sources, 2016, 306, 300-308.	4.0	60
74	Element Specific Monolayer Depth Profiling. Advanced Materials, 2014, 26, 6554-6559.	11.1	58
75	Nano- and Microstructure Engineering: An Effective Method for Creating High Efficiency Magnesium Silicide Based Thermoelectrics. ACS Applied Materials & Interfaces, 2016, 8, 34431-34437.	4.0	58
76	Selfâ€Assembled Functional DNA Superstructures as Highâ€Density and Versatile Recognition Elements for Printed Paper Sensors. Angewandte Chemie - International Edition, 2018, 57, 12440-12443.	7.2	58
77	Selective electroreduction of CO₂ to formate on 3D [100] Pb dendrites with nanometer-sized needle-like tips. Journal of Materials Chemistry A, 2017, 5, 20747-20756.	5.2	56
78	Cross-sectional study of periodic surface structures on gallium phosphide induced by ultrashort laser pulse irradiation. Applied Physics Letters, 2008, 92, .	1.5	55
79	Nanocrystalline tungsten carbide (WC) synthesis/characterization and its possible application as a PEM fuel cell catalyst support. Electrochimica Acta, 2012, 61, 198-206.	2.6	55
80	Electroreduction of CO₂ to formate on amine modified Pb electrodes. Journal of Materials Chemistry A, 2019, 7, 11272-11281.	5.2	55
81	Enhancement of resolution in core-loss and low-loss spectroscopy in a monochromated microscope. Ultramicroscopy, 2006, 106, 1091-1103.	0.8	54
82	Stable Hydrogen Storage Cycling in Magnesium Hydride, in the Range of Room Temperature to 300 Â°C, Achieved Using a New Bimetallic Cr-V Nanoscale Catalyst. Journal of Physical Chemistry C, 2012, 116, 3188-3199.	1.5	54
83	Scanning transmission electron microscopy investigation of the Si(111)/AlN interface grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 2010, 97, .	1.5	52
84	Unraveling the Rapid Performance Decay of Layered High-Energy Cathodes: From Nanoscale Degradation to Drastic Bulk Evolution. ACS Nano, 2018, 12, 2708-2718.	7.3	52
85	Modification of Nickel Surfaces by Bismuth: Effect on Electrochemical Activity and Selectivity toward Glycerol. ACS Applied Materials & Interfaces, 2020, 12, 15095-15107.	4.0	52
86	Dual-Site-Mediated Hydrogenation Catalysis on Pd/NiO: Selective Biomass Transformation and Maintenance of Catalytic Activity at Low Pd Loading. ACS Catalysis, 2020, 10, 5483-5492.	5.5	52
87	Surface-initiated atom transfer radical polymerization of polyhedral oligomeric silsesquioxane (POSS) methacrylate from flat silicon wafer. Polymer, 2006, 47, 1119-1123.	1.8	51
88	Highly Porous and Preferentially Oriented {100} Platinum Nanowires and Thin Films. Advanced Functional Materials, 2012, 22, 4172-4181.	7.8	51
89	Spatially resolved surface valence gradient and structural transformation of lithium transition metal oxides in lithium-ion batteries. Physical Chemistry Chemical Physics, 2016, 18, 29064-29075.	1.3	51
90	Electron Energy-Loss Spectroscopy of Multipolar Edge and Cavity Modes in Silver Nanosquares. ACS Photonics, 2016, 3, 428-433.	3.2	51

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91	Magnetoâ€Thermal Metrics Can Mirror the Longâ€Term Intracellular Fate of Magnetoâ€Plasmonic Nanohybrids and Reveal the Remarkable Shielding Effect of Gold. Advanced Functional Materials, 2017, 27, 1605997.	7.8	51
92	Ti4O7 supported Ru@Pt coreâ€“shell catalyst for CO-tolerance in PEM fuel cell hydrogen oxidation reaction. Applied Energy, 2013, 103, 507-513.	5.1	50
93	InGaN/Si Double-Junction Photocathode for Unassisted Solar Water Splitting. ACS Energy Letters, 2020, 5, 3741-3751.	8.8	49
94	Mechanism of Action of the Tungsten Dopant in LiNiO₂ Positive Electrode Materials. Advanced Energy Materials, 2022, 12, .	10.2	49
95	Experimental evidence of nanometer-scale confinement of plasmonic eigenmodes responsible for hot spots in random metallic films. Physical Review B, 2013, 88, .	1.1	48
96	The cathodic behaviour of Alâ€“Mn precipitates during atmospheric and saline aqueous corrosion of a sand-cast AM50 alloy. Corrosion Science, 2014, 83, 299-309.	3.0	47
97	Ultralow Loading and High-Performing Pt Catalyst for a Polymer Electrolyte Membrane Fuel Cell Anode Achieved by Atomic Layer Deposition. ACS Catalysis, 2019, 9, 5365-5374.	5.5	47
98	Sizeâ€Mediated Recurring Spinel Subâ€nanodomains in Liâ€and Mnâ€Rich Layered Cathode Materials. Angewandte Chemie - International Edition, 2020, 59, 14313-14320.	7.2	46
99	Uncovering the nature of electroactive sites in nano architectured dendritic Bi for highly efficient CO2 electroreduction to formate. Applied Catalysis B: Environmental, 2020, 274, 119031.	10.8	46
100	Surface-initiated atom transfer radical polymerization grafting of poly(2,2,2-trifluoroethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Td	2.5	45
101	Nucleation and growth of Si nanocrystals in an amorphousSiO2matrix. Physical Review B, 2006, 74, .	1.1	45
102	Strain relief and AlSb buffer layer morphology in GaSb heteroepitaxial films grown on Si as revealed by high-angle annular dark-field scanning transmission electron microscopy. Applied Physics Letters, 2011, 98, .	1.5	45
103	Supramolecular Functionalization of Single-Walled Carbon Nanotubes with Conjugated Polyelectrolytes and Their Patterning on Surfaces. Macromolecules, 2008, 41, 9869-9874.	2.2	44
104	A novel CO-tolerant PtRu coreâ€“shell structured electrocatalyst with Ru rich in core and Pt rich in shell for hydrogen oxidation reaction and its implication in proton exchange membrane fuel cell. Journal of Power Sources, 2011, 196, 9117-9123.	4.0	44
105	Tracking the corrosion of magnesium sand cast AM50 alloy in chloride environments. Corrosion Science, 2013, 75, 114-122.	3.0	43
106	Asymmetric Silver â€œNanocarrotâ€•Structures: Solution Synthesis and Their Asymmetric Plasmonic Resonances. Journal of the American Chemical Society, 2013, 135, 9616-9619.	6.6	43
107	Oxidation of Fe Nanoparticles Embedded in Single-Walled Carbon Nanotubes by Exposure to a Bright Flash of White Light. Nano Letters, 2002, 2, 1277-1280.	4.5	42
108	Atomic scale real-space mapping of holes in YBa2Cu3O6+Î´. Nature Communications, 2014, 5, 4275.	5.8	42

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109	Selective area epitaxy of AlGaN nanowire arrays across nearly the entire compositional range for deep ultraviolet photonics. Optics Express, 2017, 25, 30494.	1.7	42
110	Electron Energy Loss Spectroscopy Investigation into Symmetry in Gold Trimer and Tetramer Plasmonic Nanoparticle Structures. ACS Nano, 2016, 10, 8552-8563.	7.3	41
111	Molecular beam epitaxial growth and characterization of Al(Ga)N nanowire deep ultraviolet light emitting diodes and lasers. Journal Physics D: Applied Physics, 2016, 49, 364006.	1.3	41
112	Epitaxial thin films of multiferroic Bi₂FeCrO₆ with B-site cationic order. Journal of Materials Research, 2007, 22, 2102-2110.	1.2	39
113	Synthesis and Electrophoretic Deposition of Single-Walled Carbon Nanotube Complexes with a Conjugated Polyelectrolyte. Chemistry of Materials, 2010, 22, 2741-2749.	3.2	39
114	Formation of the Ternary Complex Hydride Mg₂FeH₆ from Magnesium Hydride (Î²-MgH₂) and Iron: An Electron Microscopy and Energy-Loss Spectroscopy Study. Journal of Physical Chemistry C, 2012, 116, 25701-25714.	1.5	39
115	Atomic Resolution Coordination Mapping in Ca₂FeCoO₅ Brownmillerite by Spatially Resolved Electron Energy-Loss Spectroscopy. Chemistry of Materials, 2012, 24, 1904-1909.	3.2	39
116	High-Efficiency InGaN/GaN Dot-in-a-Wire Red Light-Emitting Diodes. IEEE Photonics Technology Letters, 2012, 24, 321-323.	1.3	38
117	Electrochemical Valorization of Glycerol on Ni-Rich Bimetallic NiPd Nanoparticles: Insight into Product Selectivity Using in Situ Polarization Modulation Infrared-Reflection Absorption Spectroscopy. ACS Sustainable Chemistry and Engineering, 2019, 7, 14425-14434.	3.2	38
118	Multiple-interface coupling effects in local electron-energy-loss measurements of band gap energies. Physical Review B, 2007, 76, .	1.1	37
119	Self-Constructed Multiple Plasmonic Hotspots on an Individual Fractal to Amplify Broadband Hot Electron Generation. ACS Nano, 2021, 15, 10553-10564.	7.3	37
120	Imaging, Core-Loss, and Low-Loss Electron-Energy-Loss Spectroscopy Mapping in Aberration-Corrected STEM. Microscopy and Microanalysis, 2010, 16, 416-424.	0.2	36
121	Toward 10 meV Electron Energy-Loss Spectroscopy Resolution for Plasmonics. Microscopy and Microanalysis, 2014, 20, 767-778.	0.2	36
122	Visualizing biointerfaces in three dimensions: electron tomography of the boneâ€“hydroxyapatite interface. Journal of the Royal Society Interface, 2010, 7, 1497-1501.	1.5	35
123	Iron oxyhydroxide colloid formation by gamma-radiolysis. Physical Chemistry Chemical Physics, 2011, 13, 7198.	1.3	35
124	Resonant optical excitations in complementary plasmonic nanostructures. Optics Express, 2012, 20, 6968.	1.7	34
125	Electron energy loss spectroscopy of interfacial layer formation in Gd2O3 films deposited directly on Si(001). Journal of Applied Physics, 2002, 91, 2921-2928.	1.1	33
126	Strain fields around dislocation arrays in a Î£9 silicon bicrystal measured by scanning transmission electron microscopy. Philosophical Magazine, 2013, 93, 1250-1267.	0.7	33

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127	Self-Similarity of Plasmon Edge Modes on Koch Fractal Antennas. ACS Nano, 2017, 11, 11240-11249.	7.3	33
128	Impact of a Titanium-Based Surface Coating Applied to Li[Ni_{0.5}Mn_{0.3}Co_{0.2}]O₂ on Lithium-Ion Cell Performance. ACS Applied Energy Materials, 2018, 1, 7052-7064.	2.5	33
129	Probing the performance of structurally controlled platinum-cobalt bimetallic catalysts for selective hydrogenation of cinnamaldehyde. Journal of Catalysis, 2020, 388, 164-170.	3.1	33
130	Atomic Ordering in InGaN Alloys within Nanowire Heterostructures. Nano Letters, 2015, 15, 6413-6418.	4.5	32
131	2D strain mapping using scanning transmission electron microscopy MoirÃ© interferometry and geometrical phase analysis. Ultramicroscopy, 2018, 187, 1-12.	0.8	32
132	Growth mechanisms of GaSb heteroepitaxial films on Si with an AlSb buffer layer. Journal of Applied Physics, 2013, 114, 113101.	1.1	31
133	Magnetocaloric effect in Ni-Mn-Ga thin films under concurrent magnetostructural and Curie transitions. Journal of Applied Physics, 2011, 110, 013910.	1.1	30
134	Lattice distortions and octahedral rotations in epitaxially strained LaNiO3/LaAlO3 superlattices. Applied Physics Letters, 2014, 104, .	1.5	30
135	Atomically resolved EELS mapping of the interfacial structure of epitaxially strained<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi mathvariant="normal">LaNiO</mml:mi></mml:mrow><mml:mn>3</mml:mn></mml:msub><mml:mo>/</mml:mo><mml:msub><mml:mrow><mml:mi mathvariant="normal">LaAlO</mml:mi></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:math>superlattices. Physical Review B, 2014, 90, .	1.1	30
136	Epitaxially stabilized thin films of Îµ-Fe2O3 (001) grown on YSZ (100). Scientific Reports, 2017, 7, 3712.	1.6	30
137	Artificial Solids by Design: Assembly and Electron Microscopy Study of Nanosheet-Derived Heterostructures. Chemistry of Materials, 2013, 25, 4892-4900.	3.2	29
138	Local Hydrogen Fluxes Correlated to Microstructural Features of a Corroding Sand Cast AM50 Magnesium Alloy. Journal of the Electrochemical Society, 2014, 161, C557-C564.	1.3	29
139	Plasmonic Coupling of Multipolar Edge Modes and the Formation of Gap Modes. ACS Photonics, 2017, 4, 1558-1565.	3.2	29
140	GaN nanowires as a reusable photoredox catalyst for radical coupling of carbonyl under blacklight irradiation. Chemical Science, 2020, 11, 7864-7870.	3.7	29
141	Biaxial ZnOâˆ’ZnS Nanoribbon Heterostructures. Journal of Physical Chemistry C, 2009, 113, 4755-4757.	1.5	28
142	Microscopic investigation of single-crystal diamond following ultrafast laser irradiation. Applied Physics A: Materials Science and Processing, 2011, 103, 185-192.	1.1	28
143	Synthesis of Cuâ€“Pd alloy thin films by co-electrodeposition. Electrochimica Acta, 2011, 56, 7397-7403.	2.6	28
144	Evidence of Eu2+ 4f electrons in the valence band spectra of EuTiO3 and EuZrO3. Journal of Applied Physics, 2012, 112, .	1.1	28

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145	Ionomer content optimization in nickel-iron-based anodes with and without ceria for anion exchange membrane water electrolysis. Journal of Power Sources, 2021, 514, 230563.	4.0	28
146	In situ controlled modification of the helium density in single helium-filled nanobubbles. Journal of Applied Physics, 2014, 115, .	1.1	27
147	Europium-doped ZnO nanosponges â€“ controlling optical properties and photocatalytic activity. Journal of Materials Chemistry C, 2019, 7, 3909-3919.	2.7	27
148	Broken Band Alignment in EuS-CdS Nanoheterostructures. Chemistry of Materials, 2011, 23, 181-187.	3.2	25
149	Synthesis of Pd and Nbâ€“doped TiO2 composite supports and their corresponding Ptâ€“Pd alloy catalysts by a two-step procedure for the oxygen reduction reaction. Journal of Power Sources, 2013, 221, 232-241.	4.0	25
150	Surface Segregation of Fe in Ptâ€“Fe Alloy Nanoparticles: Its Precedence and Effect on the Orderedâ€Phase Evolution during Thermal Annealing. ChemCatChem, 2015, 7, 3655-3664.	1.8	25
151	Localized Corrosion Behavior of AZ31B Magnesium Alloy with an Electrodeposited Poly(3,4-Ethylenedioxythiophene) Coating. Journal of the Electrochemical Society, 2015, 162, C536-C544.	1.3	25
152	Effects of bond character on the electronic structure of brownmillerite-phase oxides, Ca2Bâ€²xFe2âˆ’xO5 (Bâ€² = Al, Ga): an X-ray absorption and electron energy loss spectroscopic study. Journal of Materials Chemistry, 2009, 19, 9213.	6.7	24
153	Three-Dimensional Atomic Structure of Metastable Nanoclusters in Doped Semiconductors. Physical Review Letters, 2011, 107, 186104.	2.9	24
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