

Leonidas E Ocola

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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.

110
papers

3,515
citations

28
h-index

57
g-index

123
ext. papers

3,826
ext. citations

6.1
avg. IF

5.36
L-index

#	Paper	IF	Citations
110	Reduced graphene oxide for room-temperature gas sensors. <i>Nanotechnology</i> , 2009 , 20, 445502	3.4	556
109	Gas detection using low-temperature reduced graphene oxide sheets. <i>Applied Physics Letters</i> , 2009 , 94, 083111	3.4	325
108	Toward practical gas sensing with highly reduced graphene oxide: a new signal processing method to circumvent run-to-run and device-to-device variations. <i>ACS Nano</i> , 2011 , 5, 1154-64	16.7	312
107	Room-Temperature Gas Sensing Based on Electron Transfer between Discrete Tin Oxide Nanocrystals and Multiwalled Carbon Nanotubes. <i>Advanced Materials</i> , 2009 , 21, 2487-2491	24	260
106	Enhanced Block Copolymer Lithography Using Sequential Infiltration Synthesis. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 17725-17729	3.8	152
105	Direct growth of vertically-oriented graphene for field-effect transistor biosensor. <i>Scientific Reports</i> , 2013 , 3, 1696	4.9	151
104	Sub-10-nm patterning via directed self-assembly of block copolymer films with a vapour-phase deposited topcoat. <i>Nature Nanotechnology</i> , 2017 , 12, 575-581	28.7	124
103	Rewritable artificial magnetic charge ice. <i>Science</i> , 2016 , 352, 962-6	33.3	99
102	Ultrafast room temperature NH ₃ sensing with positively gated reduced graphene oxide field-effect transistors. <i>Chemical Communications</i> , 2011 , 47, 7761-3	5.8	80
101	Effect of cold development on improvement in electron-beam nanopatterning resolution and line roughness. <i>Journal of Vacuum Science & Technology B</i> , 2006 , 24, 3061		80
100	Enhanced polymeric lithography resists via sequential infiltration synthesis. <i>Journal of Materials Chemistry</i> , 2011 , 21, 11722		65
99	Three-dimensional coherent X-ray surface scattering imaging near total external reflection. <i>Nature Photonics</i> , 2012 , 6, 586-590	33.9	57
98	Large optical nonlinearity of ITO nanorods for sub-picosecond all-optical modulation of the full-visible spectrum. <i>Nature Communications</i> , 2016 , 7, 12892	17.4	54
97	Etch properties of resists modified by sequential infiltration synthesis. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011 , 29, 06FG01	1.3	43
96	Resists for next generation lithography. <i>Microelectronic Engineering</i> , 2002 , 61-62, 707-715	2.5	43
95	Perpendicularly Aligned, Anion Conducting Nanochannels in Block Copolymer Electrolyte Films. <i>Chemistry of Materials</i> , 2016 , 28, 1377-1389	9.6	41
94	Switchable geometric frustration in an artificial-spin-ice-superconductor heterosystem. <i>Nature Nanotechnology</i> , 2018 , 13, 560-565	28.7	41

93	Secondary Electrons in EUV Lithography. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2013 , 26, 625-634	0.7	41
92	Growth and characterization of transparent Pb(Zi,Ti)O3 capacitor on glass substrate. <i>Journal of Applied Physics</i> , 2007 , 102, 084107	2.5	35
91	Real-time detection of mercury ions in water using a reduced graphene oxide/DNA field-effect transistor with assistance of a passivation layer. <i>Sensing and Bio-Sensing Research</i> , 2015 , 5, 97-104	3.3	34
90	Quantitative Three-Dimensional Characterization of Block Copolymer Directed Self-Assembly on Combined Chemical and Topographical Prepatterned Templates. <i>ACS Nano</i> , 2017 , 11, 1307-1319	16.7	33
89	Plasmonic Photonic Mode Coupling in Indium-Tin-Oxide Nanorod Arrays. <i>ACS Photonics</i> , 2014 , 1, 163-172	6.3	33
88	Carbon-carbon contacts for robust nanoelectromechanical switches. <i>Advanced Materials</i> , 2012 , 24, 2463-2464	2.4	33
87	Fabrication of hard x-ray zone plates with high aspect ratio using metal-assisted chemical etching. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2017 , 35, 06G901	1.3	31
86	Direct-write e-beam patterning of stimuli-responsive hydrogel nanostructures. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2005 , 23, 3124		31
85	Ultra-sharp plasmonic resonances from monopole optical nanoantenna phased arrays. <i>Applied Physics Letters</i> , 2014 , 104, 231101	3.4	30
84	Synthesis and superconducting properties of niobium nitride nanowires and nanoribbons. <i>Applied Physics Letters</i> , 2007 , 91, 162508	3.4	29
83	Parametric modeling of photoelectron effects in x-ray lithography. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1993 , 11, 2839		29
82	Nanopatterning of ultrananocrystalline diamond nanowires. <i>Nanotechnology</i> , 2012 , 23, 075301	3.4	27
81	Highly sensitive room temperature carbon monoxide detection using SnO2 nanoparticle-decorated semiconducting single-walled carbon nanotubes. <i>Nanotechnology</i> , 2013 , 24, 025503	3.4	25
80	High-resolution direct-write patterning using focused ion beams. <i>MRS Bulletin</i> , 2014 , 39, 336-341	3.2	25
79	Multifunctional UV and Gas Sensors Based on Vertically Nanostructured Zinc Oxide: Volume Versus Surface Effect. <i>Sensors</i> , 2019 , 19,	3.8	23
78	Photonic Crystal Waveguide Electro-Optic Modulator With a Wide Bandwidth. <i>Journal of Lightwave Technology</i> , 2013 , 31, 1601-1607	4	22
77	Silicon compatible Sn-based resistive switching memory. <i>Nanoscale</i> , 2018 , 10, 9441-9449	7.7	20
76	Growth characterization of electron-beam-induced silver deposition from liquid precursor. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2012 , 30, 06FF08	1.3	20

75	Directed Self-Assembly of Colloidal Particles onto Nematic Liquid Crystalline Defects Engineered by Chemically Patterned Surfaces. <i>ACS Nano</i> , 2017 , 11, 6492-6501	16.7	19
74	Scanning force microscopy measurements of latent image topography in chemically amplified resists. <i>Applied Physics Letters</i> , 1996 , 68, 717-719	3.4	19
73	Infiltrated Zinc Oxide in Poly(methyl methacrylate): An Atomic Cycle Growth Study. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 1893-1903	3.8	17
72	Identification of peptides for the surface functionalization of perovskite ferroelectrics. <i>Applied Physics Letters</i> , 2006 , 88, 083903	3.4	17
71	Effect of Stereochemistry on Directed Self-Assembly of Poly(styrene-b-lactide) Films on Chemical Patterns. <i>ACS Macro Letters</i> , 2016 , 5, 396-401	6.6	16
70	Plasmonic amplifiers: engineering giant light enhancements by tuning resonances in multiscale plasmonic nanostructures. <i>Small</i> , 2013 , 9, 1939-46	11	15
69	Latent image formation: Nanoscale topography and calorimetric measurements in chemically amplified resists. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1996 , 14, 3974		15
68	What We Don't Know About EUV Exposure Mechanisms. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2017 , 30, 113-120	0.7	13
67	Post-directed-self-assembly membrane fabrication for in situ analysis of block copolymer structures. <i>Nanotechnology</i> , 2016 , 27, 435303	3.4	13
66	Large area direct-write focused ion-beam lithography with a dual-beam microscope). <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010 , 28, 304-309	1.3	13
65	Development characteristics of polymethyl methacrylate in alcohol/water mixtures: a lithography and Raman spectroscopy study. <i>Nanotechnology</i> , 2016 , 27, 035302	3.4	12
64	Polarization and distance dependent coupling in linear chains of gold nanoparticles. <i>Applied Physics Letters</i> , 2015 , 106, 053104	3.4	12
63	Electron Penetration Depths in EUV Photoresists. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2014 , 27, 611-615	0.7	11
62	Electrodynamic coupling in regular arrays of gold nanocylinders. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 045102	3	11
61	Nanoscale geometry assisted proximity effect correction for electron beam direct write nanolithography. <i>Journal of Vacuum Science & Technology B</i> , 2009 , 27, 2569		11
60	Nanofabrication of super-high-aspect-ratio structures in hydrogen silsesquioxane from direct-write e-beam lithography and hot development. <i>Journal of Vacuum Science & Technology B</i> , 2008 , 26, 2632-2635		11
59	Studying secondary electron behavior in EUV resists using experimentation and modeling 2015 ,		10
58	Photonic ring resonator filters for astronomical OH suppression. <i>Optics Express</i> , 2017 , 25, 15868-15889	3.3	10

57	Three-dimensional microfluidic mixers using ion beam lithography and micromachining. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2010 , 28, C6I1-C6I6	1.3	10
56	Gas Sensors Based on Tin Oxide Nanoparticles Synthesized from a Mini-Arc Plasma Source. <i>Journal of Nanomaterials</i> , 2006 , 2006, 1-7	3.2	10
55	Three-dimensional optical trapping and orientation of microparticles for coherent X-ray diffraction imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 4018-4024	11.5	10
54	Novel Electrically Tunable Microwave Solenoid Inductor and Compact Phase Shifter Utilizing Permalloy and PZT Thin Films. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2017 , 65, 3569-3577	4.1	9
53	Gigahertz Acoustic Vibrations of Elastically Anisotropic Indium-Tin-Oxide Nanorod Arrays. <i>Nano Letters</i> , 2016 , 16, 5639-46	11.5	9
52	Controlled Selective CVD Growth of ZnO Nanowires Enabled by Mask-Free Fabrication Approach using Aqueous Fe Catalytic Inks. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700950	4.6	9
51	Cross sections of photoacid generators at low electron energies. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2015 , 33, 06FH01	1.3	9
50	Tunable Transmission Line With Nanopatterned Thin Films for Smart RF Applications. <i>IEEE Transactions on Magnetics</i> , 2014 , 50, 1-4	2	9
49	Geometric control of rippling in supported polymer nanolines. <i>Nano Letters</i> , 2012 , 12, 1516-21	11.5	9
48	Electric-Field-Assisted Dip-Pen Nanolithography on Poly(4-vinylpyridine) (P4VP) Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2010 , 2, 2904-2909	9.5	9
47	Atomic layer deposition frequency-multiplied Fresnel zone plates for hard x-rays focusing. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2018 , 36, 01A124	2.9	8
46	The range and intensity of backscattered electrons for use in the creation of high fidelity electron beam lithography patterns. <i>Nanotechnology</i> , 2013 , 24, 305302	3.4	8
45	Bottom-up direct writing approach for controlled fabrication of WS ₂ /MoS ₂ heterostructure systems. <i>RSC Advances</i> , 2016 , 6, 66589-66594	3.7	8
44	Studying thickness loss in extreme ultraviolet resists due to electron beam exposure using experiment and modeling. <i>Journal of Micro/Nanolithography, MEMS, and MOEMS</i> , 2015 , 14, 043502	0.7	7
43	Fabrication of phonon-based metamaterial structures using focused ion beam patterning. <i>Applied Physics Letters</i> , 2018 , 112, 091101	3.4	7
42	Thin film ferroelectric photonic crystals and their application to thermo-optic switches. <i>Optics Communications</i> , 2009 , 282, 3364-3367	2	7
41	Increased pattern transfer fidelity of ZEP 520A during reactive ion etching through chemical modifications by additional dosing of the electron beam resista). <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2011 , 29, 021601	1.3	7
40	Europium Effect on the Electron Transport in Graphene Ribbons. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 22486-22495	3.8	6

39	Automated geometry assisted proximity effect correction for electron beam direct write nanolithography. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2015 , 33, 06FD02	1.3	6
38	Latent image characterization of postexposure bake process in chemically amplified resists. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1997 , 15, 2545		6
37	Three Dimensional Assembly in Directed Self-assembly of Block Copolymers. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2016 , 29, 653-657	0.7	6
36	Scaling the Artificial Polariton Bandgap at Infrared Frequencies Using Indium Tin Oxide Nanorod Arrays. <i>Advanced Optical Materials</i> , 2016 , 4, 2077-2084	8.1	5
35	Advances in ion beam micromachining for complex 3D microfluidics. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2013 , 31, 06F401	1.3	5
34	Metal-assisted etching of silicon molds for electroforming. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2013 , 31, 06FF03	1.3	5
33	Synchrotron radiation micro-Fourier transform infrared spectroscopy applied to photoresist imaging. <i>Applied Physics Letters</i> , 1997 , 71, 847-849	3.4	5
32	New Developments in Resist Materials for the SCALPEL Technology. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 1998 , 11, 541-545	0.7	5
31	Mask-free fabrication and chemical vapor deposition synthesis of ultrathin zinc oxide microribbons on Si/SiO ₂ and 2D substrates. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2018 , 36, 05G506	2.9	4
30	X-ray zone plates with 25 aspect ratio using a 2- μ m-thick ultrananocrystalline diamond mold. <i>Microsystem Technologies</i> , 2014 , 20, 2045-2050	1.7	4
29	Nanofabrication of x-ray zone plates using ultrananocrystalline diamond molds and electroforming. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2010 , 28, C6P30-C6P35	1.3	4
28	Modelling photoelectron effects in X-ray Lithography. <i>Materials Research Society Symposia Proceedings</i> , 1993 , 306, 47		4
27	Nanoporous Dielectric Resistive Memories Using Sequential Infiltration Synthesis. <i>ACS Nano</i> , 2021 , 15, 4155-4164	16.7	4
26	Investigation of the optical response of photonic crystal nanocavities in ferroelectric oxide thin film. <i>Journal of Optics (United Kingdom)</i> , 2015 , 17, 105402	1.7	3
25	Cross sections of EUV PAGs: influence of concentration, electron energy, and structure 2016 ,		3
24	Photoluminescence of sequential infiltration synthesized ZnO nanostructures 2016 ,		3
23	Contrast enhancement of biological nanoporous materials with zinc oxide infiltration for electron and X-ray nanoscale microscopy. <i>Scientific Reports</i> , 2017 , 7, 5879	4.9	3
22	Measurement of backscattered 100 keV electrons on a solid substrate. <i>Applied Physics Letters</i> , 2011 , 99, 192105	3.4	3

21	Image noise in helium lithography. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2011 , 29, 041005	1.3	3
20	100 keV electron backscattered range and coefficient for silicon. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2012 , 30, 021604	1.3	3
19	Resist Requirements and Limitations for Nanoscale Electron-Beam Patterning. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 739, 151		3
18	Studying electron-PAG interactions using electron-induced fluorescence 2016 ,		2
17	Characterization of Electron-Beam-Induced Silver Deposition from Liquid Phase. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1371, 13		2
16	Design and fabrication of a multilayer micro-/nanofluidic device with an electrically driven nanovalve. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008 , 26, 752-756	2.9	2
15	Fabrication of high-aspect-ratio hard x-ray zone plates with HSQ plating molds 2008 ,		2
14	Tapered tilted linear zone plates for focusing hard x-rays 2004 ,		2
13	Resist Requirements for Electron Projection and Direct Write Nanolithography. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 705, 111		2
12	Resist characteristics with direct-write electron beam and SCALPEL exposure system 1999 ,		2
11	Energy deposition and charging in EUV lithography: Monte Carlo studies 2016 ,		1
10	PMMA-Assisted Plasma Patterning of Graphene. <i>Journal of Nanotechnology</i> , 2018 , 2018, 1-8	3.5	1
9	Variation of backscatter electron intensity. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2013 , 31, 06F202	1.3	1
8	Coplanar Waveguides With Nanometer Thick Gold Films. <i>IEEE Microwave and Wireless Components Letters</i> , 2013 , 23, 84-86	2.6	1
7	Multilayer on-chip stacked Fresnel zone plates: Hard x-ray fabrication and soft x-ray simulations. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2015 , 33, 06FD04	1.3	1
6	Ferroelectric-Specific Peptides as Building Blocks for Bio-Inorganic Devices. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 944, 1		1
5	Thermally Tunable Ferroelectric Thin Film Photonic Crystals 2008 ,		1
4	Bragg diffraction from sub-micron particles isolated by optical tweezers 2016 ,		1

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2 Ferroelectric Thin Film Microcavities and their Optical Resonant Properties. *Materials Research Society Symposia Proceedings*, **2009**, 1182, 24

1 Integration of Biomolecules with Inorganic Ferroelectrics: A Novel Approach to Nanoscale Devices. *Materials Research Society Symposia Proceedings*, **2006**, 950, 1