

Oscar Vazquez-Mena

List of Publications by Year in descending order

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46
papers

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516215

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47
all docs

47
docs citations

47
times ranked

1371
citing authors

#	ARTICLE	IF	CITATIONS
1	Metallic Nanowires by Full Wafer Stencil Lithography. <i>Nano Letters</i> , 2008, 8, 3675-3682.	4.5	101
2	Metallic Nanodot Arrays by Stencil Lithography for Plasmonic Biosensing Applications. <i>ACS Nano</i> , 2011, 5, 844-853.	7.3	87
3	Facile fabrication of nanofluidic diode membranes using anodic aluminium oxide. <i>Nanoscale</i> , 2012, 4, 5718.	2.8	70
4	A single nanotrench in a palladium microwire for hydrogen detection. <i>Nanotechnology</i> , 2008, 19, 125502.	1.3	61
5	Analysis of the blurring in stencil lithography. <i>Nanotechnology</i> , 2009, 20, 415303.	1.3	60
6	Screening-Engineered Field-Effect Solar Cells. <i>Nano Letters</i> , 2012, 12, 4300-4304.	4.5	58
7	High-Resolution Resistless Nanopatterning on Polymer and Flexible Substrates for Plasmonic Biosensing Using Stencil Masks. <i>ACS Nano</i> , 2012, 6, 5474-5481.	7.3	57
8	Performance Enhancement of a Graphene-Zinc Phosphide Solar Cell Using the Electric Field-Effect. <i>Nano Letters</i> , 2014, 14, 4280-4285.	4.5	45
9	Resistivity measurements of gold wires fabricated by stencil lithography on flexible polymer substrates. <i>Microelectronic Engineering</i> , 2008, 85, 1108-1111.	1.1	29
10	Reusability of nanostencils for the patterning of Aluminum nanostructures by selective wet etching. <i>Microelectronic Engineering</i> , 2008, 85, 1237-1240.	1.1	29
11	Reliable and Improved Nanoscale Stencil Lithography by Membrane Stabilization, Blurring, and Clogging Corrections. <i>IEEE Nanotechnology Magazine</i> , 2011, 10, 352-357.	1.1	26
12	Etching of sub-micrometer structures through Stencil. <i>Microelectronic Engineering</i> , 2008, 85, 1010-1014.	1.1	25
13	Direct chemical conversion of continuous CVD graphene/graphite films to graphene oxide without exfoliation. <i>Carbon</i> , 2020, 158, 202-209.	5.4	22
14	Improved Charge Extraction Beyond Diffusion Length by Layer-by-Layer Multistacking Intercalation of Graphene Layers inside Quantum Dots Films. <i>Advanced Materials</i> , 2019, 31, e1807894.	11.1	21
15	Metal insulator semiconductor solar cell devices based on a Cu ₂ O substrate utilizing h-BN as an insulating and passivating layer. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	20
16	Design and Fabrication of Negative-Refractive-Index Metamaterial Unit Cells for Near-Megahertz Enhanced Acoustic Transmission in Biomedical Ultrasound Applications. <i>Physical Review Applied</i> , 2021, 15, .	1.5	18
17	Optoelectronic response of hybrid PbS-QD/graphene photodetectors. <i>Journal of Chemical Physics</i> , 2019, 151, 234705.	1.2	17
18	Localized Ion Implantation Through Micro/Nanostencil Masks. <i>IEEE Nanotechnology Magazine</i> , 2011, 10, 940-946.	1.1	16

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19	Enhanced Charge Transfer and Responsivity in Hybrid Quantum Dot/Graphene Photodetectors Using ZnO as Intermediate Electron-Collecting Layer. <i>Advanced Electronic Materials</i> , 2020, 6, 2000014.	2.6	16
20	Compliant membranes improve resolution in full-wafer micro/nanostencil lithography. <i>Nanoscale</i> , 2012, 4, 773-778.	2.8	15
21	Stenciled conducting bismuth nanowires. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, 169-172.	0.6	14
22	Stencil-Nanopatterned Back Reflectors for Thin-Film Amorphous Silicon n-i-p Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2013, 3, 22-26.	1.5	14
23	Near full light absorption and full charge collection in 1-micron thick quantum dot photodetector using intercalated graphene monolayer electrodes. <i>Nanoscale</i> , 2020, 12, 4909-4915.	2.8	11
24	Robust PECVD SiC membrane made for stencil lithography. <i>Microelectronic Engineering</i> , 2011, 88, 2790-2793.	1.1	9
25	Resistless Fabrication of Nanoimprint Lithography (NIL) Stamps Using Nano-Stencil Lithography. <i>Micromachines</i> , 2013, 4, 370-377.	1.4	8
26	All-stencil transistor fabrication on 3D silicon substrates. <i>Journal of Micromechanics and Microengineering</i> , 2012, 22, 095022.	1.5	7
27	Patterning of parallel nanobridge structures by reverse nanostencil lithography using an edge-patterned stencil. <i>Nanotechnology</i> , 2007, 18, 044002.	1.3	6
28	Implementation of Metallic Vertical Interconnect Access in Hybrid Intercalated Graphene/Quantum Dot Photodetector for Improved Charge Collection. <i>Frontiers in Materials</i> , 2019, 6, .	1.2	5
29	π-π Interactions Mediated Pyrene Based Ligand Enhanced Photoresponse in Hybrid Graphene/PbS Quantum Dots Photodetectors. <i>Advanced Electronic Materials</i> , 2022, 8, 2100672.	2.6	5
30	Direct Etching of High Aspect Ratio Structures Through a Stencil. , 2009, , .		4
31	High resolution patterning of PbS quantum dots/graphene photodetectors with high responsivity via photolithography with a top graphene layer to protect surface ligands. <i>Nanoscale Advances</i> , 2021, 3, 6206-6212.	2.2	4
32	Analysis and applications of nanostructures created by stencil lithography. , 2009, , .		3
33	Measuring the carrier diffusion length in quantum dot films using graphene as photocarrier density probe. <i>Journal of Chemical Physics</i> , 2022, 156, 024702.	1.2	3
34	Integration of Nanomaterials into Three-Dimensional Vertical Architectures. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 28262-28268.	4.0	2
35	Electrochemical functionalization strategy for chemical vapor deposited graphene on silicon substrates: grafting, electronic properties and biosensing. <i>Nanotechnology</i> , 2019, 30, 475703.	1.3	2
36	High performance Pb ⁺² detection using CVD-produced high quality multilayer reduced graphene oxide. <i>Nano Express</i> , 2021, 2, 010023.	1.2	2

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37	Focused Ion Beam: A Versatile Technique for the Fabrication of Nano-Devices. <i>Praktische Metallographie/Practical Metallography</i> , 2009, 46, 154-156.	0.1	2
38	Sub-100 nm-scale aluminum nanowires by stencil lithography: Fabrication and characterization. , 2008, , .		1
39	Minimized blurring in stencil lithography using a compliant membrane. , 2009, , .		1
40	Nanostencil and Inkjet Printing for Bionanotechnology Applications. <i>Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering</i> , 2009, , 222-228.	0.2	1
41	Stencil-nanopatterned back reflectors for thin-film amorphous silicon n-i-p solar cells. , 2012, , .		1
42	A novel architecture for photovoltaic devices: Field-effect solar cells using screening-engineered nanoelectrodes for silicon and earth abundant cuprous oxide. , 2013, , .		1
43	Ultrathin 5 $\frac{1}{4}$ m Thick Silicon Nanowires Intercalated with Reduced Graphene Oxide Binderless Anode for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 6391-6398.	2.5	1
44	Frequency and damping effect of suspended silicon nitride membranes in water near the megahertz range. <i>Journal of Micromechanics and Microengineering</i> , 2020, 30, 125006.	1.5	1
45	A novel architecture for photovoltaic devices: Field-effect solar cells using screening-engineered nanoelectrodes for silicon and earth abundant cuprous oxide. , 2013, , .		0
46	Negativeâ€”index Acoustic Metamaterial Operating above 100 kHz in Water Using Microstructured Silicon Chips as Unit Cells. <i>Advanced Materials Technologies</i> , 0, , 2200407.	3.0	0