

# Alberto Eljarrat Ascunce

## List of Publications by Year in descending order

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34  
papers

397  
citations

933447

10  
h-index

794594

19  
g-index

35  
all docs

35  
docs citations

35  
times ranked

790  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electron Microscopy (Big and Small) Data Analysis With the Open Source Software Package HyperSpy. <i>Microscopy and Microanalysis</i> , 2017, 23, 214-215.	0.4	74
2	3D Visualization of the Iron Oxidation State in FeO/Fe <sub>3</sub> O <sub>4</sub> Core-Shell Nanocubes from Electron Energy Loss Tomography. <i>Nano Letters</i> , 2016, 16, 5068-5073.	9.1	56
3	EEL spectroscopic tomography: Towards a new dimension in nanomaterials analysis. <i>Ultramicroscopy</i> , 2012, 122, 12-18.	1.9	37
4	Influence of Silicon Layers on the Growth of ITO and AZO in Silicon Heterojunction Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2020, 10, 703-709.	2.5	31
5	In Situ TEM Monitoring of Phase-Segregation in Inorganic Mixed Halide Perovskite. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 4945-4950.	4.6	29
6	Optoelectronic Properties of InAlN/GaN Distributed Bragg Reflector Heterostructure Examined by Valence Electron Energy Loss Spectroscopy. <i>Microscopy and Microanalysis</i> , 2012, 18, 1143-1154.	0.4	23
7	Retrieving the electronic properties of silicon nanocrystals embedded in a dielectric matrix by low-loss EELS. <i>Nanoscale</i> , 2014, 6, 14971-14983.	5.6	18
8	Multi-resolution convolutional neural networks for inverse problems. <i>Scientific Reports</i> , 2020, 10, 5730.	3.3	17
9	Insight into high-reflectivity AlN/GaN Bragg reflectors with spontaneously formed (Al,Ga)N transient layers at the interfaces. <i>Journal of Applied Physics</i> , 2013, 113, 183106.	2.5	12
10	EELS tomography in multiferroic nanocomposites: from spectrum images to the spectrum volume. <i>Nanoscale</i> , 2014, 6, 6646-6650.	5.6	11
11	Surface-Functionalized Au-Pd Nanorods with Enhanced Photothermal Conversion and Catalytic Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 17259-17272.	8.0	11
12	Insight into the Compositional and Structural Nano Features of AlN/GaN DBRs by EELS-HAADF. <i>Microscopy and Microanalysis</i> , 2013, 19, 698-705.	0.4	10
13	A consistent picture of excitations in cubic BaSnO <sub>3</sub> revealed by combining theory and experiment. <i>Communications Materials</i> , 2022, 3, .	6.9	10
14	Density Functional Theory Modeling of Low-Loss Electron Energy-Loss Spectroscopy in Wurtzite III-Nitride Ternary Alloys. <i>Microscopy and Microanalysis</i> , 2016, 22, 706-716.	0.4	9
15	Extrinsic Localized Excitons in Patterned 2D Semiconductors. <i>Advanced Functional Materials</i> , 0, , 2203060.	14.9	8
16	Multi-focus TIE algorithm including partial spatial coherence and overlapping filters. <i>Optics Express</i> , 2018, 26, 11819.	3.4	6
17	Unraveling electronic band structure of narrow-bandgap $\pi$ -n nanojunctions in heterostructured nanowires. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 25019-25023.	2.8	6
18	Quantitative parameters for the examination of InGaN QW multilayers by low-loss EELS. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 23264-23276.	2.8	4

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19	Individual tubular J-aggregates stabilized and stiffened by silica encapsulation. <i>Colloid and Polymer Science</i> , 2020, 298, 937-950.	2.1	4
20	Structural and compositional properties of Er-doped silicon nanoclusters/oxides for multilayered photonic devices studied by STEM-EELS. <i>Nanoscale</i> , 2013, 5, 9963.	5.6	3
21	Electron energy-loss spectroscopic tomography of $\text{Fe}_x\text{Co}(3-x)\text{O}_4$ impregnated $\text{Co}_3\text{O}_4$ mesoporous particles: unraveling the chemical information in three dimensions. <i>Analyst</i> , 2016, 141, 4968-4972.	3.5	3
22	Electron energy loss spectroscopy on semiconductor heterostructures for optoelectronics and photonics applications. <i>Journal of Microscopy</i> , 2016, 262, 142-150.	1.8	3
23	Design and application of a relativistic Kramers-Kronig analysis algorithm. <i>Ultramicroscopy</i> , 2019, 206, 112825.	1.9	3
24	Precessed electron beam electron energy loss spectroscopy of graphene: Beyond channelling effects. <i>Applied Physics Letters</i> , 2014, 105, 053117.	3.3	2
25	Kinetic Study on the Adsorption of 2,3,5,6-Tetrafluoro-7,7,8,8-tetracyanoquinodimethane on Ag Nanoparticles in Chloroform: Implications for the Charge Transfer Complex of $\text{Ag}^+\text{TCNQ}^-$ . <i>ACS Applied Nano Materials</i> , 2021, 4, 11625-11635.	5.0	2
26	(V)EELS Characterization of InAlN/GaN Distributed Bragg Reflectors. <i>Journal of Physics: Conference Series</i> , 2011, 326, 012014.	0.4	1
27	(Invited) Optimizing Er-Doped Layer Stacks for Integrated Light Emitting Devices. <i>ECS Transactions</i> , 2013, 53, 81-84.	0.5	1
28	Low-loss EELS methods. <i>Advances in Imaging and Electron Physics</i> , 2019, , 49-77.	0.2	1
29	DFT modeling of wurtzite III-nitride ternary alloys. <i>Advances in Imaging and Electron Physics</i> , 2019, , 79-99.	0.2	1
30	Quantifying the data quality of focal series for inline electron holography. <i>Ultramicroscopy</i> , 2021, 231, 113264.	1.9	1
31	Multiple InGaN QW heterostructure. <i>Advances in Imaging and Electron Physics</i> , 2019, , 135-158.	0.2	0
32	Er-doped Si-nc/SiO <sub>2</sub> multilayer. <i>Advances in Imaging and Electron Physics</i> , 2019, , 159-173.	0.2	0
33	Si-NCs embedded in dielectric matrices. <i>Advances in Imaging and Electron Physics</i> , 2019, , 175-203.	0.2	0
34	AlN/GaN and InAlN/GaN DBRs. <i>Advances in Imaging and Electron Physics</i> , 2019, 209, 101-133.	0.2	0