

# Lluís Lloppez-Conesa

## List of Publications by Year in descending order

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57  
papers

992  
citations

393982

19  
h-index

454577

30  
g-index

59  
all docs

59  
docs citations

59  
times ranked

1932  
citing authors

#	ARTICLE	IF	CITATIONS
1	Origin of the large dispersion of magnetic properties in nanostructured oxides: Fe <sub>x</sub> O/Fe <sub>3</sub> O <sub>4</sub> nanoparticles as a case study. <i>Nanoscale</i> , 2015, 7, 3002-3015.	2.8	76
2	Band Engineered Epitaxial 3D GaN-InGaN Core-Shell Rod Arrays as an Advanced Photoanode for Visible-Light-Driven Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 2235-2240.	4.0	69
3	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.	4.5	56
4	Multiple strain-induced phase transitions in LaNi <sub>3</sub> O <sub>7</sub> thin films. <i>Physical Review B</i> , 2016, 94, .	1.1	54
5	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.	0.7	44
6	Absence of quantum confinement effects in the photoluminescence of Si <sub>3</sub> N <sub>4</sub> -embedded Si nanocrystals. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	44
7	Synthesis, Characterization, and Humidity Detection Properties of Nb <sub>2</sub> O <sub>5</sub> /SnO <sub>2</sub> /Nb <sub>2</sub> O <sub>5</sub> Heterostructures. <i>Journal of Physical Chemistry C</i> , 2013, 117, 10086-10094.	1.5	41
8	Determining the crystalline degree of silicon nanoclusters/SiO <sub>2</sub> multilayers by Raman scattering. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	39
9	Silicon nanocrystals in carbide matrix. <i>Solar Energy Materials and Solar Cells</i> , 2014, 128, 138-149.	3.0	34
10	Structural and optical properties of size controlled Si nanocrystals in Si <sub>3</sub> N <sub>4</sub> matrix: The nature of photoluminescence peak shift. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	31
11	Engineering Transport in Manganites by Tuning Local Nonstoichiometry in Grain Boundaries. <i>Advanced Materials</i> , 2019, 31, e1805360.	11.1	29
12	Local Structure of Rare Earth Niobates (RE <sub>3</sub> NbO <sub>7</sub> , RE=La, Y, Er, Yb, Lu) for Proton Conduction Applications. <i>Fuel Cells</i> , 2013, 13, 29-33.	1.5	27
13	Synthesis and Thermoelectric Properties of Noble Metal Ternary Chalcogenide Systems of Ag-Au-Se in the Forms of Alloyed Nanoparticles and Colloidal Nanoheterostructures. <i>Chemistry of Materials</i> , 2016, 28, 7017-7028.	3.2	26
14	Annealing temperature and barrier thickness effect on the structural and optical properties of silicon nanocrystals/SiO <sub>2</sub> superlattices. <i>Journal of Applied Physics</i> , 2014, 116, 133505.	1.1	24
15	Atomic-Scale Determination of Cation Inversion in Spinel-Based Oxide Nanoparticles. <i>Nano Letters</i> , 2018, 18, 5854-5861.	4.5	24
16	Assessing Oxygen Vacancies in Bismuth Oxide through EELS Measurements and DFT Simulations. <i>Journal of Physical Chemistry C</i> , 2017, 121, 24809-24815.	1.5	23
17	Independent Tuning of Optical Transparency Window and Electrical Properties of Epitaxial SrVO <sub>3</sub> Thin Films by Substrate Mismatch. <i>Advanced Functional Materials</i> , 2019, 29, 1904238.	7.8	21
18	Facile and Efficient Atomic Hydrogenation Enabled Black TiO <sub>2</sub> with Enhanced Photoelectrochemical Activity via a Favorably Low Energy Barrier Pathway. <i>Advanced Energy Materials</i> , 2019, 9, 1900725.	10.2	21

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19	Carrier transport and electroluminescence efficiency of erbium-doped silicon nanocrystal superlattices. Applied Physics Letters, 2013, 103, .	1.5	20
20	Structural, optical and electrical properties of silicon nanocrystals embedded in Si <sub>x</sub> C <sub>1-x</sub> /SiC multilayer systems for photovoltaic applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 639-644.	1.7	19
21	Silicon nanocrystals in SiN <sub>x</sub> /SiO <sub>2</sub> hetero-superlattices: The loss of size control after thermal annealing. Journal of Applied Physics, 2014, 115, 244304.	1.1	19
22	Tuning Branching in Ceria Nanocrystals. Chemistry of Materials, 2017, 29, 4418-4424.	3.2	19
23	Boron doping of silicon rich carbides: Electrical properties. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 551-558.	1.7	18
24	Retrieving the electronic properties of silicon nanocrystals embedded in a dielectric matrix by low-loss EELS. Nanoscale, 2014, 6, 14971-14983.	2.8	18
25	Structural and optical characterization of size controlled silicon nanocrystals in SiO <sub>2</sub> /SiO <sub>x</sub> N <sub>y</sub> multilayers. Energy Procedia, 2011, 10, 43-48.	1.8	16
26	Enhanced Photoelectrochemical Behavior of H-TiO <sub>2</sub> Nanorods Hydrogenated by Controlled and Local Rapid Thermal Annealing. Nanoscale Research Letters, 2017, 12, 336.	3.1	16
27	Retrospective growth of Mg <sub>2</sub> (OH) <sub>2</sub> thin films on Al <sub>2</sub> O <sub>3</sub> thin film $\text{O} < \text{sub} > 2 < / \text{sub} > \text{O} < \text{sub} > 3 < / \text{sub} >$ Evidence of a wurtzite to rocksalt transformation. Physical Review B, 2012, 86.	1.1	15
28	Simulation of STEM-HAADF Image Contrast of Ruddlesden-Popper Faulted LaNiO <sub>3</sub> Thin Films. Journal of Physical Chemistry C, 2017, 121, 9300-9304.	1.5	14
29	Growth, structure, luminescence and mechanical resonance of Bi <sub>2</sub> O <sub>3</sub> nano- and microwires. CrystEngComm, 2015, 17, 132-139.	1.3	12
30	EELS tomography in multiferroic nanocomposites: from spectrum images to the spectrum volume. Nanoscale, 2014, 6, 6646-6650.	2.8	11
31	Direct Measurement of Oxygen Mass Transport at the Nanoscale. Advanced Materials, 2021, 33, e2105622.	11.1	11
32	Insight into the Compositional and Structural Nano Features of AlN/GaN DBRs by EELS-HAADF. Microscopy and Microanalysis, 2013, 19, 698-705.	0.2	10
33	Absorption and emission of silicon nanocrystals embedded in SiC: Eliminating Fabry-Pérot interference. Journal of Applied Physics, 2015, 117, .	1.1	10
34	Evidence of a minority monoclinic LaNiO <sub>2.5</sub> phase in lanthanum nickelate thin films. Physical Chemistry Chemical Physics, 2017, 19, 9137-9142.	1.3	10
35	Effect of Si <sub>3</sub> N <sub>4</sub> -Mediated Inversion Layer on the Electroluminescence Properties of Silicon Nanocrystal Superlattices. Advanced Electronic Materials, 2018, 4, 1700666.	2.6	9
36	Charge transport in nanocrystalline SiC with and without embedded Si nanocrystals. Physical Review B, 2015, 91, .	1.1	8

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37	Zinc blende and wurtzite CoO polymorph nanoparticles: Rational synthesis and commensurate and incommensurate magnetic order. Applied Materials Today, 2019, 16, 322-331.	2.3	8
38	Apatite Mineralization Process from Silicocarnotite Bioceramics: Mechanism of Crystal Growth and Maturation. Crystal Growth and Design, 2020, 20, 4030-4045.	1.4	5
39	Quantitative parameters for the examination of InGaN QW multilayers by low-loss EELS. Physical Chemistry Chemical Physics, 2016, 18, 23264-23276.	1.3	4
40	Structural and optical properties of Al-Tb/SiO <sub>2</sub> multilayers fabricated by electron beam evaporation. Journal of Applied Physics, 2016, 120, .	1.1	4
41	The effect of Sb-surfactant on GaInP CuPt<sub>B</sub> type ordering: assessment through dark field TEM and aberration corrected HAADF imaging. Physical Chemistry Chemical Physics, 2017, 19, 9806-9810.	1.3	4
42	Structural and compositional properties of Er-doped silicon nanoclusters/oxides for multilayered photonic devices studied by STEM-EELS. Nanoscale, 2013, 5, 9963.	2.8	3
43	Rare Earth-Ion/Nanosilicon Ultrathin Layer: A Versatile Nanohybrid Light-Emitting Building Block for Active Optical Metamaterials. Journal of Physical Chemistry C, 2015, 119, 11800-11808.	1.5	3
44	Electron energy-loss spectroscopic tomography of Fe <sub>x</sub> Co(3- $\tilde{x}$ )O <sub>4</sub> impregnated Co <sub>3</sub> O <sub>4</sub> mesoporous particles: unraveling the chemical information in three dimensions. Analyst, The, 2016, 141, 4968-4972.	1.7	3
45	Electron energy loss spectroscopy on semiconductor heterostructures for optoelectronics and photonics applications. Journal of Microscopy, 2016, 262, 142-150.	0.8	3
46	Mapping the Magnetic Coupling of Self-Assembled Fe <sub>3</sub> O <sub>4</sub> Nanocubes by Electron Holography. Materials, 2021, 14, 774.	1.3	3
47	Understanding the Anisotropy in the Electrical Conductivity of CuPt<sub>B</sub>-type Ordered GaInP Thin Films by Combining <i>In Situ</i> TEM Biasing and First Principles Calculations. ACS Applied Electronic Materials, 2022, 4, 3478-3485.	2.0	3
48	On the use of Sb to improve the performance of GaInP subcells of multijunction solar cells. , 2015, , .		2
49	Cation disorder in Sr <sub>0.67</sub> Ba <sub>0.33</sub> Nb <sub>2</sub> O <sub>6</sub> assessed by aberration corrected stem. Results in Materials, 2019, 3, 100038.	0.9	2
50	Grain Boundaries: Engineering Transport in Manganites by Tuning Local Nonstoichiometry in Grain Boundaries (Adv. Mater. 4/2019). Advanced Materials, 2019, 31, 1970026.	11.1	2
51	Size-€Controlled Si Nanocrystals Fabricated by Electron Beam Evaporation. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800619.	0.8	2
52	(Invited) Optimizing Er-Doped Layer Stacks for Integrated Light Emitting Devices. ECS Transactions, 2013, 53, 81-84.	0.3	1
53	Green Electroluminescence of Al/Tb/Al/SiO<sub>2</sub> Devices Fabricated by Electron Beam Evaporation. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700451.	0.8	1
54	Unveiling GaN Polytypism in Distributed GaN/InAlN Bragg Reflectors Through HRTEM Image Simulation. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800218.	0.8	1

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55	(Invited) Transport and Electroluminescence Properties of Size-Controlled Silicon Nanocrystals Embedded in SiO <sub>2</sub> Matrix Following the Superlattice Approach. ECS Transactions, 2014, 61, 133-139.	0.3	0
56	Atomistic modelling and high resolution electron microscopy simulations of CeO <sub>2</sub> nanoparticles. Applied Physics Letters, 2017, 111, 223107.	1.5	0
57	Electron Tomography. Springer Series in Materials Science, 2021, , 257-283.	0.4	0