Gabriel Lozano

List of Publications by Year
in descending order

82 papers	3,196 citations	218677 26 h-index	149698 56 g-index
82 all docs	82 docs citations	82 times ranked	4820 citing authors

#	Article	IF	Citations
1	Plasmonics for solid-state lighting: enhanced excitation and directional emission of highly efficient light sources. Light: Science and Applications, 2013, 2, e66-e66.	16.6	335
2	Highly Efficient Perovskite Solar Cells with Tunable Structural Color. Nano Letters, 2015, 15, 1698-1702.	9.1	289
3	Unbroken Perovskite: Interplay of Morphology, Electroâ€optical Properties, and Ionic Movement. Advanced Materials, 2016, 28, 5031-5037.	21.0	242
4	Coherent and Broadband Enhanced Optical Absorption in Graphene. ACS Nano, 2013, 7, 4810-4817.	14.6	190
5	ABX3 Perovskites for Tandem Solar Cells. Joule, 2017, 1, 769-793.	24.0	176
6	Metallic nanostructures for efficient LED lighting. Light: Science and Applications, 2016, 5, e16080-e16080.	16.6	161
7	Porous one dimensional photonic crystals: novel multifunctional materials for environmental and energy applications. Energy and Environmental Science, 2011, 4, 4800.	30.8	114
8	Sorption Properties of Mesoporous Multilayer Thin Films. Journal of Physical Chemistry C, 2008, 112, 3157-3163.	3.1	110
9	Optical analysis of CH₃NH₃Sn_xPb_{1â˜’x}I₃ absorbers: a roadmap for perovskite-on-perovskite tandem solar cells. Journal of Materials Chemistry A, 2016, 4, 11214-11221.	10.3	101
10	High voltage vacuum-deposited CH₃NH₃PbI₃â€“CH₃NH₃PbI₃ tandem solar cells. Energy and Environmental Science, 2018, 11, 3292-3297.	30.8	98
11	Hybrid plasmonic-photonic modes in diffractive arrays of nanoparticles coupled to light-emitting optical waveguides. Optics Express, 2013, 21, 4250.	3.4	90
12	Tailor-made directional emission in nanoimprinted plasmonic-based light-emitting devices. Nanoscale, 2014, 6, 9223-9229.	5.6	87
13	Quantum rod emission coupled to plasmonic lattice resonances: A collective directional source of polarized light. Applied Physics Letters, 2012, 100, 111103.	3.3	86
14	Theoretical Analysis of the Performance of One-Dimensional Photonic Crystal-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 3681-3687.	3.1	73
15	TiO2â€“SiO2 one-dimensional photonic crystals of controlled porosity by glancing angle physical vapour deposition. Journal of Materials Chemistry, 2010, 20, 6408.	6.7	64
16	Molding with nanoparticle-based one-dimensional photonic crystals: a route to flexible and transferable Bragg mirrors of high dielectric contrast. Journal of Materials Chemistry, 2009, 19, 3144.	6.7	61
17	Optical Description of Mesostructured Organicâ€“Inorganic Halide Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 48-53.	4.6	59
18	Modified emission of extended light emitting layers by selective coupling to collective lattice resonances. Physical Review B, 2016, 94, .	3.2	55

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19	The Role of Metal Halide Perovskites in Next-Generation Lighting Devices. Journal of Physical Chemistry Letters, 2018, 9, 3987-3997.	4.6	53
20	Interplay of Resonant Cavity Modes with Localized Surface Plasmons: Optical Absorption Properties of Bragg Stacks Integrating Gold Nanoparticles. Advanced Materials, 2011, 23, 2108-2112.	21.0	34
21	Revealing the substitution mechanism in Eu³⁺:CaMoO₄and Eu³⁺,Na⁺:CaMoO₄phosphors. Journal of Materials Chemistry C, 2018, 6, 12830-12840.	5.5	34
22	Efficient bifacial dye-sensitized solar cells through disorder by design. Journal of Materials Chemistry A, 2016, 4, 1953-1961.	10.3	33
23	Enhanced absorption and emission of Y_3Al_5O_12:Ce^3+ thin layers prepared by epoxide-catalyzed sol-gel method. Optical Materials Express, 2012, 2, 1111.	3.0	30
24	Growth Dynamics of Self-Assembled Colloidal Crystal Thin Films. Langmuir, 2007, 23, 9933-9938.	3.5	28
25	Fluorescent Humidity Sensors Based on Photonic Resonators. Advanced Optical Materials, 2017, 5, 1700663.	7.3	28
26	Localized surface plasmon effects on the photophysics of perovskite thin films embedding metal nanoparticles. Journal of Materials Chemistry C, 2020, 8, 916-921.	5.5	28
27	Control of the external photoluminescent quantum yield of emitters coupled to nanoantenna phased arrays. Journal of Applied Physics, 2015, 118, .	2.5	27
28	Towards a full understanding of the growth dynamics and optical response of self-assembled photonic colloidal crystal films. Journal of Materials Chemistry, 2009, 19, 185-190.	6.7	26
29	Environmentally responsive nanoparticle-based luminescent optical resonators. Nanoscale, 2010, 2, 936.	5.6	24
30	Interplay between crystal-size and disorder effects in the high-energy optical response of photonic crystal slabs. Physical Review B, 2007, 76, .	3.2	23
31	Directional absorption by phased arrays of plasmonic nanoantennae probed with time-reversed Fourier microscopy. New Journal of Physics, 2014, 16, 013040.	2.9	21
32	Photonic Tuning of the Emission Color of Nanophosphor Films Processed at High Temperature. Advanced Optical Materials, 2017, 5, 1700099.	7.3	21
33	Experimental and theoretical analysis of the intensity of beams diffracted by three-dimensional photonic crystals. Physical Review B, 2008, 78, .	3.2	20
34	Efficient third harmonic generation from FAPbBr₃ perovskite nanocrystals. Journal of Materials Chemistry C, 2020, 8, 15990-15995.	5.5	20
35	Persistent luminescent nanoparticles: Challenges and opportunities for a shimmering future. Journal of Applied Physics, 2021, 130, .	2.5	20
36	Persistent luminescence of transparent ZnGa₂O₄:Cr³⁺ thin films from colloidal nanoparticles of tunable size. Journal of Materials Chemistry C, 2021, 9, 4474-4485.	5.5	19

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37	Synthesis, functionalization and properties of uniform europium-doped sodium lanthanum tungstate and molybdate (NaLa(XO4)2, Xâ€¯=â€¯Mo,W) probes for luminescent and X-ray computed tomography bioimaging. Journal of Colloid and Interface Science, 2019, 554, 520-530.	9.4	18
38	Tamm Plasmons Directionally Enhance Rare-Earth Nanophosphor Emission. ACS Photonics, 2019, 6, 634-641.	6.6	17
39	Enhanced Directional Light Extraction from Patterned Rareâ€Earth Phosphor Films. Advanced Optical Materials, 2021, 9, 2001611.	7.3	17
40	Physical origin of the high energy optical response of three dimensional photonic crystals. Optics Express, 2007, 15, 17754.	3.4	16
41	Relation between growth dynamics and the spatial distribution of intrinsic defects in self-assembled colloidal crystal films. Applied Physics Letters, 2008, 92, .	3.3	16
42	Highly Efficient Transparent Nanophosphor Films for Tunable White-Light-Emitting Layered Coatings. ACS Applied Materials & Interfaces, 2019, 11, 4219-4225.	8.0	16
43	Design and realization of transparent solar modules based on luminescent solar concentrators integrating nanostructured photonic crystals. Progress in Photovoltaics: Research and Applications, 2015, 23, 1785-1792.	8.1	15
44	Photonic structuring improves the colour purity of rare-earth nanophosphors. Materials Horizons, 2018, 5, 661-667.	12.2	15
45	Characterization of Mesoporous Thin Films by Specular Reflectance Porosimetry. Langmuir, 2012, 28, 13777-13782.	3.5	14
46	Multidirectional Lightâ€Harvesting Enhancement in Dye Solar Cells by Surface Patterning. Advanced Optical Materials, 2014, 2, 879-884.	7.3	14
47	Flexible nanophosphor films doped with Mie resonators for enhanced out-coupling of the emission. Journal of Materials Chemistry C, 2019, 7, 267-274.	5.5	14
48	Optical Analysis of the Fine Crystalline Structure of Artificial Opal Films. Langmuir, 2009, 25, 12860-12864.	3.5	13
49	Near-field resonance at far-field-induced transparency in diffractive arrays of plasmonic nanorods. Optics Letters, 2013, 38, 1238.	3.3	13
50	Excitation of confined modes on particle arrays. Optics Express, 2013, 21, 5636.	3.4	12
51	Coherent absorption and enhanced photoluminescence in thin layers of nanorods. Physical Review B, 2012, 85, .	3.2	11
52	Highly Versatile Upconverting Oxyfluoride-Based Nanophosphor Films. ACS Applied Materials & Interfaces, 2021, 13, 30051-30060.	8.0	10
53	Light generation at the anomalous dispersion high energy range of a nonlinear opal film. Optics Express, 2009, 17, 12210.	3.4	9
54	Conformal Growth of Organic Luminescent Planar Defects within Artificial Opals. Chemistry of Materials, 2010, 22, 379-385.	6.7	9

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55	Design and Realization of a Novel Optically Disordered Material: A Demonstration of a Mie Glass. Advanced Optical Materials, 2017, 5, 1700025.	7.3	8
56	Nanophotonics for current and future white light-emitting devices. Journal of Applied Physics, 2021, 130, .	2.5	8
57	Enhanced up-conversion photoluminescence in fluorideâ€"oxyfluoride nanophosphor films by embedding gold nanoparticles. Materials Advances, 2022, 3, 4235-4242.	5.4	8
58	Symmetry analysis of the numerical instabilities in the transfer matrix method. Journal of Optics (United Kingdom), 2013, 15, 125719.	2.2	6
59	Dipole reorientation and local density of optical states influence the emission of light-emitting electrochemical cells. Physical Chemistry Chemical Physics, 2020, 22, 92-96.	2.8	5
60	Angular dependence of the intensity of light beams diffracted by colloidal crystals. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 1394.	2.1	4
61	Finite Size Effects on Light Propagation throughout Random Media: Relation between Optical Properties and Scattering Event Statistics. Advanced Optical Materials, 2020, 8, 1901196.	7.3	4
62	One-reactor vacuum and plasma synthesis of transparent conducting oxide nanotubes and nanotrees: from single wire conductivity to ultra-broadband perfect absorbers in the NIR. Nanoscale, 2021, 13, 13882-13895.	5.6	4
63	High-temperature solar-selective coatings based on Cr(Al)N. Part 1: Microstructure and optical properties of CrNy and Cr1-xAlxNy films prepared by DC/HiPIMS. Solar Energy Materials and Solar Cells, 2021, 223, 110951.	6.2	4
64	Optical Responses of Localized and Extended Modes in a Mesoporous Layer on Plasmonic Array to Isopropanol Vapor. Journal of Physical Chemistry C, 2020, 124, 5772-5779.	3.1	3
65	Transparent Phosphor Thin Films Based on Rareâ€Earthâ€Doped Garnets: Building Blocks for Versatile Persistent Luminescence Materials. Advanced Photonics Research, 2022, 3, .	3.6	3
66	Anomalous group velocity at the high energy range of a 3D photonic nanostructure. Optics Express, 2010, 18, 15682.	3.4	2
67	Analysis of artificial opals by scanning near field optical microscopy. Journal of Applied Physics, 2011, 109, 083514.	2.5	2
68	Anomalous group velocity at the high energy range of real 3D photonic nanostructures. , 2010, , .		1
69	Anomalous light propagation, finite size-effects and losses in real 3D photonic nanostructures. , 2011, , .		1
70	Plasmonic LED device. , 2014, , .		1
71	Optical design of all-perovskite tandem solar cells. , 2017, , .		1
72	Emerging materials and devices for efficient light generation. Journal of Applied Physics, 2022, 131, .	2.5	1

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73	Transparent Phosphor Thin Films Based on Rareâ€Earthâ€Doped Garnets: Building Blocks for Versatile Persistent Luminescence Materials. Advanced Photonics Research, 2022, 3, .	3.6	1
74	Photonic Crystals: Interplay of Resonant Cavity Modes with Localized Surface Plasmons: Optical Absorption Properties of Bragg Stacks Integrating Gold Nanoparticles (Adv. Mater. 18/2011). Advanced Materials, 2011, 23, 2024-2024.	21.0	0
75	Light Harvesting: Multidirectional Light-Harvesting Enhancement in Dye Solar Cells by Surface Patterning (Advanced Optical Materials 9/2014). Advanced Optical Materials, 2014, 2, 804-804.	7.3	0
76	Photonic Tuning of Nanophosphor Transparent thin films. , 2017, , .		0
77	Plasmonic Crystals for Solid-State Lighting. , 2012, , .		0
78	Modeling the Optical Response of Three-Dimensional Disordered Structures Using theÂKorringaâ€“Kohnâ€“Rostoker Method. Series in Optics and Optoelectronics, 2012, , 39-54.	0.0	0
79	Interplay of Order and Disorder in the High-Energy Optical Response of Three-Dimensional Photonic Crystals. Series in Optics and Optoelectronics, 2012, , 301-322.	0.0	0
80	Nanophotonics for Color Conversion in Solid-State Lighting. , 2016, , .		0
81	Nanophotonics Tunes Rare-Earth Nanophosphor Emission. , 2019, , .		0
82	Transparent nanophosphor films for efficient white-light generation. , 2019, , .		0