Luis CerdÃ¡n

List of Publications by Year
in descending order

57 papers	1,262 citations	361296 20 h-index	360920 35 g-index
58 all docs	58 docs citations	58 times ranked	1633 citing authors

#	Article	IF	Citations
1	FRET-assisted laser emission in colloidal suspensions of dye-doped latex nanoparticles. Nature Photonics, 2012, 6, 621-626.	15.6	137
2	Chiral Organic Dyes Endowed with Circularly Polarized Laser Emission. Journal of Physical Chemistry C, 2017, 121, 5287-5292.	1.5	116
3	Dyeâ€Doped POSS Solutions: Random Nanomaterials for Laser Emission. Advanced Materials, 2009, 21, 4163-4166.	11.1	66
4	A borane laser. Nature Communications, 2015, 6, 5958.	5.8	63
5	First Highly Efficient and Photostable E and Câ€...Derivatives of 4,4â€Difluoroâ€4â€boraâ€3a,4aâ€diazaâ€sâ€indacene (BODIPY) as Dye Lasers in the Liquid Phase, Thin Films, and Solidâ€State Rods. Chemistry - A European Journal, 2014, 20, 2646-2653.	1.7	62
6	Amplified spontaneous emission and optical gain measurements from pyrromethene 567 ï¿½?? doped polymer waveguides and quasi-waveguides. Optics Express, 2008, 16, 7023.	1.7	59
7	Carboxylates versus Fluorines: Boosting the Emission Properties of Commercial BODIPYs in Liquid and Solid Media. Advanced Functional Materials, 2013, 23, 4195-4205.	7.8	56
8	Unprecedented Jâ€Aggregated Dyes in Pure Organic Solvents. Advanced Functional Materials, 2016, 26, 2756-2769.	7.8	52
9	New perylene-doped polymeric thin films for efficient and long-lasting lasers. Journal of Materials Chemistry, 2012, 22, 8938.	6.7	48
10	Thermochromic Fluorescence from B₁₈H₂₀(NC₅H₅)₂: An Inorganicâ€“Organic Composite Luminescent Compound with an Unusual Molecular Geometry. Advanced Optical Materials, 2017, 5, 1600694.	3.6	45
11	Random lasing from sulforhodamine dye-doped polymer films with high surface roughness. Applied Physics B: Lasers and Optics, 2012, 108, 839-850.	1.1	40
12	Laser emission from mirrorless waveguides based on photosensitized polymers incorporating POSS. Optics Express, 2010, 18, 10247.	1.7	38
13	Circularly polarized laser emission in optically active organic dye solutions. Physical Chemistry Chemical Physics, 2017, 19, 22088-22093.	1.3	37
14	Synthetic Approach to Readily Accessible Benzofuran-Fused Borondipyrromethenes as Red-Emitting Laser Dyes. Journal of Organic Chemistry, 2019, 84, 2523-2541.	1.7	31
15	Nâ€BODIPYs Come into Play: Smart Dyes for Photonic Materials. Chemistry - A European Journal, 2017, 23, 9383-9390.	1.7	30
16	FÃ¶rster Resonance Energy Transfer and Laser Efficiency in Colloidal Suspensions of Dye-Doped Nanoparticles: Concentration Effects. Journal of Physical Chemistry C, 2014, 118, 13107-13117.	1.5	24
17	Variable Stripe Length method: influence of stripe length choice on measured optical gain. Optics Letters, 2017, 42, 5258.	1.7	24
18	Random Lasing in Selfâ€Assembled Dyeâ€Doped Latex Nanoparticles: Packing Density Effects. Advanced Functional Materials, 2013, 23, 3916-3924.	7.8	22

#	Article	IF	Citations
19	Straightforward Synthetic Protocol for the Introduction of Stabilized Câ€…Nucleophiles in the BODIPY Core for Advanced Sensing and Photonic Applications. Chemistry - A European Journal, 2015, 21, 1755-1764.	1.7	22
20	On the characteristic lengths in the variable stripe length method for optical gain measurements. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 1874.	0.9	21
21	Waveguided random lasing in red-emitting-dye-doped organicâ€“inorganic hybrid polymer thin films. Organic Electronics, 2012, 13, 1463-1469.	1.4	21
22	BOPHYs versus BODIPYs: A comparison of their performance as effective multi-function organic dyes. Dyes and Pigments, 2019, 170, 107662.	2.0	21
23	Singular laser behavior of hemicyanine dyes: unsurpassed efficiency and finely structured spectrum in the near-IR region. Laser Physics Letters, 2012, 9, 426-433.	0.6	20
24	Circularly polarized laser emission induced in isotropic and achiral dye systems. Scientific Reports, 2016, 6, 28740.	1.6	18
25	Waveguides and quasi-waveguides based on pyrromethene 597-doped poly(methyl methacrylate). Applied Physics B: Lasers and Optics, 2009, 97, 73-83.	1.1	17
26	Unveiling the role of upper excited electronic states in the photochemistry and laser performance of anti-B18H22. Journal of Materials Chemistry C, 2020, 8, 12806-12818.	2.7	16
27	Naturally Assembled Excimers in Xanthenes as Singular and Highly Efficient Laser Dyes in Liquid and Solid Media. Advanced Optical Materials, 2013, 1, 984-990.	3.6	15
28	Solid state dye lasers with scattering feedback. Progress in Quantum Electronics, 2013, 37, 348-382.	3.5	13
29	A Series of Ultra-Efficient Blue Borane Fluorophores. Inorganic Chemistry, 2020, 59, 17058-17070.	1.9	13
30	Multicolored Emission and Lasing in DCM-Adamantane Plasma Nanocomposite Optical Films. ACS Applied Materials & Interfaces, 2017, 9, 8948-8959.	4.0	12
31	Highâ€Gain Longâ€Lived Amplified Spontaneous Emission from Dyeâ€Doped Fluorinated Polyimide Planar Waveguides. Macromolecular Chemistry and Physics, 2009, 210, 1624-1631.	1.1	11
32	Stereochemical and Steric Control of Photophysical and Chiroptical Properties in Bichromophoric Systems. Chemistry - A European Journal, 2018, 24, 3802-3815.	1.7	11
33	Tailoring the Molecular Skeleton of Azaâ€BODIPYs to Design Photostable Redâ€Lightâ€Emitting Laser Dyes. ChemPhotoChem, 2019, 3, 75-85.	1.5	11
34	A simple experiment on slow light in ruby. American Journal of Physics, 2008, 76, 826-832.	0.3	9
35	Amplified spontaneous emission and optical gain measurements from pyrromethene 567 ï¿½?? doped polymer waveguides and quasi-waveguides: erratum. Optics Express, 2008, 16, 7587.	1.7	9
36	Laser Efficiency Enhancement Due to Non-Resonant Feedback in Dye-Doped Hybrid Materials: Theoretical Insights and Experiment. IEEE Journal of Quantum Electronics, 2011, 47, 907-919.	1.0	8

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37	Amplified Spontaneous Emission Threshold Dependence on Determination Method in Dye-Doped Polymer and Lead Halide Perovskite Waveguides. Molecules, 2022, 27, 4261.	1.7	8
38	A FRET analysis of dye diffusion in core/shell polymer nanoparticles. RSC Advances, 2014, 4, 22115.	1.7	7
39	Simultaneous retrieval of optical gains, losses, and threshold in active waveguides. Optics and Laser Technology, 2020, 121, 105814.	2.2	7
40	Reconstruction of Nuclear Ensemble Approach Electronic Spectra Using Probabilistic Machine Learning. Journal of Chemical Theory and Computation, 2022, 18, 3052-3064.	2.3	5
41	Focusing on charge-surface interfacial effects to enhance the laser properties of dye-doped nanoparticles. Laser Physics Letters, 2014, 11, 015901.	0.6	3
42	Emission properties of dye-doped cationic nanoparticles: size, surfactant and monomeric composition effects. RSC Advances, 2015, 5, 4454-4462.	1.7	3
43	Unveiling photophysical and photonic phenomena by means of optical gain measurements in waveguides and solutions. Optics and Laser Technology, 2021, 136, 106766.	2.2	3
44	Phot0, a plausible primeval pigment on Earth and rocky exoplanets. Physical Chemistry Chemical Physics, 2022, 24, 16979-16987.	1.3	3
45	Ultrashort Pulse Generation in Nanolasers by Means of Lorenzâ€“Haken Instabilities. Annalen Der Physik, 2021, 533, 2100122.	0.9	2
46	Variable Stripe Length method for optical gain measurements: Characteristic lengths. , 2011, , .		1
47	Taming the Photonic Behavior of Laser Dyes Through Specific and Dynamic Selfâ€Assembly onto Cellulose Nanocrystals. Advanced Photonics Research, 2021, 2, 2000107.	1.7	1
48	State-of-the-Art Active Materials for Organic Lasers. , 2018, , 85-149.		1
49	Dye-doped fluorinated polyimides as efficient long-lived wave-guide lasers and amplifiers. , 2009, , .		0
50	Non-resonant feedback to enhance conventional lasing in advanced materials. , 2011, , .		0
51	Efficiency and photostability optimization in Perylene-doped polymer distributed feedback lasers and amplifiers. , 2011, , .		0
52	Photophysical and Lasing Properties of Rh6G Confined Polymeric Nanoparticles Suspension. , 2012, , .		0
53	Tailoring the Molecular Skeleton of Azaâ€BODIPYs to Design Photostable Redâ€Lightâ€Emitting Laser Dyes. ChemPhotoChem, 2019, 3, 63-63.	1.5	0
54	Waveguided Random Laser Emission in Dye-Doped Hybrid Polymer Thin Films. , 2012, , .		0

#	Article	IF	Citations
55	Interaction of Anti-B₁₈H₂₂ with Light. , 2018, , 115-136.		0
56	Using the Variable Pump Intensity method to measure optical gains and unveil photophysical and photonic phenomena in active waveguides. EPJ Web of Conferences, 2020, 243, 11002.	0.1	0
57	Quantitative comparison between different methods for the determination of the amplified spontaneous emission threshold in dye-polymer blends and perovskite thin films. Materials Today: Proceedings, 2022, , .	0.9	0