JosÃ© M Villalvilla

List of Publications by Year
in descending order

67 papers	1,257 citations	331259 21 h-index	395343 33 g-index
67 all docs	67 docs citations	67 times ranked	1050 citing authors

#	Article	IF	Citations
1	Excited states engineering enables efficient near-infrared lasing in nanographenes. Materials Horizons, 2022, 9, 393-402.	6.4	12
2	Periâ€Acenoacene for Solution Processed Distributed Feedback Laser: The Effect of 1,2â€Oxaborine Doping. Advanced Optical Materials, 2022, 10, .	3.6	9
3	Effect of Substituents at Imide Positions on the Laser Performance of 1,7-Bay-Substituted Perylenediimide Dyes. Journal of Physical Chemistry C, 2021, 125, 12277-12288.	1.5	7
4	Simultaneous Determination of Refractive Index and Thickness of Submicron Optical Polymer Films from Transmission Spectra. Polymers, 2021, 13, 2545.	2.0	9
5	Nearâ€Infrared Lasing in Fourâ€Zigzag Edged Nanographenes by 1D versus 2D Electronic Ï€â€Conjugation. Advanced Functional Materials, 2021, 31, 2105073.	7.8	25
6	N,Nâ€²-Bis(3-methylphenyl)-N,Nâ€²-dyphenylbenzidine Based Distributed Feedback Lasers with Holographically Fabricated Polymeric Resonators. Polymers, 2021, 13, 3843.	2.0	4
7	Violet-emitting distributed-feedback laser using a naphtho[2,1-b:6,5-bâ€²]difuran derivative. Journal of Materials Chemistry C, 2021, 9, 17287-17290.	2.7	1
8	Blue and Deepâ€Blueâ€Emitting Organic Lasers with Topâ€Layer Distributed Feedback Resonators. Advanced Optical Materials, 2020, 8, 2001153.	3.6	12
9	Dual Amplified Spontaneous Emission and Lasing from Nanographene Films. Nanomaterials, 2020, 10, 1525.	1.9	14
10	Kinetically Protected Carbon-Bridged Oligo(p-phenylenevinylene) Derivatives for Blue Color Amplified Spontaneous Emission. Bulletin of the Chemical Society of Japan, 2020, 93, 751-758.	2.0	9
11	Peryleneâ€Fused, Aggregationâ€Free Polycyclic Aromatic Hydrocarbons for Solutionâ€Processed Distributed Feedback Lasers. Angewandte Chemie, 2020, 132, 15037-15044.	1.6	6
12	Peryleneâ€Fused, Aggregationâ€Free Polycyclic Aromatic Hydrocarbons for Solutionâ€Processed Distributed Feedback Lasers. Angewandte Chemie - International Edition, 2020, 59, 14927-14934.	7.2	24
13	Controlling the emission properties of solution-processed organic distributed feedback lasers through resonator design. Scientific Reports, 2019, 9, 11159.	1.6	20
14	Solution-processed nanographene distributed feedback lasers. Nature Communications, 2019, 10, 3327.	5.8	59
15	Sub-400â€¯nm film thickness determination from transmission spectra in organic distributed feedback lasers fabrication. Thin Solid Films, 2019, 692, 137580.	0.8	8
16	Carbonâ€Bridged pâ€Phenylenevinylene Polymer for Highâ€Performance Solutionâ€Processed Distributed Feedback Lasers. Advanced Optical Materials, 2018, 6, 1800069.	3.6	20
17	Influence of Blending Ratio and Polymer Matrix on the Lasing Properties of Perylenediimide Dyes. Journal of Physical Chemistry C, 2018, 122, 24896-24906.	1.5	23
18	Molecular aggregation of naphthalimide organic semiconductors assisted by amphiphilic and lipophilic interactions: a joint theoretical and experimental study. Physical Chemistry Chemical Physics, 2017, 19, 6206-6215.	1.3	9

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19	An Efficient and Colorâ€Tunable Solutionâ€Processed Organic Thinâ€Film Laser with a Polymeric Topâ€Layer Resonator. Advanced Optical Materials, 2017, 5, 1700238.	3.6	39
20	Two-dimensional distributed feedback lasers with thermally-nanoimprinted perylenediimide-containing films. Optical Materials Express, 2017, 7, 1295.	1.6	6
21	Organic distributed feedback laser to monitor solvent extraction upon thermal annealing in solution-processed polymer films. Sensors and Actuators B: Chemical, 2016, 232, 605-610.	4.0	10
22	Organic distributed feedback laser for label-free biosensing of ErbB2 protein biomarker. Sensors and Actuators B: Chemical, 2016, 223, 261-265.	4.0	28
23	Improved Amplified Spontaneous Emission of Dyeâ€Doped Functionalized Mesostructured Silica Waveguide Films. Advanced Optical Materials, 2015, 3, 1454-1461.	3.6	3
24	Solution-processable, photo-stable, low-threshold, and broadly tunable thin film organic lasers based on novel high-performing laser dyes. Proceedings of SPIE, 2015, , .	0.8	3
25	Label-free sensors based on perylenediimide-doped polystyrene distributed feedback lasers. Proceedings of SPIE, 2015, , .	0.8	0
26	Distributed feedback lasers based on perylenediimide dyes for label-free refractive index sensing. Sensors and Actuators B: Chemical, 2015, 220, 1368-1375.	4.0	29
27	Singular Temperatures Connected to Charge Transport Mechanism Transitions in Perylene Bisimides from Steady-State Photocurrent Measurements. Journal of Physical Chemistry C, 2015, 119, 14023-14028.	1.5	3
28	Carbon-bridged oligo(p-phenylenevinylene)s for photostable and broadly tunable, solution-processable thin film organic lasers. Nature Communications, 2015, 6, 8458.	5.8	105
29	Distributed feedback lasers based on dichromated poly(vinyl alcohol) reusable surface-relief gratings. Optical Materials Express, 2014, 4, 733.	1.6	13
30	Electron Transport in a Water-Soluble Liquid-Crystalline Perylene Bisimide. Journal of Physical Chemistry C, 2014, 118, 26577-26583.	1.5	10
31	Thermal-nanoimprint lithography for perylenediimide-based distributed feedback laser fabrication. Microelectronic Engineering, 2014, 114, 52-56.	1.1	4
32	Perylenediimide-based distributed feedback lasers with holographic relief gratings on dichromated gelatine. Journal of Applied Physics, 2013, 114, .	1.1	19
33	Comparing the distribution of the electronic gap of an organic molecule with its photoluminescence spectrum. Applied Physics Letters, 2013, 102, 163307.	1.5	3
34	Improved performance of perylenediimide-based lasers. Journal of Materials Chemistry C, 2013, 1, 1182-1191.	2.7	47
35	1,7â€Bayâ€Substituted Perylenediimide Derivative with Outstanding Laser Performance. Advanced Optical Materials, 2013, 1, 933-938.	3.6	58
36	Influence of the excitation area on the thresholds of organic second-order distributed feedback lasers. Applied Physics Letters, 2012, 101, 223303.	1.5	25

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37	Film thickness and grating depth variation in organic second-order distributed feedback lasers. Journal of Applied Physics, 2012, 112, .	1.1	43
38	Millisecond photorefractivity with novel dicyanomethylenedihydrofuran-containing polymers. Journal of Materials Chemistry, 2012, 22, 12220.	6.7	9
39	Efficient organic distributed feedback lasers with imprinted active films. Optics Express, 2011, 19, 22443.	1.7	47
40	Very Large Photoconduction Enhancement Upon Selfâ€Assembly of a New Triindole Derivative in Solutionâ€Processed Films. Advanced Functional Materials, 2011, 21, 738-745.	7.8	25
41	Highly photostable solid-state organic distributed feedback laser fabricated via thermal nanoimprint lithography. Microelectronic Engineering, 2010, 87, 1428-1430.	1.1	6
42	Second-order distributed feedback lasers based on films containing perylenediimide derivatives. Proceedings of SPIE, 2010, , .	0.8	1
43	Critical Temperatures in the Photorefractive Polymer Composite Behavior. Journal of Physical Chemistry Letters, 2010, 1, 383-387.	2.1	2
44	Blue surface-emitting distributed feedback lasers based on TPD-doped films. Applied Optics, 2010, 49, 463.	2.1	25
45	Highly photostable organic distributed feedback laser emitting at 573 nm. Applied Physics Letters, 2010, 97, 171104.	1.5	43
46	Enhanced Photorefractivity of Poly(Nâ€vinylcarbazole)â€Based Composites through Electricâ€Field Treatments and Ionic Liquid Doping. Advanced Functional Materials, 2009, 19, 428-437.	7.8	11
47	Phthalocyanines as Efficient Sensitizers in Low-T_g Hole-Conducting Photorefractive Polymer Composites. Chemistry of Materials, 2009, 21, 2714-2720.	3.2	23
48	Effect of structural modifications in the laser properties of polymer films doped with perylenebisimide derivatives. Synthetic Metals, 2009, 159, 2293-2295.	2.1	20
49	Determination of the glass transition temperature of photorefractive polymer composites from photoconductivity measurements. Applied Physics Letters, 2008, 92, 041101.	1.5	16
50	Photorefractive polymer composites using a trinitrofluorenoneâ€“C60 dyad with a conformationally flexible linker as photosensitizer. Synthetic Metals, 2007, 157, 1064-1070.	2.1	8
51	Amplified spontaneous emission in polymer films doped with a perylenediimide derivative. Applied Optics, 2007, 46, 3836.	2.1	40
52	Effect of Structural Modifications in the Spectral and Laser Properties of Perylenediimide Derivatives. Journal of Physical Chemistry C, 2007, 111, 13595-13605.	1.5	67
53	Amplified spontaneous emission in TPD-based waveguides: thickness and TPD concentration dependence.. , 2006, , .		2
54	Concentration dependence of amplified spontaneous emission in organic-based waveguides. Organic Electronics, 2006, 7, 319-329.	1.4	38

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55	Photorefractive properties of an unsensitized polymer composite based on a dicyanostyrene derivative as nonlinear optical chromophore. Applied Physics Letters, 2005, 87, 261111.	1.5	11
56	Concentration dependence of amplified spontaneous emission in two oligo-(p-phenylenevinylene) derivatives. Journal of Applied Physics, 2005, 97, 063522.	1.1	20
57	Tuneability of amplified spontaneous emission through control of the thickness in organic-based waveguides. Journal of Applied Physics, 2005, 97, 093103.	1.1	51
58	TPD-BASED BLUE ORGANIC LASERS. Journal of Nonlinear Optical Physics and Materials, 2004, 13, 621-626.	1.1	11
59	Synthesis and Electrochemical and Photorefractive Properties of New Trinitrofluorenoneâ^'C60Photosensitizers. Chemistry of Materials, 2004, 16, 5021-5026.	3.2	20
60	Application of dichromated gelatin for dry developed lithographic techniques on GaAs. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 1085.	1.6	3
61	Oxygen ECR stream etching of dichromated gelatin films. Thin Solid Films, 1998, 317, 340-342.	0.8	5
62	Diffraction gratings in dry developed dichromated gelatin films. Thin Solid Films, 1998, 317, 343-346.	0.8	12
63	Gallium arsenide etching using ion beams from hydrogen/methane mixtures. Vacuum, 1996, 47, 39-44.	1.6	9
64	bombardment angle dependence of reactive ion-beam etching of GaAs with CH4/H2. Vacuum, 1994, 45, 1113-1114.	1.6	2
65	Temperature dependence of reactive ion beam etching of GaAs with CH4/H2. Vacuum, 1992, 43, 591-593.	1.6	4
66	Significance of charge exchange in the determination of yields in broad-beam ion etching. Vacuum, 1989, 39, 683-685.	1.6	4
67	Kinetic study of the formation of copper selenides by copper selenization. Materials Chemistry and Physics, 1988, 19, 341-356.	2.0	3