Paul N Stavrinou

List of Publications by Year
in descending order

139 papers	4,812 citations	136940 32 h-index	102480 66 g-index
139 all docs	139 docs citations	139 times ranked	6373 citing authors

#	Article	IF	Citations
1	Planar refractive index patterning through microcontact photo-thermal annealing of a printable organic/inorganic hybrid material. Materials Horizons, 2022, 9, 411-416.	12.2	4
2	Slow Energy Transfer in Selfâ€Doped Î²â€Conformation Film of Steric Polydiarylfluorenes toward Stable Dual Deepâ€Blue Amplified Spontaneous Emission. Advanced Optical Materials, 2022, 10, 2100723.	7.3	8
3	Highly Deformed o â€Carborane Functionalised Nonâ€linear Polycyclic Aromatics with Exceptionally Long Câ^'C Bonds. Chemistry - A European Journal, 2021, 27, 1970-1975.	3.3	8
4	Correlating the Structural and Photophysical Properties of Ortho, Meta, and Paraâ€Carboranylâ€"Anthracene Dyads. Advanced Electronic Materials, 2020, 6, 2000312.	5.1	13
5	Fully Solutionâ€Processed Photonic Structures from Inorganic/Organic Molecular Hybrid Materials and Commodity Polymers. Advanced Functional Materials, 2019, 29, 1808152.	14.9	14
6	The Importance of Microstructure in Determining Polaron Generation Yield in Poly(9,9-dioctylfluorene). Chemistry of Materials, 2019, 31, 6787-6797.	6.7	16
7	A metallic hot-carrier photovoltaic device. Semiconductor Science and Technology, 2019, 34, 064001.	2.0	8
8	Managing Local Order in Conjugated Polymer Blends via Polarity Contrast. Chemistry of Materials, 2019, 31, 6540-6547.	6.7	20
9	Ultrastable Supramolecular Selfâ€Encapsulated Wideâ€Bandgap Conjugated Polymers for Largeâ€Area and Flexible Electroluminescent Devices. Advanced Materials, 2019, 31, e1804811.	21.0	72
10	Controlling Molecular Conformation for Highly Efficient and Stable Deep-Blue Copolymer Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2018, 10, 11070-11082.	8.0	20
11	Systematic investigation of self-organization behavior in supramolecular Ï€-conjugated polymer for multi-color electroluminescence. Journal of Materials Chemistry C, 2018, 6, 1535-1542.	5.5	24
12	Identifying triplet pathways in dilute pentacene films. Nature Communications, 2018, 9, 4222.	12.8	71
13	Carboraneâ€Induced Excimer Emission of Severely Twisted Bisâ€oâ€Carboranyl Chrysene. Angewandte Chemie - International Edition, 2018, 57, 10640-10645.	13.8	77
14	Carboraneâ€Induced Excimer Emission of Severely Twisted Bisâ€oâ€Carboranyl Chrysene. Angewandte Chemie, 2018, 130, 10800-10805.	2.0	28
15	The Influence of Backbone Fluorination on the Dielectric Constant of Conjugated Polythiophenes. Advanced Electronic Materials, 2018, 4, 1700375.	5.1	17
16	Homoconjugation in poly(phenylene methylene)s: A case study of non-Ï€-conjugated polymers with unexpected fluorescent properties. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 707-720.	2.1	34
17	Understanding the molecular gelation processes of heteroatomic conjugated polymers for stable blue polymer light-emitting diodes. Journal of Materials Chemistry C, 2017, 5, 6762-6770.	5.5	19
18	Pentafluorobenzene end-group as a versatile handle for para fluoro â€œclickâ€•functionalization of polythiophenes. Chemical Science, 2017, 8, 2215-2225.	7.4	38

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19	Excitonic coupling dominates the homogeneous photoluminescence excitation linewidth in semicrystalline polymeric semiconductors. Physical Review B, 2017, 95, .	3.2	17
20	Polymers with Exceptional Photoluminescence by Homoconjugation. Chimia, 2017, 71, 733.	0.6	4
21	Nanoscale current spreading analysis in solution-processed graphene oxide/silver nanowire transparent electrodes via conductive atomic force microscopy. Journal of Applied Physics, 2016, 119, .	2.5	14
22	Current voltage characteristics of a metallic structure for a hot-carrier photovoltaic cell. , 2016, , .		1
23	Optoelectronic characterization of carrier extraction in a hot carrier photovoltaic cell structure. Journal of Optics (United Kingdom), 2016, 18, 074003.	2.2	13
24	Heteroatomic Conjugated Polymers and the Spectral Tuning of Electroluminescence via a Supramolecular Coordination Strategy. Macromolecular Rapid Communications, 2016, 37, 1807-1813.	3.9	18
25	Supramolecular Polymerâ€“Molecule Complexes as Gain Media for Ultraviolet Lasers. ACS Macro Letters, 2016, 5, 967-971.	4.8	28
26	Room temperature dielectric bistability in solution-processed spin crossover polymer thin films. Journal of Materials Chemistry C, 2016, 4, 6240-6248.	5.5	17
27	Solutionâ€crystallization and related phenomena in 9,9â€dialkylâ€fluorene polymers. II. Influence of sideâ€chain structure. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1492-1506.	2.1	20
28	Interplay between solid state microstructure and photophysics for poly(9,9â€dioctylfluorene) within oriented polyethylene hosts. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 22-38.	2.1	24
29	Solutionâ€crystallization and related phenomena in 9,9â€dialkylâ€fluorene polymers. I. Crystalline polymerâ€solvent compound formation for poly(9,9â€dioctylfluorene). Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1481-1491.	2.1	21
30	Multijunction organic photovoltaic cells for underwater solar power. , 2015, , .		10
31	Dip-pen patterning of poly(9,9-dioctylfluorene) chain-conformation-based nano-photonic elements. Nature Communications, 2015, 6, 5977.	12.8	59
32	A metallic hot carrier photovoltaic cell. Proceedings of SPIE, 2015, , .	0.8	6
33	Utilizing vertically aligned CdSe/CdS nanorods within a luminescent solar concentrator. Applied Physics Letters, 2015, 106, .	3.3	11
34	Highâ€Efficiency, Solutionâ€Processed, Multilayer Phosphorescent Organic Lightâ€Emitting Diodes with a Copper Thiocyanate Holeâ€Injection/Holeâ€Transport Layer. Advanced Materials, 2015, 27, 93-100.	21.0	178
35	Highâ€Efficiency Organic Photovoltaic Cells Based on the Solutionâ€Processable Hole Transporting Interlayer Copper Thiocyanate (CuSCN) as a Replacement for PEDOT:PSS. Advanced Energy Materials, 2015, 5, 1401529.	19.5	133
36	Wavefront kinetics of plasma oxidation of polydimethylsiloxane: limits for sub-Î¼m wrinkling. Soft Matter, 2014, 10, 1155.	2.7	74

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37	High-speed scanning thermal lithography for nanostructuring of electronic devices. Nanoscale, 2014, 6, 5813-5819.	5.6	5
38	Polythiophenes with vinylene linked ortho, meta and para-carborane sidechains. Polymer Chemistry, 2014, 5, 6190-6199.	3.9	23
39	Controlling the Interaction of Light with Polymer Semiconductors. Advanced Materials, 2013, 25, 4906-4911.	21.0	42
40	Paper No 19.2: Large-Area Printed Transparent Electrodes for Flexible Organic Light-Emitting Diodes. Digest of Technical Papers SID International Symposium, 2013, 44, 282-284.	0.3	0
41	Interfacial molecular order of conjugated polymer in P3HT:ZnO bilayer photovoltaics and its impact on device performance. Applied Physics Letters, 2013, 103, 153304.	3.3	12
42	Paper No P33: Largeâ€Area Printed Transparent Electrodes for Flexible Organic Lightâ€Emitting Diodes. Digest of Technical Papers SID International Symposium, 2013, 44, 112-114.	0.3	0
43	Confined Surface Plasmonâ€“Polariton Amplifiers. Nano Letters, 2013, 13, 1323-1329.	9.1	52
44	Controlling radiative loss in quantum well solar cells. Journal Physics D: Applied Physics, 2013, 46, 264007.	2.8	20
45	Drift-diffusion modeling of InP-based triple junction solar cells. Proceedings of SPIE, 2013, , .	0.8	12
46	Location, Location, Location - Strategic Positioning of 2,1,3-Benzothiadiazole Units within Trigonal Quaterfluorene-Truxene Star-Shaped Structures. Advanced Functional Materials, 2013, 23, 2792-2804.	14.9	67
47	Onâ€Demand Patterning of Nanostructured Pentacene Transistors by Scanning Thermal Lithography. Advanced Materials, 2013, 25, 552-558.	21.0	13
48	Efficient optical gain media comprising binary blends of poly(3-hexylthiophene) and poly(9,9-dioctylfluorene-co-benzothiadiazole). Journal of Applied Physics, 2012, 111, 123107.	2.5	44
49	Simulation of novel InAlAsSb solar cells. Proceedings of SPIE, 2012, , .	0.8	34
50	Luminescent Solar Concentrators utilising aligned CdSe/CdS nanorods. , 2011, , .		3
51	Modeling and analysis of multijunction solar cells. Proceedings of SPIE, 2011, , .	0.8	22
52	Plasmonic Sinks for the Selective Removal of Long-Lived States. ACS Nano, 2011, 5, 9958-9965.	14.6	44
53	Surface plasmon coupled emission using conjugated light-emitting polymer films [Invited]. Optical Materials Express, 2011, 1, 1127.	3.0	12
54	Recent results for singleâ€junction and tandem quantum well solar cells. Progress in Photovoltaics: Research and Applications, 2011, 19, 865-877.	8.1	66

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55	Wellâ€Defined and Monodisperse Linear and Starâ€Shaped Quaterfluoreneâ€DPP Molecules: the Significance of Conjugation and Dimensionality. Advanced Materials, 2011, 23, 2093-2097.	21.0	48
56	Random lasing in low molecular weight organic thin films. Applied Physics Letters, 2011, 99, 041114.	3.3	24
57	Electrically-driven surface plasmon polariton generation using conjugated polymers. , 2011, , .		0
58	Design of an achievable, all lattice-matched multijunction solar cell using InGaAlAsSb. , 2011, , .		24
59	Experimental measurement of restricted radiative emission in quantum well solar cells. , 2010, , .		7
60	Spatial Patterning of the Î²â€Phase in Poly(9,9â€dioctylfluorene): A Metamaterialsâ€Inspired Molecular Conformation Approach to the Fabrication of Polymer Semiconductor Optical Structures. Advanced Functional Materials, 2009, 19, 3237-3242.	14.9	45
61	Dispersionless saturable absorber mirrors with large modulation depths and low saturation fluences. Applied Physics B: Lasers and Optics, 2009, 97, 53-60.	2.2	8
62	Dispersionless Saturable Absorber Mirrors for Ultrashort Pulse Generation. , 2009, , .		0
63	Morphology evolution via self-organization and lateral and vertical diffusion in polymer:fullerene solar cell blends. Nature Materials, 2008, 7, 158-164.	27.5	1,396
64	Simultaneous optimization of charge-carrier mobility and optical gain in semiconducting polymer films. Nature Materials, 2008, 7, 376-380.	27.5	252
65	New light from hybrid inorganicâ€“organic emitters. Journal Physics D: Applied Physics, 2008, 41, 094006.	2.8	47
66	Blue-light-emitting polymer lasers with non-periodic circular Bragg resonators. Proceedings of SPIE, 2008, , .	0.8	1
67	Patterning and integration of polyfluorene polymers on micro-pixellated UV AlInGaN light-emitting diodes. Journal Physics D: Applied Physics, 2008, 41, 094008.	2.8	2
68	GaAs-based IIIâ€“Nyâ€“V1â^'yactive regions based on short-period super-lattice structures. Semiconductor Science and Technology, 2008, 23, 125016.	2.0	2
69	Patterning and integration of polyfluorene polymers on micropixellated UV AlInGaN light emitting diodes. , 2007, , .		0
70	Patterning and integration of polyfluorene polymers on micropixellated UV AlInGaN light emitting diodes. , 2007, , .		0
71	The change in refractive index of poly(9,9-dioctylfluorene) due to the adoption of the Î²-phase chain conformation. Journal of Physics Condensed Matter, 2007, 19, 466107.	1.8	27
72	Wavelength control across the near IR spectrum with GaInNAs. Applied Physics Letters, 2007, 90, 032109.	3.3	3

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73	Spectroscopic evaluation of the structural and compositional properties of GaNxAs1â^'x superlattices grown by molecular beam epitaxy. Thin Solid Films, 2007, 515, 4430-4434.	1.8	3
74	Identification of the local vibrational modes of small nitrogen clusters in dilute GaAsN. Physica B: Condensed Matter, 2007, 401-402, 339-342.	2.7	6
75	Optical hotspots speed up wireless communication. Nature Photonics, 2007, 1, 245-247.	31.4	71
76	Organic semiconductor devices for X-ray imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 580, 774-777.	1.6	18
77	Resonators, Sub-Wavelength Patterning and Optical Environments for Polymer Thin-Film Laser Structures. , 2007, , .		0
78	Experimental characterization of integrated optical wireless components. IEEE Photonics Technology Letters, 2006, 18, 977-979.	2.5	7
79	Wavelength-tunable and white-light emission from polymer-converted micropixellated InGaN ultraviolet light-emitting diodes. Journal of Optics, 2006, 8, S445-S449.	1.5	22
80	RF-plasma source qualification and compositional characterisation of GaNAs superlattices using SIMS. Applied Surface Science, 2006, 252, 7218-7220.	6.1	7
81	Modelling the Confined States in Multi Quantum Well Solar Cells. , 2006, , .		0
82	Low-threshold lasers based on a high-mobility semiconducting polymer. Applied Physics Letters, 2006, 88, 081104.	3.3	23
83	Resonant-cavity LED transceiver arrays for optical wireless communication. , 2006, , .		0
84	Integrated transceivers for optical wireless communications. IEEE Journal of Selected Topics in Quantum Electronics, 2005, 11, 173-183.	2.9	83
85	Optical coherence of planar microcavity emission. Applied Physics B: Lasers and Optics, 2005, 80, 817-821.	2.2	2
86	Determination Of InAsP/InP And InGaAs/InP Band Offsets Using Blue Shifting Type II Asymmetric Multiple Quantum Wells. AIP Conference Proceedings, 2005, , .	0.4	1
87	On the use of optical probes to monitor the thermal transitions in spin-coated poly(9,9-dioctylfluorene) films. Journal of Physics Condensed Matter, 2005, 17, 6307-6318.	1.8	28
88	Polyfluorene distributed feedback lasers operating in the green-yellow spectral region. Applied Physics Letters, 2005, 87, 031104.	3.3	68
89	Characterization of a high-thermal-stability spiroanthracenefluorene-based blue-light-emitting polymer optical gain medium. Journal of Applied Physics, 2005, 98, 083101.	2.5	33
90	Blue surface-emitting distributed feedback lasers based on a high-mobility semiconducting polymer. , 2005, , .		0

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91	Significant improvements in the optical gain properties of oriented liquid crystalline conjugated polymer films. Synthetic Metals, 2005, 155, 274-278.	3.9	35
92	Spectral conversion of InGaN ultraviolet microarray light-emitting diodes using fluorene-based red-, green-, blue-, and white-light-emitting polymer overlayer films. Applied Physics Letters, 2005, 87, 103505.	3.3	67
93	Transient Photoresponse of Organic Photodetectors. , 2005, , .		0
94	Advanced receivers for free-space optical communications. , 2004, , .		0
95	Spherical aberration correction for optical tweezers. Optics Communications, 2004, 236, 145-150.	2.1	64
96	Emission from laterally confined microcavities: an optical mode approach. Optics Communications, 2004, 237, 141-151.	2.1	0
97	Hybrid polaritons in strongly coupled microcavities: experiments and models. Journal of Luminescence, 2004, 110, 347-353.	3.1	18
98	Equations of motion in a non-integer-dimensional space. Journal of Physics A, 2004, 37, 6987-7003.	1.6	122
99	Solid-state tracking integrated optical wireless transceivers for line-of-sight optical links. , 2004, , .		0
100	Title is missing!. Optical and Quantum Electronics, 2003, 35, 1157-1163.	3.3	0
101	Resonant-cavity light-emitting diodes (RC-LEDs) and detectors for mid-IR gas-sensing applications. IEE Proceedings: Optoelectronics, 2003, 150, 360.	0.8	5
102	Strong coupling in organic semiconductor microcavities. Semiconductor Science and Technology, 2003, 18, S419-S427.	2.0	42
103	Variable numerical-aperture temporal-coherence measurement of resonant-cavity LEDs. Journal of Lightwave Technology, 2003, 21, 149-154.	4.6	5
104	High-speed integrated transceivers for optical wireless. , 2003, 41, 58-62.		49
105	Â Â 3 Âm InAs resonant-cavity-enhanced photodetector. Semiconductor Science and Technology, 2003, 18, 964-967.	2.0	18
106	Demonstration of a blueshift in type II asymmetric InP/InAsP/InGaAs multiple quantum wells. Journal of Applied Physics, 2003, 94, 3222-3228.	2.5	6
107	Pulse delay and propagation through subwavelength metallic slits. Physical Review E, 2003, 68, 066604.	2.1	12
108	Electro-absorption and electro-refraction in InGaAsN quantum well structures. Electronics Letters, 2002, 38, 343.	1.0	24

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109	Mid-infrared (Â Â 2Â6 Âµm) measurements of the refractive indices of GaAs and AlAs. Semiconductor Science and Technology, 2002, 17, 1189-1192.	2.0	13
110	Flip-chip integrated optical wireless transceivers. , 2002, , .		0
111	A comparative study of spontaneous emission and carrier recombination processes in InGaAs quantum dots and GaInNAs quantum wells emitting near 1300 nm. Journal of Applied Physics, 2002, 92, 6215-6218.	2.5	19
112	The propagation of electromagnetic power through subwavelength slits in a metallic grating. Optics Communications, 2002, 206, 217-223.	2.1	28
113	Optical characterization of GaAs pyramid microstructures formed by molecular beam epitaxial regrowth on pre-patterned substrates. Journal of Applied Physics, 2001, 90, 475-480.	2.5	11
114	Time-reversal symmetry, microcavities and photonic crystals. Journal of Modern Optics, 2001, 48, 581-595.	1.3	9
115	Multiple-quantum-well asymmetric Fabry-Perot modulators for microwave photonic applications. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 1888-1893.	4.6	8
116	<title>High-speed integrated optical wireless transceivers for in-building optical LANs</title>. , 2001, , .		5
117	High-speed integrated optical wireless system demonstrator. , 2001, , .		1
118	Angular emission profiles and coherence length measurements of highly efficient,low-voltage resonant-cavity light-emitting diodes operating around 650 nm. , 2001, , .		1
119	Insight into planar microcavity emission as a function of numerical aperture. Optics Communications, 2001, 195, 327-338.	2.1	25
120	Time-reversal symmetry, microcavities and photonic crystals. Journal of Modern Optics, 2001, 48, 581-595.	1.3	6
121	High-efficiency, low voltage resonant-cavity light-emitting diodes operating around 650 nm. Electronics Letters, 2000, 36, 1730.	1.0	11
122	Quantum dot resonant cavity light emitting diode operating near 1300 nm. Electronics Letters, 1999, 35, 242.	1.0	23
123	Angular spectrum of visible resonant cavity light-emitting diodes. Journal of Applied Physics, 1999, 86, 3475-3477.	2.5	27
124	1.3 Âµm Room Temperature Emission from InAs/GaAs Self-Assembled Quantum Dots. Japanese Journal of Applied Physics, 1999, 38, 528-530.	1.5	97
125	Design of InGaAsP multiple quantum-well Fabry-Perot modulators for soliton control. Journal of Lightwave Technology, 1999, 17, 1408-1414.	4.6	1
126	General rules for constructing valence band effective mass Hamiltonians with correct operator order for heterostructures with arbitrary orientations. Semiconductor Science and Technology, 1998, 13, 11-17.	2.0	13

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127	Operator ordering and boundary conditions for valence-band modeling: Application to [110] heterostructures. Physical Review B, 1997, 55, 15456-15459.	3.2	18
128	Indoor optical wireless systemsâ€“a review. Optical and Quantum Electronics, 1997, 29, 349-378.	3.3	103
129	Photoconductivity studies of InAsP/InP heterostructures in applied magnetic and electric fields. Semiconductor Science and Technology, 1996, 11, 34-38.	2.0	3
130	X-ray characterisation of InGaAs/AlAs multiple quantum well pâ€“iâ€“n structures. Materials Science and Technology, 1995, 11, 50-53.	1.6	2
131	Growth of InAsxP1â^'x/InP multiâ€quantum well structures by solid source molecular beam epitaxy. Journal of Applied Physics, 1995, 78, 3330-3334.	2.5	14
132	Ultrafast recovery time in a strained InGaAs-AlAs p-i-n modulator. IEEE Photonics Technology Letters, 1995, 7, 173-175.	2.5	5
133	Roomâ€temperature characterization of InGaAs/AlAs multiple quantum wellpâ€iâ€ndiodes. Applied Physics Letters, 1994, 65, 3323-3325.	3.3	7
134	Use of a threeâ€layer quantumâ€well structure to achieve an absorption edge blueshift. Applied Physics Letters, 1994, 64, 1251-1253.	3.3	20
135	Effect of well/barrier ratio on the performance of strained InGaAs/GaAs quantum well modulators. Electronics Letters, 1994, 30, 2067-2069.	1.0	7
136	Strain effects in InAsP/InP MQW modulators for 1.06 Î¼m operation. , 0, , .		0
137	A 25 period InAs/sub 0.54/P/sub 0.46//In/sub 0.89/Ga/sub 0.11/P MQW for 1.55 Î¼m modulation grown by solid source MBE. , 0, , .		0
138	Managing Local Order in Conjugated Polymer Blends via Polarity Contrast. , 0, , .		0
139	How Can We Engineer Hierarchical Structures and Pattern Functional Organic Materials?. , 0, , .		0