

Deirdre O'Carroll

List of Publications by Year in descending order

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Version: 2024-02-01

73
papers

2,422
citations

236612

25
h-index

205818

48
g-index

75
all docs

75
docs citations

75
times ranked

3541
citing authors

#	ARTICLE	IF	CITATIONS
1	Microcavity effects and optically pumped lasing in single conjugated polymer nanowires. Nature Nanotechnology, 2007, 2, 180-184.	15.6	379
2	Solution-Processed MoS ₂ /Organolead Trihalide Perovskite Photodetectors. Advanced Materials, 2017, 29, 1603995.	11.1	187
3	All-in-One: Achieving Robust, Strongly Luminescent and Highly Dispersible Hybrid Materials by Combining Ionic and Coordinate Bonds in Molecular Crystals. Journal of the American Chemical Society, 2017, 139, 9281-9290.	6.6	146
4	Melt-Processed Polyfluorene Nanowires as Active Waveguides. Small, 2007, 3, 1178-1183.	5.2	133
5	A Systematic Approach to Achieving High Performance Hybrid Lighting Phosphors with Excellent Thermal and Photostability. Advanced Functional Materials, 2017, 27, 1603444.	7.8	125
6	Optical Biosensors for Virus Detection: Prospects for SARS-CoV-2/COVID-19. ChemBioChem, 2021, 22, 1176-1189.	1.3	120
7	Poly(9,9-dioctylfluorene) Nanowires with Pronounced ¹² Phase Morphology: Synthesis, Characterization, and Optical Properties. Advanced Materials, 2008, 20, 42-48.	11.1	109
8	Conjugated Polymer/Metal Nanowire Heterostructure Plasmonic Antennas. Advanced Materials, 2010, 22, 1223-1227.	11.1	72
9	Blending Ionic and Coordinate Bonds in Hybrid Semiconductor Materials: A General Approach toward Robust and Solution-Processable Covalent/Coordinate Network Structures. Journal of the American Chemical Society, 2020, 142, 4242-4253.	6.6	72
10	Ultrafast Charge Transfer and Enhanced Absorption in MoS ₂ Organic van der Waals Heterojunctions Using Plasmonic Metasurfaces. ACS Nano, 2016, 10, 9899-9908.	7.3	71
11	Alignment and Dynamic Manipulation of Conjugated Polymer Nanowires in Nematic Liquid Crystal Hosts. Advanced Materials, 2008, 20, 2497-2502.	11.1	54
12	Absorption-Induced Transparency. Angewandte Chemie - International Edition, 2011, 50, 2085-2089.	7.2	52
13	Absorption-induced scattering and surface plasmon out-coupling from absorber-coated plasmonic metasurfaces. Nature Communications, 2015, 6, 7899.	5.8	48
14	A New Type of Hybrid Copper Iodide as Nontoxic and Ultrastable LED Emissive Layer Material. ACS Energy Letters, 2021, 6, 2565-2574.	8.8	46
15	Carbon Dots and Stability of Their Optical Properties. Particle and Particle Systems Characterization, 2021, 38, 2000271.	1.2	45
16	Conjugated polymer-based photonic nanostructures. Polymer Chemistry, 2013, 4, 5181.	1.9	44
17	Highly Anisotropic Luminescence from Poly(9,9-dioctylfluorene) Nanowires Doped with Orientationally Ordered ¹² -Phase Polymer Chains. Chemistry of Materials, 2008, 20, 6501-6508.	3.2	43
18	Rational design of a high-efficiency, multivariate metal-organic framework phosphor for white LED bulbs. Chemical Science, 2020, 11, 1814-1824.	3.7	43

#	ARTICLE	IF	CITATIONS
19	Template Synthesis of Highly Oriented Polyfluorene Nanotube Arrays. <i>Chemistry of Materials</i> , 2008, 20, 996-1003.	3.2	42
20	Plasmonic electrodes for bulk-heterojunction organic photovoltaics: a review. <i>Journal of Photonics for Energy</i> , 2015, 5, 057002.	0.8	40
21	Highly efficient and very robust blue-excitable yellow phosphors built on multiple-stranded one-dimensional inorganic-organic hybrid chains. <i>Chemical Science</i> , 2019, 10, 5363-5372.	3.7	38
22	Hybrid plasmonic Au-TiN vertically aligned nanocomposites: a nanoscale platform towards tunable optical sensing. <i>Nanoscale Advances</i> , 2019, 1, 1045-1054.	2.2	37
23	Emission Colour Tuning in Semiconducting Polymer Nanotubes by Energy Transfer to Organo-Lanthanide Dopants. <i>Advanced Materials</i> , 2007, 19, 2474-2479.	11.1	36
24	Synthesis of Pentacene Nanotubes by Melt-Assisted Template Wetting. <i>Chemistry of Materials</i> , 2007, 19, 338-340.	3.2	35
25	Surface plasmon and photonic mode propagation in gold nanotubes with varying wall thickness. <i>Physical Review B</i> , 2011, 84, .	1.1	29
26	Computational comparison of conventional and inverted organic photovoltaic performance parameters with varying metal electrode surface workfunction. <i>Solar Energy Materials and Solar Cells</i> , 2014, 120, 572-583.	3.0	25
27	Luminescent Conjugated Polymer Nanowire Junctions with On-Branch Molecular Anisotropy. <i>Advanced Materials</i> , 2009, 21, 1160-1165.	11.1	23
28	Metal-Polymer-Metal Split-Dipole Nanoantennas. <i>Advanced Materials</i> , 2012, 24, OP136-42.	11.1	21
29	Mode-specific study of nanoparticle-mediated optical interactions in an absorber/metal thin film system. <i>Nanoscale</i> , 2015, 7, 13196-13206.	2.8	21
30	Light-management in ultra-thin polythiophene films using plasmonic monopole nanoantennas. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	20
31	Structural, optical, and electrical properties of silver gratings prepared by nanoimprint lithography of nanoparticle ink. <i>Applied Surface Science</i> , 2021, 537, 147892.	3.1	19
32	The role of photonics in energy. <i>Journal of Photonics for Energy</i> , 2015, 5, 050997.	0.8	18
33	Long-term effects of impurities on the particle size and optical emission of carbon dots. <i>Nanoscale Advances</i> , 2021, 3, 182-189.	2.2	18
34	Polyfluorene nanowire active waveguides as sub-wavelength polarized light sources. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 2468-2473.	1.3	16
35	Absorption and scattering effects by silver nanoparticles near the interface of organic/inorganic semiconductor tandem films. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	0.8	16
36	Photon Recycling in Semiconductor Thin Films and Devices. <i>Advanced Science</i> , 2021, 8, e2004076.	5.6	16

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37	Polyfluorene nanowires with pronounced axial texturing prepared by melt-assisted template wetting. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2008, 147, 298-302.	1.7	15
38	Nanoporous Silver Thin Films: Multifunctional Platforms for Influencing Chain Morphology and Optical Properties of Conjugated Polymers. <i>Advanced Functional Materials</i> , 2015, 25, 3302-3313.	7.8	14
39	Luminescent Optical Detection of Volatile Electron Deficient Compounds by Conjugated Polymer Nanofibers. <i>Analytical Chemistry</i> , 2015, 87, 4421-4428.	3.2	12
40	Identification of the local electrical properties of crystalline and amorphous domains in electrochemically doped conjugated polymer thin films. <i>RSC Advances</i> , 2020, 10, 21454-21463.	1.7	11
41	Survey of Mechanical Durability of PV Backsheets. , 2017, , .		9
42	Aperiodic Porous Metasurface-Mediated Organic Semiconductor Fluorescence. <i>ACS Photonics</i> , 2018, 5, 1215-1227.	3.2	8
43	Optical and Electrical Properties of Organic Semiconductor Thin Films on Aperiodic Plasmonic Metasurfaces. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 35579-35587.	4.0	8
44	Pressure effects on interfacial surface contacts and performance of organic solar cells. <i>Journal of Applied Physics</i> , 2017, 122, .	1.1	7
45	Influence of partially-oxidized silver back electrodes on the electrical properties and stability of organic semiconductor diodes. <i>Organic Electronics</i> , 2019, 70, 179-185.	1.4	7
46	Applications of scanning electron microscopy and focused ion beam milling in dental research. <i>European Journal of Oral Sciences</i> , 2022, 130, e12853.	0.7	7
47	Influence of Pressure on Contacts between Layers in Organic Photovoltaic Cells. <i>Advanced Materials Research</i> , 0, 1132, 204-216.	0.3	6
48	Cost, energy and emissions assessment of organic polymer light-emitting device architectures. <i>Journal of Cleaner Production</i> , 2016, 137, 1418-1431.	4.6	6
49	Enhancing surface plasmon leakage at the metal/semiconductor interface: towards increased light outcoupling efficiency in organic optoelectronics. <i>Optics Express</i> , 2014, 22, 7644.	1.7	5
50	Gold Nanowire and Nanorod Plasmonic Mechanisms for Increasing Ultra-Thin Organic Photovoltaic Active Layer Absorption. <i>Plasmonics</i> , 2014, 9, 1283-1301.	1.8	5
51	Effects of metal film thickness and gain on the coupling of organic semiconductor exciton emission to surface plasmon polaritons. <i>Journal of Materials Chemistry C</i> , 2016, 4, 10111-10119.	2.7	5
52	Plasmonic sphere-on-plane systems with semiconducting polymer spacer layers. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 11749-11757.	1.3	5
53	Short-Wavelength Lasing Spasing and Random Spasing with Deeply Subwavelength Thin-Film Gain Media. <i>Advanced Functional Materials</i> , 2018, 28, 1802630.	7.8	5
54	Dual-Mode Polymer-Based Temperature Sensor by Dedoping of Electrochemically Doped, Conjugated Polymer Thin Films. <i>ACS Applied Electronic Materials</i> , 2021, 3, 4718-4725.	2.0	4

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55	Oxidation of Planar and Plasmonic Ag Surfaces by Exposure to O ₂ /Ar Plasma for Organic Optoelectronic Applications. <i>MRS Advances</i> , 2016, 1, 943-948.	0.5	3
56	Investigation of the role of polyol molecular weight in the polyol synthesis of silver nanoparticles. <i>Materials Research Express</i> , 2019, 6, 115067.	0.8	3
57	Strong Plasmon-Exciton Coupling in Ag Nanoparticle-Conjugated Polymer Core-Shell Hybrid Nanostructures. <i>Polymers</i> , 2020, 12, 2141.	2.0	3
58	Polarized Luminescence from Single Polymer Nanowires and Aligned Nanowire Arrays. <i>Materials Research Society Symposia Proceedings</i> , 2006, 948, 1.	0.1	2
59	Metal Films: Nanoporous Silver Thin Films: Multifunctional Platforms for Influencing Chain Morphology and Optical Properties of Conjugated Polymers (<i>Adv. Funct. Mater.</i> 22/2015). <i>Advanced Functional Materials</i> , 2015, 25, 3443-3443.	7.8	2
60	Influence of organic active layer morphology on plasmonic light-trapping. , 2016, , .		2
61	Special Section Guest Editorial: Nanophotonics and Plasmonics for Solar Energy Harvesting and Conversion. <i>Journal of Photonics for Energy</i> , 2015, 5, 057001.	0.8	1
62	Effects of conjugated polymer incorporation on the morphology and energy harvesting of solution-processed, phthalocyanine-based thin films. <i>Synthetic Metals</i> , 2016, 220, 469-476.	2.1	1
63	Modification of Luminescence from Dual-Emission Molecules by Plasmonic Surfaces. <i>Journal of Physical Chemistry C</i> , 2020, 124, 17218-17226.	1.5	1
64	The integrity of synthetic magnesium silicate in charged compounds. <i>Scientific Reports</i> , 2021, 11, 23717.	1.6	1
65	Optimization of PCDTBT Metal-Insulator-Metal Hole-Only Photodiodes. , 0, , .		1
66	Waveguiding, Microcavity Effects and Optically Pumped Lasing in Single Melt Processed Polyfluorene Nanowires. <i>Materials Research Society Symposia Proceedings</i> , 2006, 965, 1.	0.1	0
67	Light management for conjugated polymer-based photovoltaics. , 2013, , .		0
68	Plasmonic mode interactions with organic semiconductor gain media in nano-confined geometries. <i>Proceedings of SPIE</i> , 2014, , .	0.8	0
69	Nanophotonic interactions between organic excitons and plasmonic metasurfaces (Conference) Tj ETQq1 1 0.784314 rgBT /Qverlock		0
70	Native-Metal-Oxide-Coated Plasmonic Electrode Metasurfaces for Nanophotonic Light Trapping and Efficient Charge Collection. , 2017, , .		0
71	Spasers: Short-Wavelength Lasing-Spasing and Random Spasing with Deeply Subwavelength Thin-Film Gain Media (<i>Adv. Funct. Mater.</i> 39/2018). <i>Advanced Functional Materials</i> , 2018, 28, 1870281.	7.8	0
72	Organic photonic nanostructures. , 2019, , 111-138.		0

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73	Charge Transfer and Enhanced Absorption in MoS ₂ - Organic Heterojunctions Using Plasmonic Metasurfaces. , 2017, , .		0