Deirdre O'Carroll

List of Publications by Year
in descending order

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	Applications of scanning electron microscopy and focused ion beam milling in dental research. European Journal of Oral Sciences, 2022, 130, e12853.	0.7	7
2	Optical Biosensors for Virus Detection: Prospects for SARSâ€CoVâ€2/COVIDâ€19. ChemBioChem, 2021, 22, 1176-1189.	1.3	120
3	Structural, optical, and electrical properties of silver gratings prepared by nanoimprint lithography of nanoparticle ink. Applied Surface Science, 2021, 537, 147892.	3.1	19
4	Long-term effects of impurities on the particle size and optical emission of carbon dots. Nanoscale Advances, 2021, 3, 182-189.	2.2	18
5	Carbon Dots and Stability of Their Optical Properties. Particle and Particle Systems Characterization, 2021, 38, 2000271.	1.2	45
6	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
7	Photon Recycling in Semiconductor Thin Films and Devices. Advanced Science, 2021, 8, e2004076.	5.6	16
8	Dual-Mode Polymer-Based Temperature Sensor by Dedoping of Electrochemically Doped, Conjugated Polymer Thin Films. ACS Applied Electronic Materials, 2021, 3, 4718-4725.	2.0	4
9	The integrity of synthetic magnesium silicate in charged compounds. Scientific Reports, 2021, 11, 23717.	1.6	1
10	Rational design of a high-efficiency, multivariate metalâ€“organic framework phosphor for white LED bulbs. Chemical Science, 2020, 11, 1814-1824.	3.7	43
11	Strong Plasmonâ€“Exciton Coupling in Ag Nanoparticleâ€”Conjugated Polymer Core-Shell Hybrid Nanostructures. Polymers, 2020, 12, 2141.	2.0	3
12	Modification of Luminescence from Dual-Emission Molecules by Plasmonic Surfaces. Journal of Physical Chemistry C, 2020, 124, 17218-17226.	1.5	1
13	Optical and Electrical Properties of Organic Semiconductor Thin Films on Aperiodic Plasmonic Metasurfaces. ACS Applied Materials & Interfaces, 2020, 12, 35579-35587.	4.0	8
14	Identification of the local electrical properties of crystalline and amorphous domains in electrochemically doped conjugated polymer thin films. RSC Advances, 2020, 10, 21454-21463.	1.7	11
15	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
16	Investigation of the role of polyol molecular weight in the polyol synthesis of silver nanoparticles. Materials Research Express, 2019, 6, 115067.	0.8	3
17	Hybrid plasmonic Auâ€“TiN vertically aligned nanocomposites: a nanoscale platform towards tunable optical sensing. Nanoscale Advances, 2019, 1, 1045-1054.	2.2	37
18	Highly efficient and very robust blue-excitable yellow phosphors built on multiple-stranded one-dimensional inorganicâ€“organic hybrid chains. Chemical Science, 2019, 10, 5363-5372.	3.7	38

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19	Influence of partially-oxidized silver back electrodes on the electrical properties and stability of organic semiconductor diodes. Organic Electronics, 2019, 70, 179-185.	1.4	7
20	Organic photonic nanostructures. , 2019, , 111-138.		0
21	Aperiodic Porous Metasurface-Mediated Organic Semiconductor Fluorescence. ACS Photonics, 2018, 5, 1215-1227.	3.2	8
22	Plasmonic sphere-on-plane systems with semiconducting polymer spacer layers. Physical Chemistry Chemical Physics, 2018, 20, 11749-11757.	1.3	5
23	Spasers: Short-Wavelength Lasing-Spasing and Random Spasing with Deeply Subwavelength Thin-Film Gain Media (Adv. Funct. Mater. 39/2018). Advanced Functional Materials, 2018, 28, 1870281.	7.8	0
24	Shortâ€Wavelength Lasingâ€Spasing and Random Spasing with Deeply Subwavelength Thinâ€Film Gain Media. Advanced Functional Materials, 2018, 28, 1802630.	7.8	5
25	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
26	A Systematic Approach to Achieving High Performance Hybrid Lighting Phosphors with Excellent Thermalâ€and Photostability. Advanced Functional Materials, 2017, 27, 1603444.	7.8	125
27	Pressure effects on interfacial surface contacts and performance of organic solar cells. Journal of Applied Physics, 2017, 122, .	1.1	7
28	Solutionâ€Processed MoS₂/Organolead Trihalide Perovskite Photodetectors. Advanced Materials, 2017, 29, 1603995.	11.1	187
29	Native-Metal-Oxide-Coated Plasmonic Electrode Metasurfaces for Nanophotonic Light Trapping and Efficient Charge Collection. , 2017, , .		0
30	Survey of Mechanical Durability of PV Backsheets. , 2017, , .		9
31	Charge Transfer and Enhanced Absorption in MoS2 - Organic Heterojunctions Using Plasmonic Metasurfaces. , 2017, , .		0
32	Influence of organic active layer morphology on plasmonic light-trapping. , 2016, , .		2
33	Nanophotonic interactions between organic excitons and plasmonic metasurfaces (Conference) Tj ETQq1 1 0.784314 rgBT /Overlock 10		0
34	Oxidation of Planar and Plasmonic Ag Surfaces by Exposure to O2/Ar Plasma for Organic Optoelectronic Applications. MRS Advances, 2016, 1, 943-948.	0.5	3
35	Effects of metal film thickness and gain on the coupling of organic semiconductor exciton emission to surface plasmon polaritons. Journal of Materials Chemistry C, 2016, 4, 10111-10119.	2.7	5
36	Cost, energy and emissions assessment of organic polymer light-emitting device architectures. Journal of Cleaner Production, 2016, 137, 1418-1431.	4.6	6

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37	Effects of conjugated polymer incorporation on the morphology and energy harvesting of solution-processed, phthalocyanine-based thin films. Synthetic Metals, 2016, 220, 469-476.	2.1	1
38	Ultrafast Charge Transfer and Enhanced Absorption in MoS₂â€“Organic van der Waals Heterojunctions Using Plasmonic Metasurfaces. ACS Nano, 2016, 10, 9899-9908.	7.3	71
39	Metal Films: Nanoporous Silver Thin Films: Multifunctional Platforms for Influencing Chain Morphology and Optical Properties of Conjugated Polymers (Adv. Funct. Mater. 22/2015). Advanced Functional Materials, 2015, 25, 3443-3443.	7.8	2
40	Special Section Guest Editorial: Nanophotonics and Plasmonics for Solar Energy Harvesting and Conversion. Journal of Photonics for Energy, 2015, 5, 057001.	0.8	1
41	Mode-specific study of nanoparticle-mediated optical interactions in an absorber/metal thin film system. Nanoscale, 2015, 7, 13196-13206.	2.8	21
42	Nanoporous Silver Thin Films: Multifunctional Platforms for Influencing Chain Morphology and Optical Properties of Conjugated Polymers. Advanced Functional Materials, 2015, 25, 3302-3313.	7.8	14
43	Plasmonic electrodes for bulk-heterojunction organic photovoltaics: a review. Journal of Photonics for Energy, 2015, 5, 057002.	0.8	40
44	Luminescent Optical Detection of Volatile Electron Deficient Compounds by Conjugated Polymer Nanofibers. Analytical Chemistry, 2015, 87, 4421-4428.	3.2	12
45	Absorption-induced scattering and surface plasmon out-coupling from absorber-coated plasmonic metasurfaces. Nature Communications, 2015, 6, 7899.	5.8	48
46	The role of photonics in energy. Journal of Photonics for Energy, 2015, 5, 050997.	0.8	18
47	Enhancing surface plasmon leakage at the metal/semiconductor interface: towards increased light outcoupling efficiency in organic optoelectronics. Optics Express, 2014, 22, 7644.	1.7	5
48	Plasmonic mode interactions with organic semiconductor gain media in nano-confined geometries. Proceedings of SPIE, 2014, , .	0.8	0
49	Computational comparison of conventional and inverted organic photovoltaic performance parameters with varying metal electrode surface workfunction. Solar Energy Materials and Solar Cells, 2014, 120, 572-583.	3.0	25
50	Gold Nanowire and Nanorod Plasmonic Mechanisms for Increasing Ultra-Thin Organic Photovoltaic Active Layer Absorption. Plasmonics, 2014, 9, 1283-1301.	1.8	5
51	Absorption and scattering effects by silver nanoparticles near the interface of organic/inorganic semiconductor tandem films. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	16
52	Conjugated polymer-based photonic nanostructures. Polymer Chemistry, 2013, 4, 5181.	1.9	44
53	Light management for conjugated polymer-based photovoltaics. , 2013, , .		0
54	Light-management in ultra-thin polythiophene films using plasmonic monopole nanoantennas. Applied Physics Letters, 2012, 101, .	1.5	20

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55	Metalâ€“Polymerâ€“Metal Splitâ€Dipole Nanoantennas. Advanced Materials, 2012, 24, OP136-42.	11.1	21
56	Surface plasmon and photonic mode propagation in gold nanotubes with varying wall thickness. Physical Review B, 2011, 84, .	1.1	29
57	Absorptionâ€Induced Transparency. Angewandte Chemie - International Edition, 2011, 50, 2085-2089.	7.2	52
58	Conjugated Polymer/Metal Nanowire Heterostructure Plasmonic Antennas. Advanced Materials, 2010, 22, 1223-1227.	11.1	72
59	Luminescent Conjugated Polymer Nanowire Yâ€Junctions with Onâ€Branch Molecular Anisotropy. Advanced Materials, 2009, 21, 1160-1165.	11.1	23
60	Poly(9,9â€dioctylfluorene) Nanowires with Pronounced Î²â€Phase Morphology: Synthesis, Characterization, and Optical Properties. Advanced Materials, 2008, 20, 42-48.	11.1	109
61	Alignment and Dynamic Manipulation of Conjugated Polymer Nanowires in Nematic Liquid Crystal Hosts. Advanced Materials, 2008, 20, 2497-2502.	11.1	54
62	Polyfluorene nanowire active waveguides as sub-wavelength polarized light sources. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2468-2473.	1.3	16
63	Polyfluorene nanowires with pronounced axial texturing prepared by melt-assisted template wetting. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 147, 298-302.	1.7	15
64	Highly Anisotropic Luminescence from Poly(9,9-dioctylfluorene) Nanowires Doped with Orientationally Ordered Î²-Phase Polymer Chains. Chemistry of Materials, 2008, 20, 6501-6508.	3.2	43
65	Template Synthesis of Highly Oriented Polyfluorene Nanotube Arrays. Chemistry of Materials, 2008, 20, 996-1003.	3.2	42
66	Synthesis of Pentacene Nanotubes by Melt-Assisted Template Wetting. Chemistry of Materials, 2007, 19, 338-340.	3.2	35
67	Emission Colour Tuning in Semiconducting Polymer Nanotubes by Energy Transfer to Organoâ€• Lanthanide Dopants. Advanced Materials, 2007, 19, 2474-2479.	11.1	36
68	Melt-Processed Polyfluorene Nanowires as Active Waveguides. Small, 2007, 3, 1178-1183.	5.2	133
69	Microcavity effects and optically pumped lasing in single conjugated polymer nanowires. Nature Nanotechnology, 2007, 2, 180-184.	15.6	379
70	Polarized Luminescence from Single Polymer Nanowires and Aligned Nanowire Arrays. Materials Research Society Symposia Proceedings, 2006, 948, 1.	0.1	2
71	Waveguiding, Microcavity Effects and Optically Pumped Lasing in Single Melt Processed Polyfluorene Nanowires. Materials Research Society Symposia Proceedings, 2006, 965, 1.	0.1	0
72	Influence of Pressure on Contacts between Layers in Organic Photovoltaic Cells. Advanced Materials Research, 0, 1132, 204-216.	0.3	6

#	Article	IF	Citations
73	Optimization of PCDTBT Metal-Insulator-Metal Hole-Only Photodiodes. , 0, , .		1