

# Paul G O'brien

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/610582/publications.pdf>

Version: 2024-02-01

45  
papers

2,418  
citations

218677

26  
h-index

243625

44  
g-index

47  
all docs

47  
docs citations

47  
times ranked

3556  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ellipsoidal Optical Cavities for Enhanced Thermophotovoltaics. IEEE Journal of Photovoltaics, 2022, 12, 353-363.	2.5	3
2	Radiative cooling for buildings: A review of techno-enviro-economics and life-cycle assessment methods. Renewable and Sustainable Energy Reviews, 2022, 162, 112415.	16.4	31
3	Elliptic paraboloid-based solar spectrum splitters for self-powered photobioreactors. Renewable Energy, 2021, 163, 1773-1785.	8.9	2
4	Numerical evaluation of one-dimensional transparent photonic crystal heat mirror coatings for parabolic dish concentrator receivers. Renewable Energy, 2021, 171, 1202-1212.	8.9	12
5	Elliptic Array Luminescent Solar Concentrators for Combined Power Generation and Microalgae Growth. Energies, 2021, 14, 5229.	3.1	3
6	Evaluation of a ZrO <sub>2</sub> /ZrO <sub>2</sub> -aerogel one-dimensional photonic crystal as an optical filter for thermophotovoltaic applications. Thermal Science and Engineering Progress, 2021, 25, 100968.	2.7	11
7	Transparent Photonic Crystal Heat Mirrors for Solar Thermal Applications. Energies, 2020, 13, 1464.	3.1	11
8	Heat Generated Using Luminescent Solar Concentrators for Building Energy Applications. Energies, 2020, 13, 5574.	3.1	13
9	Solar-Driven Interfacial Water Evaporation Using Open-Porous PDMS Embedded with Carbon Nanoparticles. ACS Applied Energy Materials, 2020, 3, 3378-3386.	5.1	37
10	Highly Efficient Ambient Temperature CO <sub>2</sub> Photomethanation Catalyzed by Nanostructured RuO <sub>2</sub> on Silicon Photonic Crystal Support. Advanced Energy Materials, 2018, 8, 1702277.	19.5	58
11	Solar Fuels: Highly Efficient Ambient Temperature CO <sub>2</sub> Photomethanation Catalyzed by Nanostructured RuO <sub>2</sub> on Silicon Photonic Crystal Support (Adv. Energy Mater. 9/2018). Advanced Energy Materials, 2018, 8, 1870041.	19.5	7
12	Enhanced photothermal reduction of gaseous CO <sub>2</sub> over silicon photonic crystal supported ruthenium at ambient temperature. Energy and Environmental Science, 2018, 11, 3443-3451.	30.8	83
13	Analysis Of Thermal Losses In Air-Water Interfacial Solar Heating Systems. , 2018, , .		1
14	Photothermal Catalyst Engineering: Hydrogenation of Gaseous CO <sub>2</sub> with High Activity and Tailored Selectivity. Advanced Science, 2017, 4, 1700252.	11.2	97
15	Photothermal Catalysis: Photothermal Catalyst Engineering: Hydrogenation of Gaseous CO <sub>2</sub> with High Activity and Tailored Selectivity (Adv. Sci. 10/2017). Advanced Science, 2017, 4, .	11.2	2
16	Synthesis of Black TiO <sub>2</sub> Nanoparticles by Mg Reduction of TiO <sub>2</sub> Nanocrystals and their Application for Solar Water Evaporation. Advanced Energy Materials, 2017, 7, 1601811.	19.5	326
17	Spatial Separation of Charge Carriers in In <sub>2</sub> O <sub>3</sub> (OH) Nanocrystal Superstructures for Enhanced Gas-Phase Photocatalytic Activity. ACS Nano, 2016, 10, 5578-5586.	14.6	118
18	Nanostructured Indium Oxide Coated Silicon Nanowire Arrays: A Hybrid Photothermal/Photochemical Approach to Solar Fuels. ACS Nano, 2016, 10, 9017-9025.	14.6	109

#	ARTICLE	IF	CITATIONS
19	Photocatalytic Properties of All Four Polymorphs of Nanostructured Iron Oxyhydroxides. ChemNanoMat, 2016, 2, 1047-1054.	2.8	38
20	Visible and Near-Infrared Photothermal Catalyzed Hydrogenation of Gaseous CO <sub>2</sub> over Nanostructured Pd@Nb <sub>2</sub> O <sub>5</sub> . Advanced Science, 2016, 3, 1600189.	11.2	133
21	Heterogeneous reduction of carbon dioxide by hydride-terminated silicon nanocrystals. Nature Communications, 2016, 7, 12553.	12.8	93
22	Carbon Dioxide Reduction: Visible and Near-Infrared Photothermal Catalyzed Hydrogenation of Gaseous CO <sub>2</sub> over Nanostructured Pd@Nb <sub>2</sub> O <sub>5</sub> (Adv. Sci. 10/2016). Advanced Science, 2016, 3, .	11.2	1
23	Activation of Ultrathin Films of Hematite for Photoelectrochemical Water Splitting via H <sub>2</sub> Treatment. ChemSusChem, 2015, 8, 1557-1567.	6.8	51
24	Morphology-controlled In <sub>2</sub> O <sub>3</sub> nanostructures enhance the performance of photoelectrochemical water oxidation. Nanoscale, 2015, 7, 3683-3693.	5.6	37
25	The Rational Design of a Single-Component Photocatalyst for Gas-Phase CO <sub>2</sub> Reduction Using Both UV and Visible Light. Advanced Science, 2014, 1, 1400013.	11.2	182
26	Photomethanation of Gaseous CO <sub>2</sub> over Ru/Silicon Nanowire Catalysts with Visible and Near-Infrared Photons. Advanced Science, 2014, 1, 1400001.	11.2	150
27	Enhancing photovoltaics with broadband high-transparency glass using porosity-tuned multilayer silica nanoparticle anti-reflective coatings. RSC Advances, 2014, 4, 31188-31195.	3.6	15
28	See-Through Dye-Sensitized Solar Cells: Photonic Reflectors for Tandem and Building Integrated Photovoltaics. Advanced Materials, 2013, 25, 5734-5741.	21.0	51
29	See-through amorphous silicon solar cells with selectively transparent and conducting photonic crystal back reflectors for building integrated photovoltaics. Applied Physics Letters, 2013, 103, 221109.	3.3	24
30	Enhanced Hematite Water Electrolysis Using a 3D Antimony-Doped Tin Oxide Electrode. ACS Nano, 2013, 7, 4261-4274.	14.6	72
31	Nanoporous transparent and conducting films and photonic crystals. Optical Materials Express, 2013, 3, 2055.	3.0	3
32	Optical characterization of selectively transparent and conducting photonic crystals for use in thin crystalline silicon photovoltaics. , 2013, , .		0
33	From Bare Metal Powders to Colloidally Stable TCO Dispersions and Transparent Nanoporous Conducting Metal Oxide Thin Films. Small, 2012, 8, 3806-3809.	10.0	11
34	Selectively transparent and conducting photonic crystal solar spectrum splitters made of alternating sputtered indium-tin oxide and spin-coated silica nanoparticle layers for enhanced photovoltaics. Solar Energy Materials and Solar Cells, 2012, 102, 173-183.	6.2	30
35	Growth of Metal Nanocrystals on Nanostructured Metal Oxides~Dramatic Effect of Antimony Doping. Chemistry of Materials, 2011, 23, 1353-1355.	6.7	11
36	Organic Light-Emitting Diode Microcavities from Transparent Conducting Metal Oxide Photonic Crystals. Nano Letters, 2011, 11, 1457-1462.	9.1	58

#	ARTICLE	IF	CITATIONS
37	Selectively transparent and conducting photonic crystal rear-contacts for thin-film silicon-based building integrated photovoltaics. Optics Express, 2011, 19, 17040.	3.4	23
38	Selectively Transparent and Conducting Photonic Crystals. Advanced Materials, 2010, 22, 611-616.	21.0	47
39	Flash Nano-Welding: Investigation and Control of the Photothermal Response of Ultrathin Bismuth Sulfide Nanowire Films. Advanced Materials, 2010, 22, 4395-4400.	21.0	24
40	Photonic crystal intermediate reflectors for micromorph solar cells: a comparative study. Optics Express, 2010, 18, 4478.	3.4	34
41	Tailoring the Electrical Properties of Inverse Silicon Opals - A Step Towards Optically Amplified Silicon Solar Cells. Advanced Materials, 2009, 21, 559-563.	21.0	40
42	Cross-Linking Bi <sub>2</sub> S <sub>3</sub> Ultrathin Nanowires: A Platform for Nanostructure Formation and Biomolecule Detection. Nano Letters, 2009, 9, 1482-1486.	9.1	75
43	Large-scale Synthesis of Ultrathin Bi <sub>2</sub> S <sub>3</sub> Necklace Nanowires. Angewandte Chemie - International Edition, 2008, 47, 3814-3817.	13.8	138
44	Silicon Photovoltaics Using Conducting Photonic Crystal Back-Reflectors. Advanced Materials, 2008, 20, 1577-1582.	21.0	84
45	Enhanced Photoconductivity in Thin-Film Semiconductors Optically Coupled to Photonic Crystals. Advanced Materials, 2007, 19, 4177-4182.	21.0	65