## Darren Delai Sun

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Selfâ€Assembling TiO <sub>2</sub> Nanorods on Large Graphene Oxide Sheets at a Twoâ€Phase Interface and Their Antiâ€Recombination in Photocatalytic Applications. Advanced Functional Materials, 2010, 20, 4175-4181.	14.9	720
2	An Efficient Bicomponent TiO2/SnO2Nanofiber Photocatalyst Fabricated by Electrospinning with a Side-by-Side Dual Spinneret Method. Nano Letters, 2007, 7, 1081-1085.	9.1	666
3	Nano Gives the Answer: Breaking the Bottleneck of Internal Concentration Polarization with a Nanofiber Composite Forward Osmosis Membrane for a High Water Production Rate. Advanced Materials, 2011, 23, 3256-3260.	21.0	362
4	Hybridized Nanowires and Cubes: A Novel Architecture of a Heterojunctioned TiO <sub>2</sub> /SrTiO <sub>3</sub> Thin Film for Efficient Water Splitting. Advanced Functional Materials, 2010, 20, 4287-4294.	14.9	276
5	Concurrent filtration and solar photocatalytic disinfection/degradation using high-performance Ag/TiO2 nanofiber membrane. Water Research, 2012, 46, 1101-1112.	11.3	273
6	Graphene oxide–CdS composite with high photocatalytic degradation and disinfection activities under visible light irradiation. Journal of Hazardous Materials, 2013, 250-251, 412-420.	12.4	263
7	Significant improvement of photocatalytic hydrogen generation rate over TiO2 with deposited CuO. International Journal of Hydrogen Energy, 2009, 34, 6096-6104.	7.1	243
8	Highâ€Performance Multifunctional TiO <sub>2</sub> Nanowire Ultrafiltration Membrane with a Hierarchical Layer Structure for Water Treatment. Advanced Functional Materials, 2009, 19, 3731-3736.	14.9	227
9	Graphene oxide enwrapped Ag3PO4 composite: towards a highly efficient and stable visible-light-induced photocatalyst for water purification. Catalysis Science and Technology, 2012, 2, 2525.	4.1	218
10	Highly efficient CuO incorporated TiO2 nanotube photocatalyst for hydrogen production from water. International Journal of Hydrogen Energy, 2011, 36, 6560-6568.	7.1	202
11	Facile synthesis of monodispersed silver nanoparticles on graphene oxide sheets with enhanced antibacterial activity. New Journal of Chemistry, 2011, 35, 1418.	2.8	193
12	Novel-structured electrospun TiO2/CuO composite nanofibers for high efficient photocatalytic cogeneration of clean water and energy from dye wastewater. Water Research, 2013, 47, 4059-4073.	11.3	190
13	Fabrication and comparison of highly efficient Cu incorporated TiO2 photocatalyst for hydrogen generation from water. International Journal of Hydrogen Energy, 2010, 35, 5254-5261.	7.1	183
14	TiO2 nanowire membrane for concurrent filtration and photocatalytic oxidation of humic acid in water. Journal of Membrane Science, 2008, 313, 44-51.	8.2	182
15	Energy recovery from concentrated seawater brine by thin-film nanofiber composite pressure retarded osmosis membranes with high power density. Energy and Environmental Science, 2013, 6, 1199.	30.8	179
16	High quality graphene oxide–CdS–Pt nanocomposites for efficient photocatalytic hydrogen evolution. Journal of Materials Chemistry, 2012, 22, 2292-2298.	6.7	156
17	Hierarchical CuO/ZnO "corn-like―architecture for photocatalytic hydrogen generation. International Journal of Hydrogen Energy, 2011, 36, 13473-13480.	7.1	142
18	Value-added utilisation of recycled concrete in hot-mix asphalt. Waste Management, 2007, 27, 294-301.	7.4	127

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19	Hierarchical ZnO/Cu "corn-like―materials with high photodegradation and antibacterial capability under visible light. Physical Chemistry Chemical Physics, 2011, 13, 6205.	2.8	125
20	A low-energy forward osmosis process to produce drinking water. Energy and Environmental Science, 2011, 4, 2582.	30.8	121
21	Functional Freeâ€Standing Graphene Honeycomb Films. Advanced Functional Materials, 2013, 23, 2972-2978.	14.9	116
22	Multifunctional graphene oxide–TiO2 microsphere hierarchical membrane for clean water production. Applied Catalysis B: Environmental, 2013, 138-139, 17-25.	20.2	110
23	Sulfonated graphene oxide–ZnO–Ag photocatalyst for fast photodegradation and disinfection under visible light. Journal of Hazardous Materials, 2013, 262, 826-835.	12.4	109
24	Hierarchically multifunctional TiO2 nano-thorn membrane for water purification. Chemical Communications, 2010, 46, 6542.	4.1	108
25	Highly water soluble and recovered dextran coated Fe3O4 magnetic nanoparticles for brackish water desalination. Separation and Purification Technology, 2011, 81, 392-399.	7.9	107
26	Direct Growth of ZnO Nanocrystals onto the Surface of Porous TiO <sub>2</sub> Nanotube Arrays for Highly Efficient and Recyclable Photocatalysts. Small, 2009, 5, 2260-2264.	10.0	105
27	Green Approach for Photocatalytic Cu(II)-EDTA Degradation over TiO <sub>2</sub> : Toward Environmental Sustainability. Environmental Science & Technology, 2015, 49, 2541-2548.	10.0	98
28	Hierarchical SrTiO3/TiO2 nanofibers heterostructures with high efficiency in photocatalytic H2 generation. Applied Catalysis B: Environmental, 2012, 125, 367-374.	20.2	96
29	Effects of various TiO2 nanostructures and graphene oxide on photocatalytic activity of TiO2. Journal of Hazardous Materials, 2014, 279, 96-104.	12.4	94
30	Photocatalytic degradation of E. coliform in water. Water Research, 2003, 37, 3452-3462.	11.3	91
31	Hierarchical TiO2/CdS "spindle-like―composite with high photodegradation and antibacterial capability under visible light irradiation. Journal of Hazardous Materials, 2012, 229-230, 209-216.	12.4	91
32	Recovery of heavy metals and stabilization of spent hydrotreating catalyst using a glass–ceramic matrix. Journal of Hazardous Materials, 2001, 87, 213-223.	12.4	86
33	Highly efficient TiO2 nanotube photocatalyst for simultaneous hydrogen production and copper removal from water. International Journal of Hydrogen Energy, 2011, 36, 6538-6545.	7.1	86
34	Optimization and an insightful properties—Activity study of electrospun TiO2/CuO composite nanofibers for efficient photocatalytic H2 generation. Applied Catalysis B: Environmental, 2013, 140-141, 68-81.	20.2	80
35	One-pot hydrothermal synthesis of a hierarchical nanofungus-like anatase TiO2 thin film for photocatalytic oxidation of bisphenol A. Applied Catalysis B: Environmental, 2011, 110, 260-272.	20.2	77
36	The efficient separation of surfactant-stabilized oil–water emulsions with a flexible and superhydrophilic graphene–TiO <sub>2</sub> composite membrane. Journal of Materials Chemistry A, 2014, 2, 14082-14088.	10.3	71

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37	Adsorption and photocatalytic degradation of Acid Orange 7 over hydrothermally synthesized mesoporous TiO2 nanotube. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 379, 169-175.	4.7	65
38	Grafted multifunctional titanium dioxide nanotube membrane: Separation and photodegradation of aquatic pollutant. Applied Catalysis B: Environmental, 2008, 84, 262-267.	20.2	64
39	Transformation of Bromine Species in TiO <sub>2</sub> Photocatalytic System. Environmental Science & Technology, 2010, 44, 439-444.	10.0	64
40	The design of a hierarchical photocatalyst inspired by natural forest and its usage on hydrogen generation. International Journal of Hydrogen Energy, 2012, 37, 13998-14008.	7.1	64
41	Multi-functional CNT/ZnO/TiO2 nanocomposite membrane for concurrent filtration and photocatalytic degradation. Separation and Purification Technology, 2015, 156, 922-930.	7.9	63
42	Fabrication of magnetic cryptomelane-type manganese oxide nanowires for water treatment. Chemical Communications, 2011, 47, 1890-1892.	4.1	62
43	Facile fabrication of porous chitosan/TiO <sub>2</sub> /Fe <sub>3</sub> O <sub>4</sub> microspheres with multifunction for water purifications. New Journal of Chemistry, 2011, 35, 137-140.	2.8	62
44	Electrospun TiO2/SnO2 nanofibers with innovative structure and chemical properties for highly efficient photocatalytic H2 generation. International Journal of Hydrogen Energy, 2012, 37, 10575-10584.	7.1	61
45	Large cale Production of Hierarchical TiO <sub>2</sub> Nanorod Spheres for Photocatalytic Elimination of Contaminants and Killing Bacteria. Chemistry - A European Journal, 2013, 19, 3061-3070.	3.3	60
46	The synergetic effect of sulfonated graphene and silver as co-catalysts for highly efficient photocatalytic hydrogen production of ZnO nanorods. Journal of Materials Chemistry A, 2013, 1, 14262.	10.3	59
47	A green approach assembled multifunctional Ag/AgBr/TNF membrane for clean water production & disinfection of bacteria through utilizing visible light. Applied Catalysis B: Environmental, 2016, 196, 57-67.	20.2	58
48	A hierarchically structured and multifunctional membrane for water treatment. Applied Catalysis B: Environmental, 2012, 111-112, 571-577.	20.2	57
49	Mechanistic Performance of Asphalt-Concrete Mixture Incorporating Coarse Recycled Concrete Aggregate. Journal of Materials in Civil Engineering, 2013, 25, 1299-1305.	2.9	57
50	Superior Antifouling Capability of Hydrogel Forward Osmosis Membrane for Treating Wastewaters with High Concentration of Organic Foulants. Environmental Science & Technology, 2018, 52, 1421-1428.	10.0	53
51	Hierarchical 3D dendritic TiO2 nanospheres building with ultralong 1D nanoribbon/wires for high performance concurrent photocatalytic membrane water purification. Water Research, 2013, 47, 4126-4138.	11.3	51
52	Immobilization of mercury and zinc in an alkali-activated slag matrix. Journal of Hazardous Materials, 2003, 101, 65-77.	12.4	49
53	A new nanocomposite forward osmosis membrane custom-designed for treating shale gas wastewater. Scientific Reports, 2015, 5, 14530.	3.3	47
54	Facile preparation of monodisperse, carbon doped single crystal rutile TiO2 nanorod spheres with a large percentage of reactive (110) facet exposure for highly efficient H2 generation. Journal of Materials Chemistry, 2012, 22, 18801.	6.7	46

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55	Facile Fabrication of <scp><scp>TiO</scp></scp> <sub>2</sub> / <scp><scp>SrTiO</scp></scp> <sub>3</sub> Composite Nanofibers by Electrospinning for High Efficient <scp><scp>H</scp></scp> <sub>2</sub> Generation. Journal of the American Ceramic Society, 2013, 96, 942-949.	3.8	46
56	Hierarchical sulfonated graphene oxide–TiO2 composites for highly efficient hydrogen production with a wide pH range. Applied Catalysis B: Environmental, 2014, 147, 888-896.	20.2	43
57	Hierarchical assembly of anatase nanowhiskers and evaluation of their photocatalytic efficiency in comparison to various one-dimensional TiO2 nanostructures. Journal of Materials Chemistry, 2011, 21, 11844.	6.7	42
58	Hierarchically multifunctional K-OMS-2/TiO2/Fe3O4 heterojunctions for the photocatalytic oxidation of humic acid under solar light irradiation. Journal of Hazardous Materials, 2012, 243, 302-310.	12.4	41
59	Hierarchical Nitrogenâ€Doped Flowerlike ZnO Nanostructure and Its Multifunctional Environmental Applications. Chemistry - an Asian Journal, 2012, 7, 1772-1780.	3.3	41
60	Impact of prolonged sludge retention time on the performance of a submerged membrane bioreactor. Desalination, 2007, 208, 101-112.	8.2	40
61	Hierarchical 3D micro-/nano-V2O5 (vanadium pentoxide) spheres as cathode materials for high-energy and high-power lithium ion-batteries. Energy, 2014, 76, 607-613.	8.8	40
62	Construction of selfâ€organized freeâ€standing TiO <sub>2</sub> nanotube arrays for effective disinfection of drinking water. Journal of Chemical Technology and Biotechnology, 2010, 85, 1061-1066.	3.2	38
63	A new nano-engineered hierarchical membrane for concurrent removal of surfactant and oil from oil-in-water nanoemulsion. Scientific Reports, 2016, 6, 24365.	3.3	38
64	Characterization of mercury- and zinc-doped alkali-activated slag matrix. Cement and Concrete Research, 2003, 33, 1257-1262.	11.0	37
65	Three-dimensional architecture constructed from a graphene oxide nanosheet–polymer composite for high-flux forward osmosis membranes. Journal of Materials Chemistry A, 2017, 5, 12183-12192.	10.3	37
66	Effects of hydraulic retention time on behavior of start-up submerged membrane bioreactor with prolonged sludge retention time. Desalination, 2006, 195, 209-225.	8.2	35
67	Influence of a prolonged solid retention time environment on nitrification/denitrification and sludge production in a submerged membrane bioreactor. Desalination, 2009, 245, 28-43.	8.2	35
68	Hierarchical ZnO nanostructured membrane for multifunctional environmental applications. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 410, 11-17.	4.7	32
69	A lithium-ion anode with micro-scale mixed hierarchical carbon coated single crystal TiO2 nanorod spheres and carbon spheres. Journal of Materials Chemistry, 2012, 22, 24552.	6.7	32
70	Ultrasonic Preparation of Hierarchical Grapheneâ€Oxide/TiO 2 Composite Microspheres for Efficient Photocatalytic Hydrogen Production. Chemistry - an Asian Journal, 2013, 8, 2779-2786.	3.3	32
71	Manta ray gill inspired radially distributed nanofibrous membrane for efficient and continuous oil–water separation. Environmental Science: Nano, 2018, 5, 1466-1472.	4.3	32
72	Characterization of mercury- and zinc-doped alkali-activated slag matrix. Cement and Concrete Research, 2003, 33, 1251-1256.	11.0	31

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73	Biofouling development and rejection enhancement in long SRT MF membrane bioreactor. Process Biochemistry, 2007, 42, 1641-1648.	3.7	29
74	The size and dispersion effect of modified graphene oxide sheets on the photocatalytic H2 generation activity of TiO2 nanorods. Carbon, 2013, 60, 445-452.	10.3	29
75	Dimension induced intrinsic physio-electrical effects of nanostructured TiO2 on its antibacterial properties. Chemical Engineering Journal, 2018, 334, 1309-1315.	12.7	29
76	Facile synthesis of hierarchically meso/nanoporous s- and c-codoped TiO2 and its high photocatalytic efficiency in H2 generation. Applied Catalysis B: Environmental, 2013, 129, 294-300.	20.2	27
77	Hierarchical heteroarchitectures functionalized membrane for high efficient water purification. Journal of Membrane Science, 2015, 475, 245-251.	8.2	26
78	Forward Osmosis Membranes for Water Reclamation. Separation and Purification Reviews, 2016, 45, 93-107.	5.5	23
79	Hierarchical CuO/ZnO Membranes for Environmental Applications under the Irradiation of Visible Light. International Journal of Photoenergy, 2012, 2012, 1-11.	2.5	22
80	Effects of Hydraulic Retention Time on System Performance of a Submerged Membrane Bioreactor. Separation Science and Technology, 2003, 38, 851-868.	2.5	21
81	Efficient Oil/Water Separation Membrane Derived from Super-Flexible and Superhydrophilic Core–Shell Organic/Inorganic Nanofibrous Architectures. Polymers, 2019, 11, 974.	4.5	20
82	Room-temperature fabrication of anatase TiO2 submicrospheres with nanothornlike shell for photocatalytic degradation of methylene blue. Journal of Photochemistry and Photobiology A: Chemistry, 2009, 204, 154-160.	3.9	19
83	The effect of fabrication method of hierarchical 3D TiO2 nanorod spheres on photocatalytic pollutants degradation. Applied Catalysis A: General, 2012, 447-448, 193-199.	4.3	19
84	Effects of TiO2 nanostructure and operating parameters on optimized water disinfection processes: A comparative study. Chemical Engineering Journal, 2014, 249, 160-166.	12.7	19
85	Enhanced performance of hybrid solar cells using carboxylic acid-functionalized graphene oxide supported TiO2 nanorod composites. Materials Letters, 2013, 95, 178-181.	2.6	18
86	Aggregating TiO2 (B) Nanowires to Porous Basketry-like Microspheres and Their Photocatalytic Properties. Chemistry Letters, 2008, 37, 424-425.	1.3	17
87	Multifunctional nanostructured membrane for clean water reclamation from wastewater with various pH conditions. RSC Advances, 2013, 3, 15202.	3.6	16
88	New aluminium-rich alkali slag matrix with clay minerals for immobilizing simulated radioactive Sr and Cs waste. Journal of Nuclear Materials, 2001, 299, 199-204.	2.7	15
89	Solarâ€Lightâ€Driven Photodegradation and Antibacterial Activity of Hierarchical TiO <sub>2</sub> /ZnO/CuO Material. ChemPlusChem, 2012, 77, 941-948.	2.8	15
90	Hierarchical TiO <sub>2</sub> /V <sub>2</sub> O <sub>5</sub> Multifunctional Membrane for Water Purification. ChemPlusChem, 2013, 78, 1475-1482.	2.8	15

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91	Recovery and Marine Clay Stabilization of Heavy Metals Present in Spent Hydrotreating Catalysts. Journal of Environmental Engineering, ASCE, 2001, 127, 916-921.	1.4	14
92	A novel strategy to fabricate inorganic nanofibrous membranes for water treatment: use of functionalized graphene oxide as a cross linker. RSC Advances, 2012, 2, 5134.	3.6	14
93	Fine-tuning selective layer architecture of hydrogel membrane towards high separation performances for engineered osmosis. Journal of Membrane Science, 2019, 592, 117370.	8.2	14
94	Hybrid TiO2 photocatalytic oxidation and ultrafiltration for humic acid removal and membrane fouling control. Water Science and Technology: Water Supply, 2011, 11, 324-332.	2.1	13
95	A free-standing, hybrid TiO2/K-OMS-2 hierarchical nanofibrous membrane with high photocatalytic activity for concurrent membrane filtration applications. RSC Advances, 2012, 2, 3638.	3.6	13
96	A Hierarchical Nanostructured Carbon Nanofiber–In <sub>2</sub> S <sub>3</sub> Photocatalyst with High Photodegradation and Disinfection Abilities Under Visible Light. Chemistry - an Asian Journal, 2014, 9, 1663-1670.	3.3	12
97	Stabilization Treatment for Reutilization of Spent Refinery Catalyst into Value-Added Product. Energy Sources Part A Recovery, Utilization, and Environmental Effects, 2003, 25, 607-615.	0.5	11
98	Oil-Water Separation Using a Self-Cleaning Underwater Superoleophobic Micro/Nanowire Hierarchical Nanostructured Membrane. ChemistrySelect, 2016, 1, 1329-1338.	1.5	11
99	Highâ€Performance Lithiumâ€lon Anodes with Hierarchically Assembled Singleâ€Crystal SnO <sub>2</sub> Nanoflake Spheres. Chemistry - an Asian Journal, 2012, 7, 2381-2385.	3.3	10
100	Stability investigation of graphene oxide–silver nanoparticles composites in natural reservoir water. RSC Advances, 2013, 3, 25331.	3.6	10
101	Threeâ€Tier Hierarchical Clusters of Carbonâ€Coated Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> Single Crystals as Highâ€Power and Highâ€Energy Anodes for Lithiumâ€Ion Batteries. ChemElectroChem, 2016, 3, 91-97.	3.4	9
102	Electrospun Bi3+/TiO2 nanofibers for concurrent photocatalytic H2 and clean water production from glycerol under solar irradiation: A systematic study. Journal of Cleaner Production, 2021, 298, 126671.	9.3	8
103	A general method for the fabrication of hierarchically-nanostructured membranes with multifunctional environmental applications. Separation and Purification Technology, 2013, 107, 324-330.	7.9	6
104	Hierarchical ZnO Nanoflake Structured Multifunctional Membrane for Water Purification. Separation Science and Technology, 2013, 48, 473-479.	2.5	6
105	Multi-dimensional micro-/nano-reactor spheres for sustainable water treatment. Catalysis Science and Technology, 2017, 7, 5550-5561.	4.1	6
106	Stabilization of mercury using waste ladle furnace slag. Journal of the Air and Waste Management Association, 2013, 63, 1469-1478.	1.9	5
107	Spatially isolated CoNx quantum dots on carbon nanotubes enable a robust radical-free Fenton-like process. Chemical Communications, 2022, 58, 451-454.	4.1	5
108	Comparison study on membrane fouling by various sludge fractions with long solid retention time in membrane bioreactor. Membrane Water Treatment, 2013, 4, 175-189.	0.5	4

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109	An ion exchange approach assembled multi-dimensional hierarchical Fe–TiO <sub>2</sub> composite micro-/nano multi-shell hollow spheres for bacteria lysis through utilizing visible light. Catalysis Science and Technology, 2018, 8, 2077-2086.	4.1	3
110	Porous Graphene: Functional Free‣tanding Graphene Honeycomb Films (Adv. Funct. Mater. 23/2013). Advanced Functional Materials, 2013, 23, 2971-2971.	14.9	2
111	Hierarchical Hybrid K-OMS-2/TiO <sub>2</sub> Nanofibrous Membrane for Water Treatment. ACS Symposium Series, 2013, , 267-276.	0.5	0
112	A facile method for the fast and accurate selection of a UF membrane for membrane bioreactors. Environmental Science: Water Research and Technology, 0, , .	2.4	0