

Darren Delai Sun

List of Publications by Year in descending order

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44444

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#	ARTICLE	IF	CITATIONS
1	Self-Assembling TiO ₂ Nanorods on Large Graphene Oxide Sheets at a Two-Phase Interface and Their Anti-Recombination in Photocatalytic Applications. <i>Advanced Functional Materials</i> , 2010, 20, 4175-4181.	7.8	720
2	An Efficient Bicomponent TiO ₂ /SnO ₂ Nanofiber Photocatalyst Fabricated by Electrospinning with a Side-by-Side Dual Spinneret Method. <i>Nano Letters</i> , 2007, 7, 1081-1085.	4.5	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. <i>Advanced Materials</i> , 2011, 23, 3256-3260.	11.1	362
4	Hybridized Nanowires and Cubes: A Novel Architecture of a Heterojunctioned TiO ₂ /SrTiO ₃ Thin Film for Efficient Water Splitting. <i>Advanced Functional Materials</i> , 2010, 20, 4287-4294.	7.8	276
5	Concurrent filtration and solar photocatalytic disinfection/degradation using high-performance Ag/TiO ₂ nanofiber membrane. <i>Water Research</i> , 2012, 46, 1101-1112.	5.3	273
6	Graphene oxide-CdS composite with high photocatalytic degradation and disinfection activities under visible light irradiation. <i>Journal of Hazardous Materials</i> , 2013, 250-251, 412-420.	6.5	263
7	Significant improvement of photocatalytic hydrogen generation rate over TiO ₂ with deposited CuO. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 6096-6104.	3.8	243
8	High-Performance Multifunctional TiO ₂ Nanowire Ultrafiltration Membrane with a Hierarchical Layer Structure for Water Treatment. <i>Advanced Functional Materials</i> , 2009, 19, 3731-3736.	7.8	227
9	Graphene oxide enwrapped Ag ₃ PO ₄ composite: towards a highly efficient and stable visible-light-induced photocatalyst for water purification. <i>Catalysis Science and Technology</i> , 2012, 2, 2525.	2.1	218
10	Highly efficient CuO incorporated TiO ₂ nanotube photocatalyst for hydrogen production from water. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 6560-6568.	3.8	202
11	Facile synthesis of monodispersed silver nanoparticles on graphene oxide sheets with enhanced antibacterial activity. <i>New Journal of Chemistry</i> , 2011, 35, 1418.	1.4	193
12	Novel-structured electrospun TiO ₂ /CuO composite nanofibers for high efficient photocatalytic cogeneration of clean water and energy from dye wastewater. <i>Water Research</i> , 2013, 47, 4059-4073.	5.3	190
13	Fabrication and comparison of highly efficient Cu incorporated TiO ₂ photocatalyst for hydrogen generation from water. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 5254-5261.	3.8	183
14	TiO ₂ nanowire membrane for concurrent filtration and photocatalytic oxidation of humic acid in water. <i>Journal of Membrane Science</i> , 2008, 313, 44-51.	4.1	182
15	Energy recovery from concentrated seawater brine by thin-film nanofiber composite pressure retarded osmosis membranes with high power density. <i>Energy and Environmental Science</i> , 2013, 6, 1199.	15.6	179
16	High quality graphene oxide-CdS-Pt nanocomposites for efficient photocatalytic hydrogen evolution. <i>Journal of Materials Chemistry</i> , 2012, 22, 2292-2298.	6.7	156
17	Hierarchical CuO/ZnO 'corn-like' architecture for photocatalytic hydrogen generation. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 13473-13480.	3.8	142
18	Value-added utilisation of recycled concrete in hot-mix asphalt. <i>Waste Management</i> , 2007, 27, 294-301.	3.7	127

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19	Hierarchical ZnO/Cu \AA -corn-like materials with high photodegradation and antibacterial capability under visible light. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 6205.	1.3	125
20	A low-energy forward osmosis process to produce drinking water. <i>Energy and Environmental Science</i> , 2011, 4, 2582.	15.6	121
21	Functional Free-Standing Graphene Honeycomb Films. <i>Advanced Functional Materials</i> , 2013, 23, 2972-2978.	7.8	116
22	Multifunctional graphene oxide-TiO ₂ microsphere hierarchical membrane for clean water production. <i>Applied Catalysis B: Environmental</i> , 2013, 138-139, 17-25.	10.8	110
23	Sulfonated graphene oxide-ZnO-Ag photocatalyst for fast photodegradation and disinfection under visible light. <i>Journal of Hazardous Materials</i> , 2013, 262, 826-835.	6.5	109
24	Hierarchically multifunctional TiO ₂ nano-thorn membrane for water purification. <i>Chemical Communications</i> , 2010, 46, 6542.	2.2	108
25	Highly water soluble and recovered dextran coated Fe ₃ O ₄ magnetic nanoparticles for brackish water desalination. <i>Separation and Purification Technology</i> , 2011, 81, 392-399.	3.9	107
26	Direct Growth of ZnO Nanocrystals onto the Surface of Porous TiO ₂ Nanotube Arrays for Highly Efficient and Recyclable Photocatalysts. <i>Small</i> , 2009, 5, 2260-2264.	5.2	105
27	Green Approach for Photocatalytic Cu(II)-EDTA Degradation over TiO ₂ : Toward Environmental Sustainability. <i>Environmental Science & Technology</i> , 2015, 49, 2541-2548.	4.6	98
28	Hierarchical SrTiO ₃ /TiO ₂ nanofibers heterostructures with high efficiency in photocatalytic H ₂ generation. <i>Applied Catalysis B: Environmental</i> , 2012, 125, 367-374.	10.8	96
29	Effects of various TiO ₂ nanostructures and graphene oxide on photocatalytic activity of TiO ₂ . <i>Journal of Hazardous Materials</i> , 2014, 279, 96-104.	6.5	94
30	Photocatalytic degradation of E. coliform in water. <i>Water Research</i> , 2003, 37, 3452-3462.	5.3	91
31	Hierarchical TiO ₂ /CdS \AA -spindle-like composite with high photodegradation and antibacterial capability under visible light irradiation. <i>Journal of Hazardous Materials</i> , 2012, 229-230, 209-216.	6.5	91
32	Recovery of heavy metals and stabilization of spent hydrotreating catalyst using a glass-ceramic matrix. <i>Journal of Hazardous Materials</i> , 2001, 87, 213-223.	6.5	86
33	Highly efficient TiO ₂ nanotube photocatalyst for simultaneous hydrogen production and copper removal from water. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 6538-6545.	3.8	86
34	Optimization and an insightful properties-Activity study of electrospun TiO ₂ /CuO composite nanofibers for efficient photocatalytic H ₂ generation. <i>Applied Catalysis B: Environmental</i> , 2013, 140-141, 68-81.	10.8	80
35	One-pot hydrothermal synthesis of a hierarchical nanofungus-like anatase TiO ₂ thin film for photocatalytic oxidation of bisphenol A. <i>Applied Catalysis B: Environmental</i> , 2011, 110, 260-272.	10.8	77
36	The efficient separation of surfactant-stabilized oil-water emulsions with a flexible and superhydrophilic graphene-TiO ₂ composite membrane. <i>Journal of Materials Chemistry A</i> , 2014, 2, 14082-14088.	5.2	71

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37	Adsorption and photocatalytic degradation of Acid Orange 7 over hydrothermally synthesized mesoporous TiO ₂ nanotube. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011, 379, 169-175.	2.3	65
38	Grafted multifunctional titanium dioxide nanotube membrane: Separation and photodegradation of aquatic pollutant. <i>Applied Catalysis B: Environmental</i> , 2008, 84, 262-267.	10.8	64
39	Transformation of Bromine Species in TiO ₂ Photocatalytic System. <i>Environmental Science & Technology</i> , 2010, 44, 439-444.	4.6	64
40	The design of a hierarchical photocatalyst inspired by natural forest and its usage on hydrogen generation. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 13998-14008.	3.8	64
41	Multi-functional CNT/ZnO/TiO ₂ nanocomposite membrane for concurrent filtration and photocatalytic degradation. <i>Separation and Purification Technology</i> , 2015, 156, 922-930.	3.9	63
42	Fabrication of magnetic cryptomelane-type manganese oxide nanowires for water treatment. <i>Chemical Communications</i> , 2011, 47, 1890-1892.	2.2	62
43	Facile fabrication of porous chitosan/TiO ₂ /Fe ₃ O ₄ microspheres with multifunction for water purifications. <i>New Journal of Chemistry</i> , 2011, 35, 137-140.	1.4	62
44	Electrospun TiO ₂ /SnO ₂ nanofibers with innovative structure and chemical properties for highly efficient photocatalytic H ₂ generation. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 10575-10584.	3.8	61
45	Large-scale Production of Hierarchical TiO ₂ Nanorod Spheres for Photocatalytic Elimination of Contaminants and Killing Bacteria. <i>Chemistry - A European Journal</i> , 2013, 19, 3061-3070.	1.7	60
46	The synergetic effect of sulfonated graphene and silver as co-catalysts for highly efficient photocatalytic hydrogen production of ZnO nanorods. <i>Journal of Materials Chemistry A</i> , 2013, 1, 14262.	5.2	59
47	A green approach assembled multifunctional Ag/AgBr/TNF membrane for clean water production & disinfection of bacteria through utilizing visible light. <i>Applied Catalysis B: Environmental</i> , 2016, 196, 57-67.	10.8	58
48	A hierarchically structured and multifunctional membrane for water treatment. <i>Applied Catalysis B: Environmental</i> , 2012, 111-112, 571-577.	10.8	57
49	Mechanistic Performance of Asphalt-Concrete Mixture Incorporating Coarse Recycled Concrete Aggregate. <i>Journal of Materials in Civil Engineering</i> , 2013, 25, 1299-1305.	1.3	57
50	Superior Antifouling Capability of Hydrogel Forward Osmosis Membrane for Treating Wastewaters with High Concentration of Organic Foulants. <i>Environmental Science & Technology</i> , 2018, 52, 1421-1428.	4.6	53
51	Hierarchical 3D dendritic TiO ₂ nanospheres building with ultralong 1D nanoribbon/wires for high performance concurrent photocatalytic membrane water purification. <i>Water Research</i> , 2013, 47, 4126-4138.	5.3	51
52	Immobilization of mercury and zinc in an alkali-activated slag matrix. <i>Journal of Hazardous Materials</i> , 2003, 101, 65-77.	6.5	49
53	A new nanocomposite forward osmosis membrane custom-designed for treating shale gas wastewater. <i>Scientific Reports</i> , 2015, 5, 14530.	1.6	47
54	Facile preparation of monodisperse, carbon doped single crystal rutile TiO ₂ nanorod spheres with a large percentage of reactive (110) facet exposure for highly efficient H ₂ generation. <i>Journal of Materials Chemistry</i> , 2012, 22, 18801.	6.7	46

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55	Facile Fabrication of $\text{TiO}_2/\text{SrTiO}_3$ Composite Nanofibers by Electrospinning for High Efficient H_2 Generation. <i>Journal of the American Ceramic Society</i> , 2013, 96, 942-949.	1.9	46
56	Hierarchical sulfonated graphene oxide- TiO_2 composites for highly efficient hydrogen production with a wide pH range. <i>Applied Catalysis B: Environmental</i> , 2014, 147, 888-896.	10.8	43
57	Hierarchical assembly of anatase nanowhiskers and evaluation of their photocatalytic efficiency in comparison to various one-dimensional TiO_2 nanostructures. <i>Journal of Materials Chemistry</i> , 2011, 21, 11844.	6.7	42
58	Hierarchically multifunctional K-OMS-2/ TiO_2 / Fe_3O_4 heterojunctions for the photocatalytic oxidation of humic acid under solar light irradiation. <i>Journal of Hazardous Materials</i> , 2012, 243, 302-310.	6.5	41
59	Hierarchical Nitrogen-Doped Flowerlike ZnO Nanostructure and Its Multifunctional Environmental Applications. <i>Chemistry - an Asian Journal</i> , 2012, 7, 1772-1780.	1.7	41
60	Impact of prolonged sludge retention time on the performance of a submerged membrane bioreactor. <i>Desalination</i> , 2007, 208, 101-112.	4.0	40
61	Hierarchical 3D micro-/nano- V_2O_5 (vanadium pentoxide) spheres as cathode materials for high-energy and high-power lithium ion-batteries. <i>Energy</i> , 2014, 76, 607-613.	4.5	40
62	Construction of self-organized free-standing TiO_2 nanotube arrays for effective disinfection of drinking water. <i>Journal of Chemical Technology and Biotechnology</i> , 2010, 85, 1061-1066.	1.6	38
63	A new nano-engineered hierarchical membrane for concurrent removal of surfactant and oil from oil-in-water nanoemulsion. <i>Scientific Reports</i> , 2016, 6, 24365.	1.6	38
64	Characterization of mercury- and zinc-doped alkali-activated slag matrix. <i>Cement and Concrete Research</i> , 2003, 33, 1257-1262.	4.6	37
65	Three-dimensional architecture constructed from a graphene oxide nanosheet-polymer composite for high-flux forward osmosis membranes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 12183-12192.	5.2	37
66	Effects of hydraulic retention time on behavior of start-up submerged membrane bioreactor with prolonged sludge retention time. <i>Desalination</i> , 2006, 195, 209-225.	4.0	35
67	Influence of a prolonged solid retention time environment on nitrification/denitrification and sludge production in a submerged membrane bioreactor. <i>Desalination</i> , 2009, 245, 28-43.	4.0	35
68	Hierarchical ZnO nanostructured membrane for multifunctional environmental applications. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012, 410, 11-17.	2.3	32
69	A lithium-ion anode with micro-scale mixed hierarchical carbon coated single crystal TiO_2 nanorod spheres and carbon spheres. <i>Journal of Materials Chemistry</i> , 2012, 22, 24552.	6.7	32
70	Ultrasonic Preparation of Hierarchical Graphene Oxide/ TiO_2 Composite Microspheres for Efficient Photocatalytic Hydrogen Production. <i>Chemistry - an Asian Journal</i> , 2013, 8, 2779-2786.	1.7	32
71	Manta ray gill inspired radially distributed nanofibrous membrane for efficient and continuous oil-water separation. <i>Environmental Science: Nano</i> , 2018, 5, 1466-1472.	2.2	32
72	Characterization of mercury- and zinc-doped alkali-activated slag matrix. <i>Cement and Concrete Research</i> , 2003, 33, 1251-1256.	4.6	31

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73	Biofouling development and rejection enhancement in long SRT MF membrane bioreactor. <i>Process Biochemistry</i> , 2007, 42, 1641-1648.	1.8	29
74	The size and dispersion effect of modified graphene oxide sheets on the photocatalytic H ₂ generation activity of TiO ₂ nanorods. <i>Carbon</i> , 2013, 60, 445-452.	5.4	29
75	Dimension induced intrinsic physio-electrical effects of nanostructured TiO ₂ on its antibacterial properties. <i>Chemical Engineering Journal</i> , 2018, 334, 1309-1315.	6.6	29
76	Facile synthesis of hierarchically meso/nanoporous s- and c-codoped TiO ₂ and its high photocatalytic efficiency in H ₂ generation. <i>Applied Catalysis B: Environmental</i> , 2013, 129, 294-300.	10.8	27
77	Hierarchical heteroarchitectures functionalized membrane for high efficient water purification. <i>Journal of Membrane Science</i> , 2015, 475, 245-251.	4.1	26
78	Forward Osmosis Membranes for Water Reclamation. <i>Separation and Purification Reviews</i> , 2016, 45, 93-107.	2.8	23
79	Hierarchical CuO/ZnO Membranes for Environmental Applications under the Irradiation of Visible Light. <i>International Journal of Photoenergy</i> , 2012, 2012, 1-11.	1.4	22
80	Effects of Hydraulic Retention Time on System Performance of a Submerged Membrane Bioreactor. <i>Separation Science and Technology</i> , 2003, 38, 851-868.	1.3	21
81	Efficient Oil/Water Separation Membrane Derived from Super-Flexible and Superhydrophilic Core-Shell Organic/Inorganic Nanofibrous Architectures. <i>Polymers</i> , 2019, 11, 974.	2.0	20
82	Room-temperature fabrication of anatase TiO ₂ submicrospheres with nanothornlike shell for photocatalytic degradation of methylene blue. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2009, 204, 154-160.	2.0	19
83	The effect of fabrication method of hierarchical 3D TiO ₂ nanorod spheres on photocatalytic pollutants degradation. <i>Applied Catalysis A: General</i> , 2012, 447-448, 193-199.	2.2	19
84	Effects of TiO ₂ nanostructure and operating parameters on optimized water disinfection processes: A comparative study. <i>Chemical Engineering Journal</i> , 2014, 249, 160-166.	6.6	19
85	Enhanced performance of hybrid solar cells using carboxylic acid-functionalized graphene oxide supported TiO ₂ nanorod composites. <i>Materials Letters</i> , 2013, 95, 178-181.	1.3	18
86	Aggregating TiO ₂ (B) Nanowires to Porous Basketry-like Microspheres and Their Photocatalytic Properties. <i>Chemistry Letters</i> , 2008, 37, 424-425.	0.7	17
87	Multifunctional nanostructured membrane for clean water reclamation from wastewater with various pH conditions. <i>RSC Advances</i> , 2013, 3, 15202.	1.7	16
88	New aluminium-rich alkali slag matrix with clay minerals for immobilizing simulated radioactive Sr and Cs waste. <i>Journal of Nuclear Materials</i> , 2001, 299, 199-204.	1.3	15
89	Solar-Light-Driven Photodegradation and Antibacterial Activity of Hierarchical TiO ₂ /ZnO/CuO Material. <i>ChemPlusChem</i> , 2012, 77, 941-948.	1.3	15
90	Hierarchical TiO ₂ /VO ₅ Multifunctional Membrane for Water Purification. <i>ChemPlusChem</i> , 2013, 78, 1475-1482.	1.3	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.	0.7	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.	1.7	14
93	Fine-tuning selective layer architecture of hydrogel membrane towards high separation performances for engineered osmosis. Journal of Membrane Science, 2019, 592, 117370.	4.1	14
94	Hybrid TiO ₂ photocatalytic oxidation and ultrafiltration for humic acid removal and membrane fouling control. Water Science and Technology: Water Supply, 2011, 11, 324-332.	1.0	13
95	A free-standing, hybrid TiO ₂ /K-OMS-2 hierarchical nanofibrous membrane with high photocatalytic activity for concurrent membrane filtration applications. RSC Advances, 2012, 2, 3638.	1.7	13
96	A Hierarchical Nanostructured Carbon Nanofiber@S ₃ Photocatalyst with High Photodegradation and Disinfection Abilities Under Visible Light. Chemistry - an Asian Journal, 2014, 9, 1663-1670.	1.7	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.	0.7	11
99	High-Performance Lithium-Ion Anodes with Hierarchically Assembled Single-Crystal SnO ₂ Nanoflake Spheres. Chemistry - an Asian Journal, 2012, 7, 2381-2385.	1.7	10
100	Stability investigation of graphene oxide-silver nanoparticles composites in natural reservoir water. RSC Advances, 2013, 3, 25331.	1.7	10
101	Three-Tier Hierarchical Clusters of Carbon-Coated Li ₄ Ti ₅ O ₁₂ Single Crystals as High-Power and High-Energy Anodes for Lithium-Ion Batteries. ChemElectroChem, 2016, 3, 91-97.	1.7	9
102	Electrospun Bi ₃ +/TiO ₂ nanofibers for concurrent photocatalytic H ₂ and clean water production from glycerol under solar irradiation: A systematic study. Journal of Cleaner Production, 2021, 298, 126671.	4.6	8
103	A general method for the fabrication of hierarchically-nanostructured membranes with multifunctional environmental applications. Separation and Purification Technology, 2013, 107, 324-330.	3.9	6
104	Hierarchical ZnO Nanoflake Structured Multifunctional Membrane for Water Purification. Separation Science and Technology, 2013, 48, 473-479.	1.3	6
105	Multi-dimensional micro-/nano-reactor spheres for sustainable water treatment. Catalysis Science and Technology, 2017, 7, 5550-5561.	2.1	6
106	Stabilization of mercury using waste ladle furnace slag. Journal of the Air and Waste Management Association, 2013, 63, 1469-1478.	0.9	5
107	Spatially isolated CoNx quantum dots on carbon nanotubes enable a robust radical-free Fenton-like process. Chemical Communications, 2022, 58, 451-454.	2.2	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 ₂ composite micro-/nano multi-shell hollow spheres for bacteria lysis through utilizing visible light. Catalysis Science and Technology, 2018, 8, 2077-2086.	2.1	3
110	Porous Graphene: Functional Free-standing Graphene Honeycomb Films (Adv. Funct. Mater. 23/2013). Advanced Functional Materials, 2013, 23, 2971-2971.	7.8	2
111	Hierarchical Hybrid K-OMS-2/TiO ₂ 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, , .	1.2	0