Min-Hsin Yeh

List of Publications by Year
in descending order

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93 papers	7,139 citations	76326 40 h-index	54911 84 g-index
93 all docs	93 docs citations	93 times ranked	7854 citing authors

#	Article	IF	Citations
1	Self-powered textile for wearable electronics by hybridizing fiber-shaped nanogenerators, solar cells, and supercapacitors. Science Advances, 2016, 2, e1600097.	10.3	705
2	Harvesting Low-Frequency (<5 Hz) Irregular Mechanical Energy: A Possible Killer Application of Triboelectric Nanogenerator. ACS Nano, 2016, 10, 4797-4805.	14.6	606
3	A highly sensitive, self-powered triboelectric auditory sensor for social robotics and hearing aids. Science Robotics, 2018, 3, .	17.6	573
4	All-in-One Shape-Adaptive Self-Charging Power Package for Wearable Electronics. ACS Nano, 2016, 10, 10580-10588.	14.6	290
5	A highly shape-adaptive, stretchable design based on conductive liquid for energy harvesting and self-powered biomechanical monitoring. Science Advances, 2016, 2, e1501624.	10.3	274
6	Blow-driven triboelectric nanogenerator as an active alcohol breath analyzer. Nano Energy, 2015, 16, 38-46.	16.0	255
7	Harvesting Broad Frequency Band Blue Energy by a Triboelectricâ€“Electromagnetic Hybrid Nanogenerator. ACS Nano, 2016, 10, 6526-6534.	14.6	244
8	A Waterâ€Proof Triboelectricâ€“Electromagnetic Hybrid Generator for Energy Harvesting in Harsh Environments. Advanced Energy Materials, 2016, 6, 1501593.	19.5	243
9	Triboelectrificationâ€Enabled Selfâ€Powered Detection and Removal of Heavy Metal Ions in Wastewater. Advanced Materials, 2016, 28, 2983-2991.	21.0	204
10	Ultralight Cut-Paper-Based Self-Charging Power Unit for Self-Powered Portable Electronic and Medical Systems. ACS Nano, 2017, 11, 4475-4482.	14.6	201
11	Motion-Driven Electrochromic Reactions for Self-Powered Smart Window System. ACS Nano, 2015, 9, 4757-4765.	14.6	158
12	An Ultrarobust High-Performance Triboelectric Nanogenerator Based on Charge Replenishment. ACS Nano, 2015, 9, 5577-5584.	14.6	135
13	High-efficiency ramie fiber degumming and self-powered degumming wastewater treatment using triboelectric nanogenerator. Nano Energy, 2016, 22, 548-557.	16.0	132
14	Conducting polymer-based counter electrode for a quantum-dot-sensitized solar cell (QDSSC) with a polysulfide electrolyte. Electrochimica Acta, 2011, 57, 277-284.	5.2	128
15	Whirligig-inspired triboelectric nanogenerator with ultrahigh specific output as reliable portable instant power supply for personal health monitoring devices. Nano Energy, 2018, 47, 74-80.	16.0	122
16	Designing a carbon nanotubes-interconnected ZIF-derived cobalt sulfide hybrid nanocage for supercapacitors. Journal of Materials Chemistry A, 2019, 7, 1479-1490.	10.3	109
17	A Streaming Potential/Currentâ€Based Microfluidic Direct Current Generator for Selfâ€Powered Nanosystems. Advanced Materials, 2015, 27, 6482-6487.	21.0	104
18	Site Activity and Population Engineering of NiRu-Layered Double Hydroxide Nanosheets Decorated with Silver Nanoparticles for Oxygen Evolution and Reduction Reactions. ACS Catalysis, 2019, 9, 117-129.	11.2	103

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19	Rolling Friction Enhanced Freeâ€Standing Triboelectric Nanogenerators and their Applications in Selfâ€Powered Electrochemical Recovery Systems. Advanced Functional Materials, 2016, 26, 1054-1062.	14.9	101
20	Self-Powered Triboelectric Nanosensor for Microfluidics and Cavity-Confined Solution Chemistry. ACS Nano, 2015, 9, 11056-11063.	14.6	99
21	A novel coreâ€"shell multi-walled carbon nanotube@graphene oxide nanoribbon heterostructure as a potential supercapacitor material. Journal of Materials Chemistry A, 2013, 1, 11237.	10.3	90
22	Ternary Electrification Layered Architecture for High-Performance Triboelectric Nanogenerators. ACS Nano, 2020, 14, 9050-9058.	14.6	88
23	A low-cost counter electrode of ITO glass coated with a graphene/NafionÂ® composite film for use in dye-sensitized solar cells. Carbon, 2012, 50, 4192-4202.	10.3	77
24	Multiwalled Carbon Nanotube@Reduced Graphene Oxide Nanoribbon as the Counter Electrode for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2014, 118, 16626-16634.	3.1	76
25	Boron-doped carbon nanotubes as metal-free electrocatalyst for dye-sensitized solar cells: Heteroatom doping level effect on tri-iodide reduction reaction. Journal of Power Sources, 2018, 375, 29-36.	7.8	75
26	A composite catalytic film of PEDOT:PSS/TiNâ€"NPs on a flexible counter-electrode substrate for a dye-sensitized solar cell. Journal of Materials Chemistry, 2011, 21, 19021.	6.7	73
27	A coral-like film of Ni@NiS with coreâ€"shell particles for the counter electrode of an efficient dye-sensitized solar cell. Journal of Materials Chemistry A, 2014, 2, 5816-5824.	10.3	70
28	Facile Synthesis of Boron-doped Graphene Nanosheets with Hierarchical Microstructure at Atmosphere Pressure for Metal-free Electrochemical Detection of Hydrogen Peroxide. Electrochimica Acta, 2015, 172, 52-60.	5.2	68
29	A zeolitic imidazolate framework-derived ZnSe/N-doped carbon cube hybrid electrocatalyst as the counter electrode for dye-sensitized solar cells. Journal of Materials Chemistry A, 2018, 6, 5107-5118.	10.3	63
30	A composite film of TiS2/PEDOT:PSS as the electrocatalyst for the counter electrode in dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 14888.	10.3	59
31	Robust and conductive MagnÃ©liÂPhase Ti4O7 decorated on 3D-nanoflower NiRu-LDH as high-performance oxygen reduction electrocatalyst. Nano Energy, 2018, 47, 309-315.	16.0	59
32	Enhanced performance of a flexible dye-sensitized solar cell with a composite semiconductor film of ZnO nanorods and ZnO nanoparticles. Electrochimica Acta, 2012, 62, 341-347.	5.2	58
33	Dyeâ€Sensitized Solar Cells with Reduced Graphene Oxide as the Counter Electrode Prepared by a Green Photothermal Reduction Process. ChemPhysChem, 2014, 15, 1175-1181.	2.1	58
34	Insights into the co-sensitizer adsorption kinetics for complementary organic dye-sensitized solar cells. Journal of Power Sources, 2014, 247, 906-914.	7.8	54
35	Designing a spontaneously deriving NiFe-LDH from bimetallic MOF-74 as an electrocatalyst for oxygen evolution reaction in alkaline solution. Chemical Engineering Journal, 2021, 423, 130204.	12.7	50
36	Graphite with Different Structures as Catalysts for Counter Electrodes in Dye-sensitized Solar Cells. Electrochimica Acta, 2015, 179, 211-219.	5.2	49

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37	A counter electrode based on hollow spherical particles of polyaniline for a dye-sensitized solar cell. Journal of Materials Chemistry, 2012, 22, 14727.	6.7	46
38	Size effects of platinum nanoparticles on the electrocatalytic ability of the counter electrode in dye-sensitized solar cells. Nano Energy, 2015, 17, 241-253.	16.0	44
39	Thermally Stable Boron-Doped Multiwalled Carbon Nanotubes as a Pt-free Counter Electrode for Dye-Sensitized Solar Cells. ACS Sustainable Chemistry and Engineering, 2017, 5, 537-546.	6.7	44
40	Oxygen Plasma Activation of Carbon Nanotubes-Interconnected Prussian Blue Analogue for Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2020, 12, 42634-42643.	8.0	44
41	Morphological Influence of Polypyrrole Nanoparticles on the Performance of Dyeâ€“Sensitized Solar Cells. Electrochimica Acta, 2015, 155, 263-271.	5.2	42
42	Facile fabrication of PtNP/MWCNT nanohybrid films for flexible counter electrode in dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 3185.	6.7	41
43	ZnO nanowire/nanoparticles composite films for the photoanodes of quantum dot-sensitized solar cells. Electrochimica Acta, 2013, 88, 35-43.	5.2	40
44	Designing ZIF-67 derived NiCo layered double hydroxides with 3D hierarchical structure for Enzyme-free electrochemical lactate monitoring in human sweat. Chemical Engineering Journal, 2022, 427, 131687.	12.7	39
45	Structural and Electronic Effects of Carbonâ€Supported Pt_{<i>x</i>}Pd_{1âˆ’<i>x</i>} Nanoparticles on the Electrocatalytic Activity of the Oxygenâ€Reduction Reaction and on Methanol Tolerance. Chemistry - A European Journal, 2010, 16, 11064-11071.	3.3	37
46	Boron-doped carbon nanotubes with uniform boron doping and tunable dopant functionalities as an efficient electrocatalyst for dopamine oxidation reaction. Sensors and Actuators B: Chemical, 2017, 248, 288-297.	7.8	37
47	Surface-engineered N-doped carbon nanotubes with B-doped graphene quantum dots: Strategies to develop highly-efficient noble metal-free electrocatalyst for online-monitoring dissolved oxygen biosensor. Carbon, 2022, 186, 406-415.	10.3	36
48	Lowâ€temperature flexible Ti/TiO₂ photoanode for dyeâ€sensitized solar cells with binderâ€free TiO₂ paste. Progress in Photovoltaics: Research and Applications, 2012, 20, 181-190.	8.1	35
49	Nanocomposite Graphene/Pt Electrocatalyst as Economical Counter Electrode for Dyeâ€Sensitized Solar Cells. ChemElectroChem, 2014, 1, 416-425.	3.4	35
50	Low-Temperature Flexible Photoanode and Net-Like Pt Counter Electrode for Improving the Performance of Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 21808-21815.	3.1	34
51	High performance CdS quantum-dot-sensitized solar cells with Ti-based ceramic materials as catalysts on the counter electrode. Journal of Power Sources, 2013, 237, 141-148.	7.8	34
52	Bimetallic catalyst of PtIr nanoparticles with high electrocatalytic ability for hydrogen peroxide oxidation. Sensors and Actuators B: Chemical, 2014, 190, 55-60.	7.8	34
53	Self-powered molecular imprinted polymers-based triboelectric sensor for noninvasive monitoring lactate levels in human sweat. Nano Energy, 2022, 100, 107464.	16.0	32
54	Zinc oxide-based dye-sensitized solar cells with a ruthenium dye containing an alkyl bithiophene group. Journal of Power Sources, 2014, 246, 1-9.	7.8	31

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55	Synthesis of a novel amphiphilic polymeric ionic liquid and its application in quasi-solid-state dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 20814-20822.	10.3	30
56	A composite poly(3,3-diethyl-3,4-dihydro-2H-thieno-[3,4-b] [1,4]-dioxepine) and Pt film as a counter electrode catalyst in dye-sensitized solar cells. Electrochimica Acta, 2011, 56, 6157-6164.	5.2	29
57	Dye-sensitized solar cells with low-cost catalytic films of polymer-loaded carbon black on their counter electrode. RSC Advances, 2013, 3, 5871.	3.6	29
58	Double-Wall TiO₂ Nanotubes for Dye-Sensitized Solar Cells: A Study of Growth Mechanism. ACS Sustainable Chemistry and Engineering, 2018, 6, 3907-3915.	6.7	29
59	Synthesis of Surfactant-Free and Morphology-Controllable Vanadium Diselenide for Efficient Counter Electrodes in Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 25090-25099.	8.0	29
60	Solid-state dye-sensitized solar cell with a charge transfer layer comprising two ionic liquids and a carbon material. Journal of Materials Chemistry, 2011, 21, 15471.	6.7	28
61	Effect of trifluoromethyl substituents in benzyl-based viologen on the electrochromic performance: Optical contrast and stability. Solar Energy Materials and Solar Cells, 2019, 200, 110020.	6.2	27
62	Preparing coreâ€“shell structure of ZnO@TiO2 nanowires through a simple dippingâ€“rinseâ€“hydrolyzation process as the photoanode for dye-sensitized solar cells. Nano Energy, 2013, 2, 609-621.	16.0	26
63	Prussian Blue Analogue-Derived Metal Oxides as Electrocatalysts for Oxygen Evolution Reaction: Tailoring the Molar Ratio of Cobalt to Iron. ACS Applied Energy Materials, 2020, 3, 11752-11762.	5.1	26
64	Flexible dye-sensitized solar cells with one-dimensional ZnO nanorods as electron collection centers in photoanodes. Electrochimica Acta, 2013, 88, 421-428.	5.2	25
65	Transparent Cobalt Selenide/Graphene Counter Electrode for Efficient Dye-Sensitized Solar Cells with Co²⁺/³⁺-Based Redox Couple. ACS Applied Materials & Interfaces, 2020, 12, 44597-44607.	8.0	25
66	A novel 2,7-diaminofluorene-based organic dye for a dye-sensitized solar cell. Journal of Power Sources, 2012, 215, 122-129.	7.8	24
67	Metal-based flexible TiO2 photoanode with titanium oxide nanotubes as the underlayer for enhancement of performance of a dye-sensitized solar cell. Electrochimica Acta, 2011, 57, 270-276.	5.2	22
68	Designing bimetallic Ni-based layered double hydroxides for enzyme-free electrochemical lactate biosensors. Sensors and Actuators B: Chemical, 2021, 346, 130505.	7.8	22
69	Improved performance of dye-sensitized solar cells using TiO 2 nanotubes infiltrated by TiO 2 nanoparticles using a dippingâ€“rinsingâ€“hydrolysis process. Journal of Power Sources, 2013, 243, 535-543.	7.8	20
70	Incorporating electrospun nanofibers of TEMPO-grafted PVDF-HFP polymer matrix in viologen-based electrochromic devices. Solar Energy Materials and Solar Cells, 2020, 208, 110375.	6.2	19
71	Synthesis of Boronâ€“doped Multiâ€“walled Carbon Nanotubes by an Ammoniaâ€“assisted Substitution Reaction for Applying in Supercapacitors. Energy Procedia, 2014, 61, 1764-1767.	1.8	18
72	Surface modification of TiO₂ nanotube arrays with Y₂O₃ barrier layer: controlling charge recombination dynamics in dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 8281-8287.	10.3	18

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73	Platinum nanoparticles decorated graphene nanoribbon with eco-friendly unzipping process for electrochemical sensors. Journal of the Taiwan Institute of Chemical Engineers, 2019, 96, 566-574.	5.3	18
74	CO-assisted synthesis of finely size-controlled platinum nanoparticles. Chemical Communications, 2011, 47, 3864.	4.1	17
75	Designing a hybrid type photoelectrochromic device with dual coloring modes for realizing ultrafast response/high optical contrast self-powered smart windows. Nano Energy, 2021, 90, 106575.	16.0	17
76	Highly ordered TiO2 nanotube stamps on Ti foils: Synthesis and application for all flexible dyeâ€“sensitized solar cells. Electrochemistry Communications, 2013, 37, 71-75.	4.7	14
77	Controlling Available Active Sites of Pt-Loaded TiO2 Nanotube-Imprinted Ti Plates for Efficient Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 3910-3919.	8.0	14
78	Synthesis of hexagonal ZnO clubs with opposite faces of unequal dimensions for the photoanode of dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2011, 13, 20999.	2.8	13
79	Carbonaceous allotropes modified ionic liquid electrolytes for efficient quasi-solid-state dye-sensitized solar cells. Electrochimica Acta, 2014, 130, 587-593.	5.2	12
80	Identification of the physical origin behind disorder, heterogeneity, and reconstruction and their correlation with the photoluminescence lifetime in hybrid perovskite thin films. Journal of Materials Chemistry A, 2017, 5, 21002-21015.	10.3	10
81	Large-area blade-coated organic solar cells processed from halogen-free solvent. Organic Electronics, 2019, 75, 105376.	2.6	9
82	Boron and Nitrogen Codoped Multilayer Graphene as a Counter Electrode: A Combined Theoretical and Experimental Study on Dye-Sensitized Solar Cells under Ambient Light Conditions. Journal of Physical Chemistry C, 2021, 125, 24894-24901.	3.1	9
83	Composite Films Based on Poly(3,4-ethylene dioxythiophene):Poly(styrene sulfonate) Conducting Polymer and TiC Nanoparticles as the Counter Electrodes for Flexible Dye-Sensitized Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10NE01.	1.5	8
84	Study on Oxidation State Dependent Electrocatalytic Ability for I^{âˆ’}/I₃^{âˆ’} Redox Reaction of Reduced Graphene Oxides. Electroanalysis, 2014, 26, 147-155.	2.9	7
85	Composite Films Based on Poly(3,4-ethylene dioxythiophene):Poly(styrene sulfonate) Conducting Polymer and TiC Nanoparticles as the Counter Electrodes for Flexible Dye-Sensitized Solar Cells. Japanese Journal of Applied Physics, 0, 51, 10NE01.	1.5	3
86	Designing Novel Poly(oxyalkylene)-Segmented Ester-Based Polymeric Dispersants for Efficient TiO2 Photoanodes of Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 38394-38403.	8.0	2
87	Electrochemical and Microstructural Investigations of PtFe Nanocompounds Synthesized by Atmospheric-Pressure Plasma Jet. Journal of the Electrochemical Society, 2020, 167, 056501.	2.9	2
88	Self-Powered Electrochromic Smart Window Driven By Transparent Triboelectric Nanogenerators Via Harvesting Wind and Rain Energies. ECS Meeting Abstracts, 2015, , .	0.0	0
89	Dye-Sensitized Solar Cells with Reduced Graphene Oxideas the Counter Electrode Prepared By a Greenphotothermal Reduction Process. ECS Meeting Abstracts, 2015, , .	0.0	0
90	(Invited) Ultralight Triboelectric Nanogenerators for Portable Self-Charging Power Unit and Self-Powered Sensing Platform. ECS Meeting Abstracts, 2019, , .	0.0	0

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91	Unraveling the Efficiency of Heteroatom-Doped Graphene Quantum Dots Incorporated Mof-Derived Bimetallic Layered Double Hydroxide Towards Oxygen Evolution Reaction. SSRN Electronic Journal, 0, , .	0.4	0
92	Boron-Doped Graphene Quantum Dots Anchored Carbon Nanotubes as a Noble Metal-Free Electrocatalyst of Uric Acid for Wearable Sweat Sensor. SSRN Electronic Journal, 0, , .	0.4	0
93	Boron-Doped Graphene Quantum Dots Anchored Carbon Nanotubes as a Noble Metal-Free Electrocatalyst of Uric Acid for Wearable Sweat Sensor. SSRN Electronic Journal, 0, , .	0.4	0