Jen-Hsien Huang

List of Publications by Year in descending order

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80 papers	3,355 citations	117625 34 h-index	149698 56 g-index
81 all docs	81 docs citations	81 times ranked	5473 citing authors

#	Article	IF	Citations
1	Robust multifunctional superhydrophobic coatings with enhanced water/oil separation, self-cleaning, anti-corrosion, and anti-biological adhesion. Chemical Engineering Journal, 2017, 314, 347-357.	12.7	208
2	Surfactant-Free Water-Processable Photoconductive All-Carbon Composite. Journal of the American Chemical Society, 2011, 133, 4940-4947.	13.7	200
3	Layer-by-Layer Graphene/TCNQ Stacked Films as Conducting Anodes for Organic Solar Cells. ACS Nano, 2012, 6, 5031-5039.	14.6	199
4	Graphene-based thermoplastic composites and their application for LED thermal management. Carbon, 2016, 102, 66-73.	10.3	157
5	Effective Work Function Modulation of Graphene/Carbon Nanotube Composite Films As Transparent Cathodes for Organic Optoelectronics. ACS Nano, 2011, 5, 6262-6271.	14.6	150
6	A ternary cascade structure enhances the efficiency of polymer solar cells. Journal of Materials Chemistry, 2010, 20, 2820.	6.7	109
7	Tunable Novel Cyclopentadithiophene-Based Copolymers Containing Various Numbers of Bithiazole and Thienyl Units for Organic Photovoltaic Cell Applications. Macromolecules, 2009, 42, 3681-3693.	4.8	99
8	Electrochemical characterization of the solvent-enhanced conductivity of poly(3,4-ethylenedioxythiophene) and its application in polymer solar cells. Journal of Materials Chemistry, 2009, 19, 3704.	6.7	95
9	Annealing effect of polymer bulk heterojunction solar cells based on polyfluorene and fullerene blend. Organic Electronics, 2009, 10, 27-33.	2.6	91
10	Towards solution processed all-carbon solar cells: a perspective. Energy and Environmental Science, 2012, 5, 7810.	30.8	87
11	Synthesis and applications of lowâ€bandgap conjugated polymers containing phenothiazine donor and various benzodiazole acceptors for polymer solar cells. Journal of Polymer Science Part A, 2010, 48, 4823-4834.	2.3	66
12	Three-dimensional carbon nanotube based polymer composites for thermal management. Composites Part A: Applied Science and Manufacturing, 2016, 90, 678-686.	7.6	65
13	Facile preparation of WO 3 /PEDOT:PSS composite for inkjet printed electrochromic window and its performance for heat shielding. Dyes and Pigments, 2018, 148, 465-473.	3.7	64
14	The Influence of Charge Trapping on the Electrochromic Performance of Poly(3,4-alkylenedioxythiophene) Derivatives. ACS Applied Materials & Interfaces, 2010, 2, 351-359.	8.0	62
15	Nanographite/polyaniline composite films as the counter electrodes for dye-sensitized solar cells. Journal of Materials Chemistry, 2011, 21, 10384.	6.7	62
16	rGO/SWCNT composites as novel electrode materials for electrochemical biosensing. Biosensors and Bioelectronics, 2013, 43, 173-179.	10.1	61
17	Ternary composite based on homogeneous Ni(OH)2 on graphene with Ag nanoparticles as nanospacers for efficient supercapacitor. Chemical Engineering Journal, 2018, 334, 2058-2067.	12.7	61
18	Fabrication of multilayer organic solar cells through a stamping technique. Journal of Materials Chemistry, 2009, 19, 4077.	6.7	59

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19	Interfacial engineering of melamine sponges using hydrophobic TiO 2 nanoparticles for effective oil/water separation. Journal of the Taiwan Institute of Chemical Engineers, 2016, 67, 476-483.	5.3	56
20	Synthesis and characterization of novel lowâ€bandgap triphenylamineâ€based conjugated polymers with mainâ€chain donors and pendent acceptors for organic photovoltaics. Journal of Polymer Science Part A, 2010, 48, 5812-5823.	2.3	53
21	Dibenzo[f,h]thieno[3,4-b] quinoxaline-Based Small Molecules for Efficient Bulk-Heterojunction Solar Cells. Organic Letters, 2009, 11, 4898-4901.	4.6	49
22	Solvent-Annealing-Induced Self-Organization of Poly(3-hexylthiophene), a High-Performance Electrochromic Material. ACS Applied Materials & Interfaces, 2009, 1, 2821-2828.	8.0	49
23	Using a low temperature crystallization process to prepare anatase TiO2 buffer layers for air-stable inverted polymer solar cells. Energy and Environmental Science, 2010, 3, 654.	30.8	49
24	Effects of nanomorphological changes on the performance of solar cells with blends of poly[9,9â€²-dioctyl-fluorene-co-bithiophene] and a soluble fullerene. Nanotechnology, 2009, 20, 025202.	2.6	45
25	Fullerene C 70 decorated TiO 2 nanowires for visible-light-responsive photocatalyst. Applied Surface Science, 2015, 355, 536-546.	6.1	44
26	Modulation of Donorâ^'Acceptor Interface through Thermal Treatment for Efficient Bilayer Organic Solar Cells. Journal of Physical Chemistry C, 2010, 114, 2764-2768.	3.1	43
27	Efficient bilayer polymer solar cells possessing planar mixed-heterojunction structures. Journal of Materials Chemistry, 2010, 20, 3295.	6.7	43
28	The investigation of donor-acceptor compatibility in bulk-heterojunction polymer systems. Applied Physics Letters, 2013, 103, .	3.3	43
29	Balanced carrier transport in organic solar cells employing embedded indium-tin-oxide nanoelectrodes. Applied Physics Letters, 2011, 98, .	3.3	41
30	Monitoring the 3D Nanostructures of Bulk Heterojunction Polymer Solar Cells Using Confocal Lifetime Imaging. Analytical Chemistry, 2010, 82, 1669-1673.	6.5	40
31	Thermally conductive polymeric composites incorporating 3D MWCNT/PEDOT:PSS scaffolds. Composites Part B: Engineering, 2018, 136, 46-54.	12.0	39
32	Wet-milled transition metal oxide nanoparticles as buffer layers for bulk heterojunction solar cells. RSC Advances, 2012, 2, 7487.	3.6	35
33	Enhanced spectral response in polymer bulk heterojunction solar cells by using active materials with complementary spectra. Solar Energy Materials and Solar Cells, 2010, 94, 22-28.	6.2	34
34	Achieving efficient poly(3,4-ethylenedioxythiophene)-based supercapacitors by controlling the polymerization kinetics. Electrochimica Acta, 2011, 56, 7228-7234.	5.2	34
35	Three-Dimensional Conductive Nanocomposites Based on Multiwalled Carbon Nanotube Networks and PEDOT:PSS as a Flexible Transparent Electrode for Optoelectronics. ACS Applied Materials & Interfaces, 2015, 7, 11668-11676.	8.0	34
36	Surface modification of Ni(OH)2 nanosheets with PEDOT:PSS for supercapacitor and bendable electrochromic applications. Solar Energy Materials and Solar Cells, 2019, 195, 1-11.	6.2	33

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37	Co2+-Doped BiOBrxCl1-x hierarchical microspheres display enhanced visible-light photocatalytic performance in the degradation of rhodamine B and antibiotics and the inactivation of E. coli. Journal of Hazardous Materials, 2021, 402, 123457.	12.4	30
38	Correlation between Exciton Lifetime Distribution and Morphology of Bulk Heterojunction Films after Solvent Annealing. Journal of Physical Chemistry C, 2010, 114, 9062-9069.	3.1	29
39	Highly Stable, Solution-Processable Phenothiazine Derivative as Hole Collection Material for Organic Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 7680-7685.	8.0	28
40	Few-layer graphene based sponge as a highly efficient, recyclable and selective sorbent for organic solvents and oils. RSC Advances, 2015, 5, 53741-53748.	3.6	28
41	GFP Plasmid and Chemoreagent Conjugated with Graphene Quantum Dots as a Novel Gene Delivery Platform for Colon Cancer Inhibition In Vitro and In Vivo. ACS Applied Bio Materials, 2020, 3, 5948-5956.	4.6	27
42	Organic solar cells featuring nanobowl structures. Energy and Environmental Science, 2013, 6, 1192.	30.8	26
43	Facile Transfer Method for Fabricating Light-Harvesting Systems for Polymer Solar Cells. Journal of Physical Chemistry C, 2011, 115, 11864-11870.	3.1	25
44	Nanoscale Correlation between Exciton Dissociation and Carrier Transport in Silole-Containing Cyclopentadithiophene-Based Bulk Heterojunction Films. Journal of Physical Chemistry C, 2011, 115, 2398-2405.	3.1	24
45	Controlled Growth of Nanofiber Network Hole Collection Layers with Pore Structure for Polymerâ"Fullerene Solar Cells. Journal of Physical Chemistry C, 2008, 112, 19125-19130.	3.1	23
46	Molecular-weight-dependent nanoscale morphology in silole-containing cyclopentadithiophene polymer and fullerene derivative blends. Organic Electronics, 2011, 12, 1755-1762.	2.6	23
47	Doping and surface modification enhance the applicability of Li4Ti5O12 microspheres as high-rate anode materials for lithium ion batteries. Ceramics International, 2018, 44, 23063-23072.	4.8	23
48	PEDOT-modified laser-scribed graphene films as bginderâ€“ and metallic current collectorâ€“free electrodes for large-sized supercapacitors. Applied Surface Science, 2020, 518, 146193.	6.1	23
49	Three-Dimensional Nanoscale Imaging of Polymer Bulk-Heterojunction by Scanning Electrical Potential Microscopy and C₆₀⁺ Cluster Ion Slicing. Analytical Chemistry, 2009, 81, 8936-8941.	6.5	21
50	A Strategic Buffer Layer of Polythiophene Enhances the Efficiency of Bulk Heterojunction Solar Cells. ACS Applied Materials & Interfaces, 2010, 2, 1281-1285.	8.0	20
51	Microwave-assisted synthesis of TiO2/WS2 heterojunctions with enhanced photocatalytic activity. Journal of the Taiwan Institute of Chemical Engineers, 2018, 91, 489-498.	5.3	20
52	Spray-drying synthesis of Li4Ti5O12 microspheres in pilot scale using TiO2 nanosheets as starting materials and their application in high-rate lithium ion battery. Journal of Alloys and Compounds, 2019, 773, 376-386.	5.5	20
53	Preparation and characterization of high refractive index silicone/TiO2 nanocomposites for LED encapsulants. Journal of the Taiwan Institute of Chemical Engineers, 2015, 46, 168-175.	5.3	19
54	High-performance Li-Ion capacitor constructed from biomass-derived porous carbon and high-rate Li4Ti5O12. Applied Surface Science, 2021, 543, 148717.	6.1	19

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55	Spray-dried nanoporous NiO/PANI:PSS composite microspheres for high-performance asymmetric supercapacitors. Composites Part B: Engineering, 2019, 175, 107066.	12.0	18
56	Refluxed Esterification of Fullerene-Conjugated P25 TiO₂ Promotes Free Radical Scavenging Capacity and Facilitates Antiaging Potentials in Human Cells. ACS Applied Materials & Interfaces, 2019, 11, 311-319.	8.0	18
57	The effect of wetting property on electrochromic properties offunctionalized poly(3,4-ethylenedioxythiophene) films. Dyes and Pigments, 2017, 145, 95-102.	3.7	17
58	Integration of PEG and PEI with graphene quantum dots to fabricate pH-responsive nanostars for colon cancer suppression in vitro and in vivo. FlatChem, 2022, 31, 100320.	5.6	17
59	Interfacial engineering affects the photocatalytic activity of poly(3-hexylthiophene)-modified TiO2. RSC Advances, 2013, 3, 26438.	3.6	16
60	Efficient bulk heterjunction solar cells based on a low-bandgap polyfluorene copolymers and fullerene derivatives. Organic Electronics, 2009, 10, 1109-1115.	2.6	15
61	Performance of chromophore-type electrochromic devices employing indium tin oxide nanorod optical amplification. Solar Energy Materials and Solar Cells, 2012, 98, 191-197.	6.2	15
62	Intercalating pyrene with polypeptide as a novel self-assembly nano-carrier for colon cancer suppression in vitro and in vivo. Materials Science and Engineering C, 2020, 109, 110593.	7.3	15
63	Conductive PProDOT-Me2â€“capped Li4Ti5O12 microspheres with an optimized Ti3+/Ti4+ ratio for enhanced and rapid lithium-ion storage. Ceramics International, 2019, 45, 15252-15261.	4.8	14
64	Dual-color electrochromic films incorporating a periodic polymer nanostructure. RSC Advances, 2012, 2, 4746.	3.6	13
65	Influence of the bridging atom on the electrochromic performance of a cyclopentadithiophene polymer. Solar Energy Materials and Solar Cells, 2016, 150, 43-50.	6.2	13
66	The effect of dual-doping on the electrochemical performance of LiNi0.5Mn1.5O4 and its application in fullâ€cell lithiumâ€ion batteries. Ceramics International, 2022, 48, 14778-14788.	4.8	12
67	MWCNT-embedded Li4Ti5O12 microspheres interfacially modified with polyaniline as ternary composites for high-performance lithium ion battery anodes. Ceramics International, 2020, 46, 6801-6810.	4.8	11
68	Incorporation of a stable radical 2,2,6,6-tetramethyl-1-piperidinyloxy (TEMPO) in an electrochromic device. Solar Energy Materials and Solar Cells, 2009, 93, 2102-2107.	6.2	10
69	Synthesis and applications of cyanoâ€vinyleneâ€based polymers containing cyclopentadithiophene and dithienosilole units for photovoltaic cells. Journal of Polymer Science Part A, 2011, 49, 3417-3425.	2.3	10
70	Controlling vertical alignment of phthalocyanine nanofibers on transparent graphene-coated ITO electrodes for organic field emitters. Journal of Materials Chemistry, 2012, 22, 7837.	6.7	10
71	Influence of molecular weight on silole-containing cyclopentadithiophene polymer and its impact on the electrochromic properties. Solar Energy Materials and Solar Cells, 2012, 98, 300-307.	6.2	9
72	Wetâ€milled anatase titanium oxide nanoparticles as a buffer layer for airâ€stable bulk heterojunction solar cells. Progress in Photovoltaics: Research and Applications, 2015, 23, 1017-1024.	8.1	8

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73	The optoelectronic properties and applications of solution-processable titanium oxide nanoparticles. Organic Electronics, 2015, 18, 126-134.	2.6	6
74	Bio-Phenolic Resin Derived Porous Carbon Materials for High-Performance Lithium-Ion Capacitor. Polymers, 2022, 14, 575.	4.5	6
75	Morphology evolution and electrochemical behavior of NixMn1-x(OH)2 mixed hydroxides as high-performance electrode for supercapacitor. Electrochimica Acta, 2022, 403, 139692.	5.2	5
76	Efficient organic optoelectronics with multilayer structures. Journal of Materials Chemistry, 2012, 22, 1364-1369.	6.7	4
77	Ubiquitous carrier harvesting in organic solar cells with embedded indiumâ€“tin-oxide nano-electrodes. Solar Energy Materials and Solar Cells, 2013, 118, 102-108.	6.2	3
78	Versatile Functionalization of P25 Conjugated ND Nanocomposites for UV-Mediated Free Radical Scavenging and Facilitates Anti-Inflammation Potential in Human Cells. ACS Applied Materials & Interfaces, 2021, 13, 39088-39099.	8.0	3
79	Enhanced carrier collection and light harvesting of polymer solar cells using embedded indium-tin-oxide nano-electrods. , 2010, , .		0
80	Balanced carrier transport in organic solar cells using implanted indium-tin-oxide nano-columns. , 2011, , .		0