Wei-Yang Chou

List of Publications by Year
in descending order

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59	734	567281 15	610901 24
papers	citations	h-index	g-index

59	59	59	1096
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In situ memory characteristics of thermal disturbance in low-voltage organic field-effect transistors. Journal of Physics and Chemistry of Solids, 2022, 164, 110628.	4.0	1
2	Room temperature ferromagnetism in Fe3O4 nanoparticle-embedded polymer semiconductors. Journal of Physics and Chemistry of Solids, 2022, 167, 110750.	4.0	4
3	Analysis of ultrathin organic inverters by using in situ grazing incidence X-ray diffraction under high bending times and low voltage. Organic Electronics, 2021, 88, 106002.	2.6	4
4	Enhancing functionalities of organic ultraviolet-visible phototransistors incorporating spiropyran-merocyanine photochromic materials. Journal of Materials Chemistry A, 2021, 9, 22522-22532.	10.3	9
5	Ferromagnetism above Room Temperature in a Ni-Doped Organic-Based Magnetic Semiconductor. ACS Applied Materials & Interfaces, 2021, 13, 34962-34972.	8.0	2
6	Ultraviolet Light-Activated Charge Modulation Heterojunction for Versatile Organic Thin Film Transistors. ACS Applied Materials & Interfaces, 2021, 13, 45822-45832.	8.0	3
7	Enhanced Functionality of Dual-Gate Organic Transistors Based on Semiconducting/Insulating Polyblend-Induced Asymmetric Charge Modulation Layers. ACS Applied Materials & Interfaces, 2020, 12, 47763-47773.	8.0	2
8	Multifunctional Interfacial Layers from a One-Step Process for Effective Charge Capturing and Erasing in Low-Voltage-Driven Organic Thin-Film Transistors. ACS Applied Electronic Materials, 2020, 2, 1413-1420.	4.3	5
9	Memory characteristics of organic field-effect memory transistors modulated by nano-pâ€“n junctions. Journal of Materials Chemistry C, 2020, 8, 7501-7508.	5.5	3
10	Electrical stability study of polymer-based organic transistors in ambient air using an active semiconducting/insulating polyblend-based pseudo-bilayer. Materials Chemistry Frontiers, 2020, 4, 1679-1688.	5.9	4
11	PEDOT:PSS Transparent Electrode for ITO-Free Polymer:Fullerene Bulk-Heterojunction Organic Solar Cells. , 2019, , .		0
12	Temperature effects on the electrical properties of ambipolar organic complementary-like inverters. Organic Electronics, 2019, 72, 25-29.	2.6	2
13	Modulation of interfacial properties for low voltage-driven organic thin-film transistors. , 2019, , .		0
14	Electronic structure manipulation of graphene dots for effective hydrogen evolution from photocatalytic water decomposition. Nanoscale, 2018, 10, 10721-10730.	5.6	27
15	Effects of interfacial tension and molecular dipole moment on the electrical characteristics of low-voltage-driven organic electronic devices. Organic Electronics, 2018, 59, 374-381.	2.6	5
16	Enhanced and Anisotropic Charge Transport in Polymer-Based Thin-Film Transistors by Guiding Polymer Growth. Crystal Growth and Design, 2017, 17, 629-636.	3.0	6
17	Lithium-Induced Defect Levels in ZnO Nanoparticles To Facilitate Electron Transport in Inverted Organic Photovoltaics. Journal of Physical Chemistry C, 2016, 120, 15035-15041.	3.1	11
18	Controlling carrier trapping and relaxation with a dipole field in an organic field-effect device. RSC Advances, 2016, 6, 77735-77744.	3.6	10

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19	Spontaneous Formation of an Ideal-Like Field-Effect Channel for Decay-Free Polymeric Thin-Film Transistors by Multiple-Scale Phase Separation. ACS Applied Materials & Interfaces, 2015, 7, 16486-16494.	8.0	16
20	Synergistic Effects of Binary-Solvent Annealing for Efficient Polymerâ€“Fullerene Bulk Heterojunction Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 18967-18976.	8.0	13
21	Initial time-dependent current growth phenomenon in n-type organic transistors induced by interfacial dipole effects. Journal of Applied Physics, 2015, 117, 104507.	2.5	5
22	High-response organic thin-film memory transistors based on dipole-functional polymer electret layers. Organic Electronics, 2015, 26, 359-364.	2.6	15
23	Temperature-dependent ambipolar electrical characteristics of pentacene-based thin-film transistors: The impact of opposite-sign charge carriers. Organic Electronics, 2015, 25, 74-78.	2.6	2
24	A nanoscale study of charge extraction in organic solar cells: the impact of interfacial molecular configurations. Nanoscale, 2015, 7, 104-112.	5.6	13
25	Light sensing in photosensitive, flexible n-type organic thin-film transistors. Journal of Materials Chemistry C, 2014, 2, 626-632.	5.5	27
26	Manipulating the ambipolar characteristics of pentacene-based field-effect transistors. Journal of Materials Chemistry C, 2014, 2, 1823.	5.5	28
27	Highly energy-efficient and air-stable organic transistors by an ultrathin hybrid dielectric with large internal voltage generation. Journal of Materials Chemistry C, 2014, 2, 7752-7760.	5.5	12
28	Charge transfer highways in polymer solar cells embedded with imprinted PEDOT:PSS gratings. RSC Advances, 2014, 4, 58342-58348.	3.6	6
29	Open-circuit voltage shifted by the bending effect for flexible organic solar cells. Journal of Materials Chemistry A, 2014, 2, 15781-15787.	10.3	3
30	Temperature dependence of optical properties of pentacene thin films probed by spectroscopic ellipsometry. Solid State Communications, 2014, 188, 1-4.	1.9	12
31	Gate field induced ordered electric dipoles in a polymer dielectric for low-voltage operating organic thin-film transistors. RSC Advances, 2013, 3, 20267.	3.6	11
32	Vibrational Spectroscopies for Future Studies of Molecule-Metal Interface. , 2013, , 243-249.		0
33	Synergistic Amplification of Short-Circuit Current for Organic Solar Cells via Modulation of P3HT:PCBM Spatial Distribution with Solvent Treatment. Journal of Physical Chemistry C, 2013, 117, 14472-14478.	3.1	10
34	The influence of dual-carrier recombination and release on electrical characteristics of pentacene-based ambipolar transistors. Applied Physics Letters, 2013, 103, .	3.3	5
35	New Pentacene Crystalline Phase Induced by Nanoimprinted Polyimide Gratings. Journal of Physical Chemistry C, 2012, 116, 8619-8626.	3.1	15
36	Alignment of poly(3,4-ethylenedioxythiophene) polymer chains in photovoltaic cells by ultraviolet irradiation. Journal of Materials Chemistry, 2012, 22, 22409.	6.7	40

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37	The importance of pâ€“n junction interfaces for efficient small molecule-based organic solar cells. Physical Chemistry Chemical Physics, 2012, 14, 5284.	2.8	12
38	Effective oxygen plasma treatment on indium tin oxide electrode to improve organic solar cell efficiency. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 369-372.	1.8	10
39	Polymer bilayer films with semi-interpenetrating semiconducting/insulating microstructure for field-effect transistor applications. Soft Matter, 2011, 7, 11103.	2.7	12
40	Importance of Disordered Polymer Segments to Microstructure-Dependent Photovoltaic Properties of Polymerâ€“Fullerene Bulk Heterojunction Solar Cells. Journal of Physical Chemistry C, 2011, 115, 15057-15066.	3.1	28
41	Reformation of conjugated polymer chains toward maximum effective conjugation lengths by quasi-swelling and recrystallization approach. Soft Matter, 2011, 7, 351-354.	2.7	9
42	Improvement of n-ZnO/p-Si photodiodes by embedding of silver nanoparticles. Journal of Nanoparticle Research, 2011, 13, 4757-4763.	1.9	12
43	Nanoimprinting-induced efficiency enhancement in organic solar cells. Applied Physics Letters, 2011, 99, 183108.	3.3	15
44	Analyses of Electrical Properties and Stability of Organic Complementary Transistors. Journal of the Electrochemical Society, 2010, 157, H959.	2.9	2
45	Dual carrier traps related hysteresis in organic inverters with polyimide-modified gate-dielectrics. Applied Physics Letters, 2010, 96, .	3.3	6
46	Polymorphic transformation induced by nanoimprinted technology in pentacene-film early-stage growth. Applied Physics Letters, 2010, 97, .	3.3	4
47	Application of nanoimprinting technology to organic field-effect transistors. Applied Physics Letters, 2010, 96, .	3.3	8
48	Tuning surface properties in photosensitive polyimide. Material design for high performance organic thin-film transistors. Journal of Materials Chemistry, 2010, 20, 5474.	6.7	21
49	Raman spectroscopy applied to reveal polycrystalline grain structures and carrier transport properties of organic semiconductor films: Application to pentacene-based organic transistors. Organic Electronics, 2009, 10, 289-298.	2.6	33
50	Organic complementary inverters with polyimide films as the surface modification of dielectrics. Organic Electronics, 2009, 10, 1001-1005.	2.6	17
51	Long-Term Operations of Polymeric Thin-Film Transistors: Electric-Field-Induced Intrachain Order and Charge Transport Enhancements of Conjugated Poly(3-hexylthiophene). Macromolecules, 2009, 42, 8251-8259.	4.8	30
52	Charge transport properties and memory effects in organic thin-film transistors using polymeric dielectrics. , 2008, , .		0
53	48.4: Flexible Liquid Crystal Display Film by Plasma Alignment Method. Digest of Technical Papers SID International Symposium, 2007, 38, 1518-1521.	0.3	2
54	Influence of molecular structure and microstructure on device performance of polycrystalline pentacene thin-film transistors. Applied Physics Letters, 2007, 90, 171926.	3.3	44

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55	Effect of surface free energy in gate dielectric in pentacene thin-film transistors. Applied Physics Letters, 2006, 89, 112126.	3.3	110
56	High Mobility Pentacene Thin-Film Transistors on Photopolymer Modified Dielectrics. Japanese Journal of Applied Physics, 2006, 45, 7922-7924.	1.5	10
57	Enhanced efficiency in polymer light-emitting diodes due to the improvement of charge-injection balance. Applied Physics Letters, 2006, 88, 071108.	3.3	14
58	Porous p-n junction-induced memory characteristics in low-voltage organic memory transistors. Journal Physics D: Applied Physics, 0, , .	2.8	1
59	Air-Stable Crystalline Polymer-Based Field-Effect Transistors Fabricated by a Thermal Gradient Process. Crystal Growth and Design, 0, , .	3.0	3