

Yiliang Wu

List of Publications by Year in descending order

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87888

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80
all docs

80
docs citations

80
times ranked

5891
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Performance Semiconducting Polythiophenes for Organic Thin-Film Transistors. <i>Journal of the American Chemical Society</i> , 2004, 126, 3378-3379.	13.7	1,018
2	Facile Synthesis of Silver Nanoparticles Useful for Fabrication of High-Conductivity Elements for Printed Electronics. <i>Journal of the American Chemical Society</i> , 2005, 127, 3266-3267.	13.7	456
3	Low-Temperature, Solution-Processed, High-Mobility Polymer Semiconductors for Thin-Film Transistors. <i>Journal of the American Chemical Society</i> , 2007, 129, 4112-4113.	13.7	347
4	Indolo[3,2-b]carbazole-Based Thin-Film Transistors with High Mobility and Stability. <i>Journal of the American Chemical Society</i> , 2005, 127, 614-618.	13.7	339
5	Thiophene Polymer Semiconductors for Organic Thin-Film Transistors. <i>Chemistry - A European Journal</i> , 2008, 14, 4766-4778.	3.3	274
6	A Simple and Efficient Approach to a Printable Silver Conductor for Printed Electronics. <i>Journal of the American Chemical Society</i> , 2007, 129, 1862-1863.	13.7	144
7	Polyindolo[3,2-b]carbazoles: A New Class of p-Channel Semiconductor Polymers for Organic Thin-Film Transistors. <i>Macromolecules</i> , 2006, 39, 6521-6527.	4.8	141
8	Photoinduced Alignment of Polymer Liquid Crystals Containing Azobenzene Moieties in the Side Chain. 1. Effect of Light Intensity on Alignment Behavior. <i>Macromolecules</i> , 1998, 31, 349-354.	4.8	139
9	Controlled orientation of liquid-crystalline polythiophene semiconductors for high-performance organic thin-film transistors. <i>Applied Physics Letters</i> , 2005, 86, 142102.	3.3	130
10	Synthesis and Thin-Film Transistor Performance of Poly(4,8-didodecylbenzo[1,2-b:4,5-b']dithiophene). <i>Chemistry of Materials</i> , 2006, 18, 3237-3241.	6.7	130
11	Printed Silver Ohmic Contacts for High-Mobility Organic Thin-Film Transistors. <i>Journal of the American Chemical Society</i> , 2006, 128, 4202-4203.	13.7	119
12	Spatially Resolved Raman Spectroelectrochemistry of Solid-State Polythiophene/Viologen Memory Devices. <i>Journal of the American Chemical Society</i> , 2012, 134, 14869-14876.	13.7	118
13	Enabling Gate Dielectric Design for All Solution-Processed, High-Performance, Flexible Organic Thin-Film Transistors. <i>Journal of the American Chemical Society</i> , 2006, 128, 4554-4555.	13.7	117
14	Stable Solution-Processed High-Mobility Substituted Pentacene Semiconductors. <i>Chemistry of Materials</i> , 2007, 19, 418-423.	6.7	114
15	Photoinduced Alignment of Polymer Liquid Crystals Containing Azobenzene Moieties in the Side Chain. 2. Effect of Spacer Length of the Azobenzene Unit on Alignment Behavior. <i>Macromolecules</i> , 1998, 31, 1104-1108.	4.8	107
16	Photoinduced Alignment of Polymer Liquid Crystals Containing Azobenzene Moieties in the Side Chain. 5. Effect of the Azo Contents on Alignment Behavior and Enhanced Response. <i>Macromolecules</i> , 1999, 32, 3951-3956.	4.8	103
17	Three-Dimensional Manipulation of an Azo Polymer Liquid Crystal with Unpolarized Light. <i>Advanced Materials</i> , 1999, 11, 300-302.	21.0	101
18	Lamination Method for the Study of Interfaces in Polymeric Thin Film Transistors. <i>Journal of the American Chemical Society</i> , 2004, 126, 13928-13929.	13.7	96

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19	Poly(3,3'-dialkylterthiophene)s: Room-Temperature, Solution-Processed, High-Mobility Semiconductors for Organic Thin-Film Transistors. <i>Chemistry of Materials</i> , 2005, 17, 221-223.	6.7	95
20	Microscopic Studies on Liquid Crystal Poly(3,3'-dialkylquaterthiophene) Semiconductor. <i>Macromolecules</i> , 2004, 37, 8307-8312.	4.8	86
21	Photoinduced Birefringence and Surface Relief Gratings in Novel Polyurethanes with Azobenzene Groups in the Main Chain. <i>Macromolecules</i> , 2001, 34, 7822-7828.	4.8	84
22	Studies of Gold Nanoparticles as Precursors to Printed Conductive Features for Thin-Film Transistors. <i>Chemistry of Materials</i> , 2006, 18, 4627-4632.	6.7	84
23	Short channel effects in regioregular poly(thiophene) thin film transistors. <i>Journal of Applied Physics</i> , 2004, 96, 2063-2070.	2.5	81
24	Photoinduced Chirality in Thin Films of Achiral Polymer Liquid Crystals Containing Azobenzene Chromophores. <i>Macromolecules</i> , 2004, 37, 6801-6805.	4.8	81
25	Polythiophene-based field-effect transistors with enhanced air stability. <i>Synthetic Metals</i> , 2004, 142, 49-52.	3.9	73
26	Self-aligned inkjet printing of highly conducting gold electrodes with submicron resolution. <i>Journal of Applied Physics</i> , 2007, 101, 064513.	2.5	73
27	Photoinduced alignment of polymer liquid crystals containing azobenzene moieties in the side chain. 4. Dynamic study of the alignment process. <i>Polymer</i> , 1999, 40, 4787-4793.	3.8	70
28	Photoinduced Alignment of Polymer Liquid Crystals Containing Azobenzene Moieties in the Side Chain. 3. Effect of Structure of Photochromic Moieties on Alignment Behavior. <i>Macromolecules</i> , 1998, 31, 4457-4463.	4.8	66
29	Photoinduced Alignment of Polymer Liquid Crystals Containing Azobenzene Moieties in the Side Chain. 6. Biaxiality and Three-Dimensional Reorientation. <i>Macromolecules</i> , 1999, 32, 8829-8835.	4.8	65
30	Photoinduced Birefringence and Surface Relief Gratings in Polyurethane Elastomers with Azobenzene Chromophore in the Hard Segment. <i>Macromolecules</i> , 2004, 37, 6090-6095.	4.8	64
31	Effects of humidity on unencapsulated poly(thiophene) thin-film transistors. <i>Applied Physics Letters</i> , 2006, 88, 113514.	3.3	61
32	Inkjet printing narrow electrodes with $\approx 50\text{ nm}$ line width and channel length for organic thin-film transistors. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	58
33	A More Than Six Orders of Magnitude UV-Responsive Organic Field-Effect Transistor Utilizing a Benzothiophene Semiconductor and Disperse Red 1 for Enhanced Charge Separation. <i>Advanced Materials</i> , 2015, 27, 228-233.	21.0	54
34	Direct Observation of Alkyl Chain Interdigitation in Conjugated Polyquarterthiophene Self-Organized on Graphite Surfaces. <i>Macromolecular Rapid Communications</i> , 2008, 29, 1197-1202.	3.9	53
35	Novel High-Performance Liquid-Crystalline Organic Semiconductors for Thin-Film Transistors. <i>Chemistry of Materials</i> , 2009, 21, 2727-2732.	6.7	46
36	Redox-Gated Three-Terminal Organic Memory Devices: Effect of Composition and Environment on Performance. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 11052-11058.	8.0	41

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37	High performance nanocomposite thin film transistors with bilayer carbon nanotube-polythiophene active channel by ink-jet printing. <i>Journal of Applied Physics</i> , 2009, 106, .	2.5	40
38	Design of High-Performance Regioregular Polythiophenes for Organic Thin-Film Transistors. <i>Proceedings of the IEEE</i> , 2005, 93, 1412-1419.	21.3	39
39	Redox driven conductance changes for resistive memory. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 102, 841-850.	2.3	38
40	Investigation of circular Bragg reflection in an azo polymer with photoinduced chirality. <i>Journal of Applied Physics</i> , 2003, 94, 2162-2166.	2.5	37
41	ZnO field-effect transistors prepared by aqueous solution-growth ZnO crystal thin film. <i>Journal of Applied Physics</i> , 2007, 102, 076101.	2.5	36
42	Highly UV-sensitive and Responsive Benzothiophene/Dielectric Polymer Blend-based Organic Thin-Film Phototransistor. <i>Advanced Electronic Materials</i> , 2015, 1, 1500119.	5.1	36
43	Facile Inkjet-Printing Self-Aligned Electrodes for Organic Thin-Film Transistor Arrays with Small and Uniform Channel Length. <i>ACS Applied Materials & Interfaces</i> , 2010, 2, 2189-2192.	8.0	35
44	Organic thin-film transistors with poly(methyl silsesquioxane) modified dielectric interfaces. <i>Applied Physics Letters</i> , 2006, 89, 013505.	3.3	31
45	Organic thin-film transistor integration using silicon nitride gate dielectric. <i>Applied Physics Letters</i> , 2007, 90, 133514.	3.3	31
46	High-Performance Polythiophene Thin-Film Transistors Processed with Environmentally Benign Solvent. <i>Macromolecules</i> , 2010, 43, 6368-6373.	4.8	29
47	Precise parameter extraction technique for organic thin-film transistors operating in the linear regime. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	27
48	Poly(3,3'-didodecylquarterthiophene) field effect transistors with single-walled carbon nanotube based source and drain electrodes. <i>Applied Physics Letters</i> , 2007, 91, 223512.	3.3	26
49	Ion Transport and Switching Speed in Redox-Gated 3-Terminal Organic Memory Devices. <i>Journal of the Electrochemical Society</i> , 2014, 161, H831-H838.	2.9	21
50	Direct Method of Tracing the Wetting States on Nanocomposite Surfaces. <i>Langmuir</i> , 2010, 26, 7686-7689.	3.5	19
51	Effect of Polymer Binders on UV-Responsive Organic Thin-Film Phototransistors with Benzothienobenzothiophene Semiconductor. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 3744-3754.	8.0	18
52	Enhancement of Carrier Mobilities of Organic Semiconductors on Sol-gel Dielectrics: Investigations of Molecular Organization and Interfacial Chemistry Effects. <i>Advanced Functional Materials</i> , 2009, 19, 378-385.	14.9	15
53	Photoinduced alignment of polymer liquid crystals containing azobenzene moieties in the side group VII. On He-Ne laser beam irradiation. <i>Liquid Crystals</i> , 2000, 27, 749-753.	2.2	14
54	Binary Blends of Polyimide and Benzothienobenzothiophene for High-Performance Solution-Processed Organic Phototransistors. <i>Advanced Electronic Materials</i> , 2017, 3, 1700284.	5.1	14

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55	A comparative study of plasma-enhanced chemical vapor gate dielectrics for solution-processed polymer thin-film transistor circuit integration. <i>Journal of Applied Physics</i> , 2008, 104, .	2.5	12
56	Direct spectroscopic monitoring of conductance switching in polythiophene memory devices. <i>Electrochimica Acta</i> , 2013, 110, 437-445.	5.2	12
57	Graphene Nanoplatelets Prepared by Electric Heating Acid-Treated Graphite in a Vacuum Chamber and Their Use as Additives in Organic Semiconductors. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 20269-20275.	8.0	12
58	Optical Switching and Image Storage by Means of Photochromic Liquid Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2000, 347, 1-13.	0.3	9
59	Composite Semiconductor Material of Carbon Nanotubes and Poly[5,5- ϵ^2 -bis(3-dodecyl-2-thienyl)-2,2- ϵ^2 -bithiophene] for High-Performance Organic Thin-Film Transistors. <i>Journal of Electronic Materials</i> , 2013, 42, 3481-3488.	2.2	8
60	Miscibility of phenoxy polymer/polyacrylate blends. <i>Macromolecular Chemistry and Physics</i> , 1996, 197, 3191-3197.	2.2	7
61	Miscibility of phenoxy polymer/poly(methyl acrylate-co-methyl methacrylate) blends. <i>European Polymer Journal</i> , 1998, 34, 1261-1263.	5.4	7
62	Benzothienobenzothiophene/polyimide blend-based organic phototransistors with double-layer gate dielectric. <i>Organic Electronics</i> , 2018, 59, 349-357.	2.6	7
63	Effects of gate dielectric surface modification on phototransistors with polymer-blended benzothieno[2,3-b]benzothiophene semiconductor thin films. <i>Organic Electronics</i> , 2017, 44, 253-262.	2.6	6
64	Unsorted single walled carbon nanotubes enabled the fabrication of high performance organic thin film transistors with low cost metal electrodes. <i>Chemical Communications</i> , 2013, 49, 8791.	4.1	5
65	Using unsorted single-wall carbon nanotubes to enhance mobility of diketopyrrolopyrrole-quarterthiophene copolymer in thin-film transistors. <i>Organic Electronics</i> , 2014, 15, 2639-2646.	2.6	5
66	Sensitivity of the threshold voltage of organic thin-film transistors to light and water. <i>Journal of Applied Physics</i> , 2015, 117, .	2.5	5
67	Enabling Materials for Printed Electronics. , 2006, , .		4
68	Effects of semiconductor-dielectric interfaces on polymeric thin-film transistors. , 2005, , .		3
69	Development of Silver Nanoparticle Ink for Printed Electronics. <i>Journal of Microelectronics and Electronic Packaging</i> , 2013, 10, 49-53.	0.7	3
70	Printed Organic Electronics. , 2005, , 219-243.		1
71	Printed polymer and $\text{a}\text{-}\text{Si}$ TFT backplanes for flexible displays. <i>Journal of Information Display</i> , 2005, 6, 12-17.	4.0	1
72	Substituted Indolo[3,2-b]Carbazoles: A New Class of Stable, High Mobility Organic Semiconductors for Thin Film Transistors. <i>Materials Research Society Symposia Proceedings</i> , 2005, 871, 1.	0.1	0

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73	Organic Thin Film Transistors with Contacts Printed from Metal Nanoparticles. Materials Research Society Symposia Proceedings, 2005, 871, 1.	0.1	0
74	Study of Organic Thin-film Transistor on Silicon Nitride Gate Dielectrics for Integration in Display Circuits and Arrays. , 2006, , .		0
75	Comparison of conductor and dielectric inks in printed organic complementary transistors. Proceedings of SPIE, 2014, , .	0.8	0