Beng S Ong

List of Publications by Year
in descending order

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58 papers	7,215 citations	81889 39 h-index	149686 56 g-index
58 all docs	58 docs citations	58 times ranked	7813 citing authors

#	Article	IF	Citations
1	High-Performance Semiconducting Polythiophenes for Organic Thin-Film Transistors. Journal of the American Chemical Society, 2004, 126, 3378-3379.	13.7	1,018
2	A stable solution-processed polymer semiconductor with record high-mobility for printed transistors. Scientific Reports, 2012, 2, 754.	3.3	800
3	Facile Synthesis of Silver Nanoparticles Useful for Fabrication of High-Conductivity Elements for Printed Electronics. Journal of the American Chemical Society, 2005, 127, 3266-3267.	13.7	456
4	Stable, Solution-Processed, High-Mobility ZnO Thin-Film Transistors. Journal of the American Chemical Society, 2007, 129, 2750-2751.	13.7	431
5	Low-Temperature, Solution-Processed, High-Mobility Polymer Semiconductors for Thin-Film Transistors. Journal of the American Chemical Society, 2007, 129, 4112-4113.	13.7	347
6	Indolo[3,2-b]carbazole-Based Thin-Film Transistors with High Mobility and Stability. Journal of the American Chemical Society, 2005, 127, 614-618.	13.7	339
7	Thiophene Polymer Semiconductors for Organic Thinâ€Film Transistors. Chemistry - A European Journal, 2008, 14, 4766-4778.	3.3	274
8	All jet-printed polymer thin-film transistor active-matrix backplanes. Applied Physics Letters, 2004, 85, 3304-3306.	3.3	261
9	Enhanced efficiency of polymer solar cells by adding a high-mobility conjugated polymer. Energy and Environmental Science, 2015, 8, 1463-1470.	30.8	216
10	A Simple and Efficient Approach to a Printable Silver Conductor for Printed Electronics. Journal of the American Chemical Society, 2007, 129, 1862-1863.	13.7	144
11	Polyindolo[3,2-b]carbazoles:Â A New Class of p-Channel Semiconductor Polymers for Organic Thin-Film Transistors. Macromolecules, 2006, 39, 6521-6527.	4.8	141
12	High-Performance Thin-Film Transistors from Solution-Processed Dithienothiophene Polymer Semiconductor Nanoparticles. Chemistry of Materials, 2008, 20, 2057-2059.	6.7	136
13	A high-sensitivity near-infrared phototransistor based on an organic bulk heterojunction. Nanoscale, 2013, 5, 11850.	5.6	134
14	Controlled orientation of liquid-crystalline polythiophene semiconductors for high-performance organic thin-film transistors. Applied Physics Letters, 2005, 86, 142102.	3.3	130
15	Synthesis and Thin-Film Transistor Performance of Poly(4,8-didodecylbenzo[1,2-b:4,5-bâ€˜]dithiophene). Chemistry of Materials, 2006, 18, 3237-3241.	6.7	130
16	5,11-Dihydro-5,11-di-1-naphthylindolo[3,2-b]carbazole:â€‰ Atropisomerism in a Novel Hole-Transport Molecule for Organic Light-Emitting Diodes. Journal of the American Chemical Society, 1999, 121, 5097-5098.	13.7	123
17	Printed Silver Ohmic Contacts for High-Mobility Organic Thin-Film Transistors. Journal of the American Chemical Society, 2006, 128, 4202-4203.	13.7	119
18	Enabling Gate Dielectric Design for All Solution-Processed, High-Performance, Flexible Organic Thin-Film Transistors. Journal of the American Chemical Society, 2006, 128, 4554-4555.	13.7	117

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19	Stable Solution-Processed High-Mobility Substituted Pentacene Semiconductors. Chemistry of Materials, 2007, 19, 418-423.	6.7	114
20	A simple and efficient method of thioacetal - and ketalization. Tetrahedron Letters, 1980, 21, 4225-4228.	1.4	106
21	Study of Arylamine-Substituted Porphyrins as Hole-Transporting Materials in High-Performance Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 13231-13239.	8.0	97
22	Lamination Method for the Study of Interfaces in Polymeric Thin Film Transistors. Journal of the American Chemical Society, 2004, 126, 13928-13929.	13.7	96
23	Poly(3,3â€˜â€‰â€˜-dialkylterthiophene)s:â€‰ Room-Temperature, Solution-Processed, High-Mobility Semiconductors for Organic Thin-Film Transistors. Chemistry of Materials, 2005, 17, 221-223.	6.7	95
24	Microscopic Studies on Liquid Crystal Poly(3,3â€˜Ââ€˜â€˜-dialkylquaterthiophene) Semiconductor. Macromolecules, 2004, 37, 8307-8312.	4.8	86
25	Enhancing Crystalline Structural Orders of Polymer Semiconductors for Efficient Charge Transport via Polymerâ€Matrixâ€Mediated Molecular Selfâ€Assembly. Advanced Materials, 2016, 28, 6687-6694.	21.0	86
26	Studies of Gold Nanoparticles as Precursors to Printed Conductive Features for Thin-Film Transistors. Chemistry of Materials, 2006, 18, 4627-4632.	6.7	84
27	Solution-Processed Donor-Acceptor Polymer Nanowire Network Semiconductors For High-Performance Field-Effect Transistors. Scientific Reports, 2016, 6, 24476.	3.3	82
28	Short channel effects in regioregular poly(thiophene) thin film transistors. Journal of Applied Physics, 2004, 96, 2063-2070.	2.5	81
29	Polythiophene-based field-effect transistors with enhanced air stability. Synthetic Metals, 2004, 142, 49-52.	3.9	73
30	Effects of humidity on unencapsulated poly(thiophene) thin-film transistors. Applied Physics Letters, 2006, 88, 113514.	3.3	61
31	Highly sensitive near infrared organic phototransistors based on conjugated polymer nanowire networks. Organic Electronics, 2017, 48, 12-18.	2.6	55
32	11,11,12,12-Tetracyanoanthraquinodimethane. Journal of Organic Chemistry, 1984, 49, 5002-5003.	3.2	54
33	Direct Observation of Alkyl Chain Interdigitation in Conjugated Polyquarterthiophene Selfâ€Organized on Graphite Surfaces. Macromolecular Rapid Communications, 2008, 29, 1197-1202.	3.9	53
34	Surface-initiated atom transfer radical polymerization of polyhedral oligomeric silsesquioxane (POSS) methacrylate from flat silicon wafer. Polymer, 2006, 47, 1119-1123.	3.8	51
35	Substituent Effects on Physical and Photovoltaic Properties of 5,6-Difluorobenzo[c][1,2,5]thiadiazole-Based Dâ€“A Polymers: Toward a Donor Design for High Performance Polymer Solar Cells. Macromolecules, 2013, 46, 9587-9592.	4.8	50
36	Engineering gate dielectric surface properties for enhanced polymer field-effect transistor performance. Journal of Materials Chemistry C, 2015, 3, 12267-12272.	5.5	50

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37	Performance improvement for solution-processed high-mobility ZnO thin-film transistors. Journal Physics D: Applied Physics, 2008, 41, 125102.	2.8	47
38	Novel High-Performance Liquid-Crystalline Organic Semiconductors for Thin-Film Transistors. Chemistry of Materials, 2009, 21, 2727-2732.	6.7	46
39	Surface-initiated atom transfer radical polymerization grafting of poly(2,2,2-trifluoroethyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	2.3	45
40	High performance nanocomposite thin film transistors with bilayer carbon nanotube-polythiophene active channel by ink-jet printing. Journal of Applied Physics, 2009, 106, .	2.5	40
41	Synthesis and characterization of thieno[3,2â€b]thiopheneâ€isoindigoâ€based copolymers as electron donor and hole transport materials for bulkâ€heterojunction polymer solar cells. Journal of Polymer Science Part A, 2013, 51, 424-434.	2.3	34
42	Crack engineering for the construction of arbitrary hierarchical architectures. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23909-23914.	7.1	34
43	Molecular Packing and Electronic Processes in Amorphous-like Polymer Bulk Heterojunction Solar Cells with Fullerene Intercalation. Scientific Reports, 2014, 4, 5211.	3.3	32
44	Organic Thin-Film Transistors Processed from Relatively Nontoxic, Environmentally Friendlier Solvents. Chemistry of Materials, 2010, 22, 5747-5753.	6.7	31
45	Novel Dimethylmethyleneâ€Bridged Triphenylamineâ€PDI Acceptor for Bulkâ€Heterojunction Organic Solar Cells. Advanced Science, 2017, 4, 1700110.	11.2	30
46	Spectroscopic Study of Electron and Hole Polarons in a High-Mobility Donorâ€“Acceptor Conjugated Copolymer. Journal of Physical Chemistry C, 2013, 117, 6835-6841.	3.1	29
47	Naphthalene diimide-difluorobenzene-based polymer acceptors for all-polymer solar cells. Chemical Communications, 2017, 53, 3249-3252.	4.1	27
48	Chemically driven supramolecular self-assembly of porphyrin donors for high-performance organic solar cells. Journal of Materials Chemistry A, 2018, 6, 14675-14680.	10.3	27
49	Synthesis of a Novel Lowâ€Bandgap Polymer Based on a Ladderâ€Type Heptacyclic Arene Consisting of Outer Thieno[3,2â€b]thiophene Units for Efficient Photovoltaic Application. Macromolecular Rapid Communications, 2013, 34, 681-688.	3.9	26
50	Hydrocarbonsâ€Driven Crystallization of Polymer Semiconductors for Lowâ€Temperature Fabrication of Highâ€Performance Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2018, 28, 1706372.	14.9	23
51	Boosting the photovoltaic thermal stability of fullerene bulk heterojunction solar cells through charge transfer interactions. Journal of Materials Chemistry A, 2017, 5, 23662-23670.	10.3	15
52	Small molecular PDI-functionalized 9,9â€²-bifluorenylidene acceptors for bulk heterojunction organic solar cells. New Journal of Chemistry, 2017, 41, 6822-6827.	2.8	13
53	Polymer based on benzothiadiazole-bridged bis-isoindigo for organic field-effect transistor applications. Dyes and Pigments, 2016, 125, 407-413.	3.7	12
54	Synthesis, field-effect and photovoltaic properties of random difluorobenzothiadiazole-isoindigo electron donor-acceptor polymers. Dyes and Pigments, 2016, 134, 251-257.	3.7	8

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55	Synthesis and properties of benzo[c]-, pyrrolo[3,4-c]-, and thieno[3,4-c]-pyrrole-4,6-dione copolymers. New Journal of Chemistry, 2015, 39, 2642-2650.	2.8	3
56	Potassium ion-mediated synthesis of highly water-soluble dendritically functionalized melanins. New Journal of Chemistry, 2014, 38, 3362.	2.8	1
57	Progress in Materials and Processes for Printed Electronics. , 2018, , .		1
58	Solution-Processed Donor-Acceptor Polymer Nanowire Network Semiconductors For High-Performance Field-Effect Transistors. , 0, .		1