

Lay-Lay Chua

List of Publications by Year in descending order

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citing authors

#	ARTICLE	IF	CITATIONS
1	Role of Linker Functionality in Polymers Exhibiting Main-Chain Thermally Activated Delayed Fluorescence. <i>Advanced Science</i> , 2022, 9, e2200056.	5.6	13
2	Double-type-I charge-injection heterostructure for quantum-dot light-emitting diodes. <i>Materials Horizons</i> , 2022, 9, 2147-2159.	6.4	5
3	Improving organic photovoltaic cells by forcing electrode work function well beyond onset of Ohmic transition. <i>Nature Communications</i> , 2021, 12, 2250.	5.8	20
4	Overcoming the water oxidative limit for ultra-high-workfunction hole-doped polymers. <i>Nature Communications</i> , 2021, 12, 3345.	5.8	8
5	Surface Doping of Organic Single-Crystal Semiconductors to Produce Strain-Sensitive Conductive Nanosheets. <i>Advanced Science</i> , 2021, 8, 2002065.	5.6	10
6	Bulk ion-clustering and surface ion-layering effects on work function of self-compensated charged-doped polymer semiconductors. <i>Materials Horizons</i> , 2020, 7, 1073-1082.	6.4	8
7	Spectator cation size effect on the work function and stability of self-compensated hole-doped polymers. <i>Journal of Materials Chemistry C</i> , 2020, 8, 124-131.	2.7	7
8	General bis(fluorophenyl azide) photo-crosslinkers for conjugated and non-conjugated polyelectrolytes. <i>Journal of Materials Chemistry C</i> , 2020, 8, 253-261.	2.7	6
9	Role of Singlet and Triplet Excitons on the Electrical Stability of Polymer Light-Emitting Diodes. <i>Advanced Electronic Materials</i> , 2020, 6, 2000367.	2.6	5
10	Bias-Induced Electrochemical Electron Doping of Organic Semiconductor Contacts. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900607.	1.9	4
11	Multivalent anions as universal latent electron donors. <i>Nature</i> , 2019, 573, 519-525.	13.7	50
12	Nearly 100% Photocrosslinking Efficiency in Ultrahigh Work Function Hole-Doped Conjugated Polymers Using Bis(fluorophenyl azide) Additives. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 48103-48112.	4.0	9
13	Solution-processed 2-dimensional hole-doped ionic graphene compounds. <i>Materials Horizons</i> , 2017, 4, 456-463.	6.4	3
14	Interface Doping for Ohmic Organic Semiconductor Contacts Using Self-Aligned Polyelectrolyte Counterion Monolayer. <i>Advanced Functional Materials</i> , 2017, 27, 1606291.	7.8	26
15	Characterization of ohmic contacts in polymer organic field-effect transistors. <i>Organic Electronics</i> , 2016, 37, 491-497.	1.4	9
16	Doped polymer semiconductors with ultrahigh and ultralow work functions for ohmic contacts. <i>Nature</i> , 2016, 539, 536-540.	13.7	186
17	Madelung and Hubbard interactions in polaron band model of doped organic semiconductors. <i>Nature Communications</i> , 2016, 7, 11948.	5.8	66
18	A transition solvent strategy to print polymer:fullerene films using halogen-free solvents for solar cell applications. <i>Organic Electronics</i> , 2014, 15, 449-460.	1.4	23

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19	Influence of Graphite Source on Chemical Oxidative Reactivity. <i>Chemistry of Materials</i> , 2013, 25, 2944-2949.	3.2	18
20	Efficient surfactant-free and chemical reductant-free solvothermal deoxidation of solution-processable sub-stoichiometric graphene oxide. <i>Journal of Materials Chemistry C</i> , 2013, 1, 7246.	2.7	3
21	A general method for transferring graphene onto soft surfaces. <i>Nature Nanotechnology</i> , 2013, 8, 356-362.	15.6	255
22	Suppressing Recombination in Polymer Photovoltaic Devices via Energy-Level Cascades. <i>Advanced Materials</i> , 2013, 25, 4131-4138.	11.1	57
23	Effective work functions for the evaporated metal/organic semiconductor contacts from in-situ diode flatband potential measurements. <i>Applied Physics Letters</i> , 2012, 101, 013501.	1.5	22
24	Polarization effects on energy-level alignment at the interfaces of polymer organic semiconductor films. <i>Applied Physics Letters</i> , 2012, 101, 053304.	1.5	18
25	Furan substituted diketopyrrolopyrrole and thienylenevinylene based low band gap copolymer for high mobility organic thin film transistors. <i>Journal of Materials Chemistry</i> , 2012, 22, 17284.	6.7	52
26	High internal quantum efficiency in fullerene solar cells based on crosslinked polymer donor networks. <i>Nature Communications</i> , 2012, 3, 1321.	5.8	83
27	Role of Borderline Solvents to Induce Pronounced Extended-Chain Lamellar Order in π -Stackable Polymers. <i>Macromolecules</i> , 2011, 44, 9692-9702.	2.2	45
28	Giant broadband nonlinear optical absorption response in dispersed graphene single sheets. <i>Nature Photonics</i> , 2011, 5, 554-560.	15.6	425
29	Hydrophilic Sparse Ionic Monolayer-Protected Metal Nanoparticles: Highly Concentrated Nano-Au and Nano-Ag Inks that can be Sintered to Near-Bulk Conductivity at 150°C. <i>Advanced Functional Materials</i> , 2010, 20, 296-303.	7.1	59
30	High-performance polymer semiconducting heterostructure devices by nitrene-mediated photocrosslinking of alkyl side chains. <i>Nature Materials</i> , 2010, 9, 152-158.	13.3	241
31	Determination of the interface $\tilde{\Gamma}$ -hole density in a blue-emitting organic semiconductor diode by electromodulated absorption spectroscopy. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	17
32	Synthesis, characterization and comparative OFET behaviour of indenofluorene-bithiophene and terthiophene alternating copolymers. <i>Synthetic Metals</i> , 2010, 160, 468-474.	2.1	10
33	Interplay of Processing, Morphological Order, and Charge-Carrier Mobility in Polythiophene Thin Films Deposited by Different Methods: Comparison of Spin-Cast, Drop-Cast, and Inkjet-Printed Films. <i>Langmuir</i> , 2010, 26, 15494-15507.	1.6	34
34	Solution-processed conjugated polymer organic p-i-n light-emitting diodes with high built-in potential by solution- and solid-state doping. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	14
35	Direct Evidence for the Role of the Madelung Potential in Determining the Work Function of Doped Organic Semiconductors. <i>Physical Review Letters</i> , 2009, 102, 096602.	2.9	31
36	Role of $\tilde{\Gamma}$ -Hole-Doped Interfaces at Ohmic Contacts to Organic Semiconductors. <i>Physical Review Letters</i> , 2009, 103, 036601.	2.9	32

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37	Band-like Transport in Surface-Functionalized Highly Solution-Processable Graphene Nanosheets. <i>Advanced Materials</i> , 2008, 20, 3440-3446.	11.1	299
38	Deoxidation of graphene oxide nanosheets to extended graphenites by "unzipping" elimination. <i>Journal of Chemical Physics</i> , 2008, 129, 114702.	1.2	23
39	Robust reproducible large-area molecular rectifier junctions. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	6
40	Solvent effects and multiple aggregate states in high-mobility organic field-effect transistors based on poly(bithiophene-alt-thienothiophene). <i>Applied Physics Letters</i> , 2008, 93, 162103.	1.5	21
41	Impact of self-assembled monolayer on low frequency noise of organic thin film transistors. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	9
42	Low frequency noise analysis on organic thin film transistors. <i>Journal of Applied Physics</i> , 2008, 104, .	1.1	27
43	Polyfluorene-based light-emitting diodes with an azide photocross-linked poly(3,4-ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 TF 5 103308.	1.5	44
44	Electromigration of the conducting polymer in organic semiconductor devices and its stabilization by cross-linking. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	31
45	Controlled insulator-to-metal transformation in printable polymer composites with nanometal clusters. <i>Nature Materials</i> , 2007, 6, 149-155.	13.3	150
46	Large Damage Threshold and Small Electron Escape Depth in X-ray Absorption Spectroscopy of a Conjugated Polymer Thin Film. <i>Langmuir</i> , 2006, 22, 8587-8594.	1.6	53
47	General observation of n-type field-effect behaviour in organic semiconductors. <i>Nature</i> , 2005, 434, 194-199.	13.7	2,172
48	Organic double-gate field-effect transistors: Logic-AND operation. <i>Applied Physics Letters</i> , 2005, 87, 253512.	1.5	30
49	High-stability ultrathin spin-on benzocyclobutene gate dielectric for polymer field-effect transistors. <i>Applied Physics Letters</i> , 2004, 84, 3400-3402.	1.5	213