Xiaoyuan Hou

List of Publications by Year
in descending order

74	1,978	236925 25	254184 43
papers	citations	h-index	g-index

74	74	74	1962
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Real-Time Observation of Temperature Rise and Thermal Breakdown Processes in Organic LEDs Using an IR Imaging and Analysis System. Advanced Materials, 2000, 12, 265-269.	21.0	178
2	Study of the Raman peak shift and the linewidth of lightâ€emitting porous silicon. Journal of Applied Physics, 1994, 75, 651-653.	2.5	128
3	Carrier density dependence of mobility in organic solids: A Monte Carlo simulation. Physical Review B, 2007, 75, .	3.2	96
4	Degradation of small-molecule organic solar cells. Applied Physics Letters, 2006, 89, 251118.	3.3	86
5	Large blue shift of light emitting porous silicon by boiling water treatment. Applied Physics Letters, 1993, 62, 1097-1098.	3.3	82
6	Buffer-layer-induced barrier reduction: Role of tunneling in organic light-emitting devices. Applied Physics Letters, 2004, 84, 425-427.	3.3	80
7	Dual role of LiF as a hole-injection buffer in organic light-emitting diodes. Applied Physics Letters, 2004, 84, 2913-2915.	3.3	72
8	Enhancement of electron injection in organic light-emitting devices using an Ag/LiF cathode. Journal of Applied Physics, 2004, 95, 3828-3830.	2.5	67
9	Role of buffer in organic solar cells using C60 as an acceptor. Applied Physics Letters, 2007, 90, 071109.	3.3	65
10	S2Cl2 treatment: A new sulfur passivation method of GaAs surface. Applied Physics Letters, 1994, 64, 3425-3427.	3.3	64
11	Electron blocking and hole injection: The role of N,Nâ€²-Bis(naphthalen-1-y)-N,Nâ€²-bis(phenyl)benzidine in organic light-emitting devices. Applied Physics Letters, 2004, 84, 2916-2918.	3.3	64
12	Electrochemical sulfur passivation of GaAs. Applied Physics Letters, 1992, 60, 2252-2254.	3.3	60
13	Critical conditions for achieving blue light emission from porous silicon. Applied Physics Letters, 1993, 63, 2363-2365.	3.3	52
14	Molecularâ€beamâ€epitaxy growth of GaN on GaAs(100) by using reactive nitrogen source. Applied Physics Letters, 1994, 64, 315-317.	3.3	52
15	Role of hole playing in improving performance of organic light-emitting devices with an Al2O3 layer inserted at the cathode-organic interface. Applied Physics Letters, 2006, 89, 043502.	3.3	52
16	Passivation of porous silicon by wet thermal oxidation. Journal of Applied Physics, 1996, 79, 3282-3285.	2.5	45
17	Exciton dissociation at the indium tin oxide-N,Nâ€²-Bis(naphthalen-1-yl)-N,Nâ€²-bis(phenyl) benzidine interface: A transient photovoltage study. Applied Physics Letters, 2006, 88, 232101.	3.3	41
18	Sodium stearate, an effective amphiphilic molecule buffer material between organic and metal layers in organic light-emitting devices. Applied Physics Letters, 2003, 83, 1656-1658.	3.3	39

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19	Energy band lineup at the porousâ€silicon/silicon heterointerface measured by electron spectroscopy. Applied Physics Letters, 1994, 64, 3602-3604.	3.3	36
20	Aggregation and permeation of 4-(dicyanomethylene)-2-methyl-6-(p-dimethylaminostyryl)-4H-pyran molecules in Alq. Applied Physics Letters, 2002, 81, 1122-1124.	3.3	36
21	Passivation of lightâ€emitting porous silicon by rapid thermal treatment in NH3. Journal of Applied Physics, 1996, 80, 5967-5970.	2.5	34
22	Exciton Dissociation in Organic Light Emitting Diodes at the Donor-Acceptor Interface. Physical Review Letters, 2007, 98, 176403.	7.8	34
23	Conductance-dependent negative differential resistance in organic memory devices. Applied Physics Letters, 2010, 97, 233301.	3.3	30
24	From nanowires to nanoislands: Morphological evolutions of erbium silicide nanostructures formed on the vicinal Si(001) surface. Journal of Applied Physics, 2006, 100, 114312.	2.5	27
25	Structural enhancement mechanism of field emission from multilayer semiconductor films. Physical Review B, 2005, 72, .	3.2	26
26	Enabling Self-passivation by Attaching Small Grains on Surfaces of Large Grains toward High-Performance Perovskite LEDs. IScience, 2019, 19, 378-387.	4.1	26
27	Delayed-switch-on effect in metal-insulator-metal organic memories. Applied Physics Letters, 2007, 91, 143511.	3.3	25
28	Magnetic field effects on the electroluminescence of organic light emitting devices: A tool to indicate the carrier mobility. Applied Physics Letters, 2010, 97, 163302.	3.3	24
29	A mild electrochemical sulfur passivation method for GaAs(100) surfaces. Journal of Applied Physics, 1995, 78, 2764-2766.	2.5	21
30	Magnetic field modulated exciton generation in organic semiconductors: An intermolecular quantum correlated effect. Physical Review B, 2010, 82, .	3.2	20
31	Amplified Spontaneous Emission Realized by Cogrowing Large/Small Grains with Selfâ€Passivating Defects and Aligning Transition Dipoles. Advanced Optical Materials, 2019, 7, 1900345.	7.3	19
32	Interfacial reactions at Al/LiF and LiF/Al. Applied Physics Letters, 2009, 94, .	3.3	18
33	Passivation of GaAs surface by sulfur glow discharge. Applied Physics Letters, 1996, 69, 1429-1431.	3.3	17
34	Dissociation of excitons in the C60 film studied by transient photovoltage measurements. Applied Physics Letters, 2008, 93, .	3.3	16
35	Electroluminescence and magnetoresistance of the organic light-emitting diode with a La0.7Sr0.3MnO3 anode. Applied Physics Letters, 2008, 93, 183307.	3.3	16
36	A combined theoretical and experimental investigation on the transient photovoltage in organic photovoltaic cells. Applied Physics Letters, 2010, 96, .	3.3	16

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37	Raman scattering characterization of the crystalline qualities of ZnSe films grown on Sâ€passivated GaAs(100) substrates. Applied Physics Letters, 1995, 67, 2043-2045.	3.3	15
38	The dissociation of excitons at indium tin oxide-copper phthalocyanine interface in organic solar cells. Journal of Applied Physics, 2008, 104, 103702.	2.5	15
39	Using Magneto-Electroluminescence As a Fingerprint to Identify the Carrier-to-Photon Conversion Process in Dye-Doped OLEDs. Journal of Physical Chemistry C, 2011, 115, 20295-20300.	3.1	13
40	Field-induced evolution of metallic nano-tips in indium tin oxide-tris-(8-hydroxyquinoline) aluminum-aluminum device. Applied Physics Letters, 2012, 100, 123304.	3.3	13
41	Growth and optical characterization of diluted magnetic semiconductor Zn1â^'xMnxSe/ZnSe strained-layer superlattices. Journal of Applied Physics, 1997, 81, 5148-5150.	2.5	11
42	The structural, chemical, and electronic properties of a stable GaS/GaAs interface. Journal of Applied Physics, 1999, 86, 6940-6944.	2.5	11
43	Field emission enhancement by the quantum structure in an ultrathin multilayer planar cold cathode. Applied Physics Letters, 2008, 92, 142102.	3.3	11
44	Memory Devices via Unipolar Resistive Switching in Symmetric Organicâ€“Inorganic Perovskite Nanoscale Heterolayers. ACS Applied Nano Materials, 2020, 3, 11889-11896.	5.0	11
45	Photoinduced Injection Enhancement in Fullerene-Based Organic Solar Cell Originates from Excitonâ€“Electron Interaction. Journal of Physical Chemistry C, 2014, 118, 11928-11934.	3.1	10
46	Phonon modes of ZnS1â^'xTex alloys epitaxially grown on (100) GaAs substrates. Journal of Applied Physics, 1997, 81, 3465-3467.	2.5	9
47	Photoluminescence from C+-implanted SiNxOy films grown on crystalline silicon. Applied Physics Letters, 1997, 71, 2193-2195.	3.3	9
48	Determination of capacitance-voltage characteristics of organic semiconductor devices by combined current-voltage and voltage decay measurements. Science China Technological Sciences, 2011, 54, 826-829.	4.0	9
49	Interfacial processes in small molecule organic solar cells. Science China: Physics, Mechanics and Astronomy, 2010, 53, 288-300.	5.1	8
50	Highly Efficient Charge Collection in Bulk-Heterojunction Organic Solar Cells by Anomalous Hole Transfer and Improved Interfacial Contact. ACS Applied Materials & Interfaces, 2018, 10, 28256-28261.	8.0	8
51	Blue Light Emission from Porous Silicon. Materials Research Society Symposia Proceedings, 1992, 283, 89.	0.1	6
52	Photoemission study of C60-induced barrier reduction for hole injection at N, Nâ€²-bis(naphthalene-1-yl)-N, Nâ€²-bis(phenyl) benzidine/Al. Journal of Applied Physics, 2009, 105, 106105.	2.5	6
53	Multipeak characteristics of field emission energy distribution from semiconductors. Physical Review B, 2004, 70, .	3.2	5
54	Capacitance measurements to directly investigate exciton behaviors in organic photovoltaic materials. Journal Physics D: Applied Physics, 2015, 48, 455108.	2.8	5

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55	TOP-electrode-eliminated organic bi-stable devices and their two switching modes in different atmospheres. Organic Electronics, 2015, 22, 127-131.	2.6	5
56	Experimental evidence of harmful exciton dissociation at MoO3/CuPc interface in OPV. Journal of Applied Physics, 2016, 120, 145501.	2.5	5
57	Bias-dependent interface roughening and its effect on electric bistability of organic devices. Applied Physics Letters, 2014, 104, 011603.	3.3	4
58	Obvious efficiency enhancement of organic light-emitting diodes by parylene-N buffer layer. Applied Physics Letters, 2012, 100, 163303.	3.3	3
59	Enhanced surface losses of organic solar cells induced by efficient polaron pair dissociation at the metal/organic interface. Journal of Applied Physics, 2012, 112, 034510.	2.5	3
60	Transient photovoltage study on the dynamics of excitons and carriers in tris-(8-hydroxyquinolinato)aluminum. Journal of Applied Physics, 2014, 116, 153704.	2.5	3
61	Sulfurized Passivation of GaAs (100) Surfaces. Materials Research Society Symposia Proceedings, 1992, 284, 607.	0.1	2
62	Photoinduced charge injection in the metal/organic interface studied by transient photovoltage measurements with bias. Science China: Physics, Mechanics and Astronomy, 2013, 56, 2012-2015.	5.1	2
63	In situ observation of structure and electrical property changes of a Ga-doped ZnO/graphene flexible transparent electrode during deformation. Applied Physics Letters, 2014, 104, 221907.	3.3	2
64	Square wave voltages-induced ON states of organic resistive memory devices. Applied Physics Letters, 2016, 109, 153303.	3.3	2
65	Recovery of electroluminescence in electron-only organic light-emitting diode by inserting a thin MoO3 layer at Bphen/NPB interface. AIP Advances, 2019, 9, .	1.3	2
66	Quantitative C-V study of the electric-field-assisted generation of mobile holes. Journal of Applied Physics, 2019, 126, 204501.	2.5	2
67	Transient photovoltage and photoluminescence study of exciton dissociation at indium tin oxide/pentacene interface. Science China: Physics, Mechanics and Astronomy, 2011, 54, 1112-1115.	5.1	1
68	Large enhancement of transient photovoltage induced by the absorption of the metal Al. Science China: Physics, Mechanics and Astronomy, 2012, 55, 1240-1244.	5.1	1
69	Field-dependent, organics assistant filamentary mechanism in both vertical and planar organic memories. Organic Electronics, 2018, 53, 83-87.	2.6	1
70	Tristep Mechanism To Explain the Illuminated Câ€“V Characteristic of an Organic Device. Journal of Physical Chemistry C, 2019, 123, 17384-17389.	3.1	1
71	Lateral magnetoresistances of epitaxial ZnSe and CdMnTe thin films measured by the microwave contactless method. Journal of Applied Physics, 1997, 82, 477-479.	2.5	0
72	Photoluminescence from Si-based SiNxOy films. Science Bulletin, 1998, 43, 124-126.	1.7	0

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73	Anomalous Hole-Transfer and Heterogeneous Interfacial Contact Effect in Bulk-Heterojunction Organic Solar Cells. , 0, , .		0
74	Anomalous Hole-Transfer and Heterogeneous Interfacial Contact Effect in Bulk-Heterojunction Organic Solar Cells. , 0, , .		0