Masayuki Chikamatsu

List of Publications by Year
in descending order

82	2,539	186265 28	197818 49
papers	citations	h-index	g-index

82	82	82	4285
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Insights into Microscopic Crystal Growth Dynamics of CH₃NH₃PbI₃ under a Laser Deposition Process Revealed by In Situ X-ray Diffraction. ACS Applied Materials & Interfaces, 2021, 13, 22559-22566.	8.0	3
2	A Sodium Chloride Modification of SnO₂ Electron Transport Layers to Enhance the Performance of Perovskite Solar Cells. ACS Omega, 2021, 6, 17880-17889.	3.5	29
3	Characteristics change in organic photovoltaics by thermal recovery and photodegradation. Japanese Journal of Applied Physics, 2020, 59, SCCD04.	1.5	2
4	Improvement in thermal stability of solar cell using a non-fullerene n-type liquid crystalline semiconductor. Japanese Journal of Applied Physics, 2020, 59, 031004.	1.5	0
5	Epitaxial growth of CH3NH3PbI3 on rubrene single crystal. APL Materials, 2020, 8, .	5.1	11
6	Overview on Research and Development of Perovskite Solar Cells in National Institute of Advanced Industrial Science and Technology. Denki Kagaku, 2020, 88, 184-185.	0.0	0
7	Investigation of the power generation of organic photovoltaic modules connected to the power grid for more than three years. Japanese Journal of Applied Physics, 2019, 58, 052001.	1.5	7
8	Effects of optical interference and optimized crystallinity in organic photovoltaic cells with a low-bandgap small molecule fabricated by dry process. Japanese Journal of Applied Physics, 2019, 58, SBBG12.	1.5	0
9	Optical Characteristics and Operational Principles of Hybrid Perovskite Solar Cells. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700730.	1.8	48
10	Influence of O₂ plasma treatment on NiO _x layer in perovskite solar cells. Japanese Journal of Applied Physics, 2018, 57, 04FS07.	1.5	26
11	Organic-Inorganic Hybrid Perovskite Solar Cells. Springer Series in Optical Sciences, 2018, , 463-507.	0.7	2
12	Organic-Inorganic Hybrid Perovskites. Springer Series in Optical Sciences, 2018, , 471-493.	0.7	1
13	Ultra-thin Cadmium Sulfide Electron-transporting Layer for Planar Perovskite Solar Cell. Chemistry Letters, 2018, 47, 1350-1353.	1.3	3
14	Tail state formation in solar cell materials: First principles analyses of zincblende, chalcopyrite, kesterite, and hybrid perovskite crystals. Physical Review Materials, 2018, 2, .	2.4	39
15	Organic field-effect transistor based on paramagnetic Cu(II) neutral complexes coordinated by Schiff base-type TTF ligands. Polyhedron, 2017, 136, 70-73.	2.2	8
16	Universal rules for visible-light absorption in hybrid perovskite materials. Journal of Applied Physics, 2017, 121, .	2.5	91
17	Adjustment of Conduction Band Edge of Compact TiO₂ Layer in Perovskite Solar Cells Through TiCl₄ Treatment. ACS Applied Materials & Interfaces, 2017, 9, 36708-36714.	8.0	35
18	Determination and interpretation of the optical constants for solar cell materials. Applied Surface Science, 2017, 421, 276-282.	6.1	24

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19	Hysteresis Analysis of Organolead Halide Perovskite Solar Cells by Transient Current Measurement. Electrochemistry, 2017, 85, 276-279.	1.4	3
20	Novel Cobalt Complexes as a Dopant for Hole-transporting Material in Perovskite Solar Cells. Electrochemistry, 2017, 85, 226-230.	1.4	11
21	Constructing Nanostructured Donor/Acceptor Bulk Heterojunctions via Interfacial Templates for Efficient Organic Photovoltaics. ACS Applied Materials & Interfaces, 2017, 9, 43893-43901.	8.0	5
22	Stable Delocalized Singlet Biradical Hydrocarbon for Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2016, 26, 277-283.	14.9	57
23	Development of organic thin film devices based on Cu(II) complex with tetrathiafulvalene moieties in the ligands. Molecular Crystals and Liquid Crystals, 2016, 641, 81-85.	0.9	4
24	Degradation mechanism of CH3NH3PbI3 perovskite materials upon exposure to humid air. Journal of Applied Physics, 2016, 119, .	2.5	168
25	Relationship between photostability and nanostructures in DTS(FBTTh2)2:fullerene bulk-heterojunction films. Solar Energy Materials and Solar Cells, 2016, 151, 96-101.	6.2	7
26	Highly Controlled Codeposition Rate of Organolead Halide Perovskite by Laser Evaporation Method. ACS Applied Materials & Interfaces, 2016, 8, 26013-26018.	8.0	25
27	Laser deposition for the controlled co-deposition of organolead halide perovskite. , 2016, , .		0
28	Optical Transitions in Hybrid Perovskite Solar Cells: Ellipsometry, Density Functional Theory, and Quantum Efficiency Analyses for<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>CH</mml:mi></mml:mrow><mml:mn>3</mml:mn></mml:msub><mml:mr Physical Review Applied, 2016, 5, .	3.8	322
29	Thermal stabilization of organic photovoltaic cells using [6,6]-phenyl C61-butyric acid methyl ester analogs: Effects of alkyl substituents on the nanostructures of bulk heterojunction films and their stabilities. Synthetic Metals, 2016, 221, 61-66.	3.9	3
30	Improvement of properties of an ambipolar organic field-effect transistor by using a singlet biradicaloid film. Japanese Journal of Applied Physics, 2016, 55, 011601.	1.5	3
31	Fabrication of carbon nanotube hybrid films as transparent electrodes for small-molecule photovoltaic cells. RSC Advances, 2016, 6, 25062-25069.	3.6	10
32	Effects of Substituted Alkyl Chain Length on Solution-Processable Layered Organic Semiconductor Crystals. Chemistry of Materials, 2015, 27, 3809-3812.	6.7	144
33	Crystallization Dynamics of Organolead Halide Perovskite by Real-Time X-ray Diffraction. Nano Letters, 2015, 15, 5630-5634.	9.1	77
34	Understanding Device-Structure-Induced Variations in Open-Circuit Voltage for Organic Photovoltaics. ACS Applied Materials & Interfaces, 2015, 7, 10814-10822.	8.0	2
35	Uniaxially oriented polycrystalline thin films and air-stable n-type transistors based on donor-acceptor semiconductor (diC8BTBT)(FnTCNQ) [nâ€‰=â€‰0, 2, 4]. Applied Physics Letters, 2015, 106, .	3.3	46
36	Direct observation of energy band development in a one-dimensional biradical molecular chain by ultraviolet photoemission spectroscopy. Applied Physics Letters, 2013, 102, 134103.	3.3	10

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37	Industrially Feasible Approach to Transparent, Flexible, and Conductive Carbon Nanotube Films: Cellulose-Assisted Film Deposition Followed by Solution and Photonic Processing. Applied Physics Express, 2013, 6, 025101.	2.4	24
38	Simple push coating of polymer thin-film transistors. Nature Communications, 2012, 3, 1176.	12.8	111
39	Optimization of thermal treatment of vapor-deposited thiophene/phenylene co-oligomer films. Journal of Crystal Growth, 2012, 345, 39-43.	1.5	11
40	Soluble Fullerene-Based n-Channel Organic Thin-Film Transistors Printed by Using a Polydimethylsiloxane Stamp. ACS Applied Materials & Interfaces, 2011, 3, 836-841.	8.0	8
41	Complementary Inverters Based on Soluble P- and N-Channel Organic Semiconductors. IEICE Transactions on Electronics, 2011, E94-C, 1845-1847.	0.6	0
42	Anisotropic field-effect hole mobility of liquid crystalline conjugated polymer layers formed on photoaligned polyimide films. Journal of Applied Physics, 2011, 109, .	2.5	29
43	Solution-processable Oligothiophene Derivatives with Branched Alkyl Chains and Their Thin-film Transistor Characteristics. Chemistry Letters, 2010, 39, 60-61.	1.3	18
44	High-Performance Solution-Processed n-Channel Organic Thin-Film Transistors Based on a Long Chain Alkyl-Substituted C₆₀Derivative. Applied Physics Express, 2010, 3, 101601.	2.4	16
45	Investigation of Slide-Coating Method for Poly(3-hexylthiophene) Field-Effect Transistors. Japanese Journal of Applied Physics, 2010, 49, 01AE12.	1.5	1
46	Highly polarized polymer-based light-emitting diodes fabricated by using very thin photoaligned polyimide layers. Journal of Applied Physics, 2010, 107, .	2.5	14
47	Investigation of self-assembled monolayer treatment on SiO2 gate insulator of poly(3-hexylthiophene) thin-film transistors. Thin Solid Films, 2009, 518, 642-646.	1.8	37
48	Synergistic effect of polymer and oligomer blends for solution-processable organic thin-film transistors. Organic Electronics, 2008, 9, 952-958.	2.6	13
49	High-Performance n-Type Organic Thin-Film Transistors Based on Solution-Processable Perfluoroalkyl-Substituted C₆₀ Derivatives. Chemistry of Materials, 2008, 20, 7365-7367.	6.7	69
50	Preliminary study on organic memory embedded metal nanoparticle stacking layers. , 2008, , .		0
51	Highly efficient polarized polymer light-emitting diodes utilizing oriented films of Î²-phase poly(9,9-dioctylfluorene). Applied Physics Letters, 2008, 93, .	3.3	65
52	Color Control and White Emission of Organic Light-Emitting Device by External Light. Japanese Journal of Applied Physics, 2007, 46, L345-L347.	1.5	8
53	Influences of submonolayer proteins on organic light-emitting diodes. Applied Physics Letters, 2007, 91, 024101.	3.3	3
54	Very thin photoalignment films for liquid crystalline conjugated polymers: Application to polarized light-emitting diodes. Applied Physics Letters, 2007, 91, .	3.3	32

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55	Ambipolar organic field-effect transistors based on a low band gap semiconductor with balanced hole and electron mobilities. Applied Physics Letters, 2007, 91, .	3.3	120
56	Structure, Physical Properties and Thin-Film Transistor Characteristics of Sexithiophene Isomers. Molecular Crystals and Liquid Crystals, 2007, 472, 137/[527]-143/[533].	0.9	3
57	Doping effect of solution-processed thin-film transistors based on polyfluorene. Journal of Materials Chemistry, 2007, 17, 1416.	6.7	65
58	Crystal Structure of Friction-Transferred Poly(2,5-dioctyloxy-1,4-phenylenevinylene). Journal of Physical Chemistry B, 2007, 111, 4349-4354.	2.6	34
59	Structure and Electrical Properties of Unsubstituted Oligothiophenes End-Capped at the Î²-Position. Chemistry of Materials, 2007, 19, 2694-2701.	6.7	28
60	Organic Lightâ€Emitting Diode Application of Fluorescent Cellulose as a Natural Polymer. Macromolecular Chemistry and Physics, 2007, 208, 2000-2006.	2.2	33
61	Organic Memory Device Based on Carbazole-Substituted Cellulose. Macromolecular Rapid Communications, 2007, 28, 1479-1484.	3.9	40
62	Single-Crystal-like Structure of Poly(9,9-dioctylfluorene) Thin Films Evaluated by Synchrotron-Sourced Grazing-Incidence X-ray Diffraction. Polymer Journal, 2007, 39, 1306-1311.	2.7	8
63	Color-variable organic light-emitting device by external light irradiation. Applied Physics Letters, 2006, 89, 223520.	3.3	2
64	ITO surface smoothing with argon cluster ion beam. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 140-142.	1.4	9
65	Correlation of molecular structure, packing motif and thin-film transistor characteristics of solution-processed n-type organic semiconductors based on dodecyl-substituted C60 derivatives. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 182, 245-249.	3.9	17
66	Development of New D-A Systems Based on Fullerene and TTF for Organic Devices. Molecular Crystals and Liquid Crystals, 2006, 455, 387-394.	0.9	0
67	Polymer-Supported Anisotropic Submicrometer-Patterned Electrodes for Displays. Advanced Materials, 2005, 17, 297-301.	21.0	5
68	Highly polarized polymer light-emitting diodes utilizing friction-transferred poly(9,9-dioctylfluorene) thin films. Applied Physics Letters, 2005, 87, 243503.	3.3	83
69	Solution-processed n-type organic thin-film transistors with high field-effect mobility. Applied Physics Letters, 2005, 87, 203504.	3.3	116
70	Mg-doped C60 thin film as improved n-type organic semiconductor for a solar cell. Applied Physics Letters, 2004, 84, 127-129.	3.3	39
71	Effects of intrinsic layer thickness on solar cell parameters of organic pâ€iâ€n heterojunction photovoltaic cells. Applied Physics Letters, 2004, 85, 6412-6414.	3.3	57
72	C60 thin-film transistors with low work-function metal electrodes. Applied Physics Letters, 2004, 85, 2396-2398.	3.3	25

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73	Nanocrystalline metal electrodes for high-efficiency organic solar cells. Applied Physics Letters, 2004, 85, 1832-1834.	3.3	9
74	Insertion of Thin Interlayers under the Negative Electrode of C60Schottky-Type Photovoltaic Cells. Journal of Physical Chemistry B, 2004, 108, 1-3.	2.6	49
75	Photoresponsive organic electroluminescent devices. Journal of Photochemistry and Photobiology A: Chemistry, 2003, 158, 215-218.	3.9	9
76	LiF/Al bilayer source and drain electrodes for n-channel organic field-effect transistors. Synthetic Metals, 2003, 137, 953-954.	3.9	7
77	Preparation of Anisotropic Fine Metal Electrodes and Application to the Electroluminescent Devices. Shinku/Journal of the Vacuum Society of Japan, 2003, 46, 835-839.	0.2	0
78	Device Performance of an n-Channel Organic Thin-Film Transistor with LiF/Al Bilayer Source and Drain Electrodes. Japanese Journal of Applied Physics, 2002, 41, L808-L810.	1.5	19
79	Light up-conversion from near-infrared to blue using a photoresponsive organic light-emitting device. Applied Physics Letters, 2002, 81, 769-771.	3.3	45
80	Electrical and Optical Properties of a Potassium- doped Film of a Long Alkyl Chain-linked C 60. Molecular Crystals and Liquid Crystals, 2002, 377, 353-356.	0.9	4
81	Structural Study on Cast Films of C₆₀ Derivatives with Long Alkyl Chains. Molecular Crystals and Liquid Crystals, 1998, 316, 157-160.	0.3	5
82	High-Performance Poly(3-hexylthiophene) Field-Effect Transistors Fabricated by a Slide-Coating Method. Applied Physics Express, 0, 1, 061802.	2.4	23