Michio M Matsushita

List of Publications by Year
in descending order

81	2,298	218677	233421
papers	citations	26 h-index	45 g-index

82	82	82	2806
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hydrogen-Bonded Organic Ferromagnet. Journal of the American Chemical Society, 1997, 119, 4369-4379.	13.7	172
2	X-ray Magnetic Circular Dichroism of Size-Selected, Thiolated Gold Clusters. Journal of the American Chemical Society, 2006, 128, 12034-12035.	13.7	136
3	Electron Highways into Nanochannels of Covalent Organic Frameworks for High Electrical Conductivity and Energy Storage. ACS Applied Materials & Interfaces, 2019, 11, 7661-7665.	8.0	113
4	Spintronics in organic Ï€-electronic systems. Journal of Materials Chemistry, 2009, 19, 1738.	6.7	112
5	An organic ferromagnet: Î±-phase crystal of 2-(2â€²,5â€²-dihydroxyphenyl)-4,4,5,5-tetramethyl-4,5-dihydro-1H-imidazolyl-1-oxy-3-oxide (Î±-HQNN). Journal of the Chemical Society Chemical Communications, 1994, , 1723-1724.	2.0	106
6	Intramolecular Exchange Interaction in a Novel Cross-Conjugated Spin System Composed of .pi.-Ion Radical and Nitronyl Nitroxide. Journal of the American Chemical Society, 1994, 116, 4523-4524.	13.7	91
7	Multifunctional Dithiadiazolyl Radicals: Fluorescence, Electroluminescence, and Photoconducting Behavior in Pyren-1â€²-yl-dithiadiazolyl. Journal of the American Chemical Society, 2018, 140, 6260-6270.	13.7	75
8	Novel spin-polarized TTF donors affording ground state triplet cation diradicals. Tetrahedron Letters, 1999, 40, 5027-5030.	1.4	62
9	Storage of an electric field for photocurrent generation in ferroelectric-functionalized organic devices. Nature Communications, 2014, 5, 3279.	12.8	61
10	Design and preparation of pyrrole-based spin-polarized donorsElectronic supplementary information (ESI) available: cyclic voltammograms for N-PN, Î²-PN, N-TPN, PhNN and TPP. See http://www.rsc.org/suppdata/jm/b2/b211986b/. Journal of Materials Chemistry, 2003, 13, 1011-1022.	6.7	60
11	Ionic-Liquid Component Dependence of Carrier Injection and Mobility for Electric-Double-Layer Organic Thin-Film Transistors. Journal of Physical Chemistry C, 2012, 116, 5240-5245.	3.1	60
12	Influence of Magnetic Field upon the Conductance of a Unicomponent Crystal of a Tetrathiafulvalene-Based Nitronyl Nitroxide. Journal of the American Chemical Society, 2010, 132, 4528-4529.	13.7	56
13	EPR and Density Functional Studies of Light-Induced Radical Pairs in a Single Crystal of a Hexaarylbiimidazolyl Derivative. Angewandte Chemie - International Edition, 2001, 40, 580-582.	13.8	52
14	Negative Magneto-resistance Observed on an Ion-radical Salt of a TTF-based Spin-polarized Donor. Chemistry Letters, 2007, 36, 110-111.	1.3	48
15	Electrochemical and Electrochromic Properties of Octathio[8]circulene Thin Films in Ionic Liquids. Journal of the American Chemical Society, 2008, 130, 15790-15791.	13.7	47
16	Utilizing Photocurrent Transients for Dithiolene-Based Photodetection: Stepwise Improvements at Communications Relevant Wavelengths. Journal of the American Chemical Society, 2012, 134, 12742-12750.	13.7	43
17	Cotunneling current affected by spin-polarized wire molecules in networked gold nanoparticles. Physical Review B, 2008, 77, .	3.2	41
18	Dual-gate field-effect transistors of octathio[8]circulene thin-films with ionic liquid and SiO2 gate dielectrics. Applied Physics Letters, 2010, 97, .	3.3	40

#	Article	IF	Citations
19	Organic optoelectronic interfaces with anomalous transient photocurrent. Journal of Materials Chemistry C, 2015, 3, 5122-5135.	5.5	40
20	Electron transport in networks of gold nanoparticles connected by oligothiophene molecular wires. Journal of Materials Chemistry, 2006, 16, 3459.	6.7	37
21	Discovery of the K₄ Structure Formed by a Triangular ÏЄ Radical Anion. Journal of the American Chemical Society, 2015, 137, 7612-7615.	13.7	37
22	Transformation between Monovalent and Divalent Ionic Solids: An Ionic(I)â€“Ionic(II) Phase Transition in a Biferroceneâ€“F1TCNQ Charge-Transfer Complex. Journal of the Physical Society of Japan, 2005, 74, 2214-2216.	1.6	33
23	Crystal Structure, Spin Polarization, Solid-State Electrochemistry, and High n-Type Carrier Mobility of a Paramagnetic Semiconductor: Vanadyl Tetrakis(thiadiazole)porphyrazine. Inorganic Chemistry, 2012, 51, 456-462.	4.0	32
24	Switching of Transfer Characteristics of an Organic Field-Effect Transistor by Phase Transitions: Sensitive Response to Molecular Dynamics and Charge Fluctuation. Chemistry of Materials, 2015, 27, 4441-4449.	6.7	32
25	Structural, Magnetic, and Electronic Properties of Phenolic Oxime Complexes of Cu and Ni. Inorganic Chemistry, 2011, 50, 12867-12876.	4.0	30
26	A complementary organic inverter of porphyrazine thin films: low-voltage operation using ionic liquid gate dielectrics. Chemical Communications, 2011, 47, 5837.	4.1	29
27	Synthesis, optical properties and charge transport characteristics of a series of novel thiophene-fused phenazine derivatives. Journal of Materials Chemistry C, 2013, 1, 3467.	5.5	29
28	Photoconductivity and FET performance of an n-type porphyrazine semiconductor, tetrakis(thiadiazole)porphyrazine. Organic Electronics, 2011, 12, 239-243.	2.6	28
29	Planar Ni(ii), Cu(ii) and Co(ii) tetraaza[14]annulenes: structural, electronic and magnetic properties and application to field effect transistors. Journal of Materials Chemistry, 2012, 22, 17967.	6.7	27
30	Electrochemical field-effect transistors of octathio[8]circulene robust thin films with ionic liquids. Chemical Physics Letters, 2009, 483, 81-83.	2.6	26
31	Formation of Self-Assembled Monolayer of Phenylthiol Carrying Nitronyl Nitroxide on Gold Surface. Chemistry Letters, 2002, 31, 596-597.	1.3	25
32	A novel TTF-based donor carrying four nitronyl nitroxides. Tetrahedron Letters, 2003, 44, 4415-4418.	1.4	24
33	Preparation and Characterization of Gold Nano-Particles Chemisorbed by Ï€-Radical Thiols. Chemistry Letters, 2002, 31, 1030-1031.	1.3	23
34	Current-Induced Low-Resistance State and Its Crystal Structure of a TTF-Based Dimeric Donor Salt. Journal of the American Chemical Society, 2005, 127, 12450-12451.	13.7	23
35	3D Spin-Liquid State in an Organic Hyperkagome Lattice of Mott Dimers. Physical Review Letters, 2017, 119, 057201.	7.8	23
36	A new metalâ€“organic hybrid material with intrinsic resistance-based bistability: monitoring in situ room temperature switching behavior. Journal of Materials Chemistry C, 2014, 2, 399-404.	5.5	21

#	Article	IF	Citations
37	In Situ Real-Time Measurements for Ambipolar Channel Formation Processes in Organic Double-Layer Field-Effect Transistors of CuPc and F₁₆CuPc. Journal of Physical Chemistry C, 2018, 122, 26054-26060.	3.1	21
38	Controlling Coâ€tunneling Currents in Nanoparticle Networks Using Spinâ€Polarized Wire Molecules. Small, 2008, 4, 471-475.	10.0	20
39	Synthesis and properties of TSF-based spin-polarized donor. Polyhedron, 2009, 28, 1996-2000.	2.2	20
40	Electrodeposition as a superior route to a thin film molecular semiconductor. Chemical Science, 2011, 2, 316-320.	7.4	18
41	Highly efficient organic optoelectronic conversion induced by electric double layers in ionic liquids. Applied Physics Letters, 2012, 100, 163304.	3.3	18
42	Ambipolar Carrier Injections Governed by Electrochemical Potentials of Ionic Liquids in Electric-Double-Layer Thin-Film Transistors of Lead- and Titanyl-Phthalocyanine. Journal of Physical Chemistry C, 2013, 117, 5552-5557.	3.1	18
43	Electron-Transfer Processes in Highly-Correlated Electron Systems of Thiazyl Radicals. Bulletin of the Chemical Society of Japan, 2014, 87, 234-249.	3.2	18
44	High Ambipolar Mobility in a Neutral Radical Gold Dithiolene Complex. Advanced Functional Materials, 2019, 29, 1904181.	14.9	17
45	Construction of a network structure composed of gold nanoparticles and spin-polarized molecular wires and its conducting and magnetic properties. Polyhedron, 2005, 24, 2263-2268.	2.2	15
46	A field-effect transistor consists of spin-polarized TTF-based donor. Polyhedron, 2005, 24, 2870-2875.	2.2	15
47	Electric double layers allow for opaque electrodes in high performance organic optoelectronic devices. Applied Physics Letters, 2012, 101, .	3.3	14
48	Photocurrent Generation in Organic Photodetectors with Tailor-Made Active Layers Fabricated by Layer-by-Layer Deposition. ACS Applied Materials & Interfaces, 2015, 7, 7049-7053.	8.0	14
49	Charge transport in various dimensions of small networks composed of gold nanoparticles and terthiophene wire-molecules. Applied Physics Letters, 2011, 98, 263114.	3.3	13
50	Thiadiazole dioxide-fused picene: acceptor ability, anion radical formation, and n-type charge transport characteristics. Chemical Communications, 2014, 50, 4178.	4.1	13
51	Superperiodic conductance in a molecularly wired double-dot system self-assembled in a nanogap electrode. Journal of Applied Physics, 2010, 108, .	2.5	11
52	Factors Affecting the Stability and Performance of Ionic Liquid-Based Planar Transient Photodetectors. Langmuir, 2015, 31, 5235-5243.	3.5	11
53	Ionic liquid thin layer-induced memory effects in organic field-effect transistors. Physical Chemistry Chemical Physics, 2019, 21, 18823-18829.	2.8	11
54	Ferromagnetic Spin Ordering Along Intermolecular Hydrogen Bonds of a Hydroquinone Derivative Carrying a Nitronyl Nitroxide. Molecular Crystals and Liquid Crystals, 1996, 279, 139-144.	0.3	10

#	Article	IF	Citations
55	Giant Magnetoresistance in a Molecular Thin Film as an Intrinsic Property. Advanced Functional Materials, 2014, 24, 2383-2388.	14.9	10
56	Electrochemical deposition of highly-conducting metal dithiolene films. Dalton Transactions, 2016, 45, 9363-9368.	3.3	10
57	Theoretical Studies of Magnetic Interactions in 2â€², 5â€²-Dihydroxyphenyl Nitronyl Nitroxide Crystal. Molecular Crystals and Liquid Crystals, 1997, 306, 151-160.	0.3	9
58	Photoinduced Electron Transfer from Nitoxide Free Radicals to the Triplet State of C60. Journal of Physical Chemistry A, 2003, 107, 2815-2820.	2.5	9
59	Molecular and thin film properties of cobalt half-sandwich compounds for optoelectronic application. Physical Chemistry Chemical Physics, 2017, 19, 6768-6776.	2.8	9
60	Ground State Spin Multiplicity of Cation Diradicals Derived from Pyrroles Carrying Nitronyl Nitroxide. Molecular Crystals and Liquid Crystals, 1997, 306, 81-88.	0.3	8
61	Effect of photoinduced charge displacement on organic optoelectronic conversion. Physical Review B, 2011, 84, .	3.2	7
62	Negative differential resistance in the Peierls insulating phases of TTF-TCNQ. Physical Review B, 2017, 96, .	3.2	7
63	Electric and Thermosalient Properties of a Charge-Transfer Complex Exhibiting a Minor Valence Instability Transition. Crystal Growth and Design, 2020, 20, 4758-4763.	3.0	7
64	Noncatalytic, solvent-free thermal formation of cyclic trimers using 1,6-bis(acyloxymethyl)hexa-2,4-diyne derivatives. Tetrahedron Letters, 2004, 45, 2671-2675.	1.4	6
65	Chemical control of the monovalentâ€“divalent electron-transfer phase transition in biferroceniumâ€“TCNQ salts. Chemical Communications, 2014, 50, 5473-5475.	4.1	6
66	Influence of Air Exposure on Photocarrier Generation in Amorphous and Phase II Thin Films of Titanyl Phthalocyanine. Journal of Physical Chemistry C, 2018, 122, 7731-7736.	3.1	5
67	Chemical potentials of electric double layers at metalâ€“electrolyte interfaces: dependence on electrolyte concentration and electrode materials, and application to field-effect transistors. Physical Chemistry Chemical Physics, 2020, 22, 12395-12402.	2.8	4
68	Dielectric properties associated with structural phase transitions observed in tetramethylammonium salt of o-phenylenebis(squaric acid). Chemical Physics, 2006, 322, 392-398.	1.9	3
69	Association-mediated chromism of amphiphilic triphenyl-6-oxoverdazyl. New Journal of Chemistry, 2008, 32, 2201.	2.8	3
70	Energy levels of metal porphyrins upon molecular alignment during layer-by-layer electrostatic assembly: scanning tunneling spectroscopy vis-Ã-vis optical spectroscopy. RSC Advances, 2016, 6, 47410-47417.	3.6	3
71	Rate-determining process in MISIM photocells for optoelectronic conversion using photo-induced pure polarization current without carrier transfer across interfaces. Physical Chemistry Chemical Physics, 2019, 21, 13440-13445.	2.8	3
72	Stabilization of Interfacial Polarization and Induction of Polarization Hysteresis in Organic MISIM Devices. ACS Applied Materials & Interfaces, 2021, 13, 31928-31933.	8.0	3

#	Article	IF	Citations
73	Bis(tetra-n-butylammonium) bis(Î¼-1,2-dicyanoethene-1,2-dithiolato-Îº3S,Sâ€²:Sâ€²)bis[(1,2-dicyanoethene-1,2-dithiolato-Îº2S,Sâ€²)cobalt(III)]. Acta Crystallographica Section C: Crystal Structure Communications, 2002, 58, m431-m433.	0.4	2
74	Polyhedral building block with specific facial interaction for conducting supramolecular self-assembly. Journal of Materials Chemistry, 2004, 14, 2842.	6.7	2
75	A programmable single-component diode based on an ambipolar organic field-effect transistor (OFET). Pure and Applied Chemistry, 2012, 84, 979-989.	1.9	2
76	Ambipolar Transport in Phase-Separated Thin Films of p- and n-Type Vanadylporphyrazines with Two-Dimensional Percolation. Journal of Physical Chemistry C, 2014, 118, 14142-14149.	3.1	2
77	Transport Characteristics of the Organic Field-Effect Transistors Based on Charge Transfer Complex as Semiconductors. Journal of Nanoscience and Nanotechnology, 2016, 16, 3355-3359.	0.9	2
78	Giant negative magnetoresistance in Ni(quinoline-8-selenoate)₂. Physical Chemistry Chemical Physics, 2018, 20, 514-519.	2.8	2
79	Theoretical Studies of Magnetic Interactions in 3â€², 5â€²-Dihydroxyphenyl Nitronyl Nitroxide Crystal. Molecular Crystals and Liquid Crystals, 1999, 335, 633-642.	0.3	1
80	Cycle of charge carrier states with formation and extinction of a floating gate in an ambipolar tetracyanoquaterthienoquinoid-based field-effect transistor. Chemical Physics Letters, 2017, 671, 71-77.	2.6	1
81	Construction of Coexisting Systems of Magnetism and Conductivity Based on Organic Radical Spins. Molecular Science, 2012, 6, A0049.	0.2	1