

# Takashi Nagase

## List of Publications by Year in descending order

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108  
papers

1,430  
citations

331670

21  
h-index

414414

32  
g-index

111  
all docs

111  
docs citations

111  
times ranked

1710  
citing authors

#	ARTICLE	IF	CITATIONS
1	Revisiting open-circuit photovoltage decay in organic solar cells for the determination of bimolecular recombination constants. Japanese Journal of Applied Physics, 2021, 60, 034001.	1.5	1
2	Enhanced performance of solution-processable floating-gate organic phototransistor memory for organic image sensor applications. Applied Physics Express, 2021, 14, 041007.	2.4	3
3	Electrically programmable multilevel nonvolatile memories based on solution-processed organic floating-gate transistors. Applied Physics Letters, 2021, 118, .	3.3	14
4	Understanding the influence of contact resistances on short-channel high-mobility organic transistors in linear and saturation regimes. Applied Physics Express, 2021, 14, 041010.	2.4	4
5	Performance Improvement of Solution-Processed Organic Floating-Gate Transistor Memories via Tuning the Work Function of Gate Electrodes. , 2021, , .		0
6	Intersystem Crossing Rate in Thermally Activated Delayed Fluorescence Emitters. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900616.	1.8	13
7	Interpretation of modulus spectra in organic field-effect transistors: equivalent-circuit approach. Japanese Journal of Applied Physics, 2020, 59, SDDA06.	1.5	0
8	Operation mechanism and efficiency-limiting factors in solution-processed quantum-dots light-emitting diodes. Organic Electronics, 2020, 86, 105865.	2.6	6
9	Modulated Photocurrent Spectroscopy Study of the Electronic Transport Properties of Working Organic Photovoltaics: Degradation Analysis. Materials, 2020, 13, 2660.	2.9	2
10	Simultaneous determination of electron and hole drift mobilities in working inverted organic solar cells: modulated photocurrent spectroscopy versus impedance spectroscopy. Japanese Journal of Applied Physics, 2020, 59, 064002.	1.5	2
11	Interpretation of the modulus spectra of organic field-effect transistors with electrode overlap and peripheral regions: determination of the electronic properties of the gate insulator and organic semiconductor. Japanese Journal of Applied Physics, 2020, 59, 094002.	1.5	2
12	Modulated photocurrent spectroscopies for characterization of the charge transport process in organic photovoltaics. Journal of Physics: Conference Series, 2019, 1220, 012018.	0.4	1
13	Effect of non-chlorinated solvents on the enhancement of field-effect mobility in dioctylbenzothienobenzothiophene-based top-gate organic transistors processed by spin coating. Organic Electronics, 2019, 69, 181-189.	2.6	13
14	19â€™5: Lateâ€™News Paper: Characterization of carrier transport properties in working polymer lightâ€™emitting diodes. Digest of Technical Papers SID International Symposium, 2019, 50, 263-266.	0.3	1
15	Determination of bimolecular recombination constants in organic double-injection devices using impedance spectroscopy. Applied Physics Letters, 2019, 114, 123301.	3.3	7
16	Full characterization of electronic transport properties in working polymer light-emitting diodes via impedance spectroscopy. Journal of Applied Physics, 2019, 125, 115501.	2.5	6
17	Enhanced performance of solution-processable organic floating-gate transistor memories using binary small molecules dispersed polymer storage layers. , 2019, , .		0
18	Modulated Photocurrent Spectroscopy for Determination of Electron and Hole Mobilities in Working Organic Solar Cells. Scientific Reports, 2019, 9, 20346.	3.3	10

#	ARTICLE	IF	CITATIONS
19	Optical memory characteristics of solution-processed organic transistors with self-organized organic floating gates for printable multi-level storage devices. <i>Organic Electronics</i> , 2019, 67, 109-115.	2.6	31
20	Effective Europium Coordination Luminophores Linked with Bi- and Tridentate Carbazole Phosphine Oxides for Organic Electroluminescent Devices. <i>Journal of Physical Chemistry C</i> , 2018, 122, 9599-9605.	3.1	12
21	High-performance didodecylbenzothienobenzothiophene-based top-gate organic transistors processed by spin coating using binary solvent mixtures. <i>Organic Electronics</i> , 2018, 58, 306-312.	2.6	8
22	Determination of Interface-State Distributions in Polymer-Based Metal-Insulator-Semiconductor Capacitors by Impedance Spectroscopy. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 1493.	2.5	9
23	Influence of Substrate Modification with Dipole Monolayers on the Electrical Characteristics of Short-Channel Polymer Field-Effect Transistors. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 1274.	2.5	3
24	Triplet-triplet annihilation in a thermally activated delayed fluorescence emitter lightly doped in a host. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	21
25	Emission properties of thermally activated delayed fluorescence emitters: analysis based on a four-level model considering a higher triplet excited state. <i>Journal of Photonics for Energy</i> , 2018, 8, 1.	1.3	7
26	Contributions of a Higher Triplet Excited State to the Emission Properties of a Thermally Activated Delayed-Fluorescence Emitter. <i>Physical Review Applied</i> , 2017, 7, .	3.8	45
27	Control of the Singlet-Triplet Energy Gap in a Thermally Activated Delayed Fluorescence Emitter by Using a Polar Host Matrix. <i>Nanoscale Research Letters</i> , 2017, 12, 268.	5.7	23
28	Molecular Electronics. <i>Springer Handbooks</i> , 2017, , 1-1.	0.6	1
29	The Association between Tinea Pedis and Feet-Washing Behavior in Patients with Diabetes: A Cross-sectional Study. <i>Advances in Skin and Wound Care</i> , 2017, 30, 510-516.	1.0	2
30	Electron injection in inverted organic light-emitting diodes with poly(ethyleneimine) electron injection layers. <i>Organic Electronics</i> , 2017, 50, 290-295.	2.6	21
31	Photoluminescence Properties of Polymorphic Modifications of Low Molecular Weight Poly(3-hexylthiophene). <i>Nanoscale Research Letters</i> , 2017, 12, 368.	5.7	5
32	Solution-processed organic field-effect transistors based on dinaphthothienothiophene precursor with chemically modified electrodes. <i>Journal of Physics: Conference Series</i> , 2017, 924, 012008.	0.4	4
33	Relation between active-layer thickness and power conversion efficiency in P3HT:PCBM inverted organic photovoltaics. <i>Journal of Physics: Conference Series</i> , 2017, 924, 012009.	0.4	3
34	Effects of silica nanoparticle addition on polymer semiconductor wettability and carrier mobility in solution-processable organic transistors on hydrophobic substrates. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 509-516.	2.1	8
35	Write-once memory effects observed in Ga-doped ZnO/organic semiconductor/MoO <sub>3</sub> /Au structures. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 03DC05.	1.5	6
36	Inverted organic light-emitting diodes with an electrochemically deposited zinc oxide electron injection layer. <i>Journal of Applied Physics</i> , 2016, 120, 185501.	2.5	16

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37	Inverted organic light-emitting diodes using different transparent conductive oxide films as a cathode. Japanese Journal of Applied Physics, 2016, 55, 03DC06.	1.5	9
38	Determination of deep trapping lifetime in organic semiconductors using impedance spectroscopy. Applied Physics Letters, 2016, 108, 053305.	3.3	16
39	Simple Calculation of Power Conversion Efficiency of PC61BM and PC71BM Based Organic Solar Cells – Good Agreement with Experiments in Donor Materials with Different Band Gap Energies. Journal of Nanoscience and Nanotechnology, 2016, 16, 3349-3354.	0.9	1
40	Fabrication of Vertical Molecular Junction Devices with Conductive Polymer Contacts Using a Peeling Method. Journal of Nanoscience and Nanotechnology, 2016, 16, 3307-3311.	0.9	0
41	Temperature Dependence of Field-Effect Mobility in Organic Thin-Film Transistors: Similarity to Inorganic Transistors. Journal of Nanoscience and Nanotechnology, 2016, 16, 3219-3222.	0.9	3
42	Effects of Bimolecular Recombination on Impedance Spectra in Organic Semiconductors: Analytical Approach. Journal of Nanoscience and Nanotechnology, 2016, 16, 3322-3326.	0.9	11
43	High operational stability of solution-processed organic field-effect transistors with top-gate configuration. Organic Electronics, 2016, 32, 65-69.	2.6	22
44	Solution-processed dinaphtho[2,3- <i>b</i> :2',3'- <i>b'</i> ]thieno[3,2- <i>b</i> ]thiophene transistor memory based on phosphorus-doped silicon nanoparticles as a nano-floating gate. Applied Physics Express, 2015, 8, 101601.	2.4	8
45	High-performance and electrically stable solution-processed polymer field-effect transistors with a top-gate configuration. Japanese Journal of Applied Physics, 2015, 54, 011601.	1.5	25
46	Characterization of transport properties of organic semiconductors using impedance spectroscopy. Journal of Materials Science: Materials in Electronics, 2015, 26, 4463-4474.	2.2	17
47	Soluble Organic Semiconductor Precursor with Specific Phase Separation for High-Performance Printed Organic Transistors. Advanced Materials, 2015, 27, 727-732.	21.0	43
48	Electronic Structures of Planar and Nonplanar Polyfluorene. Springer Series in Materials Science, 2015, , 63-80.	0.6	1
49	Nano-gap Electrodes Developed Using Focused Ion Beam Technology. , 2015, , 1513-1528.		1
50	Electrical characterization of thieno[3,4- <i>b</i> ]thiophene and benzodithiophene copolymer using field-effect transistor configuration. Japanese Journal of Applied Physics, 2014, 53, 050305.	1.5	5
51	Angular distribution of field-effect mobility in oriented poly[5,5'-bis(3-dodecyl-2-thienyl)-2,2'-bithiophene] fabricated by roll-transfer printing. Applied Physics Letters, 2014, 104, .	3.3	10
52	Effect of contact resistance on mobility determination by impedance spectroscopy. Japanese Journal of Applied Physics, 2014, 53, 02BE02.	1.5	5
53	High performance top-gate field-effect transistors based on poly(3-alkylthiophenes) with different alkyl chain lengths. Organic Electronics, 2014, 15, 372-377.	2.6	16
54	Temperature dependence of photoluminescence properties in a thermally activated delayed fluorescence emitter. Applied Physics Letters, 2014, 104, .	3.3	48

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55	Third-order optical susceptibility in polythiophene thin films prepared by spin-coating from high-boiling-point solvents. <i>Thin Solid Films</i> , 2014, 554, 106-109.	1.8	4
56	Continuous-wave photoinduced absorption study on trapped carriers in bulk-heterojunction solar cells connected to load. <i>Thin Solid Films</i> , 2014, 554, 209-212.	1.8	1
57	Impedance spectroscopy for high resolution measurements of energetic distributions of localized states in organic semiconductors. <i>Thin Solid Films</i> , 2014, 554, 218-221.	1.8	7
58	Highly Oriented Polymer Field-Effect Transistors with High Electrical Stability. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 121601.	1.5	4
59	High Performance of Organic Transistors Using Self-Aggregated Surface of Organic Semiconductor Thin Films. <i>Journal of Smart Processing</i> , 2013, 2, 251-256.	0.1	0
60	Third-order optical susceptibility of ordered and disordered polyfluorene thin films. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 2530-2533.	3.1	0
61	Polysilsesquioxanes for Gate-Insulating Materials of Organic Thin-Film Transistors. <i>International Journal of Polymer Science</i> , 2012, 2012, 1-10.	2.7	10
62	Frequency Characteristics of Polymer Field-Effect Transistors with Self-Aligned Electrodes Investigated by Impedance Spectroscopy. <i>IEICE Transactions on Electronics</i> , 2011, E94-C, 1727-1732.	0.6	2
63	Mobility enhancement in solution-processable organic transistors through polymer chain alignment by roll-transfer printing. <i>Organic Electronics</i> , 2011, 12, 2140-2143.	2.6	17
64	Factors associated with presence and severity of toenail onychomycosis in patients with diabetes: A cross-sectional study. <i>International Journal of Nursing Studies</i> , 2011, 48, 1101-1108.	5.6	29
65	Enhancement of Third-Order Optical Susceptibility in Polythiophene Thin Films Fabricated by Drop Casting Using Anhydrous Solvent. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 072601.	1.5	1
66	Oscillatory Structure in the Electroabsorption Spectrum of $\pi$ -Conjugated Polymer Thin Films: How to Identify the Franz-Keldysh Oscillation. <i>Journal of the Physical Society of Japan</i> , 2011, 80, 034707.	1.6	4
67	Continuous-wave photoinduced absorption studies in polythiophene and fullerene blended thin films. <i>Physical Review B</i> , 2011, 83, .	3.2	16
68	Air-mediated self-organization of polymer semiconductors for high-performance solution-processable organic transistors. <i>Applied Physics Letters</i> , 2011, 98, 063304.	3.3	18
69	Charge transport enhancement via air-mediated self-organization in polymer semiconductors. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1360, 101201.	0.1	1
70	Determination of Carrier Lifetime in Bulk-Heterojunction Solar Cells by Continuous-Wave Photoinduced Absorption Spectroscopy. <i>Applied Physics Express</i> , 2011, 4, 126602.	2.4	10
71	Enhancement of Third-Order Optical Susceptibility in Polythiophene Thin Films Fabricated by Drop Casting Using Anhydrous Solvent. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 072601.	1.5	2
72	Low-Temperature Processable Organic-Inorganic Hybrid Gate Dielectrics for Solution-Based Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2010, 22, 4706-4710.	21.0	39

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73	Field-effect transistor characteristics and microstructure of regioregular poly(3-hexylthiophene) on alkylsilane self-assembled monolayers prepared by microcontact printing. <i>Organic Electronics</i> , 2010, 11, 1323-1326.	2.6	8
74	Drastic Improvement in Wettability of 6,13-Bis(triisopropylsilylethynyl)pentacene by Addition of Silica Nanoparticles for Solution-Processable Organic Field-Effect Transistors. <i>Applied Physics Express</i> , 2010, 3, 091602.	2.4	22
75	Electroabsorption study of ordered polyfluorene thin films: Origin of oscillatory structure near the bottom of the continuum state. <i>Physical Review B</i> , 2010, 81, .	3.2	10
76	Device characteristics of short-channel polymer field-effect transistors. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	36
77	Solution-Processed Dioctylbenzothienobenzothiophene-Based Top-Gate Organic Transistors with High Mobility, Low Threshold Voltage, and High Electrical Stability. <i>Applied Physics Express</i> , 2010, 3, 121601.	2.4	50
78	Determination of localized-state distributions in organic light-emitting diodes by impedance spectroscopy. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	43
79	Correlation between the crystallization of polyfluorene and the surface free energy of substrates. <i>Thin Solid Films</i> , 2008, 517, 1340-1342.	1.8	12
80	Equivalent circuits of polymer light-emitting diodes with hole-injection layer studied by impedance spectroscopy. <i>Thin Solid Films</i> , 2008, 517, 1327-1330.	1.8	25
81	Observation of negative differential resistance and single-electron tunneling in electromigrated break junctions. <i>Thin Solid Films</i> , 2008, 516, 2762-2766.	1.8	11
82	Percolative behavior of transient photoconductivity in metal-free phthalocyanine nanocrystals. <i>Thin Solid Films</i> , 2008, 516, 2558-2561.	1.8	1
83	Analysis of time-of-flight transient photocurrent in organic semiconductors with coplanar-blocking-electrodes configuration. <i>Thin Solid Films</i> , 2008, 516, 2595-2599.	1.8	18
84	Anisotropic optical properties of aligned $\beta$ -phase polyfluorene thin films. <i>Thin Solid Films</i> , 2008, 517, 1324-1326.	1.8	13
85	Electrical characteristics of polymer field-effect transistors with poly(methylsilsesquioxane) gate dielectrics on plastic substrates. <i>Thin Solid Films</i> , 2008, 517, 1343-1345.	1.8	7
86	Influence of injection barrier on the determination of charge-carrier mobility in organic light-emitting diodes by impedance spectroscopy. <i>Thin Solid Films</i> , 2008, 517, 1331-1334.	1.8	42
87	Effective control of surface property on poly(silsesquioxane) films by chemical modification. <i>Thin Solid Films</i> , 2008, 517, 1335-1339.	1.8	10
88	Determination of Charge-Carrier Mobility in Organic Light-Emitting Diodes by Impedance Spectroscopy in Presence of Localized States. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 8965.	1.5	66
89	Fabrication and Characterization of Poly(3-hexylthiophene)-Based Field-Effect Transistors with Silsesquioxane Gate Insulators. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 3196.	1.5	16
90	Preparation and Dielectric Property of Photo-Curable Polysilsesquioxane Hybrids. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2008, 21, 319-320.	0.3	3

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91	Optical properties of air-stable semiconducting copolymer based on polythiophene. Applied Physics Letters, 2007, 91, 141909.	3.3	7
92	Preparation and Optical Properties of Aligned $\pi$ -Phase Polyfluorene Thin Films. Japanese Journal of Applied Physics, 2007, 46, L1093-L1095.	1.5	13
93	Fowler-Nordheim Tunneling in Electromigrated Break Junctions with Porphyrin Molecules. Japanese Journal of Applied Physics, 2007, 46, 2683-2686.	1.5	11
94	Transient photocurrent of (silicon nanocrystals) $\pi$ -(organic polysilane) composites detection of surface states of silicon nanocrystals. Thin Solid Films, 2006, 499, 119-122.	1.8	5
95	Direct fabrication of nano-gap electrodes by focused ion beam etching. Thin Solid Films, 2006, 499, 279-284.	1.8	55
96	Fabrication of Au-molecule-Au junctions using electromigration method. Thin Solid Films, 2006, 499, 90-94.	1.8	15
97	Maskless fabrication of nanogap electrodes by using Ga-focused ion beam etching. Journal of Micro/Nanolithography, MEMS, and MOEMS, 2006, 5, 011006.	0.9	8
98	Maskless fabrication of nanoelectrode structures with nanogaps by using Ga focused ion beams. Microelectronic Engineering, 2005, 78-79, 253-259.	2.4	28
99	Fabrication of nano-gap electrodes for measuring electrical properties of organic molecules using a focused ion beam. Thin Solid Films, 2003, 438-439, 374-377.	1.8	55
100	Localized-state distributions in molecularly doped polymers determined from time-of-flight transient photocurrent. Journal of Applied Physics, 2000, 88, 252-259.	2.5	24
101	Improvement of energy resolution of transient photoconductivity analysis for measuring localized-state distributions in amorphous semiconductors. Journal of Non-Crystalline Solids, 2000, 266-269, 367-371.	3.1	10
102	High resolution measurement of localized-state distributions from transient photoconductivity in amorphous and polymeric semiconductors. Journal of Applied Physics, 1999, 86, 5026-5035.	2.5	39
103	Transient photoconductivity study of localized-state distributions in metallophthalocyanines. Thin Solid Films, 1998, 331, 82-88.	1.8	14
104	Determination of free carrier recombination lifetime in amorphous semiconductors: application to the study of iodine doping effect in arsenic triselenide. Journal of Non-Crystalline Solids, 1998, 227-230, 824-828.	3.1	10
105	On the temperature dependence of dispersion parameters in amorphous semiconductors. Journal of Non-Crystalline Solids, 1998, 227-230, 815-819.	3.1	2
106	Determination of localized-state distributions in photoconductive polymers from transient photocurrents measured with the time-of-flight method. IEEJ Transactions on Fundamentals and Materials, 1998, 118, 1446-1453.	0.2	1
107	Density of states in amorphous semiconductors determined from transient photoconductivity experiment: Computer simulation and experiment. Journal of Non-Crystalline Solids, 1996, 198-200, 363-366.	3.1	20
108	Photoinduced Absorption in P3HT/PCBM Bulk Heterostructures. Materials Science Forum, 0, 658, 503-506.	0.3	3