

# Shigeki Naka

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5386236/publications.pdf>

Version: 2024-02-01

112  
papers

1,930  
citations

304368

22  
h-index

276539

41  
g-index

114  
all docs

114  
docs citations

114  
times ranked

1626  
citing authors

#	ARTICLE	IF	CITATIONS
1	High electron mobility in bathophenanthroline. Applied Physics Letters, 2000, 76, 197-199.	1.5	279
2	Carrier transport properties of organic materials for EL device operation. Synthetic Metals, 2000, 111-112, 331-333.	2.1	212
3	Nondoped-type white organic electroluminescent devices utilizing complementary color and exciton diffusion. Applied Physics Letters, 2002, 81, 3329-3331.	1.5	100
4	Synthesis and Electroluminescence Properties of fac-Tris(2-phenylpyridine)iridium Derivatives Containing Hole-Trapping Moieties. European Journal of Inorganic Chemistry, 2006, 2006, 3676-3683.	1.0	59
5	Organic Electroluminescent Devices Using a Mixed Single Layer. Japanese Journal of Applied Physics, 1994, 33, L1772-L1774.	0.8	56
6	Origin of enhanced electrical and conducting properties in pentacene films doped by molybdenum trioxide. Organic Electronics, 2013, 14, 2698-2704.	1.4	56
7	Bias and temperature dependent charge transport in solution-processed small molecular mixed single layer organic light emitting devices. Applied Physics Letters, 2011, 98, .	1.5	55
8	Enhanced carrier injection in pentacene thin-film transistors by inserting a MoO <sub>3</sub> -doped pentacene layer. Applied Physics Letters, 2012, 100, .	1.5	52
9	Organic heterojunction phototransistor. Journal of Applied Physics, 2002, 91, 1171-1174.	1.1	49
10	Electrical properties of organic electroluminescent devices with aluminium alloy cathode. Synthetic Metals, 1997, 91, 129-130.	2.1	47
11	Organic electrophosphorescent devices with mixed hole transport material as emission layer. Current Applied Physics, 2005, 5, 305-308.	1.1	44
12	Direct Comparison of Solution- and Vacuum-Processed Small Molecular Organic Light-Emitting Devices with a Mixed Single Layer. ACS Applied Materials & Interfaces, 2011, 3, 2496-2503.	4.0	44
13	Dual Drive and Emission Panel. Japanese Journal of Applied Physics, 2005, 44, 3682-3685.	0.8	32
14	Time-of-Flight Measurement of Hole Mobility in Aluminum (III) Complexes. Japanese Journal of Applied Physics, 1999, 38, L1252-L1254.	0.8	31
15	Self-Aligned Bank Formation of Organic Electroluminescent Devices Using Ink-Jet Printing Method. Japanese Journal of Applied Physics, 2004, 43, 7725-7728.	0.8	31
16	Low Operational Voltage of Organic Electroluminescent Devices with a High Bipolar Conducting Silole Derivative. Japanese Journal of Applied Physics, 2002, 41, 6582-6585.	0.8	30
17	Dual roles of MoO <sub>3</sub> -doped pentacene thin films as hole-extraction and multicharge-separation functions in pentacene/C <sub>60</sub> heterojunction organic solar cells. Applied Physics Letters, 2013, 102, .	1.5	30
18	Synthesis and Properties of 9,9-Diaryl-4,5-diazafluorenes. A New Type of Electron-Transporting and Hole-Blocking Material in EL Device. Chemistry Letters, 2004, 33, 276-277.	0.7	29

#	ARTICLE	IF	CITATIONS
19	Spray Method for Organic Electroluminescent Device Fabrication. Japanese Journal of Applied Physics, 2002, 41, 6219-6222.	0.8	26
20	Top-Emission Organic Light-Emitting Diodes with Ink-Jet Printed Self-Aligned Emission Zones. Japanese Journal of Applied Physics, 2006, 45, 1829-1831.	0.8	23
21	Self-Aligned Organic Field-Effect Transistors Using Back-Surface Exposure Method. Japanese Journal of Applied Physics, 2004, 43, 2323-2325.	0.8	22
22	Durability Test of Solution-Processed Organic Electrophosphorescent Devices with Small Organic Molecules. Japanese Journal of Applied Physics, 2006, 45, 250-254.	0.8	22
23	Performance improvement of rubrene-based organic light emitting devices with a mixed single layer. Applied Physics A: Materials Science and Processing, 2010, 100, 1103-1108.	1.1	22
24	MoO <sub>3</sub> /Ag/MoO <sub>3</sub> anode for organic light-emitting diodes and its carrier injection property. Japanese Journal of Applied Physics, 2015, 54, 054101.	0.8	22
25	Dual Self-Aligned Vertical Multichannel Organic Transistors. Applied Physics Express, 2008, 1, 011801.	1.1	21
26	High efficiency rubrene based inverted top-emission organic light emitting devices with a mixed single layer. Journal of Luminescence, 2010, 130, 1198-1202.	1.5	21
27	Mobility enhancement of top contact pentacene based organic thin film transistor with bi-layer GeO/Au electrodes. Applied Physics Letters, 2013, 102, .	1.5	19
28	Performance Enhancement of Top-Contact Pentacene-Based Organic Thin-Film Transistors with Bilayer WO <sub>3</sub> /Au Electrodes. Japanese Journal of Applied Physics, 2013, 52, 03BB08.	0.8	19
29	Carrier mobility of organic thin films using lateral electrode structure with optical slits. Applied Physics Letters, 2006, 89, 132106.	1.5	18
30	Competitive emission process in mixed single layer top-emission organic light emitting device with reduced efficiency roll-off. Applied Physics Letters, 2010, 97, .	1.5	18
31	Charge transport characteristics in P3HT:PCBM organic blends under illumination: Influence of metal work functions. Chemical Physics Letters, 2012, 529, 64-68.	1.2	18
32	Organic Bi-function Matrix Array. Japanese Journal of Applied Physics, 2005, 44, 2826-2829.	0.8	17
33	Optical, morphological, structural, electrical, molecular orientation, and electroluminescence characteristics of organic semiconductor films prepared at various deposition rates. Thin Solid Films, 2012, 520, 2283-2288.	0.8	17
34	Efficient Interfacial Upconversion Enabling Bright Emission at an Extremely Low Driving Voltage in Organic Light-Emitting Diodes. Advanced Optical Materials, 2022, 10, .	3.6	17
35	Organic Multifunction Diodes Operable for Emission and Photodetection Modes. Japanese Journal of Applied Physics, 2006, 45, 3750-3753.	0.8	16
36	Organic Field-Effect Transistor Integrated Circuits using Self-Alignment Process Technology. Japanese Journal of Applied Physics, 2007, 46, 2666-2668.	0.8	16

#	ARTICLE	IF	CITATIONS
37	Direct comparison of charge transport and electronic traps in polymer–fullerene blends under dark and illuminated conditions. <i>Organic Electronics</i> , 2014, 15, 299-305.	1.4	16
38	Painting Method for Organic Electroluminescent Devices. <i>Japanese Journal of Applied Physics</i> , 2003, 42, 4529-4534.	0.8	15
39	Top Contact Pentacene Based Organic Thin Film Transistor With Bi-layer TiO <sub>2</sub> Electrodes. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2012, 25, 659-664.	0.1	14
40	Correlation between Physical and Electrical Properties in Pentacene and C8-BTBT-based Organic Thin Film Transistors. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2016, 29, 363-368.	0.1	14
41	White Organic Electroluminescent Devices Fabricated Using Ink-Jet Printing Method. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 7395-7398.	0.8	13
42	Sprayed Organic Electrophosphorescent Devices with Small Organic Molecules. <i>Japanese Journal of Applied Physics</i> , 2005, 44, 626-629.	0.8	12
43	Improved Light Outcoupling in Organic Electroluminescent Devices with Random Dots. <i>Japanese Journal of Applied Physics</i> , 2005, 44, 613-616.	0.8	11
44	Improved white organic electroluminescent devices using fine mesh as an evaporation mask. <i>Current Applied Physics</i> , 2005, 5, 1-4.	1.1	10
45	Macrocyclic and Acyclic Bis(2,5-diphenyl-1,3,4-oxadiazole)s with Electron-Transporting and Hole-Blocking Ability in Organic Electroluminescent Devices. <i>Macromolecular Chemistry and Physics</i> , 2005, 206, 1576-1582.	1.1	10
46	Light-Emitting Seal Using Self-Aligned Organic Light-Emitting Structure. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 472.	0.8	9
47	Evaluation of Reliability in Rubrene-Based Organic Light Emitting Devices with a Mixed Single Layer. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 01AA02.	0.8	9
48	Improved performance of mixed single layer top-emission organic light emitting devices using capping layer. <i>Solid-State Electronics</i> , 2011, 56, 155-158.	0.8	9
49	Organic Bifunctional Devices with Emission and Sensing Abilities. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 1328-1332.	0.8	8
50	Multi-Color Organic Light Emitting Panels Using Self-Aligned Ink-Jet Printing Technology. <i>Molecular Crystals and Liquid Crystals</i> , 2007, 471, 261-268.	0.4	8
51	Evaluation of bulk trap density of tris-(8-hydroxyquinoline) aluminum. <i>Journal of Applied Physics</i> , 2002, 92, 1450-1452.	1.1	7
52	Top-Absorption Organic Photodiodes Suitable for Device Integration. <i>Japanese Journal of Applied Physics</i> , 2005, 44, 2830-2832.	0.8	7
53	Highly simplified small molecular phosphorescent organic light emitting devices with a solution-processed single layer. <i>AIP Advances</i> , 2011, 1, 032130.	0.6	7
54	Bi-functional electroluminescent and photovoltaic devices based on rubrene-doped poly(3-hexylthiophene):1-(3-methoxycarbonyl)-propyl-1-phenyl-(6,6)C <sub>61</sub> blends. <i>Synthetic Metals</i> , 2012, 162, 281-284.	2.1	7

#	ARTICLE	IF	CITATIONS
55	Efficient electron transport in 4,4'-bis[N-(1-naphthyl)-N-phenyl-amino] biphenyl and the applications in white organic light emitting devices. <i>Organic Electronics</i> , 2013, 14, 1015-1020.	1.4	7
56	Improvement of Blue Organic Photodiode with Pyrazol-Derivative. <i>Journal of Photopolymer Science and Technology</i> = [Fotoporima Konwakai Shi], 2014, 27, 343-346.	0.1	7
57	Light-emitting Organic Photovoltaic Devices Based on Rubrene/PTCDI-C13 Stack. <i>Electrochemistry</i> , 2017, 85, 280-282.	0.6	7
58	Temperature Dependence of Trap Density Distribution in Poly(3-hexylthiophene) and 1-(3-Methoxycarbonyl)-propyl-1-phenyl-(6,6)C61 Based Blending Films under Illumination. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 021603.	0.8	7
59	Spatial distribution of triplet excitons formed from charge transfer states at the donor/acceptor interface. <i>Journal of Materials Chemistry A</i> , 2022, 10, 19935-19940.	5.2	7
60	Localized surface plasmon resonance effect in organic light-emitting devices with Ag islands. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 041602.	0.8	6
61	Build-on Technology of Bidirectional Optical Communication System Using Bifunctional Organic Diodes. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 2669-2672.	0.8	5
62	Organic Field-Effect Transistors with High-KAPPA. HfO <sub>2</sub> /Resin Double Gate Insulator. <i>Journal of Photopolymer Science and Technology</i> = [Fotoporima Konwakai Shi], 2008, 21, 189-192.	0.1	5
63	Transparent-Oxide <sup>ε</sup> Semiconductor-Based Self-Alignment Thin-Film Transistors. <i>Japanese Journal of Applied Physics</i> , 2009, 48, 04C097.	0.8	5
64	Improved Performance of Top-Emission Organic Light Emitting Device With a Mixed Single Layer. <i>Molecular Crystals and Liquid Crystals</i> , 2010, 519, 1-8.	0.4	5
65	Organic Light-Emitting Diode with Solution-Processed Molybdenum Trioxide from Dilute Aqueous Solution. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 05DC15.	0.8	5
66	Synthesis and polymerization of phenylacetylene having two carbazole units and properties of the formed polymer. <i>Journal of Polymer Science Part A</i> , 2015, 53, 1245-1251.	2.5	5
67	Investigation of Solution-Processed Organic Light-Emitting Diode Fabrication on Patterned Line Structure Using Bar-Coating Method. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 112102.	0.8	4
68	Complementary Circuit with Self-Alignment Organic/Oxide Thin-Film Transistors. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 021604.	0.8	4
69	Approaches to Realizing Sheet-Type Scanner with Scanning Light Source. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 05DC21.	0.8	4
70	Semitransparent Organic Solar Cells with Polyethylenimine Ethoxylated Interfacial Layer Using Lamination Process. <i>IEICE Transactions on Electronics</i> , 2019, E102.C, 196-198.	0.3	4
71	Solution-Processed Small Molecular Organic Light-Emitting Devices with a Mixed Single Layer. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 01BC06.	0.8	4
72	Self-Aligned Multifunction Diodes Using Ink-Jet Printing Method. <i>Molecular Crystals and Liquid Crystals</i> , 2007, 471, 253-260.	0.4	3

#	ARTICLE	IF	CITATIONS
73	Surface Roughness of Organic Semiconductor Superlattice Using Pentacene as Semiconductor. Japanese Journal of Applied Physics, 2008, 47, 438-440.	0.8	3
74	Temperature dependence of carrier injection in small molecular organic light emitting device with a mixed single layer. Chemical Physics Letters, 2010, 501, 75-79.	1.2	3
75	Investigation of carrier injection mechanism in small molecular organic light emitting device with a mixed single organic layer. Applied Physics A: Materials Science and Processing, 2011, 102, 681-687.	1.1	3
76	Self-Aligned Organic Light-Emitting Diodes with Color Changing by Ink-Jet Printing Dots. Japanese Journal of Applied Physics, 2011, 50, 01BC09.	0.8	3
77	Temperature Dependence of Trap Density Distribution in Poly(3-hexylthiophene) and 1-(3-Methoxycarbonyl)-propyl-1-phenyl-(6,6)C61 Based Blending Films under Illumination. Japanese Journal of Applied Physics, 2012, 51, 021603.	0.8	3
78	Improvement of roll-off in power efficiency for mixed single layer organic light emitting devices by co-doping. Synthetic Metals, 2012, 162, 1204-1209.	2.1	3
79	Evaluation of uniformity for organic film evaporation using two dimensional different apertures. Vacuum, 2013, 92, 26-31.	1.6	3
80	Characteristics of electron injection at the oxide electrode/polyethylenimine ethoxylated/Alq <sub>3</sub> interface. Japanese Journal of Applied Physics, 2020, 59, SDDC03.	0.8	3
81	Transparent Organic Light-Emitting Diodes with Top Electrode Using Ion-Plating Method. IEICE Transactions on Electronics, 2015, E98.C, 1035-1038.	0.3	3
82	Solution-processed Small Organic Electrophosphorescent Devices with Arylamine Polymer Buffer Layer. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2006, 19, 177-180.	0.1	2
83	Solution-Processed Small Molecular Organic Light-Emitting Devices with a Mixed Single Layer. Japanese Journal of Applied Physics, 2011, 50, 01BC06.	0.8	2
84	Passivation Effect of Diamond-Like Carbon Films for Organic Light-Emitting Diodes. Japanese Journal of Applied Physics, 2011, 50, 062103.	0.8	2
85	Double-Faced Organic Light-Emitting Device Using Laminate Method. Japanese Journal of Applied Physics, 2011, 50, 01BC12.	0.8	2
86	Light-emitting Organic Solar Cells Based on Small Molecular Ir(ppy) <sub>3</sub> and Polymer P3HT: PCBM. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2012, 25, 277-280.	0.1	2
87	Correlation between contact angle and electrical properties in pentacene and C6-DNT-V-based organic thin film transistors. , 2016, , .		2
88	Double-Faced Organic Light-Emitting Device Using Laminate Method. Japanese Journal of Applied Physics, 2011, 50, 01BC12.	0.8	2
89	Passivation Effect of Diamond-Like Carbon Films for Organic Light-Emitting Diodes. Japanese Journal of Applied Physics, 2011, 50, 062103.	0.8	2
90	Synthesis and Carrier-transporting Properties of 5,10-Dihydro-5,5-dimethyl-10,10-diphenyl-1,9-diazasilanthrene. Chemistry Letters, 2005, 34, 1698-1699.	0.7	1

#	ARTICLE	IF	CITATIONS
91	Fully Self-Aligned Oxide-Semiconductor Field-Effect Transistors. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2009, 22, 507-510.	0.1	1
92	Front-Light Source Using Inverted Organic Light-Emitting Diodes with Microcathode Arrays. Japanese Journal of Applied Physics, 2010, 49, 04DK11.	0.8	1
93	Self-Alignment Organic Field-Effect Transistors with Silver Nanoparticle Electrodes. Japanese Journal of Applied Physics, 2013, 52, 091601.	0.8	1
94	Gate-bias and temperature dependence in pentacene-based organic thin film transistor with MoO <sub>3</sub> /Au contacts. , 2016, , .		1
95	Mixed single-layer and self-alignment technology of organic light-emitting diodes and multi-functional integration in organic devices. Japanese Journal of Applied Physics, 2020, 59, SO0802.	0.8	1
96	Carrier Mobilities in Amorphous Organic Semiconductor Films Prepared at Various Film Formation Processes. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100330.	0.8	1
97	Additive color mixing of semitransparent laminated tandem type polymer light-emitting diodes. Molecular Crystals and Liquid Crystals, 2021, 729, 78-84.	0.4	1
98	ITE Review 2015 Series (2); Research Trend on Information Display Technology. Kyokai Joho Imeji Zasshi/Journal of the Institute of Image Information and Television Engineers, 2015, 69, 234-247.	0.0	1
99	Color Control of Organic Electroluminescent Devices with Mixed Signal Layer.. Terebijon Gakkaishi (Journal of the Institute of Television Engineers of Japan), 1995, 49, 692-694.	0.0	1
100	Self-Aligned Organic Light-Emitting Diodes with Color Changing by Ink-Jet Printing Dots. Japanese Journal of Applied Physics, 2011, 50, 01BC09.	0.8	1
101	Blue/Green Selective Organic Photodiodes with Tandem Structure. IEICE Transactions on Electronics, 2017, E100.C, 118-121.	0.3	1
102	Fabrication of Cd-free ZnCuInS/ZnS based inverted quantum dot light-emitting diode: Considering substrate temperature effect on sputtered ZnO layer. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2021, 39, 063401.	0.6	1
103	Oscillation method for uniform formation of solution-processed organic films and its application to organic light-emitting devices. Proceedings of SPIE, 2007, , .	0.8	0
104	P&#162; Carrier Injection Mechanism in a Mixed Single Layer Organic Light Emitting Device. Digest of Technical Papers SID International Symposium, 2010, 41, 1856-1859.	0.1	0
105	Influence of Perylene Doping on Performance of Organic Solar Cells Based on P3HT:PCBM Blend. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2011, 24, 325-328.	0.1	0
106	Optimization and Evaluation of Temperature Dependences in Graded Organic Solar Cells with Copper Phthalocyanine/Fullerene System. IEICE Transactions on Electronics, 2013, E96.C, 1054-1060.	0.3	0
107	Paper No P21: Organic Thin-Film Transistors Using V-Shaped Organic Semiconductor With Various Interfacial Layers. Digest of Technical Papers SID International Symposium, 2015, 46, 88-88.	0.1	0
108	Fabrication of thienoacene-based Organic Thin-Film Transistors with various interfacial layers. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
109	Semi-transparent OLEDs fabrication using lamination process. , 2016, , .		0
110	Gate-bias and temperature dependence of charge transport in dinaphtho[2,3-b:2,3-d]thiophene thin-film transistors with MoO <sub>3</sub> /Au electrodes. Japanese Journal of Applied Physics, 2018, 57, 04FL07.	0.8	0
111	Patterned emission of organic light emitting diodes with laser irradiation. , 2019, , .		0
112	On-demand Patterning for Organic Light-emitting Diodes Using Laser Irradiation. Chemistry Letters, 2022, 51, 62-64.	0.7	0