Shuichi Nagamatsu

List of Publications by Year
in descending order

64	1,942	236925 25	254184 43
papers	citations	h-index	g-index

66	66	66	1907
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Backbone Arrangement in â€œFriction-Transferredâ€•Regioregular Poly(3-alkylthiophene)s. Macromolecules, 2003, 36, 5252-5257.	4.8	161
2	Solution-processed n-type organic thin-film transistors with high field-effect mobility. Applied Physics Letters, 2005, 87, 203504.	3.3	116
3	Recent advances in the orientation of conjugated polymers for organic field-effect transistors. Journal of Materials Chemistry C, 2019, 7, 13323-13351.	5.5	111
4	Formation of Single-Crystal-like Poly(9,9-dioctylfluorene) Thin Film by the Friction-Transfer Technique with Subsequent Thermal Treatments. Macromolecules, 2004, 37, 6926-6931.	4.8	109
5	Highly polarized polymer light-emitting diodes utilizing friction-transferred poly(9,9-dioctylfluorene) thin films. Applied Physics Letters, 2005, 87, 243503.	3.3	83
6	Regioregularity vs Regiorandomness: Effect on Photocarrier Transport in Poly(3-hexylthiophene). Japanese Journal of Applied Physics, 2000, 39, L94-L97.	1.5	82
7	Correlation of the Number of Thiophene Units with Structural Order and Carrier Mobility in Unsubstituted Even- and Odd-Numbered Î±-Oligothiophene Films. Journal of Physical Chemistry B, 2005, 109, 9374-9378.	2.6	68
8	Enhancement of Transport Characteristics in Poly(3-hexylthiophene) Films Deposited with Floating Film Transfer Method. Applied Physics Express, 2009, 2, 111502.	2.4	66
9	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
10	Polymer field-effect transistors by a drawing method. Applied Physics Letters, 2004, 84, 4608-4610.	3.3	59
11	Solvent driven performance in thin floating-films of PBTTT for organic field effect transistor: Role of macroscopic orientation. Organic Electronics, 2017, 43, 240-246.	2.6	56
12	Enhancement of carrier mobility along with anisotropic transport in non-regiocontrolled poly (3-hexylthiophene) films processed by floating film transfer method. Organic Electronics, 2016, 38, 115-120.	2.6	48
13	Photocarrier Mobility in Regioregular Poly(3-hexylthiophene) Studied by the Time of Flight Method. Japanese Journal of Applied Physics, 1999, 38, L1188-L1190.	1.5	45
14	Rapid Formation and Macroscopic Selfâ€Assembly of Liquidâ€Crystalline, Highâ€Mobility, Semiconducting Thienothiophene. Advanced Materials Interfaces, 2018, 5, 1700875.	3.7	41
15	Macroscopic self ordering of solution processible poly(3,3â€³â€²-dialkylquaterthiophene) by floating film transfer method. Journal of Applied Physics, 2013, 114, .	2.5	40
16	Anisotropic charge transport in highly oriented films of semiconducting polymer prepared by ribbon-shaped floating film. Applied Physics Letters, 2018, 112, .	3.3	40
17	Organic field-effect transistors by a wet-transferring method. Applied Physics Letters, 2003, 83, 1243-1245.	3.3	38
18	Influence of backbone structure on orientation of conjugated polymers in the dynamic casting of thin floating-films. Thin Solid Films, 2016, 619, 125-130.	1.8	35

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19	Mechanism of Photocarrier Generation and Transport in Poly(3-Alkylthiophene) Films. Japanese Journal of Applied Physics, 2000, 39, 6309-6315.	1.5	34
20	Crystal Structure of Friction-Transferred Poly(2,5-dioctyloxy-1,4-phenylenevinylene). Journal of Physical Chemistry B, 2007, 111, 4349-4354.	2.6	34
21	Controlling Factors for Orientation of Conjugated Polymer Films in Dynamic Floating-Film Transfer Method. Journal of Nanoscience and Nanotechnology, 2017, 17, 1915-1922.	0.9	34
22	Layer-by-layer coating of oriented conjugated polymer films towards anisotropic electronics. Synthetic Metals, 2017, 227, 29-36.	3.9	30
23	Facile fabrication of large area oriented conjugated polymer films by ribbon-shaped FTM and its implication on anisotropic charge transport. Organic Electronics, 2019, 65, 1-7.	2.6	30
24	Structure and Electrical Properties of Unsubstituted Oligothiophenes End-Capped at the Î²-Position. Chemistry of Materials, 2007, 19, 2694-2701.	6.7	28
25	Effects of molecular alignment on carrier transport in organic transistors. Synthetic Metals, 2003, 137, 923-924.	3.9	26
26	Ambipolar Transport in Bilayer Organic Field-Effect Transistor Based on Poly(3-hexylthiophene) and Fullerene Derivatives. Japanese Journal of Applied Physics, 2010, 49, 041601.	1.5	26
27	Long-Term Air-Stable n-Channel Organic Thin-Film Transistors Using 2,5-Difluoro-1,4-phenylene-bis{2-[4-(trifluoromethyl)phenyl]acrylonitrile}. ACS Applied Materials & Interfaces, 2014, 6, 3847-3852.	8.0	26
28	C60 thin-film transistors with low work-function metal electrodes. Applied Physics Letters, 2004, 85, 2396-2398.	3.3	25
29	Optical and Transport Anisotropy in Poly(9,9$'$-dioctyl-fluorene-alt-bithiophene) Films Prepared by Floating Film Transfer Method. Japanese Journal of Applied Physics, 2012, 51, 055802.	1.5	25
30	Investigation and Control of Charge Transport Anisotropy in Highly Oriented Friction-Transferred Polythiophene Thin Films. ACS Applied Materials & Interfaces, 2020, 12, 11876-11883.	8.0	25
31	Interplay of Orientation and Blending: Synergistic Enhancement of Field Effect Mobility in Thiophene-Based Conjugated Polymers. Journal of Physical Chemistry C, 2017, 121, 11184-11193.	3.1	24
32	Unipolarization of ambipolar organic field effect transistors toward high-impedance complementary metal-oxide-semiconductor circuits. Applied Physics Letters, 2007, 91, 071905.	3.3	20
33	Implication of Molecular Weight on Optical and Charge Transport Anisotropy in PQT-C12 Films Fabricated by Dynamic FTM. ACS Applied Materials & Interfaces, 2019, 11, 28088-28095.	8.0	20
34	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
35	Polarization sensitive photoelectic conversion by polymer/titania bilayer. Synthetic Metals, 2003, 137, 1425-1426.	3.9	19
36	Solution-processable Oligothiophene Derivatives with Branched Alkyl Chains and Their Thin-film Transistor Characteristics. Chemistry Letters, 2010, 39, 60-61.	1.3	18

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37	Electrophoretic deposition onto an insulator for thin film preparation toward electronic device fabrication. Applied Physics Letters, 2012, 101, .	3.3	17
38	P3HT-fiber-based field-effect transistor: Effects of nanostructure and annealing temperature. Japanese Journal of Applied Physics, 2014, 53, 021601.	1.5	17
39	Molecular orientation of poly(3-butylthiophene) friction-transferred films. Thin Solid Films, 2009, 518, 853-856.	1.8	16
40	Ordered arrangement of F4TCNQ anions in three-dimensionally oriented P3HT thin films. Scientific Reports, 2020, 10, 20020.	3.3	14
41	One-Step Deposition of Self-Oriented eta-Phase Polyfluorene Thin Films for Polarized Polymer Light-Emitting Diodes. Applied Physics Express, 2012, 5, 092101.	2.4	13
42	Fabrication of Large-scale Drop-cast Films of Ï€-conjugated Polymers with Floating-film Transfer Method. Transactions of the Materials Research Society of Japan, 2013, 38, 305-308.	0.2	13
43	A Steady Operation of n-Type Organic Thin-Film Transistors with Cyano-Substituted Distyrylbenzene Derivative. Applied Physics Express, 2009, 2, 101502.	2.4	12
44	Synthesis, characterization and air stable semiconductor properties of thiophene-condensed pyrene derivatives. Journal of Molecular Structure, 2017, 1127, 413-418.	3.6	11
45	Role of device architecture and AlOX interlayer in organic Schottky diodes and their interpretation by analytical modeling. Journal of Applied Physics, 2019, 126, .	2.5	11
46	Molecular orientation and anisotropic charge transport in the large area thin films of regioregular Poly(3-alkylthiophenes) fabricated by ribbon-shaped FTM. Organic Electronics, 2020, 81, 105687.	2.6	9
47	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
48	Robust Hole Transport in a Thienothiophene Derivative toward Low-cost Electronics. Chemistry Letters, 2010, 39, 1315-1316.	1.3	8
49	Bis(alkyl-thiophene) thienothiophene as hole-transport organic semiconductor. Physics Procedia, 2011, 14, 182-186.	1.2	8
50	LiF/Al bilayer source and drain electrodes for n-channel organic field-effect transistors. Synthetic Metals, 2003, 137, 953-954.	3.9	7
51	Side-Chain Effects on Friction-Transferred Polymer Orientation. Polymer Journal, 2007, 39, 1300-1305.	2.7	7
52	2D positional profiling of orientation and thickness uniformity in the semiconducting polymers thin films. Organic Electronics, 2019, 68, 221-229.	2.6	7
53	Molecular structures of n-type semiconducting material 2,5-difluoro-1,4-phenylene-3,3â€²-bis{2-[(4-trifluoromethyl)phenyl]acrylonitrile} and its photo dimerization product. Journal of Molecular Structure, 2016, 1118, 372-377.	3.6	6
54	Dynamics of Preaggregation and Film Formation of Donorâ€“Acceptor Ï€-Conjugated Polymers. , 2022, 4, 205-211.		6

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55	Solvent-Assisted Friction Transfer Method for Fabricating Large-Area Thin Films of Semiconducting Polymers with Edge-On Oriented Extended Backbones. ACS Applied Materials & Interfaces, 2020, 12, 55033-55043.	8.0	5
56	Oriented Thin Films of Insoluble Polythiophene Prepared by the Friction Transfer Technique. Polymers, 2021, 13, 2393.	4.5	4
57	Optical and Transport Anisotropy in Poly(9,9'-dioctyl-fluorene-alt-bithiophene) Films Prepared by Floating Film Transfer Method. Japanese Journal of Applied Physics, 2012, 51, 055802.	1.5	4
58	Multi-Layered Oriented Polyfluorene Films. Journal of Physical Chemistry B, 2009, 113, 5746-5751.	2.6	3
59	Comparative Study on Gate Insulators of Polymers and SiO₂in Transport Properties of p- and n-Type Organic Field-Effect Transistors. Japanese Journal of Applied Physics, 2010, 49, 01AB14.	1.5	3
60	P3HT Nanofibrils Thin-Film Transistors by Adsorbing Deposition in Suspension. Materials, 2019, 12, 3643.	2.9	3
61	Implications of doping and depletion on the switching characteristics in polymer-based organic field-effect transistors. Organic Electronics, 2018, 56, 152-158.	2.6	2
62	2D positional mapping of casting condition driven microstructural distribution in organic thin films. Japanese Journal of Applied Physics, 2020, 59, SCCA06.	1.5	2
63	Molecular Structure and Crystal Packing of n-Type Semiconducting Material 3â€²,3â€²-(1,4-Phenylene)bis{2â€²-(4â€²â€²-trifluoromethyl)phenyl}acrylonitrile. Journal of Crystallography, 2014, 2014, 1-5.	0.0	0
64	Investigation of Orientation in the Thin Films of Conjugated Polymer and NIR Dye Blends Fabricated by Friction Transfer Method. , 2021, , .		0