

Shuichi Nagamatsu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6788836/publications.pdf>

Version: 2024-02-01

64
papers

1,942
citations

236612

25
h-index

253896

43
g-index

66
all docs

66
docs citations

66
times ranked

1907
citing authors

#	ARTICLE	IF	CITATIONS
1	Backbone Arrangement in "Friction-Transferred" Regioregular Poly(3-alkylthiophene)s. <i>Macromolecules</i> , 2003, 36, 5252-5257.	2.2	161
2	Solution-processed n-type organic thin-film transistors with high field-effect mobility. <i>Applied Physics Letters</i> , 2005, 87, 203504.	1.5	116
3	Recent advances in the orientation of conjugated polymers for organic field-effect transistors. <i>Journal of Materials Chemistry C</i> , 2019, 7, 13323-13351.	2.7	111
4	Formation of Single-Crystal-like Poly(9,9-dioctylfluorene) Thin Film by the Friction-Transfer Technique with Subsequent Thermal Treatments. <i>Macromolecules</i> , 2004, 37, 6926-6931.	2.2	109
5	Highly polarized polymer light-emitting diodes utilizing friction-transferred poly(9,9-dioctylfluorene) thin films. <i>Applied Physics Letters</i> , 2005, 87, 243503.	1.5	83
6	Regioregularity vs Regiorandomness: Effect on Photocarrier Transport in Poly(3-hexylthiophene). <i>Japanese Journal of Applied Physics</i> , 2000, 39, L94-L97.	0.8	82
7	Correlation of the Number of Thiophene Units with Structural Order and Carrier Mobility in Unsubstituted Even- and Odd-Numbered $\hat{1}$ -Oligothiophene Films. <i>Journal of Physical Chemistry B</i> , 2005, 109, 9374-9378.	1.2	68
8	Enhancement of Transport Characteristics in Poly(3-hexylthiophene) Films Deposited with Floating Film Transfer Method. <i>Applied Physics Express</i> , 2009, 2, 111502.	1.1	66
9	Highly efficient polarized polymer light-emitting diodes utilizing oriented films of $\hat{1}$ -phase poly(9,9-dioctylfluorene). <i>Applied Physics Letters</i> , 2008, 93, .	1.5	65
10	Polymer field-effect transistors by a drawing method. <i>Applied Physics Letters</i> , 2004, 84, 4608-4610.	1.5	59
11	Solvent driven performance in thin floating-films of PBTTT for organic field effect transistor: Role of macroscopic orientation. <i>Organic Electronics</i> , 2017, 43, 240-246.	1.4	56
12	Enhancement of carrier mobility along with anisotropic transport in non-regiocontrolled poly(3-hexylthiophene) films processed by floating film transfer method. <i>Organic Electronics</i> , 2016, 38, 115-120.	1.4	48
13	Photocarrier Mobility in Regioregular Poly(3-hexylthiophene) Studied by the Time of Flight Method. <i>Japanese Journal of Applied Physics</i> , 1999, 38, L1188-L1190.	0.8	45
14	Rapid Formation and Macroscopic Self-Assembly of Liquid-Crystalline, High-Mobility, Semiconducting Thienothiophene. <i>Advanced Materials Interfaces</i> , 2018, 5, 1700875.	1.9	41
15	Macroscopic self ordering of solution processible poly(3,3'-dialkylquaterthiophene) by floating film transfer method. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	40
16	Anisotropic charge transport in highly oriented films of semiconducting polymer prepared by ribbon-shaped floating film. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	40
17	Organic field-effect transistors by a wet-transferring method. <i>Applied Physics Letters</i> , 2003, 83, 1243-1245.	1.5	38
18	Influence of backbone structure on orientation of conjugated polymers in the dynamic casting of thin floating-films. <i>Thin Solid Films</i> , 2016, 619, 125-130.	0.8	35

#	ARTICLE	IF	CITATIONS
19	Mechanism of Photocarrier Generation and Transport in Poly(3-Alkylthiophene) Films. Japanese Journal of Applied Physics, 2000, 39, 6309-6315.	0.8	34
20	Crystal Structure of Friction-Transferred Poly(2,5-dioctyloxy-1,4-phenylenevinylene). Journal of Physical Chemistry B, 2007, 111, 4349-4354.	1.2	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.	2.1	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.	1.4	30
24	Structure and Electrical Properties of Unsubstituted Oligothiophenes End-Capped at the $\hat{1}^2$ -Position. Chemistry of Materials, 2007, 19, 2694-2701.	3.2	28
25	Effects of molecular alignment on carrier transport in organic transistors. Synthetic Metals, 2003, 137, 923-924.	2.1	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.	0.8	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.	4.0	26
28	C60 thin-film transistors with low work-function metal electrodes. Applied Physics Letters, 2004, 85, 2396-2398.	1.5	25
29	Optical and Transport Anisotropy in Poly(9,9'-dioctyl-fluorene- <i>alt</i> -bithiophene) Films Prepared by Floating Film Transfer Method. Japanese Journal of Applied Physics, 2012, 51, 055802.	0.8	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.	4.0	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.	1.5	24
32	Unipolarization of ambipolar organic field effect transistors toward high-impedance complementary metal-oxide-semiconductor circuits. Applied Physics Letters, 2007, 91, 071905.	1.5	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.	4.0	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.	0.8	19
35	Polarization sensitive photoelectric conversion by polymer/titania bilayer. Synthetic Metals, 2003, 137, 1425-1426.	2.1	19
36	Solution-processable Oligothiophene Derivatives with Branched Alkyl Chains and Their Thin-film Transistor Characteristics. Chemistry Letters, 2010, 39, 60-61.	0.7	18

#	ARTICLE	IF	CITATIONS
37	Electrophoretic deposition onto an insulator for thin film preparation toward electronic device fabrication. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	17
38	P3HT-fiber-based field-effect transistor: Effects of nanostructure and annealing temperature. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 021601.	0.8	17
39	Molecular orientation of poly(3-butylthiophene) friction-transferred films. <i>Thin Solid Films</i> , 2009, 518, 853-856.	0.8	16
40	Ordered arrangement of F4TCNQ anions in three-dimensionally oriented P3HT thin films. <i>Scientific Reports</i> , 2020, 10, 20020.	1.6	14
41	One-Step Deposition of Self-Oriented β -Phase Polyfluorene Thin Films for Polarized Polymer Light-Emitting Diodes. <i>Applied Physics Express</i> , 2012, 5, 092101.	1.1	13
42	Fabrication of Large-scale Drop-cast Films of π -conjugated Polymers with Floating-film Transfer Method. <i>Transactions of the Materials Research Society of Japan</i> , 2013, 38, 305-308.	0.2	13
43	A Steady Operation of n-Type Organic Thin-Film Transistors with Cyano-Substituted Distyrylbenzene Derivative. <i>Applied Physics Express</i> , 2009, 2, 101502.	1.1	12
44	Synthesis, characterization and air stable semiconductor properties of thiophene-condensed pyrene derivatives. <i>Journal of Molecular Structure</i> , 2017, 1127, 413-418.	1.8	11
45	Role of device architecture and ALOX interlayer in organic Schottky diodes and their interpretation by analytical modeling. <i>Journal of Applied Physics</i> , 2019, 126, .	1.1	11
46	Molecular orientation and anisotropic charge transport in the large area thin films of regioregular Poly(3-alkylthiophenes) fabricated by ribbon-shaped FTM. <i>Organic Electronics</i> , 2020, 81, 105687.	1.4	9
47	Single-Crystal-like Structure of Poly(9,9-dioctylfluorene) Thin Films Evaluated by Synchrotron-Sourced Grazing-Incidence X-ray Diffraction. <i>Polymer Journal</i> , 2007, 39, 1306-1311.	1.3	8
48	Robust Hole Transport in a Thienothiophene Derivative toward Low-cost Electronics. <i>Chemistry Letters</i> , 2010, 39, 1315-1316.	0.7	8
49	Bis(alkyl-thiophene) thienothiophene as hole-transport organic semiconductor. <i>Physics Procedia</i> , 2011, 14, 182-186.	1.2	8
50	LiF/Al bilayer source and drain electrodes for n-channel organic field-effect transistors. <i>Synthetic Metals</i> , 2003, 137, 953-954.	2.1	7
51	Side-Chain Effects on Friction-Transferred Polymer Orientation. <i>Polymer Journal</i> , 2007, 39, 1300-1305.	1.3	7
52	2D positional profiling of orientation and thickness uniformity in the semiconducting polymers thin films. <i>Organic Electronics</i> , 2019, 68, 221-229.	1.4	7
53	Molecular structures of n-type semiconducting material 2,5-difluoro-1,4-phenylene-3,3'-bis{2-[(4-trifluoromethyl)phenyl]acrylonitrile} and its photo dimerization product. <i>Journal of Molecular Structure</i> , 2016, 1118, 372-377.	1.8	6
54	Dynamics of Preaggregation and Film Formation of Donor-Acceptor π -Conjugated Polymers. , 2022, 4, 205-211.		6

#	ARTICLE	IF	CITATIONS
55	Solvent-Assisted Friction Transfer Method for Fabricating Large-Area Thin Films of Semiconducting Polymers with Edge-On Oriented Extended Backbones. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 55033-55043.	4.0	5
56	Oriented Thin Films of Insoluble Polythiophene Prepared by the Friction Transfer Technique. <i>Polymers</i> , 2021, 13, 2393.	2.0	4
57	Optical and Transport Anisotropy in Poly(9,9'-dioctyl-fluorene- <i>alt</i> -bithiophene) Films Prepared by Floating Film Transfer Method. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 055802.	0.8	4
58	Multi-Layered Oriented Polyfluorene Films. <i>Journal of Physical Chemistry B</i> , 2009, 113, 5746-5751.	1.2	3
59	Comparative Study on Gate Insulators of Polymers and SiO ₂ in Transport Properties of p- and n-Type Organic Field-Effect Transistors. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 01AB14.	0.8	3
60	P3HT Nanofibrils Thin-Film Transistors by Adsorbing Deposition in Suspension. <i>Materials</i> , 2019, 12, 3643.	1.3	3
61	Implications of doping and depletion on the switching characteristics in polymer-based organic field-effect transistors. <i>Organic Electronics</i> , 2018, 56, 152-158.	1.4	2
62	2D positional mapping of casting condition driven microstructural distribution in organic thin films. <i>Japanese Journal of Applied Physics</i> , 2020, 59, SCCA06.	0.8	2
63	Molecular Structure and Crystal Packing of n-Type Semiconducting Material 3,3'-(1,4-Phenylene)bis{2-(4-trifluoromethyl)phenyl}acrylonitrile. <i>Journal of Crystallography</i> , 2014, 1-5.		0
64	Investigation of Orientation in the Thin Films of Conjugated Polymer and NIR Dye Blends Fabricated by Friction Transfer Method. , 2021, , .		0