Tsuyoshi Sekitani

List of Publications by Year
in descending order

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123 papers	18,031 citations	50244 46 h-index	38368 95 g-index
133 all docs	133 docs citations	133 times ranked	17092 citing authors

#	Article	IF	Citations
1	An ultra-lightweight design for imperceptible plastic electronics. Nature, 2013, 499, 458-463.	13.7	2,133
2	Stretchable active-matrix organic light-emitting diode display using printable elastic conductors. Nature Materials, 2009, 8, 494-499.	13.3	1,620
3	Ultrathin and lightweight organic solar cells with high flexibility. Nature Communications, 2012, 3, 770.	5.8	1,452
4	Conformable, flexible, large-area networks of pressure and thermal sensors with organic transistor active matrixes. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12321-12325.	3.3	1,283
5	A Rubberlike Stretchable Active Matrix Using Elastic Conductors. Science, 2008, 321, 1468-1472.	6.0	1,265
6	Flexible organic transistors and circuits with extreme bending stability. Nature Materials, 2010, 9, 1015-1022.	13.3	1,142
7	Organic Nonvolatile Memory Transistors for Flexible Sensor Arrays. Science, 2009, 326, 1516-1519.	6.0	888
8	Ultrathin, highly flexible and stretchable PLEDs. Nature Photonics, 2013, 7, 811-816.	15.6	832
9	Stretchable, Largeâ€area Organic Electronics. Advanced Materials, 2010, 22, 2228-2246.	11.1	692
10	A transparent bending-insensitive pressure sensor. Nature Nanotechnology, 2016, 11, 472-478.	15.6	680
11	Printable elastic conductors with a high conductivity for electronic textile applications. Nature Communications, 2015, 6, 7461.	5.8	677
12	Organic transistors manufactured using inkjet technology with subfemtoliter accuracy. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 4976-4980.	3.3	387
13	Ultraflexible, large-area, physiological temperature sensors for multipoint measurements. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14533-14538.	3.3	313
14	A large-area wireless power-transmission sheet using printed organic transistors and plastic MEMS switches. Nature Materials, 2007, 6, 413-417.	13.3	290
15	Flexible Lowâ€Voltage Organic Transistors and Circuits Based on a Highâ€Mobility Organic Semiconductor with Good Air Stability. Advanced Materials, 2010, 22, 982-985.	11.1	213
16	Pseudo-CMOS: A Design Style for Low-Cost and Robust Flexible Electronics. IEEE Transactions on Electron Devices, 2011, 58, 141-150.	1.6	213
17	Imperceptible magnetoelectronics. Nature Communications, 2015, 6, 6080.	5.8	184
18	Ultraflexible organic amplifier with biocompatible gel electrodes. Nature Communications, 2016, 7, 11425.	5.8	179

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19	Dinaphtho[2,3-b:2â€²,3â€²-f]thieno[3,2-b]thiophene (DNTT) thin-film transistors with improved performance and stability. Organic Electronics, 2011, 12, 1370-1375.	1.4	162
20	Ultraflexible organic field-effect transistors embedded at a neutral strain position. Applied Physics Letters, 2005, 87, 173502.	1.5	158
21	Organic-transistor-based flexible pressure sensors using ink-jet-printed electrodes and gate dielectric layers. Applied Physics Letters, 2006, 89, 253507.	1.5	145
22	An Imperceptible Plastic Electronic Wrap. Advanced Materials, 2015, 27, 34-40.	11.1	145
23	A 4 V Operation, Flexible Braille Display Using Organic Transistors, Carbon Nanotube Actuators, and Organic Static Randomâ€Access Memory. Advanced Functional Materials, 2011, 21, 4019-4027.	7.8	128
24	Facile fabrication of stretchable Ag nanowire/polyurethane electrodes using high intensity pulsed light. Nano Research, 2016, 9, 401-414.	5.8	128
25	Stretchable organic integrated circuits for large-area electronic skin surfaces. MRS Bulletin, 2012, 37, 236-245.	1.7	124
26	Cut-and-paste customization of organic FET integrated circuit and its application to electronic artificial skin. IEEE Journal of Solid-State Circuits, 2005, 40, 177-185.	3.5	120
27	A strain-absorbing design for tissueâ€“machine interfaces using a tunable adhesive gel. Nature Communications, 2014, 5, 5898.	5.8	120
28	Effects of the alkyl chain length in phosphonic acid self-assembled monolayer gate dielectrics on the performance and stability of low-voltage organic thin-film transistors. Applied Physics Letters, 2009, 95, .	1.5	117
29	An ultraflexible organic differential amplifier for recording electrocardiograms. Nature Electronics, 2019, 2, 351-360.	13.1	114
30	Flexible Lowâ€Voltage Organic Transistors with High Thermal Stability at 250 Â°C. Advanced Materials, 2013, 25, 3639-3644.	11.1	101
31	Imperceptible energy harvesting device and biomedical sensor based on ultraflexible ferroelectric transducers and organic diodes. Nature Communications, 2021, 12, 2399.	5.8	101
32	Flexible low-voltage organic thin-film transistors and circuits based on C₁₀-DNTT. Journal of Materials Chemistry, 2012, 22, 4273-4277.	6.7	99
33	Sheet-Type Flexible Organic Active Matrix Amplifier System Using Pseudo-CMOS Circuits With Floating-Gate Structure. IEEE Transactions on Electron Devices, 2012, 59, 3434-3441.	1.6	97
34	Human-friendly organic integrated circuits. Materials Today, 2011, 14, 398-407.	8.3	89
35	A few-layer molecular film on polymer substrates to enhance the performance of organic devices. Nature Nanotechnology, 2018, 13, 139-144.	15.6	84
36	Direct inkjet printing of silver electrodes on organic semiconductors for thin-film transistors with top contact geometry. Applied Physics Letters, 2008, 93, .	1.5	83

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37	Wireless Monitoring Using a Stretchable and Transparent Sensor Sheet Containing Metal Nanowires. Advanced Materials, 2020, 32, e1902684.	11.1	75
38	Insole Pedometer With Piezoelectric Energy Harvester and 2 V Organic Circuits. IEEE Journal of Solid-State Circuits, 2013, 48, 255-264.	3.5	74
39	An Organic FET SRAM With Back Gate to Increase Static Noise Margin and Its Application to Braille Sheet Display. IEEE Journal of Solid-State Circuits, 2007, 42, 93-100.	3.5	72
40	Imperceptible magnetic sensor matrix system integrated with organic driver and amplifier circuits. Science Advances, 2020, 6, eaay6094.	4.7	68
41	Organic Pseudo-CMOS Circuits for Low-Voltage Large-Gain High-Speed Operation. IEEE Electron Device Letters, 2011, 32, 1448-1450.	2.2	61
42	1 <formula formulatype="inline"><tex Notation="TeX">mu</tex></formula>m-Thickness Ultra-Flexible and High Electrode-Density Surface Electromyogram Measurement Sheet With 2 V Organic Transistors for Prosthetic Hand Control. IEEE Transactions on Biomedical Circuits and Systems, 2014, 8, 824-833.	2.7	60
43	Pentacene field-effect transistors on plastic films operating at high temperature above 100Â°C. Applied Physics Letters, 2004, 85, 3902-3904.	1.5	58
44	Control of threshold voltage in low-voltage organic complementary inverter circuits with floating gate structures. Applied Physics Letters, 2011, 98, .	1.5	56
45	Longâ€Term Implantable, Flexible, and Transparent Neural Interface Based on Ag/Au Coreâ€“Shell Nanowires. Advanced Healthcare Materials, 2019, 8, e1900130.	3.9	52
46	Thermal stability of organic thin-film transistors with self-assembled monolayer dielectrics. Applied Physics Letters, 2010, 96, 053302.	1.5	48
47	Reduction in operation voltage of complementary organic thin-film transistor inverter circuits using double-gate structures. Applied Physics Letters, 2007, 90, 093504.	1.5	46
48	CoFeB/MgO-based magnetic tunnel junction directly formed on a flexible substrate. Applied Physics Express, 2019, 12, 053001.	1.1	36
49	User Customizable Logic Paper (UCLP) With Sea-Of Transmission-Gates (SOTG) of 2-V Organic CMOS and Ink-Jet Printed Interconnects. IEEE Journal of Solid-State Circuits, 2011, 46, 285-292.	3.5	34
50	Low-voltage organic transistor with subfemtoliter inkjet source-drain contacts. MRS Communications, 2011, 1, 3-6.	0.8	32
51	Stretchable and transparent electrodes based on patterned silver nanowires by laser-induced forward transfer for non-contacted printing techniques. Nanotechnology, 2016, 27, 45LT02.	1.3	32
52	Printed shadow masks for organic transistors. Applied Physics Letters, 2007, 91, 133502.	1.5	31
53	Ambient Electronics. Japanese Journal of Applied Physics, 2012, 51, 100001.	0.8	31
54	Ultraflexible and ultrathin polymeric gate insulator for 2 V organic transistor circuits. Applied Physics Express, 2016, 9, 061602.	1.1	29

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55	Hall effect measurements using polycrystalline pentacene field-effect transistors on plastic films. Applied Physics Letters, 2006, 88, 253508.	1.5	28
56	Low operation voltage of inkjet-printed plastic sheet-type micromechanical switches. Applied Physics Letters, 2008, 92, .	1.5	27
57	Stretchable EMI Measurement Sheet With 8 $imes$ 8 Coil Array, 2 V Organic CMOS Decoder, and 0.18$ mu$m Silicon CMOS LSIs for Electric and Magnetic Field Detection. IEEE Journal of Solid-State Circuits, 2010, 45, 249-259.	3.5	27
58	A large-area flexible wireless power transmission sheet using printed plastic MEMS switches and organic field-effect transistors. , 2006, , .		25
59	A 100-V AC Energy Meter Integrating 20-V Organic CMOS Digital and Analog Circuits With a Floating Gate for Process Variation Compensation and a 100-V Organic pMOS Rectifier. IEEE Journal of Solid-State Circuits, 2012, 47, 301-309.	3.5	21
60	Highly-ordered Triptycene Modifier Layer Based on Blade Coating for Ultraflexible Organic Transistors. Scientific Reports, 2019, 9, 9200.	1.6	20
61	Printable Transparent Microelectrodes toward Mechanically and Visually Imperceptible Electronics. Advanced Intelligent Systems, 2020, 2, 2000093.	3.3	20
62	Flexible neural interfaces for brain implantsâ€"the pursuit of thinness and high density. Flexible and Printed Electronics, 2020, 5, 043002.	1.5	20
63	Stretchable broadband photo-sensor sheets for nonsampling, source-free, and label-free chemical monitoring by simple deformable wrapping. Science Advances, 2022, 8, eabm4349.	4.7	19
64	High performance foldable polymer thin film transistors with a side gate architecture. Journal of Materials Chemistry, 2011, 21, 18804.	6.7	18
65	Mobility enhancement of DNTT and BTBT derivative organic thin-film transistors by triptycene molecule modification. Organic Electronics, 2021, 96, 106219.	1.4	18
66	A field-cycle-induced high-dielectric phase in ferroelectric copolymer. Journal of Applied Physics, 2010, 107, 114506.	1.1	17
67	Ultra-flexible short-channel organic field-effect transistors. Applied Physics Express, 2015, 8, 091601.	1.1	17
68	Ambient Electronics. Japanese Journal of Applied Physics, 2012, 51, 100001.	0.8	16
69	Fine printing method of silver nanowire electrodes with alignment and accumulation. Nanotechnology, 2019, 30, 37LT03.	1.3	15
70	Flexible CoFeB/MgO-based magnetic tunnel junctions annealed at high temperature (â‰¥350â€‰Â°C). Applied Physics Letters, 2019, 115, .	1.5	15
71	A 3-D-Stack Organic Sheet-Type Scanner with Double-Wordline and Double-Bitline Structure. IEEE Sensors Journal, 2006, 6, 1209-1217.	2.4	13
72	A large-area, flexible, and lightweight sheet image scanner integrated with organic field-effect transistors and organic photodiodes. , 0, , .		12

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73	Temperature dependence of Hall effects in organic thin-film transistors on plastic films. Applied Physics Letters, 2007, 90, 133516.	1.5	12
74	Plastic complementary microelectromechanical switches. Applied Physics Letters, 2008, 93, .	1.5	12
75	Bionic skins using flexible organic devices. , 2014, , .		12
76	A flexible, lightweight braille sheet display with plastic actuators driven by an organic field-effect transistor active matrix. , 0, , .		11
77	Study of Organic Thin-Film Transistors Under Electrostatic Discharge Stresses. IEEE Electron Device Letters, 2011, 32, 967-969.	2.2	11
78	Heterogeneous Functional Dielectric Patterns for Chargeâ€Carrier Modulation in Ultraflexible Organic Integrated Circuits. Advanced Materials, 2021, 33, e2104446.	11.1	10
79	Printed Organic Transistors for Large-Area Electronics. , 2007, , .		9
80	Pseudo-CMOS: A novel design style for flexible electronics. , 2010, , .		9
81	Ultralow-Noise Organic Transistors Based on Polymeric Gate Dielectrics with Self-Assembled Modifiers. ACS Applied Materials & Interfaces, 2019, 11, 41561-41569.	4.0	9
82	13.2: A Floating-Gate OTFT-Driven AMOLED Pixel Circuit for Variation and Degradation Compensation in Large-Sized Flexible Displays. Digest of Technical Papers SID International Symposium, 2011, 42, 149-152.	0.1	8
83	11.2: Invited Paper: Imperceptible Electronic Skin. Digest of Technical Papers SID International Symposium, 2014, 45, 122-125.	0.1	8
84	Large-area Electronics Based on Organic Transistors. , 2006, , .		7
85	A large-area, flexible, ultrasonic imaging system with a printed organic transistor active matrix. , 2008, , .		7
86	Spatial control of the threshold voltage of low-voltage organic transistors by microcontact printing of alkyl- and f luoroalkyl-phosphonic acids. MRS Communications, 2011, 1, 33-36.	0.8	7
87	Effect of macroscale mesh design of metal nanowire networks on the conductive properties for stretchable electrodes. Applied Physics Letters, 2021, 118, .	1.5	7
88	Flexible, large-area sensors and actuators with organic transistor integrated circuits. , 0, , .		6
89	Communication sheets using printed organic nonvolatile memories. , 2007, , .		6
90	Alternating current admittance of DNTT-based metal-insulator-semiconductor capacitors. Journal of Applied Physics, 2014, 115, 093702.	1.1	6

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91	Low Power and Flexible Braille Sheet Display with Organic FET's and Plastic Actuators. , 2006, , .		4
92	A 107-pJ/bit 100-kb/s 0.18-<formula formulatype="inline"> <tex Notation="TeX">$muhbox{m}$</tex></formula> Capacitive-Coupling Transceiver With Data Edge Signaling and DC Power-Free Pulse Detector for Printable Communication Sheet. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 2511-2518.	3.5	4
93	Organic Transistor Integerated Circuits for Large-Area Sensors. Molecular Crystals and Liquid Crystals, 2006, 444, 13-22.	0.4	3
94	Electrical Characteristics of Pentacene Thin Film Transistors in Volatile Compound Vapors. Molecular Crystals and Liquid Crystals, 2006, 462, 29-36.	0.4	3
95	A flexible EMI measurement sheet to measure electric and magnetic fields separately with distributed antennas and LSI's. , 2009, , .		3
96	Simultaneous characterization of mechanical and electrical performances of ultraflexible and stretchable organic integrated circuits. , 2012, , .		3
97	Low-Temperature printable and stretchable circuit board and its application to flexible hybrid electronics. , 2021, , .		3
98	Sheet-type organic active matrix amplifier system using V<inf>th</inf>-tunable, pseudo-CMOS circuits with floating-gate structure. , 2011, , .		2
99	Ultraflexible organic devices for biomedical applications. , 2013, , .		2
100	Breakthroughs in Photonics 2012: Large-Area Ultrathin Photonics. IEEE Photonics Journal, 2013, 5, 0700805-0700805.	1.0	2
101	Antithrombotic Protein Filter Composed of Hybrid Tissue-Fabric Material has a Long Lifetime. Annals of Biomedical Engineering, 2017, 45, 1352-1364.	1.3	2
102	Organic field-effect transistors with bending radius down to 1 mm. Materials Research Society Symposia Proceedings, 2004, 814, 231.	0.1	1
103	Pocket scanner using organic transistors and detectors. , 2005, , .		1
104	Recent advances in applications of organic integrated circuits for large-area electronics. , 2005, , .		1
105	Stretchable, printable organic transistor integrated circuits for large-area sensors and displays. , 2008, , .		1
106	22.1: Invited Paper: Stretchable and Foldable Displays using Organic Transistors with High Mechanical Stability. Digest of Technical Papers SID International Symposium, 2011, 42, 276-279.	0.1	1
107	Stretchable Electronics. Nippon Gomu Kyokaishi, 2012, 85, 101-106.	0.0	1
108	32.3: Invited Paper: Largeâ€Area, Ultraflexible Organic AMLED Pixel Circuits Driven by Printed Organic Floatingâ€Gate Transistors. Digest of Technical Papers SID International Symposium, 2012, 43, 426-429.	0.1	1

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109	Silver Nanowire-Based Stretchable and Transparent Electrodes. Journal of Japan Institute of Electronics Packaging, 2016, 19, 228-233.	0.0	1
110	Non-contact Laser Printing of Ag Nanowire-based Electrode with Photodegradable Polymers. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2019, 32, 429-434.	0.1	1
111	A photocurable bioelectronicsâ€“tissue interface. Nature Materials, 2021, 20, 1460-1461.	13.3	1
112	High-Temperature Operation of Pentacene Field-Effect Transistors with Polyimide Gate Insulators. Materials Research Society Symposia Proceedings, 2005, 871, 1.	0.1	0
113	Low Power and Flexible Braille Sheet Display with Organic FET's and Plastic Actuators. , 0, , .		0
114	Design for Mixed Circuits of Organic FETs and Plastic MEMS Switches for Wireless Power Transmission Sheet. , 2007, , .		0
115	Investigation of organic thin-film transistors for electrostatic discharge applications. , 2011, , .		0
116	Electrical and mechanical characterizations of a large-area, printed organic transistor active matrix with floating-gate-based nonuniformity compensator. , 2013, , .		0
117	Ultraflexible organic transistor active matrix using self-assembled monolayer gate dielectrics. , 2014, , .		0
118	Study of Randomly Distributed Charge Traps by Measuring Frequency- and Time-Dependence of a DNTT-Based MIS Capacitor. Journal of Display Technology, 2015, 11, 604-609.	1.3	0
119	Noise Evaluation System for Biosignal Sensors Using Pseudo-Skin and Helmholtz Coil. , 2019, , .		0
120	57â€4: Invited Paper: Imperceptible Electronics for Digital Transformation. Digest of Technical Papers SID International Symposium, 2021, 52, 810-813.	0.1	0
121	Frequency Characteristics of Ultrathin and Transparent Organic Electrochemical Transistors with 1-Âµm-Thick Parylene Lamination. , 2021, , .		0
122	Heterogeneous Functional Dielectric Patterns for Chargeâ€Carrier Modulation in Ultraflexible Organic Integrated Circuits (Adv. Mater. 45/2021). Advanced Materials, 2021, 33, 2170358.	11.1	0
123	Stretchable Printed Circuit Board for Wireless Light-Sensing System. , 2022, , .		0