Naoji Matsuhisa

List of Publications by Year
in descending order

54 papers	8,954 citations	117625 34 h-index	197818 49 g-index
55 all docs	55 docs citations	55 times ranked	9619 citing authors

#	Article	IF	Citations
1	Inflammation-free, gas-permeable, lightweight, stretchable on-skin electronics with nanomeshes. Nature Nanotechnology, 2017, 12, 907-913.	31.5	820
2	Ultraflexible organic photonic skin. Science Advances, 2016, 2, e1501856.	10.3	788
3	An integrated self-healable electronic skin system fabricated via dynamic reconstruction of a nanostructured conducting network. Nature Nanotechnology, 2018, 13, 1057-1065.	31.5	736
4	Printable elastic conductors with a high conductivity for electronic textile applications. Nature Communications, 2015, 6, 7461.	12.8	677
5	Printable elastic conductors by in situ formation of silver nanoparticles from silver flakes. Nature Materials, 2017, 16, 834-840.	27.5	578
6	A wireless body area sensor network based on stretchable passive tags. Nature Electronics, 2019, 2, 361-368.	26.0	421
7	Materials and structural designs of stretchable conductors. Chemical Society Reviews, 2019, 48, 2946-2966.	38.1	367
8	Auxetic Mechanical Metamaterials to Enhance Sensitivity of Stretchable Strain Sensors. Advanced Materials, 2018, 30, e1706589.	21.0	349
9	Artificial multimodal receptors based on ion relaxation dynamics. Science, 2020, 370, 961-965.	12.6	343
10	An Artificial Sensory Neuron with Tactile Perceptual Learning. Advanced Materials, 2018, 30, e1801291.	21.0	309
11	Rational Design of Capacitive Pressure Sensors Based on Pyramidal Microstructures for Specialized Monitoring of Biosignals. Advanced Functional Materials, 2020, 30, 1903100.	14.9	265
12	Decoupling of mechanical properties and ionic conductivity in supramolecular lithium ion conductors. Nature Communications, 2019, 10, 5384.	12.8	249
13	Plasticizing Silk Protein for Onâ€Skin Stretchable Electrodes. Advanced Materials, 2018, 30, e1800129.	21.0	230
14	Enhancing the Performance of Stretchable Conductors for Eâ€Textiles by Controlled Ink Permeation. Advanced Materials, 2017, 29, 1605848.	21.0	223
15	A Highly Sensitive Capacitive-type Strain Sensor Using Wrinkled Ultrathin Gold Films. Nano Letters, 2018, 18, 5610-5617.	9.1	212
16	Transparent, conformable, active multielectrode array using organic electrochemical transistors. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10554-10559.	7.1	201
17	Ultraflexible Nearâ€Infrared Organic Photodetectors for Conformal Photoplethysmogram Sensors. Advanced Materials, 2018, 30, e1802359.	21.0	171
18	Strain-insensitive intrinsically stretchable transistors and circuits. Nature Electronics, 2021, 4, 143-150.	26.0	170

#	Article	IF	Citations
19	High-brightness all-polymer stretchable LED with charge-trapping dilution. Nature, 2022, 603, 624-630.	27.8	170
20	An artificial sensory neuron with visual-haptic fusion. Nature Communications, 2020, 11, 4602.	12.8	166
21	High-frequency and intrinsically stretchable polymer diodes. Nature, 2021, 600, 246-252.	27.8	138
22	Integration of Organic Electrochemical and Fieldâ€Effect Transistors for Ultraflexible, High Temporal Resolution Electrophysiology Arrays. Advanced Materials, 2016, 28, 9722-9728.	21.0	131
23	300â€nm Imperceptible, Ultraflexible, and Biocompatible eâ€Skin Fit with Tactile Sensors and Organic Transistors. Advanced Electronic Materials, 2016, 2, 1500452.	5.1	120
24	All-nanofiberâ€“based, ultrasensitive, gas-permeable mechanoacoustic sensors for continuous long-term heart monitoring. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7063-7070.	7.1	110
25	Highly Durable Nanofiber-Reinforced Elastic Conductors for Skin-Tight Electronic Textiles. ACS Nano, 2019, 13, 7905-7912.	14.6	103
26	Conjugated Carbon Cyclic Nanorings as Additives for Intrinsically Stretchable Semiconducting Polymers. Advanced Materials, 2019, 31, e1903912.	21.0	99
27	A design strategy for high mobility stretchable polymer semiconductors. Nature Communications, 2021, 12, 3572.	12.8	94
28	A bioinspired stretchable membrane-based compliance sensor. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11314-11320.	7.1	90
29	An on-demand plant-based actuator created using conformable electrodes. Nature Electronics, 2021, 4, 134-142.	26.0	81
30	Dual-gate organic phototransistor with high-gain and linear photoresponse. Nature Communications, 2018, 9, 4546.	12.8	76
31	Highâ€Transconductance Stretchable Transistors Achieved by Controlled Gold Microcrack Morphology. Advanced Electronic Materials, 2019, 5, 1900347.	5.1	70
32	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.	4.0	60
33	Locally coupled electromechanical interfaces based on cytoadhesion-inspired hybrids to identify muscular excitation-contraction signatures. Nature Communications, 2020, 11, 2183.	12.8	47
34	Modular and Reconfigurable Stretchable Electronic Systems. Advanced Materials Technologies, 2019, 4, 1800417.	5.8	42
35	Low operating voltage organic transistors and circuits with anodic titanium oxide and phosphonic acid self-assembled monolayer dielectrics. Organic Electronics, 2017, 40, 58-64.	2.6	36
36	Vacuum Ultraviolet Treatment of Selfâ€Assembled Monolayers: A Tool for Understanding Growth and Tuning Charge Transport in Organic Fieldâ€Effect Transistors. Advanced Materials, 2016, 28, 2049-2054.	21.0	35

#	Article	IF	Citations
37	Metalâ€"Ligand Based Mechanophores Enhance Both Mechanical Robustness and Electronic Performance of Polymer Semiconductors. Advanced Functional Materials, 2021, 31, 2009201.	14.9	30
38	Ultraflexible Transparent Oxide/Metal/Oxide Stack Electrode with Low Sheet Resistance for Electrophysiological Measurements. ACS Applied Materials & Interfaces, 2017, 9, 34744-34750.	8.0	27
39	A Carbon Flower Based Flexible Pressure Sensor Made from Largeâ€Area Coating. Advanced Materials Interfaces, 2020, 7, 2000875.	3.7	23
40	A Monolithically Processed Rectifying Pixel for Highâ€Resolution Organic Imagers. Advanced Electronic Materials, 2018, 4, 1700601.	5.1	22
41	Lowâ€Power Monolithically Stacked Organic Photodiodeâ€Blocking Diode Imager by Turnâ€On Voltage Engineering. Advanced Electronic Materials, 2018, 4, 1800311.	5.1	18
42	A Mechanically Durable and Flexible Organic Rectifying Diode with a Polyethylenimine Ethoxylated Cathode. Advanced Electronic Materials, 2016, 2, 1600259.	5.1	15
43	Emerging polymer electrets for transistor-structured memory devices and artificial synapses. Journal of Materials Chemistry C, 2022, 10, 13372-13394.	5.5	15
44	High Sensitivity Tuning of Work Function of Self-Assembled Monolayers Modified Electrodes Using Vacuum Ultraviolet Treatment. ACS Applied Materials & Interfaces, 2017, 9, 28151-28156.	8.0	7
45	Photocurrent Amplification in Bulk Heterojunction Organic Phototransistors with Different Donorâ€"Acceptor Ratio. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700400.	2.4	6
46	Basic characteristics of implantable flexible pressure sensor for wireless readout using MRI. , 2014, 2014, 2338-41.		2
47	Ultrathin, short channel, thermally-stable organic transistors for neural interface systems. , 2014, , .		2
48	An MRI-readable wireless flexible pressure sensor. , 2015, 2015, 3173-6.		2
49	Field-Effect Transistors: Integration of Organic Electrochemical and Field-Effect Transistors for Ultraflexible, High Temporal Resolution Electrophysiology Arrays (Adv. Mater. 44/2016). Advanced Materials, 2016, 28, 9869-9869.	21.0	2
50	Enhancement of Closed-Loop Gain of Organic Amplifiers Using Double Gate Structures. IEEE Electron Device Letters, 2016, , 1-1.	3.9	1
51	Sensors: A Monolithically Processed Rectifying Pixel for Highâ€Resolution Organic Imagers (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlock	5.1	1
52	Liquid Crystals: A Mechanically Durable and Flexible Organic Rectifying Diode with a Polyethylenimine Ethoxylated Cathode (Adv. Electron. Mater. 10/2016). Advanced Electronic Materials, 2016, 2, .	5.1	0
53	Skin-like sensor systems by intrinsically stretchable electronic materials. , 2021, , .		0
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