# Naoji Matsuhisa

List of Publications by Year
in descending order



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|---|---|---|---|
| 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 | High-brightness all-polymer stretchable LED with charge-trapping dilution. Nature, 2022, 603, 624-630. | 27.8 | 170 |
| 2 | Emerging polymer electrets for transistor-structured memory devices and artificial synapses. Journal of Materials Chemistry C, 2022, 10, 13372-13394. | 5.5 | 15 |
| 3 | Strain-insensitive intrinsically stretchable transistors and circuits. Nature Electronics, 2021, 4, 143-150. | 26.0 | 170 |
| 4 | A design strategy for high mobility stretchable polymer semiconductors. Nature Communications, 2021, 12, 3572. | 12.8 | 94 |
| 5 | Skin-like sensor systems by intrinsically stretchable electronic materials. , 2021, , . | | 0 |
| 6 | An on-demand plant-based actuator created using conformable electrodes. Nature Electronics, 2021, 4, 134-142. | 26.0 | 81 |
| 7 | Metalâ€“Ligand Based Mechanophores Enhance Both Mechanical Robustness and Electronic Performance of Polymer Semiconductors. Advanced Functional Materials, 2021, 31, 2009201. | 14.9 | 30 |
| 8 | High-frequency and intrinsically stretchable polymer diodes. Nature, 2021, 600, 246-252. | 27.8 | 138 |
| 9 | Rational Design of Capacitive Pressure Sensors Based on Pyramidal Microstructures for Specialized Monitoring of Biosignals. Advanced Functional Materials, 2020, 30, 1903100. | 14.9 | 265 |
| 10 | Artificial multimodal receptors based on ion relaxation dynamics. Science, 2020, 370, 961-965. | 12.6 | 343 |
| 11 | A Carbon Flower Based Flexible Pressure Sensor Made from Largeâ€Area Coating. Advanced Materials Interfaces, 2020, 7, 2000875. | 3.7 | 23 |
| 12 | An artificial sensory neuron with visual-haptic fusion. Nature Communications, 2020, 11, 4602. | 12.8 | 166 |
| 13 | Locally coupled electromechanical interfaces based on cytoadhesion-inspired hybrids to identify muscular excitation-contraction signatures. Nature Communications, 2020, 11, 2183. | 12.8 | 47 |
| 14 | 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 |
| 15 | 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 |
| 16 | A wireless body area sensor network based on stretchable passive tags. Nature Electronics, 2019, 2, 361-368. | 26.0 | 421 |
| 17 | Highâ€Transconductance Stretchable Transistors Achieved by Controlled Gold Microcrack Morphology. Advanced Electronic Materials, 2019, 5, 1900347. | 5.1 | 70 |
| 18 | Conjugated Carbon Cyclic Nanorings as Additives for Intrinsically Stretchable Semiconducting Polymers. Advanced Materials, 2019, 31, e1903912. | 21.0 | 99 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Highly Durable Nanofiber-Reinforced Elastic Conductors for Skin-Tight Electronic Textiles. ACS Nano, 2019, 13, 7905-7912. | 14.6 | 103 |
| 20 | Materials and structural designs of stretchable conductors. Chemical Society Reviews, 2019, 48, 2946-2966. | 38.1 | 367 |
| 21 | Decoupling of mechanical properties and ionic conductivity in supramolecular lithium ion conductors. Nature Communications, 2019, 10, 5384. | 12.8 | 249 |
| 22 | Modular and Reconfigurable Stretchable Electronic Systems. Advanced Materials Technologies, 2019, 4, 1800417. | 5.8 | 42 |
| 23 | Photocurrent Amplification in Bulk Heterojunction Organic Phototransistors with Different Donorâ€“Acceptor Ratio. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700400. | 2.4 | 6 |
| 24 | Plasticizing Silk Protein for Onâ€Skin Stretchable Electrodes. Advanced Materials, 2018, 30, e1800129. | 21.0 | 230 |
| 25 | A Monolithically Processed Rectifying Pixel for Highâ€Resolution Organic Imagers. Advanced Electronic Materials, 2018, 4, 1700601. | 5.1 | 22 |
| 26 | Auxetic Mechanical Metamaterials to Enhance Sensitivity of Stretchable Strain Sensors. Advanced Materials, 2018, 30, e1706589. | 21.0 | 349 |
| 27 | Dual-gate organic phototransistor with high-gain and linear photoresponse. Nature Communications, 2018, 9, 4546. | 12.8 | 76 |
| 28 | A Highly Sensitive Capacitive-type Strain Sensor Using Wrinkled Ultrathin Gold Films. Nano Letters, 2018, 18, 5610-5617. | 9.1 | 212 |
| 29 | Lowâ€Power Monolithically Stacked Organic Photodiodeâ€Blocking Diode Imager by Turnâ€On Voltage Engineering. Advanced Electronic Materials, 2018, 4, 1800311. | 5.1 | 18 |
| 30 | Ultraflexible Nearâ€Infrared Organic Photodetectors for Conformal Photoplethysmogram Sensors. Advanced Materials, 2018, 30, e1802359. | 21.0 | 171 |
| 31 | 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 |
| 32 | An Artificial Sensory Neuron with Tactile Perceptual Learning. Advanced Materials, 2018, 30, e1801291. | 21.0 | 309 |
| 33 | Sensors: A Monolithically Processed Rectifying Pixel for Highâ€Resolution Organic Imagers (Adv.) Tj ETQq1 1 0.784314 rgBT /Overloc | 5.1 | 1 |
| 34 | Printable elastic conductors by in situ formation of silver nanoparticles from silver flakes. Nature Materials, 2017, 16, 834-840. | 27.5 | 578 |
| 35 | Enhancing the Performance of Stretchable Conductors for Eâ€Textiles by Controlled Ink Permeation. Advanced Materials, 2017, 29, 1605848. | 21.0 | 223 |
| 36 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | 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 |
| 38 | Inflammation-free, gas-permeable, lightweight, stretchable on-skin electronics with nanomeshes. Nature Nanotechnology, 2017, 12, 907-913. | 31.5 | 820 |
| 39 | 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 |
| 40 | 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 |
| 41 | Enhancement of Closed-Loop Gain of Organic Amplifiers Using Double Gate Structures. IEEE Electron Device Letters, 2016, , 1-1. | 3.9 | 1 |
| 42 | A Mechanically Durable and Flexible Organic Rectifying Diode with a Polyethylenimine Ethoxylated Cathode. Advanced Electronic Materials, 2016, 2, 1600259. | 5.1 | 15 |
| 43 | Integration of Organic Electrochemical and Fieldâ€Effect Transistors for Ultraflexible, High Temporal Resolution Electrophysiology Arrays. Advanced Materials, 2016, 28, 9722-9728. | 21.0 | 131 |
| 44 | 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 |
| 45 | Ultraflexible organic photonic skin. Science Advances, 2016, 2, e1501856. | 10.3 | 788 |
| 46 | 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 |
| 47 | 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 |
| 48 | 300â€•nm Imperceptible, Ultraflexible, and Biocompatible eâ€Skin Fit with Tactile Sensors and Organic Transistors. Advanced Electronic Materials, 2016, 2, 1500452. | 5.1 | 120 |
| 49 | 2ï¼Žã,¦ãƒ«ãƒˆãƒ©ãƒ•ãƒ¬ã,·ãƒ–ãƒ«ãƒ»ã,¹ãƒˆãƒ¬ãƒƒãƒãƒ£ãƒ–ãƒ«ã,»ãƒ³ã,µãƒ¼. Electrochemistry, 2016, 84, 164-168. | 1.4 | 0 |
| 50 | An MRI-readable wireless flexible pressure sensor. , 2015, 2015, 3173-6. | | 2 |
| 51 | Printable elastic conductors with a high conductivity for electronic textile applications. Nature Communications, 2015, 6, 7461. | 12.8 | 677 |
| 52 | Basic characteristics of implantable flexible pressure sensor for wireless readout using MRI. , 2014, 2014, 2338-41. | | 2 |
| 53 | Ultrathin, short channel, thermally-stable organic transistors for neural interface systems. , 2014, , . | | 2 |
| 54 | 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 |