Hao Wu

List of Publications by Year
in descending order

41 papers	2,532 citations	236925 25 h-index	302126 39 g-index
41 all docs	41 docs citations	41 times ranked	2638 citing authors

#	Article	IF	Citations
1	Onâ€Skin Stimulation Devices for Haptic Feedback and Humanâ€"Machine Interfaces. Advanced Materials Technologies, 2022, 7, 2100452.	5.8	7
2	Flexible Hybrid Integration Enabled xsOn-Skin Electronics for Wireless Monitoring of Electrophysiology and Motion. IEEE Transactions on Biomedical Engineering, 2022, 69, 1340-1348.	4.2	6
3	Flexible Mechanical Metamaterials Enabled Electronic Skin for Realâ€Time Detection of Unstable Grasping in Robotic Manipulation. Advanced Functional Materials, 2022, 32, .	14.9	48
4	Bioinspired Perspirationâ€Wicking Electronic Skins for Comfortable and Reliable Multimodal Health Monitoring. Advanced Functional Materials, 2022, 32, .	14.9	39
5	Wearable triboelectric devices for haptic perception and VR/AR applications. Nano Energy, 2022, 96, 107112.	16.0	39
6	Adhesive and Hydrophobic Bilayer Hydrogel Enabled Onâ€Skin Biosensors for Highâ€Fidelity Classification of Human Emotion. Advanced Functional Materials, 2022, 32, .	14.9	58
7	Fully nano/micro-fibrous triboelectric on-skin patch with high breathability and hydrophobicity for physiological status monitoring. Nano Energy, 2022, 98, 107311.	16.0	20
8	Minimally-invasive and non-invasive flexible devices for robust characterizations of deep tissues. Scientia Sinica Chimica, 2022, , .	0.4	0
9	Materials, Devices, and Systems of Onâ€Skin Electrodes for Electrophysiological Monitoring and Humanâ€"Machine Interfaces. Advanced Science, 2021, 8, 2001938.	11.2	168
10	Structural Engineering for Highâ€Performance Flexible and Stretchable Strain Sensors. Advanced Intelligent Systems, 2021, 3, 2000194.	6.1	22
11	High-Fidelity Recording of EMG Signals by Multichannel On-Skin Electrode Arrays from Target Muscles for Effective Humanâ€"Machine Interfaces. ACS Applied Electronic Materials, 2021, 3, 1350-1358.	4.3	16
12	Texture Recognition Based on Perception Data from a Bionic Tactile Sensor. Sensors, 2021, 21, 5224.	3.8	19
13	Programmable robotized â€˜transfer-and-jetâ€™ printing for large, 3D curved electronics on complex surfaces. International Journal of Extreme Manufacturing, 2021, 3, 045101.	12.7	20
14	Achieving ultrahigh instantaneous power density of 10â€‰MW/m2 by leveraging the opposite-charge-enhanced transistor-like triboelectric nanogenerator (OCT-TENG). Nature Communications, 2021, 12, 5470.	12.8	126
15	Multidimensional Force Sensors Based on Triboelectric Nanogenerators for Electronic Skin. ACS Applied Materials & Interfaces, 2021, 13, 56320-56328.	8.0	30
16	A Flexible Microwave Sensor Based on Complementary Spiral Resonator for Material Dielectric Characterization. IEEE Sensors Journal, 2020, 20, 1893-1903.	4.7	24
17	Bioinspired Triboelectric Nanogenerators as Selfâ€Powered Electronic Skin for Robotic Tactile Sensing. Advanced Functional Materials, 2020, 30, 1907312.	14.9	198
18	Rational design of flexible capacitive sensors with highly linear response over a broad pressure sensing range. Nanoscale, 2020, 12, 21198-21206.	5.6	38

#	Article	IF	Citations
19	On-skin graphene electrodes for large area electrophysiological monitoring and human-machine interfaces. Carbon, 2020, 164, 164-170.	10.3	60
20	Triboelectric nanogenerators enabled sensing and actuation for robotics. Nano Energy, 2019, 65, 104005.	16.0	62
21	A self-powered smart safety belt enabled by triboelectric nanogenerators for driving status monitoring. Nano Energy, 2019, 62, 197-204.	16.0	65
22	A stretchable dual-mode sensor array for multifunctional robotic electronic skin. Nano Energy, 2019, 62, 164-170.	16.0	152
23	Assembly and applications of 3D conformal electronics on curvilinear surfaces. Materials Horizons, 2019, 6, 642-683.	12.2	141
24	Flexible and Stretchable Photonic Sensors Based on Modulation of Light Transmission. Advanced Optical Materials, 2019, 7, 1900329.	7.3	49
25	Matrix-Independent Highly Conductive Composites for Electrodes and Interconnects in Stretchable Electronics. ACS Applied Materials & Interfaces, 2019, 11, 8567-8575.	8.0	89
26	Grab and Heat: Highly Responsive and Shape Adaptive Soft Robotic Heaters for Effective Heating of Objects of Three-Dimensional Curvilinear Surfaces. ACS Applied Materials & Interfaces, 2019, 11, 47476-47484.	8.0	10
27	Tri-Co Robot: a Chinese robotic research initiative for enhanced robot interaction capabilities. National Science Review, 2018, 5, 799-801.	9.5	69
28	Giant Voltage Enhancement <i>via</i> Triboelectric Charge Supplement Channel for Self-Powered Electroadhesion. ACS Nano, 2018, 12, 10262-10271.	14.6	109
29	Materials, Devices and Systems of Soft Bioelectronics for Precision Therapy. Advanced Healthcare Materials, 2017, 6, 1700017.	7.6	45
30	Energy Harvesters for Wearable and Stretchable Electronics: From Flexibility to Stretchability. Advanced Materials, 2016, 28, 9881-9919.	21.0	407
31	Analysis of Handling Stresses in Thin Solar Silicon Wafers Generated by a Rigid Vacuum Gripper. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2016, 138, .	2.2	4
32	Wire sawing technology: A state-of-the-art review. Precision Engineering, 2016, 43, 1-9.	3.4	127
33	Modeling and analysis of the grit level interaction in diamond wire sawing of silicon. International Journal of Advanced Manufacturing Technology, 2015, 84, 907.	3.0	3
34	Effect of reciprocating wire slurry sawing on surface quality and mechanical strength of as-cut solar silicon wafers. Precision Engineering, 2014, 38, 121-126.	3.4	25
35	Effects of carbide and nitride inclusions on diamond scribing of multicrystalline silicon for solar cells. Precision Engineering, 2013, 37, 500-504.	3.4	11
36	Effect of crystal defects on mechanical properties relevant to cutting of multicrystalline solar silicon. Materials Science in Semiconductor Processing, 2013, 16, 1416-1421.	4.0	22

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37	Comparative Analysis of Fracture Strength of Slurry and Diamond Wire Sawn Multicrystalline Silicon Solar Wafers. Advanced Engineering Materials, 2013, 15, 358-365.	3.5	38
38	Study of Ductile-to-Brittle Transition in Single Grit Diamond Scribing of Silicon: Application to Wire Sawing of Silicon Wafers. Journal of Engineering Materials and Technology, Transactions of the ASME, 2012, 134, .	1.4	71
39	Mechanical Strength of Silicon Wafers Cut by Loose Abrasive Slurry and Fixed Abrasive Diamond Wire Sawing. Advanced Engineering Materials, 2012, 14, 342-348.	3.5	63
40	Effect of crystallographic orientation on ductile scribing of crystalline silicon: Role of phase transformation and slip. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 549, 200-205.	5.6	32
41	Effect of handling stress on resonance ultrasonic vibrations in thin silicon wafers. , 2010, , .		0