Benjamin C-K Tee

List of Publications by Year
in descending order

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51 papers	19,921 citations	94269 37 h-index	205818 48 g-index
53 all docs	53 docs citations	53 times ranked	20499 citing authors

#	Article	IF	Citations
1	Skin-like pressure and strain sensors based on transparent elastic films of carbon nanotubes. Nature Nanotechnology, 2011, 6, 788-792.	15.6	2,839
2	Highly sensitive flexible pressure sensors with microstructured rubber dielectric layers. Nature Materials, 2010, 9, 859-864.	13.3	2,749
3	25th Anniversary Article: The Evolution of Electronic Skin (Eâ€Skin): A Brief History, Design Considerations, and Recent Progress. Advanced Materials, 2013, 25, 5997-6038.	11.1	2,001
4	Flexible polymer transistors with high pressure sensitivity for application in electronic skin and health monitoring. Nature Communications, 2013, 4, 1859.	5.8	1,713
5	An electrically and mechanically self-healing composite with pressure- and flexion-sensitive properties for electronic skin applications. Nature Nanotechnology, 2012, 7, 825-832.	15.6	1,270
6	Hierarchical nanostructured conducting polymer hydrogel with high electrochemical activity. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9287-9292.	3.3	1,025
7	Solution coating of large-area organic semiconductor thin films with aligned single-crystalline domains. Nature Materials, 2013, 12, 665-671.	13.3	881
8	Stretchable Organic Solar Cells. Advanced Materials, 2011, 23, 1771-1775.	11.1	754
9	A skin-inspired organic digital mechanoreceptor. Science, 2015, 350, 313-316.	6.0	708
10	Electronic Properties of Transparent Conductive Films of PEDOT:PSS on Stretchable Substrates. Chemistry of Materials, 2012, 24, 373-382.	3.2	503
11	High-Mobility Field-Effect Transistors from Large-Area Solution-Grown Aligned C₆₀ Single Crystals. Journal of the American Chemical Society, 2012, 134, 2760-2765.	6.6	481
12	Tunable Flexible Pressure Sensors using Microstructured Elastomer Geometries for Intuitive Electronics. Advanced Functional Materials, 2014, 24, 5427-5434.	7.8	424
13	Self-healing electronic skins for aquatic environments. Nature Electronics, 2019, 2, 75-82.	13.1	424
14	Continuous wireless pressure monitoring and mapping with ultra-small passive sensors for health monitoring and critical care. Nature Communications, 2014, 5, 5028.	5.8	418
15	Transparent, Optical, Pressureâ€Sensitive Artificial Skin for Largeâ€Area Stretchable Electronics. Advanced Materials, 2012, 24, 3223-3227.	11.1	410
16	Chemical and Engineering Approaches To Enable Organic Field-Effect Transistors for Electronic Skin Applications. Accounts of Chemical Research, 2012, 45, 361-371.	7.6	287
17	Wireless body sensor networks based on metamaterial textiles. Nature Electronics, 2019, 2, 243-251.	13.1	276
18	Flow-enhanced solution printing of all-polymer solar cells. Nature Communications, 2015, 6, 7955.	5.8	221

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19	A neuro-inspired artificial peripheral nervous system for scalable electronic skins. Science Robotics, 2019, 4, .	9.9	203
20	A transparent, self-healing and high-Îº dielectric for low-field-emission stretchable optoelectronics. Nature Materials, 2020, 19, 182-188.	13.3	183
21	Tuning the threshold voltage of carbon nanotube transistors by n-type molecular doping for robust and flexible complementary circuits. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4776-4781.	3.3	179
22	Self-Healing Electronic Materials for a Smart and Sustainable Future. ACS Applied Materials & Interfaces, 2018, 10, 15331-15345.	4.0	170
23	Wireless battery-free body sensor networks using near-field-enabled clothing. Nature Communications, 2020, 11, 444.	5.8	165
24	Polymer electrophosphorescence devices with high power conversion efficiencies. Applied Physics Letters, 2004, 84, 2476-2478.	1.5	145
25	Soft Electronically Functional Polymeric Composite Materials for a Flexible and Stretchable Digital Future. Advanced Materials, 2018, 30, e1802560.	11.1	140
26	Highâ€Performance Transistors and Complementary Inverters Based on Solutionâ€Grown Aligned Organic Singleâ€Crystals. Advanced Materials, 2012, 24, 2588-2591.	11.1	129
27	Artificially innervated self-healing foams as synthetic piezo-impedance sensor skins. Nature Communications, 2020, 11, 5747.	5.8	118
28	Osmosisâ€Powered Hydrogel Microneedles for Microliters of Skin Interstitial Fluid Extraction within Minutes. Advanced Healthcare Materials, 2020, 9, e1901683.	3.9	111
29	Nearâ€“hysteresis-free soft tactile electronic skins for wearables and reliable machine learning. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25352-25359.	3.3	104
30	Controlled solution deposition and systematic study of charge-transport anisotropy in single crystal and single-crystal textured TIPS pentacene thin films. Organic Electronics, 2009, 10, 696-703.	1.4	102
31	Advancing the frontiers of silk fibroin protein-based materials for futuristic electronics and clinical wound-healing (Invited review). Materials Science and Engineering C, 2018, 86, 151-172.	3.8	99
32	Design and applications of stretchable and self-healable conductors for soft electronics. Nano Convergence, 2019, 6, 25.	6.3	83
33	Progress and Roadmap for Intelligent Selfâ€Healing Materials in Autonomous Robotics. Advanced Materials, 2021, 33, e2002800.	11.1	75
34	A wireless and battery-free wound infection sensor based on DNA hydrogel. Science Advances, 2021, 7, eabj1617.	4.7	68
35	Development of a unified framework for calculating molecular weight distribution in diffusion controlled free radical bulk homo-polymerization. Polymer, 2005, 46, 539-552.	1.8	48
36	Super Tough and Self-Healable Poly(dimethylsiloxane) Elastomer via Hydrogen Bonding Association and Its Applications as Triboelectric Nanogenerators. ACS Applied Materials & Interfaces, 2020, 12, 31975-31983.	4.0	47

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37	Solution-grown aligned C60 single-crystals for field-effect transistors. Journal of Materials Chemistry C, 2014, 2, 3617.	2.7	46
38	Bioinspired Prosthetic Interfaces. Advanced Materials Technologies, 2020, 5, 1900856.	3.0	42
39	Fully transient stretchable fruitâ€based battery as safe and environmentally friendly power source for wearable electronics. EcoMat, 2021, 3, e12073.	6.8	41
40	Shapeâ€Controlled, Selfâ€Wrapped Carbon Nanotube 3D Electronics. Advanced Science, 2015, 2, 1500103.	5.6	32
41	Augmented Reality Interfaces Using Virtual Customization of Microstructured Electronic Skin Sensor Sensitivity Performances. Advanced Functional Materials, 2021, 31, 2008650.	7.8	31
42	Macromolecule conformational shaping for extreme mechanical programming of polymorphic hydrogel fibers. Nature Communications, 2022, 13, .	5.8	29
43	Environment-Resilient Graphene Vibrotactile Sensitive Sensors for Machine Intelligence. , 2020, 2, 986-992.		26
44	Sensorized Reconfigurable Soft Robotic Gripper System for Automated Food Handling. IEEE/ASME Transactions on Mechatronics, 2022, 27, 3232-3243.	3.7	26
45	Gigahertz Integrated Circuits Based on Complementary Black Phosphorus Transistors. Advanced Electronic Materials, 2018, 4, 1800274.	2.6	23
46	Highly conductive 3D metal-rubber composites for stretchable electronic applications. APL Materials, 2019, 7, .	2.2	22
47	Scaling Metalâ€Elastomer Composites toward Stretchable Multiâ€Helical Conductive Paths for Robust Responsive Wearable Health Devices. Advanced Healthcare Materials, 2021, 10, e2100221.	3.9	18
48	Micro-imprinted prism substrate for self-aligned short channel organic transistors on a flexible substrate. Applied Physics Letters, 2012, 100, .	1.5	11
49	Extended Tactile Perception: Vibration Sensing through Tools and Grasped Objects. , 2021, , .		7
50	Switchable Wettability: Stretchable Organic Solar Cells (Adv. Mater. 15/2011). Advanced Materials, 2011, 23, 1770-1770.	11.1	3
51	Electronic Skins. , 2022, , 181-215.		0