# Benjamin C-K Tee

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 51 papers | 15,947 citations | 34 h-index | 53 g-index |
| 53 ext. papers | 18,079 ext. citations | 15.7 avg, IF | 6.66 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 51 | Electronic Skins **2022**, 181-215 | | |
| 50 | A wireless and battery-free wound infection sensor based on DNA hydrogel. *Science Advances*, **2021**, 7, eabj1617 | 14.3 | 14 |
| 49 | Progress and Roadmap for Intelligent Self-Healing Materials in Autonomous Robotics. *Advanced Materials*, **2021**, 33, e2002800 | 24 | 29 |
| 48 | Fully transient stretchable fruit-based battery as safe and environmentally friendly power source for wearable electronics. *EcoMat*, **2021**, 3, e12073 | 9.4 | 17 |
| 47 | Sensorized Reconfigurable Soft Robotic Gripper System for Automated Food Handling. *IEEE/ASME Transactions on Mechatronics*, **2021**, 1-12 | 5.5 | 3 |
| 46 | Augmented Reality Interfaces Using Virtual Customization of Microstructured Electronic Skin Sensor Sensitivity Performances. *Advanced Functional Materials*, **2021**, 31, 2008650 | 15.6 | 13 |
| 45 | Scaling Metal-Elastomer Composites toward Stretchable Multi-Helical Conductive Paths for Robust Responsive Wearable Health Devices. *Advanced Healthcare Materials*, **2021**, 10, e2100221 | 10.1 | 4 |
| 44 | 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 | 9.5 | 28 |
| 43 | Osmosis-Powered Hydrogel Microneedles for Microliters of Skin Interstitial Fluid Extraction within Minutes. *Advanced Healthcare Materials*, **2020**, 9, e1901683 | 10.1 | 48 |
| 42 | An Atlas for Large-Area Electronic Skins: From Materials to Systems Design **2020**, | | 3 |
| 41 | Wireless battery-free body sensor networks using near-field-enabled clothing. *Nature Communications*, **2020**, 11, 444 | 17.4 | 85 |
| 40 | A transparent, self-healing and high-□dielectric for low-field-emission stretchable optoelectronics. *Nature Materials*, **2020**, 19, 182-188 | 27 | 114 |
| 39 | Near-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 | 11.5 | 38 |
| 38 | Environment-Resilient Graphene Vibrotactile Sensitive Sensors for Machine Intelligence **2020**, 2, 986-992 | | 12 |
| 37 | Artificially innervated self-healing foams as synthetic piezo-impedance sensor skins. *Nature Communications*, **2020**, 11, 5747 | 17.4 | 43 |
| 36 | Bioinspired Prosthetic Interfaces. *Advanced Materials Technologies*, **2020**, 5, 1900856 | 6.8 | 21 |
| 35 | Wireless body sensor networks based on metamaterial textiles. *Nature Electronics*, **2019**, 2, 243-251 | 28.4 | 148 |

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|---|---|---|---|
| 34 | Highly conductive 3D metal-rubber composites for stretchable electronic applications. *APL Materials*, **2019**, 7, 031508 | 5.7 | 13 |
| 33 | A neuro-inspired artificial peripheral nervous system for scalable electronic skins. *Science Robotics*, **2019**, 4, | 18.6 | 115 |
| 32 | Design and applications of stretchable and self-healable conductors for soft electronics. *Nano Convergence*, **2019**, 6, 25 | 9.2 | 51 |
| 31 | Self-healing electronic skins for aquatic environments. *Nature Electronics*, **2019**, 2, 75-82 | 28.4 | 240 |
| 30 | Self-Healing Electronic Materials for a Smart and Sustainable Future. *ACS Applied Materials & Interfaces*, **2018**, 10, 15331-15345 | 9.5 | 122 |
| 29 | 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 | 8.3 | 70 |
| 28 | Soft Electronically Functional Polymeric Composite Materials for a Flexible and Stretchable Digital Future. *Advanced Materials*, **2018**, 30, e1802560 | 24 | 88 |
| 27 | Gigahertz Integrated Circuits Based on Complementary Black Phosphorus Transistors. *Advanced Electronic Materials*, **2018**, 4, 1800274 | 6.4 | 19 |
| 26 | Flow-enhanced solution printing of all-polymer solar cells. *Nature Communications*, **2015**, 6, 7955 | 17.4 | 191 |
| 25 | A skin-inspired organic digital mechanoreceptor. *Science*, **2015**, 350, 313-6 | 33.3 | 576 |
| 24 | Shape-Controlled, Self-Wrapped Carbon Nanotube 3D Electronics. *Advanced Science*, **2015**, 2, 1500103 | 13.6 | 27 |
| 23 | 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, 4776-81 | 11.5 | 157 |
| 22 | Solution-grown aligned C60 single-crystals for field-effect transistors. *Journal of Materials Chemistry C*, **2014**, 2, 3617 | 7.1 | 42 |
| 21 | Continuous wireless pressure monitoring and mapping with ultra-small passive sensors for health monitoring and critical care. *Nature Communications*, **2014**, 5, 5028 | 17.4 | 320 |
| 20 | Tunable Flexible Pressure Sensors using Microstructured Elastomer Geometries for Intuitive Electronics. *Advanced Functional Materials*, **2014**, 24, 5427-5434 | 15.6 | 317 |
| 19 | Solution coating of large-area organic semiconductor thin films with aligned single-crystalline domains. *Nature Materials*, **2013**, 12, 665-71 | 27 | 770 |
| 18 | Flexible polymer transistors with high pressure sensitivity for application in electronic skin and health monitoring. *Nature Communications*, **2013**, 4, 1859 | 17.4 | 1446 |
| 17 | 25th anniversary article: The evolution of electronic skin (e-skin): a brief history, design considerations, and recent progress. *Advanced Materials*, **2013**, 25, 5997-6038 | 24 | 1622 |

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|---|---|---|---|
| 16 | An electrically and mechanically self-healing composite with pressure- and flexion-sensitive properties for electronic skin applications. *Nature Nanotechnology*, **2012**, 7, 825-32 | 28.7 | 1094 |
| 15 | High-mobility field-effect transistors from large-area solution-grown aligned C60 single crystals. *Journal of the American Chemical Society*, **2012**, 134, 2760-5 | 16.4 | 427 |
| 14 | Elastomer-Based Pressure and Strain Sensors **2012**, 325-353 | | 3 |
| 13 | Electronic Properties of Transparent Conductive Films of PEDOT:PSS on Stretchable Substrates. *Chemistry of Materials*, **2012**, 24, 373-382 | 9.6 | 422 |
| 12 | High-performance transistors and complementary inverters based on solution-grown aligned organic single-crystals. *Advanced Materials*, **2012**, 24, 2588-91 | 24 | 120 |
| 11 | Micro-imprinted prism substrate for self-aligned short channel organic transistors on a flexible substrate. *Applied Physics Letters*, **2012**, 100, 043301 | 3.4 | 11 |
| 10 | Hierarchical nanostructured conducting polymer hydrogel with high electrochemical activity. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 9287-92 | 11.5 | 850 |
| 9 | Chemical and engineering approaches to enable organic field-effect transistors for electronic skin applications. *Accounts of Chemical Research*, **2012**, 45, 361-71 | 24.3 | 263 |
| 8 | Transparent, optical, pressure-sensitive artificial skin for large-area stretchable electronics. *Advanced Materials*, **2012**, 24, 3223-7 | 24 | 338 |
| 7 | Skin-like pressure and strain sensors based on transparent elastic films of carbon nanotubes. *Nature Nanotechnology*, **2011**, 6, 788-92 | 28.7 | 2451 |
| 6 | Stretchable organic solar cells. *Advanced Materials*, **2011**, 23, 1771-5 | 24 | 692 |
| 5 | Switchable Wettability: Stretchable Organic Solar Cells (Adv. Mater. 15/2011). *Advanced Materials*, **2011**, 23, 1770-1770 | 24 | 2 |
| 4 | Highly sensitive flexible pressure sensors with microstructured rubber dielectric layers. *Nature Materials*, **2010**, 9, 859-64 | 27 | 2186 |
| 3 | 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 | 3.5 | 97 |
| 2 | Development of a unified framework for calculating molecular weight distribution in diffusion controlled free radical bulk homo-polymerization. *Polymer*, **2005**, 46, 539-552 | 3.9 | 46 |
| 1 | Polymer electrophosphorescence devices with high power conversion efficiencies. *Applied Physics Letters*, **2004**, 84, 2476-2478 | 3.4 | 133 |