

Taek-Soo Kim

List of Publications by Year in descending order

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153
papers

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times ranked

10333
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Flexible, highly efficient all-polymer solar cells. <i>Nature Communications</i> , 2015, 6, 8547. | 5.8 | 740 |
| 2 | Room-Temperature Nanosoldering of a Very Long Metal Nanowire Network by Conducting-Polymer-Assisted Joining for a Flexible Touch-Panel Application. <i>Advanced Functional Materials</i> , 2013, 23, 4171-4176. | 7.8 | 449 |
| 3 | Highly Sensitive, Flexible, and Wearable Pressure Sensor Based on a Giant Piezocapacitive Effect of Three-Dimensional Microporous Elastomeric Dielectric Layer. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 16922-16931. | 4.0 | 404 |
| 4 | Wearable Textile Battery Rechargeable by Solar Energy. <i>Nano Letters</i> , 2013, 13, 5753-5761. | 4.5 | 400 |
| 5 | Direct Measurement of Adhesion Energy of Monolayer Graphene As-Grown on Copper and Its Application to Renewable Transfer Process. <i>Nano Letters</i> , 2012, 12, 1448-1452. | 4.5 | 352 |
| 6 | Mechanically Robust All-Polymer Solar Cells from Narrow Band Gap Acceptors with Hetero-Bridging Atoms. <i>Joule</i> , 2020, 4, 658-672. | 11.7 | 279 |
| 7 | Millipede-inspired structural design principle for high performance polysaccharide binders in silicon anodes. <i>Energy and Environmental Science</i> , 2015, 8, 1224-1230. | 15.6 | 222 |
| 8 | Flash-Induced Self-Limited Plasmonic Welding of Silver Nanowire Network for Transparent Flexible Energy Harvester. <i>Advanced Materials</i> , 2017, 29, 1603473. | 11.1 | 207 |
| 9 | Tuning Mechanical and Optoelectrical Properties of Poly(3-hexylthiophene) through Systematic Regioregularity Control. <i>Macromolecules</i> , 2015, 48, 4339-4346. | 2.2 | 194 |
| 10 | Tensile testing of ultra-thin films on water surface. <i>Nature Communications</i> , 2013, 4, 2520. | 5.8 | 169 |
| 11 | Synergetic electrode architecture for efficient graphene-based flexible organic light-emitting diodes. <i>Nature Communications</i> , 2016, 7, 11791. | 5.8 | 163 |
| 12 | Wearable, Ultrawide-Range, and Bending-Insensitive Pressure Sensor Based on Carbon Nanotube Network-Coated Porous Elastomer Sponges for Human Interface and Healthcare Devices. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 23639-23648. | 4.0 | 155 |
| 13 | Simultaneously Enhancing the Cohesion and Electrical Conductivity of PEDOT:PSS Conductive Polymer Films using DMSO Additives. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 302-310. | 4.0 | 142 |
| 14 | Record-efficiency flexible perovskite solar cell and module enabled by a porous-planar structure as an electron transport layer. <i>Energy and Environmental Science</i> , 2020, 13, 4854-4861. | 15.6 | 137 |
| 15 | Comparison of Methods for Determining the Mechanical Properties of Semiconducting Polymer Films for Stretchable Electronics. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 8855-8862. | 4.0 | 136 |
| 16 | Accelerated Degradation Due to Weakened Adhesion from Li-TFSI Additives in Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 7029-7035. | 4.0 | 122 |
| 17 | Efficient, Thermally Stable, and Mechanically Robust All-Polymer Solar Cells Consisting of the Same Benzodithiophene Unit-Based Polymer Acceptor and Donor with High Molecular Compatibility. <i>Advanced Energy Materials</i> , 2021, 11, 2003367. | 10.2 | 122 |
| 18 | Importance of Critical Molecular Weight of Semicrystalline n-Type Polymers for Mechanically Robust, Efficient Electroactive Thin Films. <i>Chemistry of Materials</i> , 2019, 31, 3163-3173. | 3.2 | 115 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Exploiting π - π Stacking for Stretchable Semiconducting Polymers. <i>Macromolecules</i> , 2018, 51, 2572-2579. | 2.2 | 104 |
| 20 | Influence of Acceptor Type and Polymer Molecular Weight on the Mechanical Properties of Polymer Solar Cells. <i>Chemistry of Materials</i> , 2019, 31, 9057-9069. | 3.2 | 102 |
| 21 | A soft and transparent contact lens for the wireless quantitative monitoring of intraocular pressure. <i>Nature Biomedical Engineering</i> , 2021, 5, 772-782. | 11.6 | 100 |
| 22 | Plasmonic-Tuned Flash Cu Nanowelding with Ultrafast Photochemical-Reducing and Interlocking on Flexible Plastics. <i>Advanced Functional Materials</i> , 2017, 27, 1701138. | 7.8 | 98 |
| 23 | Flexible-spacer incorporated polymer donors enable superior blend miscibility for high-performance and mechanically-robust polymer solar cells. <i>Energy and Environmental Science</i> , 2021, 14, 4067-4076. | 15.6 | 98 |
| 24 | Long-term reliable physical health monitoring by sweat pore-inspired perforated electronic skins. <i>Science Advances</i> , 2021, 7, . | 4.7 | 89 |
| 25 | Polymer Acceptors with Flexible Spacers Afford Efficient and Mechanically Robust All-Polymer Solar Cells. <i>Advanced Materials</i> , 2022, 34, e2107361. | 11.1 | 89 |
| 26 | Performance improvement of flexible piezoelectric energy harvester for irregular human motion with energy extraction enhancement circuit. <i>Nano Energy</i> , 2019, 58, 211-219. | 8.2 | 88 |
| 27 | Hydrogel-laden paper scaffold system for origami-based tissue engineering. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 15426-15431. | 3.3 | 87 |
| 28 | Wireless powered wearable micro light-emitting diodes. <i>Nano Energy</i> , 2019, 55, 454-462. | 8.2 | 83 |
| 29 | Architectural Engineering of Rod-Coil Compatibilizers for Producing Mechanically and Thermally Stable Polymer Solar Cells. <i>ACS Nano</i> , 2014, 8, 10461-10470. | 7.3 | 82 |
| 30 | Selective Defect Passivation and Topographical Control of 4-Dimethylaminopyridine at Grain Boundary for Efficient and Stable Planar Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2021, 11, 2003382. | 10.2 | 82 |
| 31 | Synergistic enhancement and mechanism study of mechanical and moisture stability of perovskite solar cells introducing polyethylene-imine into the $\text{CH}_3\text{NH}_3\text{PbI}_3/\text{HTM}$ interface. <i>Journal of Materials Chemistry A</i> , 2015, 3, 22176-22182. | 5.2 | 80 |
| 32 | Comparative Study of the Mechanical Properties of All-Polymer and Fullerene-Polymer Solar Cells: The Importance of Polymer Acceptors for High Fracture Resistance. <i>Chemistry of Materials</i> , 2018, 30, 2102-2111. | 3.2 | 79 |
| 33 | Intrinsically Stretchable Organic Solar Cells with Efficiencies of over 11%. <i>ACS Energy Letters</i> , 2021, 6, 2512-2518. | 8.8 | 69 |
| 34 | Origin of the High Donor-Acceptor Composition Tolerance in Device Performance and Mechanical Robustness of All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2020, 32, 582-594. | 3.2 | 68 |
| 35 | Flexible and Transparent Graphene Electrode Architecture with Selective Defect Decoration for Organic Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2018, 28, 1704435. | 7.8 | 67 |
| 36 | Iron Gall Ink Revisited: In Situ Oxidation of Fe(II)-Tannin Complex for Fluidic-Interface Engineering. <i>Advanced Materials</i> , 2018, 30, e1805091. | 11.1 | 65 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Digital selective transformation and patterning of highly conductive hydrogel bioelectronics by laser-induced phase separation. <i>Science Advances</i> , 2022, 8, . | 4.7 | 63 |
| 38 | Mechanically robust and high-performance ternary solar cells combining the merits of all-polymer and fullerene blends. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4494-4503. | 5.2 | 54 |
| 39 | Mechanical Properties of Polymer–Fullerene Bulk Heterojunction Films: Role of Nanomorphology of Composite Films. <i>Chemistry of Materials</i> , 2017, 29, 3954-3961. | 3.2 | 50 |
| 40 | Large area multi-stacked lithium-ion batteries for flexible and rollable applications. <i>Journal of Materials Chemistry A</i> , 2014, 2, 10862-10868. | 5.2 | 48 |
| 41 | Healing Graphene Defects Using Selective Electrochemical Deposition: Toward Flexible and Stretchable Devices. <i>ACS Nano</i> , 2016, 10, 1539-1545. | 7.3 | 47 |
| 42 | Side Chain Engineered Naphthalene Diimide-Based Terpolymer for Efficient and Mechanically Robust All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2021, 33, 1070-1081. | 3.2 | 46 |
| 43 | Controlling Interfacial Reactions and Intermetallic Compound Growth at the Interface of a Lead-free Solder Joint with Layer-by-Layer Transferred Graphene. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 5679-5686. | 4.0 | 45 |
| 44 | Extremely Robust and Patternable Electrodes for Copy-Paper-Based Electronics. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 19031-19037. | 4.0 | 44 |
| 45 | Aqueous-Soluble Naphthalene Diimide-Based Polymer Acceptors for Efficient and Air-Stable All-Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 45038-45047. | 4.0 | 42 |
| 46 | Highly efficient, heat dissipating, stretchable organic light-emitting diodes based on a MoO ₃ /Au/MoO ₃ electrode with encapsulation. <i>Nature Communications</i> , 2021, 12, 2864. | 5.8 | 42 |
| 47 | Penetration and lateral diffusion characteristics of polycrystalline graphene barriers. <i>Nanoscale</i> , 2014, 6, 151-156. | 2.8 | 41 |
| 48 | Multi-directionally wrinkle-able textile OLEDs for clothing-type displays. <i>Npj Flexible Electronics</i> , 2020, 4, . | 5.1 | 41 |
| 49 | Direct Graphene Transfer and Its Application to Transfer Printing Using Mechanically Controlled, Large Area Graphene/Copper Freestanding Layer. <i>Advanced Functional Materials</i> , 2018, 28, 1707102. | 7.8 | 40 |
| 50 | Regioregular- <i>block</i> -Regiorandom Poly(3-hexylthiophene) Copolymers for Mechanically Robust and High-Performance Thin-Film Transistors. <i>Macromolecules</i> , 2019, 52, 7721-7730. | 2.2 | 40 |
| 51 | High-Molecular-Weight Electroactive Polymer Additives for Simultaneous Enhancement of Photovoltaic Efficiency and Mechanical Robustness in High-Performance Polymer Solar Cells. <i>Jacs Au</i> , 2021, 1, 612-622. | 3.6 | 40 |
| 52 | Understanding mechanical behavior and reliability of organic electronic materials. <i>MRS Bulletin</i> , 2017, 42, 115-123. | 1.7 | 39 |
| 53 | Controlled multiple neutral planes by low elastic modulus adhesive for flexible organic photovoltaics. <i>Nanotechnology</i> , 2017, 28, 194002. | 1.3 | 38 |
| 54 | Donor–Acceptor Alternating Copolymer Compatibilizers for Thermally Stable, Mechanically Robust, and High-Performance Organic Solar Cells. <i>ACS Nano</i> , 2021, 15, 19970-19980. | 7.3 | 38 |

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|----|--|-----|-----------|
| 55 | Contact-free thermal expansion measurement of very soft elastomers using digital image correlation. <i>Polymer Testing</i> , 2016, 51, 181-189. | 2.3 | 35 |
| 56 | Geometrically engineered rigid island array for stretchable electronics capable of withstanding various deformation modes. <i>Science Advances</i> , 2022, 8, . | 4.7 | 35 |
| 57 | Interfacial toughening of solution processed Ag nanoparticle thin films by organic residuals. <i>Nanotechnology</i> , 2012, 23, 485704. | 1.3 | 34 |
| 58 | A High Aspect Ratio Serpentine Structure for Use As a Strain-Insensitive, Stretchable Transparent Conductor. <i>Small</i> , 2018, 14, 1702818. | 5.2 | 32 |
| 59 | Bending Properties of Anisotropic Conductive Films Assembled Chip-in-Flex Packages for Wearable Electronics Applications. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2016, 6, 208-215. | 1.4 | 31 |
| 60 | Design of ultrathin OLEDs having oxide-based transparent electrodes and encapsulation with sub-mm bending radius. <i>Organic Electronics</i> , 2020, 82, 105704. | 1.4 | 29 |
| 61 | Adhesion improvement of graphene/copper interface using UV/ozone treatments. <i>Thin Solid Films</i> , 2015, 584, 170-175. | 0.8 | 28 |
| 62 | Control of Reversible Self-Bending Behavior in Responsive Janus Microstrips. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 8782-8788. | 4.0 | 28 |
| 63 | High-Performance, Flexible NO ₂ Chemiresistors Achieved by Design of Imine-Incorporated n-Type Conjugated Polymers. <i>Advanced Science</i> , 2022, 9, e2200270. | 5.6 | 28 |
| 64 | Direct Observation of Nanoscale Pt Electrode Agglomeration at the Triple Phase Boundary. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 6036-6040. | 4.0 | 26 |
| 65 | Warpage Analysis of Electroplated Cu Films on Fiber-Reinforced Polymer Packaging Substrates. <i>Polymers</i> , 2015, 7, 985-1004. | 2.0 | 25 |
| 66 | Solution-Assembled Blends of Regioregularity-Controlled Polythiophenes for Coexistence of Mechanical Resilience and Electronic Performance. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 14120-14128. | 4.0 | 25 |
| 67 | Enhanced Triboelectric Nanogenerator Based on Tungsten Disulfide via Thiolated Ligand Conjugation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 21299-21309. | 4.0 | 25 |
| 68 | Effect of Nanofiber Orientation on Nanofiber Solder Anisotropic Conductive Films Joint Properties and Bending Reliability of Flex-on-Flex Assembly. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2016, 6, 1317-1329. | 1.4 | 23 |
| 69 | Flexural and tensile moduli of flexible FR4 substrates. <i>Polymer Testing</i> , 2016, 53, 70-76. | 2.3 | 23 |
| 70 | Stretchable thin-film transistors with molybdenum disulfide channels and graphene electrodes. <i>Nanoscale</i> , 2018, 10, 16069-16078. | 2.8 | 23 |
| 71 | Direct Visualization of Cross-Sectional Strain Distribution in Flexible Devices. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 13416-13422. | 4.0 | 23 |
| 72 | Realizing Stretchable OLEDs: A Hybrid Platform Based on Rigid Island Arrays on a Stress-Relieving Bilayer Structure. <i>Advanced Materials Technologies</i> , 2020, 5, 2000494. | 3.0 | 23 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 73 | Ester-functionalized, wide-bandgap derivatives of PM7 for simultaneous enhancement of photovoltaic performance and mechanical robustness of all-polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 2775-2783. | 5.2 | 23 |
| 74 | Mechanical Behavior of Free-Standing Fuel Cell Electrodes on Water Surface. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15391-15398. | 4.0 | 21 |
| 75 | The Effect of Anisotropic Conductive Films Adhesion on the Bending Reliability of Chip-in-Flex Packages for Wearable Electronics Applications. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2017, 7, 1583-1591. | 1.4 | 21 |
| 76 | Cooptimization of Adhesion and Power Conversion Efficiency of Organic Solar Cells by Controlling Surface Energy of Buffer Layers. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 37395-37401. | 4.0 | 20 |
| 77 | Thermal expansion behavior of thin films expanding freely on water surface. <i>Scientific Reports</i> , 2019, 9, 7071. | 1.6 | 20 |
| 78 | Simultaneous Enhanced Efficiency and Stability of Perovskite Solar Cells Using Adhesive Fluorinated Polymer Interfacial Material. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 35595-35605. | 4.0 | 20 |
| 79 | <i>Egr1</i> is a 3D matrix-specific mediator of mechanosensitive stem cell lineage commitment. <i>Science Advances</i> , 2022, 8, eabm4646. | 4.7 | 20 |
| 80 | Enhancing Adhesion of Screen-Printed Silver Nanopaste Films. <i>Advanced Materials Interfaces</i> , 2015, 2, 1500283. | 1.9 | 19 |
| 81 | Unveiling the Annealing-Dependent Mechanical Properties of Freestanding Indium Tin Oxide Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 16650-16659. | 4.0 | 18 |
| 82 | Controlling Neutral Plane of Flexible Substrates by Asymmetric Impregnation of Glass Fabric for Protecting Brittle Films on Foldable Electronics. <i>Advanced Engineering Materials</i> , 2021, 23, 2001280. | 1.6 | 17 |
| 83 | Enhancing Mechanical Properties of Highly Efficient Polymer Solar Cells Using Size-Tuned Polymer Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 2668-2676. | 4.0 | 16 |
| 84 | Facilitated embedding of silver nanowires into conformally-coated iCVD polymer films deposited on cloth for robust wearable electronics. <i>Nanoscale</i> , 2017, 9, 3399-3407. | 2.8 | 16 |
| 85 | Temperature-Controlled Direct Imprinting of Ag Ionic Ink: Flexible Metal Grid Transparent Conductors with Enhanced Electromechanical Durability. <i>Scientific Reports</i> , 2017, 7, 11220. | 1.6 | 16 |
| 86 | Nanotransplantation Printing of Crystallographic-Orientation-Controlled Single-Crystalline Nanowire Arrays on Diverse Surfaces. <i>ACS Nano</i> , 2017, 11, 11642-11652. | 7.3 | 16 |
| 87 | Triad-type, multi-functional compatibilizers for enhancing efficiency, stability and mechanical robustness of polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2020, 8, 13522-13531. | 5.2 | 16 |
| 88 | Elongation improvement of transparent and flexible surface protective coating using polydimethylsiloxane-anchored epoxy-functionalized siloxane hybrid composite for reliable out-foldable displays. <i>Composites Part B: Engineering</i> , 2021, 225, 109313. | 5.9 | 16 |
| 89 | Molecular Engineering for Function-Tailored Interface Modifier in High-Performance Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2022, 12, . | 10.2 | 16 |
| 90 | Effects of the Mechanical Properties of Polymer Resin and the Conductive Ball Types of Anisotropic Conductive Films on the Bending Properties of Chip-in-Flex Package. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2016, 6, 200-207. | 1.4 | 15 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 91 | Low-Temperature and Corrosion-Resistant Gas Diffusion Multibarrier with UV and Heat Rejection Capability—A Strategy to Ensure Reliability of Organic Electronics. ACS Applied Materials & Interfaces, 2019, 11, 16776-16784. | 4.0 | 15 |
| 92 | A Flash-Induced Robust Cu Electrode on Glass Substrates and Its Application for Thin-Film LEDs. Advanced Materials, 2021, 33, e2007186. | 11.1 | 15 |
| 93 | Programmable Liquid Crystal Defect Arrays via Electric Field Modulation for Mechanically Functional Liquid Crystal Networks. ACS Applied Materials & Interfaces, 2021, 13, 36253-36261. | 4.0 | 15 |
| 94 | Self-Powered Flexible Full-Color Display via Dielectric-Tuned Hybrimer Triboelectric Nanogenerators. ACS Energy Letters, 2021, 6, 4097-4107. | 8.8 | 15 |
| 95 | Human-Palm-Inspired Artificial Skin Material Enhances Operational Functionality of Hand Manipulation. Advanced Functional Materials, 2020, 30, 2002360. | 7.8 | 14 |
| 96 | Doping suppression and mobility enhancement of graphene transistors fabricated using an adhesion promoting dry transfer process. Applied Physics Letters, 2013, 103, . | 1.5 | 13 |
| 97 | Superstrong encapsulated monolayer graphene by the modified anodic bonding. Nanoscale, 2014, 6, 547-554. | 2.8 | 13 |
| 98 | Effects of hydrophobic agent content in macro-porous substrates on the fracture behavior of the gas diffusion layer for proton exchange membrane fuel cells. Journal of Power Sources, 2014, 270, 342-348. | 4.0 | 13 |
| 99 | Properties and Reliability of Solder Microbump Joints Between Si Chips and a Flexible Substrate. Journal of Electronic Materials, 2015, 44, 2458-2466. | 1.0 | 13 |
| 100 | Prediction of time-dependent swelling of flexible polymer substrates using hygro-mechanical finite element simulations. Soft Matter, 2016, 12, 4135-4141. | 1.2 | 13 |
| 101 | Role of Crack Deflection on Rate Dependent Mechanical Transfer of Multilayer Graphene and Its Application to Transparent Electrodes. ACS Applied Nano Materials, 2019, 2, 1980-1985. | 2.4 | 13 |
| 102 | Design of Magnetic Force Field for Trajectory Control of Levitated Diamagnetic Graphite. International Journal of Precision Engineering and Manufacturing - Green Technology, 2018, 5, 341-347. | 2.7 | 12 |
| 103 | Layer-by-Layer Assembly of Free-Standing Nanofilms by Controlled Rolling. Langmuir, 2018, 34, 5831-5836. | 1.6 | 12 |
| 104 | Improving the Sensitivity of the Mechanoluminescence Composite through Functionalization for Structural Health Monitoring. ACS Applied Materials & Interfaces, 2022, 14, 30205-30215. | 4.0 | 12 |
| 105 | A quantitative strain analysis of a flexible single-crystalline silicon membrane. Applied Physics Letters, 2017, 110, 033105. | 1.5 | 10 |
| 106 | Mechanism of warpage orientation rotation due to viscoelastic polymer substrates during thermal processing. Microelectronics Reliability, 2017, 73, 136-145. | 0.9 | 10 |
| 107 | Highly Mobile Levitating Soft Actuator Driven by Multistimuli-Responses. Advanced Materials Interfaces, 2020, 7, 2001051. | 1.9 | 10 |
| 108 | Mechanical Stability Analysis via Neutral Mechanical Plane for High-Performance Flexible Si Nanomembrane FDSOI Device. Advanced Materials Interfaces, 2017, 4, 1700618. | 1.9 | 9 |

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|-----|--|------|-----------|
| 109 | Effects of Thickness and Crystallographic Orientation on Tensile Properties of Thinned Silicon Wafers. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 296-303. | 1.4 | 9 |
| 110 | An Interlocking Fibrillar Polymer Layer for Mechanical Stability of Perovskite Solar Cells. Advanced Materials Interfaces, 2020, 7, 2001425. | 1.9 | 9 |
| 111 | Liquid-assisted adhesion control of grapheneâ€“copper interface for damage-free mechanical transfer. Applied Surface Science, 2021, 551, 149229. | 3.1 | 9 |
| 112 | Siloxane Hybrid Material-Encapsulated Highly Robust Flexible 1/4LEDs for Biocompatible Lighting Applications. ACS Applied Materials & Interfaces, 2022, 14, 28258-28269. | 4.0 | 9 |
| 113 | Lithium-Ion Batteries: Mussel-Inspired Adhesive Binders for High-Performance Silicon Nanoparticle Anodes in Lithium-Ion Batteries (Adv. Mater. 11/2013). Advanced Materials, 2013, 25, 1570-1570. | 11.1 | 8 |
| 114 | Electromechanical diagnostic method for monitoring cracks in polymer electrolyte fuel cell electrodes. International Journal of Hydrogen Energy, 2017, 42, 11644-11653. | 3.8 | 8 |
| 115 | Effect of anisotropic thermo-elastic properties of woven-fabric laminates on diagonal warpage of thin package substrates. Composite Structures, 2017, 176, 973-981. | 3.1 | 8 |
| 116 | Effects of graphene oxide on the electromigration lifetime of lead-free solder joints. Journal of Materials Science: Materials in Electronics, 2019, 30, 2334-2341. | 1.1 | 8 |
| 117 | A Study on the Dynamic Bending Property of Chip-on-Flex Assembly Using Anchoring Polymer Layer Anisotropic Conductive Films. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 941-948. | 1.4 | 8 |
| 118 | Comparison of the mechanical properties of polymer blend and main-chain conjugated copolymer films with donorâ€“acceptor heterojunctions. Chemical Engineering Journal, 2021, 415, 128952. | 6.6 | 8 |
| 119 | Enhanced stretchability of metal/interlayer/metal hybrid electrode. Nanoscale, 2021, 13, 4543-4550. | 2.8 | 6 |
| 120 | Ultra-thin chip-in-flex (CIF) technology using anisotropic conductive films (ACFs) for wearable electronics applications. , 2015, , . | | 5 |
| 121 | Effect of High Film Stress of Mo Source and Drain Electrodes on Electrical Characteristics of Al Doped InZnSnO TFTs. IEEE Electron Device Letters, 2019, 40, 1760-1763. | 2.2 | 5 |
| 122 | Desolvationâ€“Triggered Versatile Transferâ€“Printing of Pure BN Films with Thermalâ€“Optical Dual Functionality. Advanced Materials, 2020, 32, 2002099. | 11.1 | 5 |
| 123 | Highly robust nanostructured carbon films by thermal reconfiguration of ionomer binding. Journal of Materials Chemistry A, 2020, 8, 24763-24773. | 5.2 | 4 |
| 124 | Tubular Hygromechanical Polymeric Brake for Soft and Compact Wearable Robots. ACS Applied Polymer Materials, 2021, 3, 3206-3213. | 2.0 | 4 |
| 125 | Capillaryâ€“Forceâ€“Driven Switchable Delamination of Nanofilms and Its Application to Green Selective Transfer. Advanced Materials Technologies, 2021, 6, 2001082. | 3.0 | 4 |
| 126 | High-Yield Etching-Free Transfer of Graphene: A Fracture Mechanics Approach. Journal of the Microelectronics and Packaging Society, 2014, 21, 59-64. | 0.1 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 127 | Thermomechanical Behavior of Poly(3-hexylthiophene) Thin Films on the Water Surface. ACS Omega, 2022, 7, 19706-19713. | 1.6 | 4 |
| 128 | Effects of ACFs Adhesion on the Bending Reliability of Chip-in-Flex Packages for Wearable Electronics Applications. , 2016, , . | | 3 |
| 129 | Effects of ACFs Modulus and Adhesion Strength on the Bending Reliability of CIF (Chip-in-Flex) Packages at Humid Environment. , 2018, , . | | 3 |
| 130 | Mechanical properties of organic semiconductors for flexible electronics. , 2021, , 199-223. | | 3 |
| 131 | Quantification of Performance Variation and Crack Evolution of Bond-Wire Interconnects Under Harsh Temperature Environments by S-Parameter Analysis. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 990-998. | 1.4 | 3 |
| 132 | Ultrathin, Flexible, and Transparent Oxide Thin-Film Transistors by Delamination and Transfer Methods for Deformable Displays. Advanced Materials Technologies, 0, , 2100431. | 3.0 | 3 |
| 133 | FEM simulation of warpage orientation change of FRP polymer substrate during thermal processing. , 2017, , . | | 2 |
| 134 | Effects of Anisotropic Conductive Films (ACFs) Gap Heights on the Bending Reliability of Chip-In-Flex (CIF) Packages for Wearable Electronics Applications. , 2017, , . | | 2 |
| 135 | High-Performance Ni/Pt Composite Catalytic Anode with Ultra-Low Pt Loading for Low-Temperature Solid Oxide Fuel Cells. International Journal of Precision Engineering and Manufacturing - Green Technology, 2020, 7, 141-150. | 2.7 | 2 |
| 136 | Creation of Curved Nanostructures Using Soft-Materials-Derived Lithography. Nanomaterials, 2020, 10, 2414. | 1.9 | 2 |
| 137 | Effects of Post-annealing and Co Interlayer Between SiNx and Cu on the Interfacial Adhesion Energy for Advanced Cu Interconnections. Electronic Materials Letters, 2020, 16, 311-320. | 1.0 | 2 |
| 138 | Electrical resistance change in thermally reconfigured nanoporous ionomer-bound carbon films. Journal of Materials Chemistry A, 2021, 9, 13019-13025. | 5.2 | 2 |
| 139 | Enlarged tensile strain at edge of flexible substrate due to anticlastic curvature. Microelectronics Reliability, 2022, 130, 114485. | 0.9 | 2 |
| 140 | Development of inclined conductive bump (ICB) for flip-chip interconnection. , 2011, , . | | 1 |
| 141 | P…: Optimization of Multilayer Inorganic/Organic Thin Film Structure for Foldable Barrier Films. Digest of Technical Papers SID International Symposium, 2017, 48, 1757-1760. | 0.1 | 1 |
| 142 | Moisture Effects on NCF Adhesion and Solder Joint Reliability of Chip-on-Board Assembly Using Cu Pillar/SnߞAg Microbump. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 371-378. | 1.4 | 1 |
| 143 | Effects of the Materials Properties of Epoxy Molding Films (EMFs) on Fan-Out Packages (FOPs) Characteristics. , 2019, , . | | 1 |
| 144 | Artificial Skin: HumanߞInspired Artificial Skin Material Enhances Operational Functionality of Hand Manipulation (Adv. Funct. Mater. 25/2020). Advanced Functional Materials, 2020, 30, 2070161. | 7.8 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | A Study on the Flexible Chip-on-Fabric Assemblies Using Anisotropic Conductive Films and Metal-Laminated Fabric Substrates. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 360-367. | 1.4 | 1 |
| 146 | Intrinsic swelling behavior of free-standing nanoporous ionomer-bound carbon films. Polymer Testing, 2021, 100, 107241. | 2.3 | 1 |
| 147 | Mechanical reliability of Cu/low-k interconnects and underfill. , 2012, , . | | 0 |
| 148 | Effect of anisotropic mechanical properties of woven composite substrates on warpage orientation of printed circuit boards. , 2017, , . | | 0 |
| 149 | Stress Analysis of Rollable OLED Display Considering Boundary Conditions Based on Finite Element Method. , 2018, , . | | 0 |
| 150 | Effect of the acceptor types on the fracture behavior of polymer solar cells. , 2018, , . | | 0 |
| 151 | Mechanical and Electrical Reliability Analysis of Flexible Si Complementary Metal-Oxide-Semiconductor Integrated Circuit. Journal of Nanoscience and Nanotechnology, 2019, 19, 6473-6480. | 0.9 | 0 |
| 152 | Stretchable OLEDs: Realizing Stretchable OLEDs: A Hybrid Platform Based on Rigid Island Arrays on a Stress-Relieving Bilayer Structure (Adv. Mater. Technol. 11/2020). Advanced Materials Technologies, 2020, 5, 2070068. | 3.0 | 0 |
| 153 | A Study on the Fabric Substrates With Fine-Pitch Laminated Cu Metal Patterns Using B-Stage Adhesive Films. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 176-183. | 1.4 | 0 |