

# Hyun-Joong Chung

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7453554/publications.pdf>

Version: 2024-02-01

79  
papers

8,295  
citations

109137

35  
h-index

74018

75  
g-index

82  
all docs

82  
docs citations

82  
times ranked

11913  
citing authors

#	ARTICLE	IF	CITATIONS
1	Epidermal Electronics. <i>Science</i> , 2011, 333, 838-843.	6.0	3,944
2	3D multifunctional integumentary membranes for spatiotemporal cardiac measurements and stimulation across the entire epicardium. <i>Nature Communications</i> , 2014, 5, 3329.	5.8	485
3	Electronic transport properties of amorphous indium-gallium-zinc oxide semiconductor upon exposure to water. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	461
4	Flexible electronics under strain: a review of mechanical characterization and durability enhancement strategies. <i>Journal of Materials Science</i> , 2016, 51, 2771-2805.	1.7	295
5	SMART biochar technology—A shifting paradigm towards advanced materials and healthcare research. <i>Environmental Technology and Innovation</i> , 2015, 4, 206-209.	3.0	206
6	Materials for Bioresorbable Radio Frequency Electronics. <i>Advanced Materials</i> , 2013, 25, 3526-3531.	11.1	189
7	3.1: <i>Distinguished Paper</i> : 12.1-inch WXGA AMOLED Display Driven by Indium-Gallium-Zinc Oxide TFTs Array. <i>Digest of Technical Papers SID International Symposium</i> , 2008, 39, 1-4.	0.1	180
8	Self-Regulated Structures in Nanocomposites by Directed Nanoparticle Assembly. <i>Nano Letters</i> , 2005, 5, 1878-1882.	4.5	149
9	Stretchable, Multiplexed pH Sensors With Demonstrations on Rabbit and Human Hearts Undergoing Ischemia. <i>Advanced Healthcare Materials</i> , 2014, 3, 59-68.	3.9	105
10	Flexible and Self-Healing Aqueous Supercapacitors for Low Temperature Applications: Polyampholyte Gel Electrolytes with Biochar Electrodes. <i>Scientific Reports</i> , 2017, 7, 1685.	1.6	102
11	Criteria for Quick and Consistent Synthesis of Poly(glycerol sebacate) for Tailored Mechanical Properties. <i>Biomacromolecules</i> , 2015, 16, 1525-1533.	2.6	92
12	Immunologic and Tissue Biocompatibility of Flexible/Stretchable Electronics and Optoelectronics. <i>Advanced Healthcare Materials</i> , 2014, 3, 515-525.	3.9	90
13	A study of alkaline gel polymer electrolytes for rechargeable zinc-air batteries. <i>Electrochimica Acta</i> , 2019, 327, 135021.	2.6	88
14	Two-Layered and Stretchable e-Textile Patches for Wearable Healthcare Electronics. <i>Advanced Healthcare Materials</i> , 2018, 7, e1801033.	3.9	86
15	Highly Flexible, Multipixelated Thermosensitive Smart Windows Made of Tough Hydrogels. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 33100-33106.	4.0	85
16	Controlling the Location of Nanoparticles in Polymer Blends by Tuning the Length and End Group of Polymer Brushes. <i>ACS Macro Letters</i> , 2012, 1, 252-256.	2.3	78
17	Magnetically Controlled Soft Robotics Utilizing Elastomers and Gels in Actuation: A Review. <i>Advanced Intelligent Systems</i> , 2021, 3, 2000186.	3.3	74
18	Reinforced Gels and Elastomers for Biomedical and Soft Robotics Applications. <i>ACS Applied Polymer Materials</i> , 2020, 2, 1073-1091.	2.0	67

#	ARTICLE	IF	CITATIONS
19	12.1-inch WXGA AMOLED display driven by InGaZnO thin-film transistors. <i>Journal of the Society for Information Display</i> , 2009, 17, 95-100.	0.8	65
20	Preparation of fabric strain sensor based on graphene for human motion monitoring. <i>Journal of Materials Science</i> , 2018, 53, 9026-9033.	1.7	65
21	Porous Polydimethylsiloxane-Silver Nanowire Devices for Wearable Pressure Sensors. <i>ACS Applied Nano Materials</i> , 2019, 2, 4869-4878.	2.4	64
22	Sponge-Templated Macroporous Graphene Network for Piezoelectric ZnO Nanogenerator. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 20753-20760.	4.0	59
23	A pH-Indicating Colorimetric Tough Hydrogel Patch towards Applications in a Substrate for Smart Wound Dressings. <i>Polymers</i> , 2017, 9, 558.	2.0	59
24	Fabrication of Releasable Single-Crystal Silicon-Metal Oxide Field-Effect Devices and Their Deterministic Assembly on Foreign Substrates. <i>Advanced Functional Materials</i> , 2011, 21, 3029-3036.	7.8	56
25	Mobile nanoparticles and their effect on phase separation dynamics in thin-film polymer blends. <i>Europhysics Letters</i> , 2004, 68, 219-225.	0.7	53
26	A jamming morphology map of polymer blend nanocomposite films. <i>Soft Matter</i> , 2011, 7, 7262.	1.2	52
27	Irreversible bonding of polyimide and polydimethylsiloxane (PDMS) based on a thiol-epoxy click reaction. <i>Journal of Micromechanics and Microengineering</i> , 2016, 26, 105019.	1.5	52
28	Comprehensive Study on the Transport Mechanism of Amorphous Indium-Gallium-Zinc Oxide Transistors. <i>Journal of the Electrochemical Society</i> , 2008, 155, H873.	1.3	50
29	Bulk-Limited Current Conduction in Amorphous InGaZnO Thin Films. <i>Electrochemical and Solid-State Letters</i> , 2008, 11, H51.	2.2	50
30	Breakdown of Dynamic Scaling in Thin Film Binary Liquids Undergoing Phase Separation. <i>Physical Review Letters</i> , 2004, 92, 185704.	2.9	47
31	Thermochromic and Piezocapacitive Flexible Sensor Array by Combining Composite Elastomer Dielectrics and Transparent Ionic Hydrogel Electrodes. <i>Advanced Materials Technologies</i> , 2019, 4, 1900327.	3.0	44
32	Epidermal electronics for electromyography: An application to swallowing therapy. <i>Medical Engineering and Physics</i> , 2016, 38, 807-812.	0.8	43
33	Internal Phase Separation Drives Dewetting in Polymer Blend and Nanocomposite Films. <i>Macromolecules</i> , 2007, 40, 384-388.	2.2	42
34	Low-Temperature Ionic Conductivity Enhanced by Disrupted Ice Formation in Polyampholyte Hydrogels. <i>Macromolecules</i> , 2018, 51, 2723-2731.	2.2	39
35	A Morphology Map Based on Phase Evolution in Polymer Blend Films. <i>Macromolecules</i> , 2006, 39, 153-161.	2.2	38
36	Mimicking $\lambda$ -Shaped and Anisotropic Stress-Strain Behavior of Human and Porcine Aorta by Fabric-Reinforced Elastomer Composites. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 33323-33335.	4.0	38

#	ARTICLE	IF	CITATIONS
37	Thin Film Receiver Materials for Deterministic Assembly by Transfer Printing. <i>Chemistry of Materials</i> , 2014, 26, 3502-3507.	3.2	35
38	Deterministic assembly of releasable single crystal silicon-metal oxide field-effect devices formed from bulk wafers. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	34
39	Investigation of Epidermal Loop Antennas for Biotelemetry IoT Applications. <i>IEEE Access</i> , 2018, 6, 15806-15815.	2.6	34
40	Effects of Crosslinker Concentration in Poly(Acrylic Acid)-KOH Gel Electrolyte on Performance of Zinc-Air Batteries. <i>Batteries and Supercaps</i> , 2020, 3, 409-416.	2.4	34
41	22.1: <i>Invited Paper</i>: Technological Challenges for Large-Size AMOLED Display. <i>Digest of Technical Papers SID International Symposium</i> , 2008, 39, 291-294.	0.1	33
42	Compositional Effects of Gel Polymer Electrolyte and Battery Design for Zinc-Air Batteries. <i>Batteries and Supercaps</i> , 2020, 3, 917-927.	2.4	32
43	A highly deformable conducting traces for printed antennas and interconnects: silver/fluoropolymer composite amalgamated by triethanolamine. <i>Flexible and Printed Electronics</i> , 2017, 2, 045001.	1.5	30
44	Self-reinforcing graphene coatings on 3D printed elastomers for flexible radio frequency antennas and strain sensors. <i>Flexible and Printed Electronics</i> , 2017, 2, 035001.	1.5	29
45	Specific Ion Effects in Polyampholyte Hydrogels Dialyzed in Aqueous Electrolytic Solutions. <i>Langmuir</i> , 2019, 35, 1526-1533.	1.6	27
46	Thermodynamic Investigation of the Effect of Interface Curvature on the Solid-Liquid Equilibrium and Eutectic Point of Binary Mixtures. <i>Journal of Physical Chemistry B</i> , 2017, 121, 9452-9462.	1.2	26
47	All-Solid-State Sodium-Selective Electrode with a Solid Contact of Chitosan/Prussian Blue Nanocomposite. <i>Sensors</i> , 2017, 17, 2536.	2.1	26
48	Silicone-based adhesives for long-term skin application: cleaning protocols and their effect on peel strength. <i>Biomedical Physics and Engineering Express</i> , 2018, 4, 015004.	0.6	26
49	The effect of oxygen flow rate on metal-insulator transition (MIT) characteristics of vanadium dioxide (VO <sub>2</sub> ) thin films by pulsed laser deposition (PLD). <i>Applied Surface Science</i> , 2020, 529, 146995.	3.1	25
50	Potassium Ion Selective Electrode Using Polyaniline and Matrix-Supported Ion-Selective PVC Membrane. <i>IEEE Sensors Journal</i> , 2018, 18, 9081-9087.	2.4	19
51	Emerging Technologies for the Commercialization of AMOLED TVs. <i>Information Display</i> , 2009, 25, 18-22.	0.1	18
52	Electrical Contact at the Interface between Silicon and Transfer-Printed Gold Films by Eutectic Joining. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 6061-6065.	4.0	18
53	A tri-electrode configuration for zinc-air batteries using gel polymer electrolytes. <i>Electrochimica Acta</i> , 2020, 357, 136865.	2.6	16
54	Freezing of Aqueous Electrolytes in Zinc-Air Batteries: Effect of Composition and Nanoscale Confinement. <i>ACS Applied Energy Materials</i> , 2018, 1, 1489-1495.	2.5	12

#	ARTICLE	IF	CITATIONS
55	Smart personal protective equipment (PPE): current PPE needs, opportunities for nanotechnology and e-textiles. <i>Flexible and Printed Electronics</i> , 2021, 6, 043004.	1.5	11
56	Selective oil/water filter paper via a scalable one-pot hydrothermal growth of ZnO nanowires. <i>RSC Advances</i> , 2015, 5, 91001-91005.	1.7	10
57	Investigation of the accelerated thermal aging behavior of polyetherimide and lifetime prediction at elevated temperature. <i>Journal of Applied Polymer Science</i> , 2022, 139, 51955.	1.3	10
58	A regenerable copper mesh based oil/water separator with switchable underwater oleophobicity. <i>RSC Advances</i> , 2016, 6, 92833-92838.	1.7	8
59	Normothermic Ex Situ Heart Perfusion in Working Mode: Assessment of Cardiac Function and Metabolism. <i>Journal of Visualized Experiments</i> , 2019, , .	0.2	8
60	Deterministically assigned directional sensing of a nanoscale crack based pressure sensor by anisotropic Poisson ratios of the substrate. <i>Journal of Materials Chemistry C</i> , 2021, 9, 5154-5161.	2.7	8
61	A novel investigation on printed stretchable WLAN antennas. , 2017, , .		6
62	Colorimetric Voltmeter Using Colloidal Fe <sub>3</sub> O <sub>4</sub> @SiO <sub>2</sub> Nanoparticles as an Overpotential Alarm System for Zinc-Air Batteries. <i>ACS Applied Nano Materials</i> , 2019, 2, 6982-6988.	2.4	6
63	Hydrothermal aging of protective fabrics. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	1.3	6
64	Mechanically and electrically robust stretchable e-textiles by controlling the permeation depth of silver-based conductive inks. <i>Flexible and Printed Electronics</i> , 2019, 4, 025006.	1.5	5
65	A model for hyperelastic materials reinforced with fibers resistance to extension and flexure. <i>International Journal of Solids and Structures</i> , 2020, 193-194, 418-433.	1.3	5
66	Hydrothermal aging of polyimide film. <i>Journal of Applied Polymer Science</i> , 0, , 52183.	1.3	5
67	Flexible printed square loop antennas for wearable applications. , 2016, , .		4
68	Direct visualization of nano and microscale polymer morphologies in as-prepared and dialyzed polyampholyte hydrogels by electron microscopy techniques. <i>MRS Communications</i> , 2018, 8, 1079-1084.	0.8	4
69	Electrical conduction of reduced graphene oxide coated meta-aramid textile and its evolution under aging conditions. <i>Journal of Industrial Textiles</i> , 2021, 50, 1330-1347.	1.1	4
70	Sensors: Stretchable, Multiplexed pH Sensors With Demonstrations on Rabbit and Human Hearts Undergoing Ischemia ( <i>Adv. Healthcare Mater.</i> 1/2014). <i>Advanced Healthcare Materials</i> , 2014, 3, 2-2.	3.9	3
71	The Position of the Heart During Normothermic Ex Situ Heart Perfusion is an Important Factor in Preservation and Recovery of Myocardial Function. <i>ASAIO Journal</i> , 2021, 67, 1222-1231.	0.9	3
72	The technological trends of future AMOLED. <i>Proceedings of SPIE</i> , 2009, , .	0.8	2

#	ARTICLE	IF	CITATIONS
73	Polymer Blend Systems With an Added Solvent. RSC Soft Matter, 2020, , 73-113.	0.2	2
74	Photoinduced Multistable Resonance Frequency Switching of Phase Change Microstring at Room Temperature. Advanced Electronic Materials, 2022, 8, 2100819.	2.6	2
75	Epidermal Loop Antenna Design at 900 MHz for Biotelemetry. , 2018, , .		1
76	Effect of water immersion, laundering, and abrasion on the conductivity of reduced graphene oxide coatings on aramid fabrics. IOP Conference Series: Materials Science and Engineering, 2020, 827, 012028.	0.3	1
77	Effect of Surface and Interfacial Tension on the Resonance Frequency of Microfluidic Channel Cantilever. Sensors, 2020, 20, 6459.	2.1	1
78	Bidirectional Frequency Tuning of Vanadium Dioxide (VO <sub>2</sub> ) Microstring Resonator by Optothermal Excitation. , 2020, , .		1
79	Elastomeric tubes with self-regulated distension. IScience, 2022, 25, 104369.	1.9	1