

# Stanford

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## Jaewan Mun

Ph.D. Student in Chemical Engineering, admitted Autumn 2015

### Bio

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#### EDUCATION AND CERTIFICATIONS

- M.S., Stanford University , Chemical Engineering (2018)
- B.S., Seoul National University , Chemical and Biological Engineering (2015)

#### STANFORD ADVISORS

- Zhenan Bao, Doctoral (Program)

### Publications

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#### PUBLICATIONS

- **Tuning the Mechanical Properties of a Polymer Semiconductor by Modulating Hydrogen Bonding Interactions** *CHEMISTRY OF MATERIALS*  
Zheng, Y., Ashizawa, M., Zhang, S., Kang, J., Nikzad, S., Yu, Z., Ochiai, Y., Wu, H., Tran, H., Mun, J., Zheng, Y., Tok, J., Gu, et al  
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- **F4-TCNQ as an Additive to Impart Stretchable Semiconductors with High Mobility and Stability** *ADVANCED ELECTRONIC MATERIALS*  
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- **Artificial multimodal receptors based on ion relaxation dynamics.** *Science (New York, N.Y.)*  
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- **Stretchable self-healable semiconducting polymer film for active-matrix strain-sensing array.** *Science advances*  
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- **An Intrinsically Stretchable High-Performance Polymer Semiconductor with Low Crystallinity** *ADVANCED FUNCTIONAL MATERIALS*  
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- **An Ultrastretchable and Self-Healable Nanocomposite Conductor Enabled by Autonomously Percolative Electrical Pathways** *ACS NANO*  
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- **Polyimide-PEG Segmented Block Copolymer Membranes with High Proton Conductivity by Improving Bicontinuous Nanostructure of Ionic Liquid-Doped Films** *MACROMOLECULAR CHEMISTRY AND PHYSICS*  
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- **Modular and Reconfigurable Stretchable Electronic Systems** *ADVANCED MATERIALS TECHNOLOGIES*  
Kang, J., Son, D., Vardoulis, O., Mun, J., Matsuhisa, N., Kim, Y., Kim, J., Tok, J., Bao, Z.  
2019; 4 (3)
- **Conjugated Carbon Cyclic Nanorings as Additives for Intrinsically Stretchable Semiconducting Polymers.** *Advanced materials (Deerfield Beach, Fla.)*  
Mun, J., Kang, J., Zheng, Y., Luo, S., Wu, H. C., Matsuhisa, N., Xu, J., Wang, G. N., Yun, Y., Xue, G., Tok, J. B., Bao, Z.

2019; e1903912

- **Electronic Skin: Recent Progress and Future Prospects for Skin-Attachable Devices for Health Monitoring, Robotics, and Prosthetics.** *Advanced materials (Deerfield Beach, Fla.)*  
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- **An integrated self-healable electronic skin system fabricated via dynamic reconstruction of a nanostructured conducting network** *NATURE NANOTECHNOLOGY*  
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- **Effect of Nonconjugated Spacers on Mechanical Properties of Semiconducting Polymers for Stretchable Transistors** *ADVANCED FUNCTIONAL MATERIALS*  
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- **Nonhalogenated Solvent Processable and Printable High-Performance Polymer Semiconductor Enabled by Isomeric Nonconjugated Flexible Linkers** *MACROMOLECULES*  
Wang, G., Molina-Lopez, F., Zhang, H., Xu, J., Wu, H., Lopez, J., Shaw, L., Mun, J., Zhang, Q., Wang, S., Ehrlich, A., Bao, Z.  
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- **Tough and Water-Insensitive Self-Healing Elastomer for Robust Electronic Skin** *ADVANCED MATERIALS*  
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- **Taming Charge Transport in Semiconducting Polymers with Branched Alkyl Side Chains** *ADVANCED FUNCTIONAL MATERIALS*  
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- **Phase transition of block copolymer/homopolymer binary blends under 2D confinement** *MACROMOLECULAR RESEARCH*  
Kim, Y., Mun, J., Yu, G., Char, K.  
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