

Sung-Yeon Jang

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Experience and Education

Associate Professor
School of Energy and Chemical Engineering, Ulsan National Institute of Science and Technology (UNIST): 2019 ~ Present

Associate Professor
Department of Bio & Nano Chemistry, Kookmin University: 2011 ~ 2019

Senior Research Scientist
Nanohybrids Center, Korea Institute of Science and Technology (KIST): 2006 ~ 2011

Postdoctor Research Fellow
Department of Chemical Engineering, UC Berkeley & Materials Science LBNL: 2004 ~ 2006
(Advisor: Arun Majumdar and Rachel Segalman)

Ph.D. Institute of Materials Science, University of Connecticut, CT: 2000 ~ 2004 (Advisor: Gregory A. Sotzing)

M.S. Polymer Science and Engineering, Kyungpook National University: 1998 ~ 2000
B.S. Polymer Science and Engineering, Kyungpook National University: 1991 ~ 1998

Research Areas

- **Next-generation Solar Cells (Materials development and Device physics)**
 - Organic photovoltaic devices (**OPV**)
 - Quantum-dot solar cells (**QDSC**)
 - Perovskite solar cells (**PSC**)

- **Nano-electronics**
 - **Organic Thermoelectrics**
 - Molecular electronics (Characterization using break junction technique)
 - **1-D nanostructure fabrication** of electronic materials

- **Chemistry of Conjugated Molecules**
 - Organic Conjugates (**synthesis of semiconducting polymers and conjugated molecules**):
Materials chemistry and electrochemistry
 - Carbon nanomaterials (**graphene, CNT**): Chemistry and Hybridization
 - Applications for Electronic Devices (**Solar cells, FET, W-LEDs, electrochromic etc.**)

Recent Publications

1. H Aqoma, IF Imran, M Al Mubarak, WT Hadmojo, YR Do*, **Sung-Yeon Jang*** *Adv. Energy Mater.* **2020**, 10, 1903294.
2. M Al Mubarak, H Aqoma, FTA Wibowo, W Lee, HM Kim, DY Ryu, JW Jeon*, **Sung-Yeon Jang*** *Adv. Energy Mater.* **2020**, 10, 1902933.
3. Longji Cui, Sunghoon Hur, Zico Alaia Akbar, Jan C. Klöckner, Wonho Jeong, Fabian Pauly*, **Sung-Yeon Jang***, Pramod Reddy* & Edgar Meyhofer* *Nature*, **2019**, 572, 628-633.
4. Gang Yeol Yoo, Randi Azmi, Changwook Kim, Woong Kim, Byoung Koun Min, **Sung-Yeon Jang***, Young Rag Do*, *ACS Nano*, **2019**, 13, 10129-10139.
5. Wisnu Tantyo Hadmojo, Febrian Tri Adhi Wibowo, Wooseop Lee, Hye-Kyung Jang, Yeongsik Kim, Septy Sinaga, Minsuk Park, Sang-Yong Ju, Du Yeol Ryu,* In Hwan Jung,* and **Sung-Yeon Jang*** *Adv. Funct. Mater.* **2019**, 29, 1808731.
6. Havid Aqoma, Muhibullah Al Mubarak, Wooseop Lee, Wisnu Tantyo Hadmojo, Cheolwoo Park, Tae Kyu Ahn, Du Yeol Ryu, **Sung-Yeon Jang*** *Adv. Energy Mater.* **2018**, 1800572.
7. Randi Azmi, Sunbing Hwang, Wenping Yin, Tae-Wook Kim, Tae Kyu Ahn, **Sung-Yeon Jang*** *ACS Energy Lett.* **2018**, 3, 1241-1246.
8. Havid Aqoma, Sujung Park, Hye-Yun Park, Wisnu Tantyo Hadmojo, Seung-Hwan Oh, Sungho Nho, Do Hui Kim, Jeonghoon Seo, Sungmin Park, Du Yeol Ryu, Shinuk Cho,* **Sung-Yeon Jang*** *Adv. Sci.* **2018**, 1700858.
9. Havid Aqoma, **Sung-Yeon Jang*** *Energy & Environ. Sci.* **2018**, 11, 1603—1609.
10. Randi Azmi, Chang-Lyoul Lee, In Hwan Jung, **Sung-Yeon Jang*** *Adv. Energy Mater.* **2018**, 8(14), 1702934.
11. Randi Azmi, Wisnu Tantyo Hadmojo, Septy Sinaga, Chang-Lyoul Lee, Sung Cheol Yoon, In Hwan Jung,* **Sung-Yeon Jang*** *Adv. Energy Mater.* **2018**, 8, 1701683. (Back Cover)
12. Havid Aqoma, Muhibullah Al Mubarak, Wisnu Tantyo Hadmojo, Eun-Hye Lee, Tae-Wook Kim, Tae Kyu Ahn, Seung-Hwan Oh, **Sung-Yeon Jang*** *Adv. Mater.* **2017**, 29, 1605756.