

Jangwon Seo

Associate Professor / Department of Chemical & Biomolecular Engineering / KAIST

Address: 291, Daehak-ro, Yuseong-gu, Daejeon, Republic of Korea

Telephone: (+82)42-350-3924

E-mail: jwseo@kaist.ac.kr

EDUCATION

Seoul National University	Ph.D	School of Materials Science and Engineering	2006
Seoul National University	MS	Department of Fiber and Polymer Science	2000
Seoul National University	BS	Department of Fiber and Polymer Science	1998

PROFESSIONAL ACTIVITIES

- Associate Professor, Department of Chemical & Biomolecular Engineering, KAIST, Republic of Korea, (May 2021 ~ Present)
- Senior/Principal researcher, Advanced Materials Division, KRICT, Republic of Korea, (2013 ~ April 2021)
- Research professor, Department of Materials Science and Engineering, SNU, Republic of Korea, (2012 ~ 2013)
- Postdoctoral associate, Institute for Lasers, Photonics, and Biophotonics, University at Buffalo, USA (2007 ~ 2012)
- Postdoctoral associate, School of Materials Science and Engineering, SNU, Republic of Korea (2006 ~ 2007)

AWARD AND HONORS

- 2017, Chemical industry day, commendation by minister (of trade, industry and energy)
- 2017, National Academy Engineering of Korea, The top 100 technologies and leaders to lead Korea in 2025
- 2017, Government funded research institute, 10 excellent technologies
- 2018, 100 National excellent research & development achievements (MIST, the grand prize)
- 2018, Science and Technology medal
- 2019, S-Oil, Next-generation scientist award
- 2020, 100 National excellent research & development achievements (MIST)
- 2022, Highly cited researcher (HCR)
- 2023, Highly cited researcher (HCR)

MAIN SCIENTIFIC PUBLICATION

- “A fluorene-terminated hole-transporting material for highly efficient and stable perovskite solar cells”, *Nat. Energy* **2018**, 3, 682.
- “Efficient, stable and scalable perovskite solar cells using poly(3-hexylthiophene)”, *Nature* **2019**, 567, 511.
- “Roll-to-roll gravure-printed flexible perovskite solar cells using eco-friendly antisolvent bathing with wide processing window”, *Nat. Comm.* **2020**, 11, 5146.
- “Efficient perovskite solar cells via improved carrier management”, *Nature* **2021**, 590, 587.
- “Alkylammonium bis(trifluoromethylsulfonyl)imide as a dopant in the hole-transporting layer for efficient and stable perovskite solar cells”, *Energy & Environ. Sci.* **2023**, 16, 2226.

RESEARCH INTERESTS

- Organic-polymeric materials for optoelectronic applications
- Organic-inorganic hybrid perovskite solar cells