

# Stanford

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## MinJae Kim

Ph.D. Student in Materials Science and Engineering, admitted Autumn 2025

### Bio

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#### BIO

MinJae Kim is a first-year PhD student and Kwanjeong Doctoral Study Abroad Fellow in Materials Science and Engineering at Stanford University. He received a BS in Materials Science and Engineering at KAIST. Before joining Stanford University, he was a National Presidential Science Scholar, KAIST Presidential Fellow, National University of Singapore (NUS) Young Fellow, and Young Future Energy Leader selected by Khalifa University.

He has received many awards and honors, including the national delegation at the Lindau Nobel Laureate Meeting and Global Young Scientists Summit, an invitation to the Nobel Ceremony, and the membership in the Young Engineers' Honor Society nominated by the National Academy of Engineering of Korea. With these achievements, he has received many recognitions from the Korean government, such as the Talent Award of Korea (Ministry of Education) and a cadetship as the Research Officer for National Defense (Ministry of Defense, Ministry of Science and ICT).

#### EDUCATION AND CERTIFICATIONS

- BS, Korea Advanced Institute of Science and Technology (KAIST) , Materials Science and Engineering (2025)

#### LINKS

- Personal Homepage: <https://mj3259.github.io>

### Research & Scholarship

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#### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Metasurfaces, Bioimaging, Optoelectronic materials and devices

### Publications

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#### PUBLICATIONS

- **Near-planar light outcoupling structures with finite lateral dimensions for ultra-efficient and optical crosstalk-free OLED displays** *NATURE COMMUNICATIONS*  
Kim, M., Kim, J., Yoo, S.  
2025; 16 (1): 11606
- **Ultralow-power carbon dioxide sensor for real-time breath monitoring** *DEVICE*  
Kim, M., Choi, D., Kang, C., Yoo, S.  
2025; 3 (5)