



Featuring research from Masanori Kaneko, Hiroaki Yoshida, Koichi Yamashita, Kazunari Domen, and Kazuhiko Seki on optimizing external quantum efficiency in photocatalysts.

Optimizing external quantum efficiency in photocatalysts via first-principles optics and carrier transport modeling

This study shows that maximizing light absorption is just as important as minimizing charge-recombination losses. As the effective optical path length increases with wavelength, reflectance losses rise due to additional traversals across interfaces, reducing the apparent quantum efficiency.

Image reproduced by permission of Kazuhiko Seki from *J. Mater. Chem. A*, 2026, **14**, 4421.

As featured in:



See Kazuhiko Seki *et al.*,
J. Mater. Chem. A, 2026, **14**, 4421.