

# ADVANCED MATERIALS

## Plasmonic Ternary Physical Unclonable Function

In their Research Article (DOI: 10.1002/adma.202503976), Sunkook Kim, Dong-Hwan Kim, and co-workers report a ternary physical unclonable function that exploits the Brownian motion of nanoparticles as a robust entropy source through an optical printing approach. The cover illustrates optical printing of gold nanoparticles, where minute fluctuations induced by stochastic Brownian motion are encoded into unpredictable outcomes under deterministic optical forces.