

박용근

Curriculum Vitae

KAIST 석좌교수

● 학력

2010 Harvard-MIT 의과학 박사
 2007 MIT Mechanical Engineering 석사
 2004 서울대학교 기계공학 학사



● 경력

2010- KAIST 물리학과 석좌교수

● 학회활동 및 수상경력

홍진기 창조인상, 유민문화재단, 2018
 과학기술 포장, 대한민국대통령, 2018
 장영실상, 과기정통부장관, 2017
 석학회원, 미국광학회
 석학회원, 세계광기술학회

● 주요 연구 실적

160여편 peer-reviewed publication, 피인용수 = +12,500, h-index = 62

1. Tomographic measurements of dielectric tensors at optical frequency, Nature Materials, in press
2. Data-driven multiplexed microtomography of endogenous subcellular dynamics, Nature Cell Biology, in press
3. Three-dimensional label-free visualization and quantification of polyhydroxyalkanoates in individual bacterial cell in its native state, PNAS, 2021
4. Intensity-based holographic imaging via space-domain Kramers-Kronig relations, Nature Photonics, 2021
5. Non-resonant power-efficient directional Nd:YAG ceramic laser using a scattering cavity, Nature Communications, 2021
6. Deep-learning based three-dimensional label-free tracking and analysis of immunological synapses of CAR-T cells, eLife, 2020
7. Ultrathin wide-angle large-area digital 3D holographic display using a non-periodic photon sieve, Nature Communications, 2019
8. Quantitative Phase Imaging in Biomedicine, Nature Photonics, 2018
9. Tomographic active optical trapping of arbitrarily shaped objects by exploiting 3-D refractive index maps, Nature Communications, 2017
10. Ultrahigh-definition dynamic 3D holographic display by active control of volume speckle fields, Nature Photonics, 2017
11. Holographic deep learning for rapid optical screening of anthrax spores, Science Advances, 2017
12. Exploiting the speckle-correlation scattering matrix for a compact reference-free holographic image sensor, Nature Communications, 2016
13. Subwavelength light focusing using random nanoparticles, Nature Photonics, 2013