

## Winners of Youth Innovation Awards of the Faculty of Information Technology, ZJU, 2020

### Winner Yang Zongyin

The researcher focuses on the development of bandgap-graded materials in the field of optoelectronics. He has been a key pioneer in the field of bandgap-graded nanowires. Furthermore, he has been a leader in defining directions and demonstrating applications of bandgap-graded nanomaterials. He has 32 publications in peer reviewed international journals (including 2 in Science as the first author), 1 book chapter, 6 conference proceedings, 8 granted Chinese patents, 1 UK patent application, 1 PCT patent. The results have been widely covered by technical and general press. His articles have been cited 1400 times with h-index and 10-index of 20 and 23 (Google Scholar), respectively. He is a regular reviewer of most of the top journals in materials and optoelectronics, including Nature Nanotechnology, JACS.



### Winner Di Dawei

The researcher focuses on novel optoelectronic devices and device physics. He and his co-workers set efficiency records for organic and perovskite LEDs, and explored high-efficiency light emission mechanisms in these novel devices. He has received important awards and honors, including Fellow of the Kun-Peng Program of Zhejiang Province, Young Scholar of the National Talent Program, MIT Technology Review Innovators Under 35 (global & China), and World Laureates Forum Young Scientist. He published his research in top-tier journals including Science, Nature Photonics (cover article), Nature Electronics (cover article) and Nature Communications.



### Winner Ji Shouling

The researcher focuses on the intersection of AI and network system security. He proposed several methods for analyzing and quantifying the security, robustness and utility of AI systems, and designed a series of mechanisms for evaluating the vulnerability of AI systems and further securing them. He also developed an open-source platform for AI security and reliability analysis. Leveraging the proposed techniques, several hundreds of 0-day vulnerabilities have been discovered. Meanwhile, the developed technologies and systems have been deployed on large-scale commercial platforms, including Alibaba and Huawei. His research was partially supported by NSFC and the National Key Research and Development Program.

