



香港大學
THE UNIVERSITY OF HONG KONG

Professor YAO Wang
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Biography

Professor Yao Wang obtained his BSc from Peking University in 2001, and PhD in physics from the University of California, San Diego in 2006. He joined the University of Hong Kong in September 2008 and is currently Chair Professor in the Department of Physics. He has received the OCPA Achievement in Asia Award (Robert T. Poe Prize) in 2014 from The International Organization of Chinese Physicists and Astronomers (OCPA), the Croucher Innovation Award in 2013 and the Croucher Senior Research Fellowship 2020 from the Croucher Foundation, and the Outstanding Researcher Award 2014/15, Outstanding Young Researcher Award 2012/13 from The University of Hong Kong. He has been named by Clarivate Analytics in the list of “Highly Cited Researchers” among the world’s top researchers in 2018 and 2019.



Professor Yao’s research interest lies in the physics of spin and valley in solids, with a current focus on two-dimensional materials and their heterostructures. He has played a decisive role in creating an important new research direction – valley optoelectronics in 2D materials, which aims to exploit valley, a quantum degree of freedom of electron, in future optoelectronic devices. With the Croucher Senior Research Fellowship he will explore new functional mechanisms for versatile electronics and optoelectronics based on van der Waals layered structure, combining its unique aspects including the rich physics associated with electron’s valley pseudospin and the ubiquitous moiré pattern that naturally provides a nanoscale landscape for manipulations of electrons and optical excitations.