



## **Citation for Dr Zhang Rui**

### **Young Researcher Award**

Dr Zhang Rui is internationally recognised for his significant contributions to the field of wireless communications. He carries out research of high impact in several frontier areas including cognitive radio, multi-antennas and energy-harvesting-enabled communications. He is also well-known for his work on the application of advanced optimisation methods to solve complex multi-user resource allocation problems in wireless networks. Recently, he pioneered promising inter-disciplinary research on the use of radio signals for simultaneous wireless information and power transfer in which he characterised the fundamental rate-energy performance trade-off, and designed practical receivers to achieve the fundamental limit. This work laid the theoretical foundation for a unified study of wireless information and power transmission, which is important for the design of next-generation wireless infrastructure that is capable of supporting both data and energy access over the air.

Zhang Rui has published extensively in his field, with over 200 publications that have been cited more than 8,000 times. Several of his high-impact papers published in prestigious Institute of Electrical and Electronics Engineers (IEEE) journals rank among the journals' top three most-cited papers. He is the editor of three top-tier IEEE journals and is an elected member of two internationally renowned technical committees of the IEEE Signal Processing Society. He is the recipient of the

prestigious 6th IEEE Communications Society Asia-Pacific Best Young Researcher Award in 2011. He also received an NUS Young Investigator Award in 2011.

This evening, we are proud to present the Young Researcher Award to Dr Zhang Rui.