

## **List of the Prof. Zhang's publications:**

**This list includes three parts: A. 8 Monographs (4 in English, 4 in Chinese) and 2 Chapters in English monographs; B. 433 Publications in the peer-reviewed journals; C. 84 Chinese invention patents.**

### **A. 8 Monographs (4 in English, 4 in Chinese) and 2 Chapters**

1. **Zhang Yue.** ZnO Nanostructures Fabrication and Applications, Royal Society of Chemistry, ISBN: 9781782627418, 2017, London, UK.
2. **Zhang Yue.** One dimensional ZnO nanomaterials, Science Press, ISBN: 978-7-03-026445-9, 2010, Beijing, China. (Chinese)
3. **Zhang Yue.** Semiconductor nanowire functional devices, Science Press, ISBN: 978-7-03-060533-7, 2019, Beijing, China. (Chinese)
4. Qi Junjie, Huang Yunhua, **Zhang Yue.** Microalloyed steel, Metallurgical Industry Press, ISBN: 7-5024-3969-2, 2006, Beijing, China. (Chinese)
5. **Zhang Yue,** Gu Yousong, Huang Yunhua. Controllable Synthesis, Structure and Property Modulation and Device Application of One-Dimensional Nanomaterials, World Scientific, ISBN: 9789814407595, 2012, Singapore.
6. **Zhang Yue,** Dai Ying. Controlled Growth and Optical Properties of Zinc Oxide Nanostructures, Springer US, ISBN: 978-0-387-28706-5, 2003, New York, USA.
7. Zheng Zhang, Zhuo Kang, Qingliang Liao, **Yue Zhang.** Van der Waals Heterostructures: Fabrications, Properties, and Applications. Wiley-VCH GmbH, ISBN: 978-3-527-34950-0.
8. Yi Fang, **Zhang Yue,** Liao Qingliang, Zhang Zheng, Kang Zhuo. Flexible Energy Conversion and Storage Devices, Flexible Triboelectric Nanogenerators. John Wiley and Sons, Inc., ISBN: 978-3-527-34253-2, 2018, New York, USA. (Chapter)
9. **Zhang Yue,** Huang Yunhua, Li Huifeng. Electromagnetic Wave Absorption Properties of Nanoscaled ZnO, Wave Propagation. InTech, ISBN: 978-953-307-275-3, 2011, Rijeka, Croatia. (Chapter)
10. **Zhang Yue,** Bai Chunli. Scanning Tunneling Microscope, Metallurgical Industry Press, 1997. (Chinese)

### **B. 433 Publications in the Peer-Reviewed Journals:**

**Listed backward in publication date order:**

- [1] B. Zhao, Z. Wan, Y. Liu, J. Q. Xu, X. D. Yang, D. Y. Shen, Z. C. Zhang, C. H. Guo, Q. Qian, J. Li, R. X. Wu, Z. Y. Lin, X. X. Yan, B. L. Li, Z. W. Zhang, H. F.

- Ma, B. Li, X. Chen, Y. Qiao, I. Shakir, Z. Almutairi, F. Wei, Y. Zhang, X. Q. Pan, Y. Huang, Y. Ping, X. D. Duan, X. F. Duan. High-Order Superlattices by Rolling up van der Waals Heterostructures. *Nature*. 2021;591:385-90.
- [2] Y. H. Yu, Z. Zhang, X. Yin, A. Kvit, Q. L. Liao, Z. Kang, X. Q. Yan, Y. Zhang, X. D. Wang. Enhanced photoelectrochemical efficiency and stability using a conformal TiO<sub>2</sub> film on a black silicon photoanode. *Nature Energy*. 2017;2:17045.
- [3] Sung-Joon Lee, Z. Y. Lin, J. Huang, C. S. Choi, P. Chen, Y. Liu, J. Guo, C. C. Jia, Y. L. Wang, L. Y. Wang, Q. L. Liao, I. Shakir, X. D. Duan, B. Dunn, Y. Zhang, Y. Huang, X. F. Duan. Programmable devices based on reversible solid-state doping of two-dimensional semiconductors with superionic silver iodide. *Nature Electronics*. 2020;3:630-7.
- [4] Y. L. Wang, Z. Wan, Q. Qian, Y. Liu, Z. Kang, Z. Fan, P. Q. Wang, Y. K. Wang, L. Chao, C. C. Lin, Z. Y. Guo, J. Guo, I. Shakir, M. Goorsky, X. D. Duan, Y. Zhang, Y. Huang, X. F. Duan. Probing photoelectrical transport in lead halide perovskites with van der Waals contacts. *Nature Nanotechnology*. 2020;15:768-75.
- [5] Zhuo Kang, Qingliang Liao, Zheng Zhang, Yue Zhang\*. Carbon neutrality orientates the reform of the steel industry. *Nature Materials*, 2022, 21, 1094–1098.
- [6] X. K. Zhang, B. S. Liu, L. Gao, H. H. Yu, X. Z. Liu, J. L. Du, J. K. Xiao, Y. H. Liu, L. Gu, Q. L. Liao, Z. Kang, Z. Zhang, Y. Zhang. Near-Ideal van der Waals Rectifiers Based on All-Two-Dimensional Schottky Junctions. *Nature Communication*. 2021;12:1522.
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- [8] J. J. Qi, Y. W. Lan, A. Z. Stieg, J. H. Chen, Y. L. Zhong, L. J. Li, C. D. Chen, Y. Zhang, K. L. Wang. Piezoelectric effect in chemical vapour deposition-grown atomic-monolayer triangular molybdenum disulfide piezotronics. *Nature Communication*. 2015;6:7430.
- [9] X. Zhao, Z. Zhang, Q. L. Liao, X. C. Xun, F. F. Gao, L. X. Xu, Z. Kang, Y. Zhang. Self-powered user-interactive electronic skin for programmable touch operation platform. *Science Advance*. 2020;6:aba4294.

- [10] F. Yi, X. F. Wang, S. M. Niu, S. M. Li, Y. J. Yin, K. R. Dai, G. J. Zhang, L. Lin, Z. Wen, H. Y. Guo, J. Wang, M. H. Yeh, Y. L. Zi, Q. L. Liao, Z. You, Y. Zhang, Z. L. Wang. A highly shape-adaptive, stretchable design based on conductive liquid for energy harvesting and self-powered biomechanical monitoring. *Science Advance*. 2016;2;e1501624.
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## C. 84 Chinese Invention Patents

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