

Tao Wang 王濤

Postdoctoral Scholar

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## Education

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- PhD of Optical Engineering  
Tianjin University, Tianjin 2013.09 – 2018.06
- Optoelectronics technology and science  
Tianjin University, Tianjin 2009.09 – 2013.06

## Publications

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- **Tao Wang**; Jieru Zhao; Qian Zhang; Jingyang Liu; Huan Chen; Jianzhong Zhang; Mingjiang Zhang ; Extracting Brillouin frequency shift accurately based on particle swarm optimization and a cross-correlation method, Applied Optics, 2022, 61(2): 446-454
- Qian Zhang; **Tao Wang**; Jian Li; Yahui Wang; Jingyang Liu; Mingjiang Zhang ; Centimeter-level spatial resolution Brillouin optical time domain analyzer using mono-pulse self-difference, Optics Letters, 2022, 47(19): 5008-5011
- Chen Huan; **Wang Tao**; Zhang Qian; Liu Jingyang; Peng Jiabin; Ge Xiaopeng; Zhang Jianzhong; Zhang Mingjiang ; Recognition of centimeter-level length changes using the intensity of probe light in BOTDA, Optics Express, 2022, 30(23): 41898-41910
- Jiangyang Liu; **Tao Wang**; Qian Zhang; Huan Chen; Jianzhong Zhang; Lijun Qiao; Shaohua Gao; Mingjiang Zhang ; Rapid noise removal based dual adversarial network for the Brillouin optical time domain analyzer, Optics Express, 2021, 29(21): 34002-34014
- Qian Zhang; **Tao Wang**; Jieru Zhao; Jingyang Liu; Yahui Wang; Jianzhong Zhang; Lijun Qiao; Mingjiang Zhang ; A dual-adaptive denoising algorithm for Brillouin

optical time domain analysis sensor, IEEE Sensors Journal, 2021, 21(20): 22712-22719

- **Tao Wang**; Mingjiang Zhang; Kun Liu; Junfeng Jiang; Yuanhao Zhao; Jinying Ma; Tiegeng Liu ; The effect of the TiO<sub>2</sub> film on the performance of the optical fiber SPR sensor, Optics Communications, 2019, 448: 93-97
- **Tao Wang**; Kun Liu; Junfeng Jiang; Meng Xue; Pengxiang Chang; Tiegeng Liu ; A large range temperature sensor based on an angled fiber end, Optical Fiber Technology, 2018, 45: 19-23
- **Tao Wang**; Kun Liu; Junfeng Jiang; Meng Xue; Pengxiang Chang; Tiegeng Liu ; Temperature-insensitive refractive index sensor based on tilted moiré FBG with high resolution, Optics Express, 2017, 25(13): 14900-14909
- **Tao Wang**; Tiegeng Liu; Kun Liu; Junfeng Jiang; Lin Yu; Meng Xue; Yunxia Meng ; An EMD-based filtering algorithm for the fiber-optic SPR sensor, IEEE PHOTONICS JOURNAL, 2016, 8(3): 1-8

### **Research Interests**

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- Distributed fiber optic temperature and strain sensing and instrument development
- Fiber optic sensing technology for structural health monitoring
- Fiber Bragg grating sensors

### **Projects**

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- Research and development of reliable packaging and high-precision temperature compensation technology for fiber Bragg grating sensors for building safety monitoring, Macao Young Scholars Program, AM2021026

### **Selected Awards & Honors**

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- N/A

**Academic Services**

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