



Jintao FAN

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Institute of Quantum Optics, **Leibniz University Hannover**
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EDUCATION

- **Postdoc** Supervisors: Prof. Uwe Morgner 2019-present
Institute of Quantum Optics, Leibniz University Hannover
- **Ph.D. candidate, *Optical Engineering*** Supervisors: Prof. Minglie Hu 2015-2019
School of Precision Instrument and Optoelectronics Engineering, Tianjin University
- **M.S., *Opto-electronics Technology*** Supervisors: Prof. Minglie Hu 2013-2015
School of Precision Instrument and Optoelectronics Engineering, Tianjin University
- **B.E., *Electronic Science and Technology (opto-electronic technology)*** 2009-2013
Qiushi Honors College, Tianjin University Top 1 student

DETAILED RESEARCH ACTIVITIES AND SKILLS

- **Research on few-cycle pulse generation via optical parametric process**
 - High average output pulses ranging from UV to MIR via different OPO configurations
 - Investigation of the noise performance of OPG output pulses
 - High quality 3.9-cycle (19.2 fs) pulse from the coherent synthesis of two cw injection seeded optical parametric amplifiers
- **Research on structure beam generation and application**
 - Structured beam OPO, including vortex beam OPO and cylindrical beam OPO

PUBLICATIONS

- **Fan J**, Gu C, Wang C, et al. Extended femtosecond laser wavelength range to 330 nm in a high-power LBO based optical parametric oscillator [J]. **Optics Express**, 2016, 24(12): 13250-13257.
- **Fan J**, Li Y, Zhang X, et al. Predicting mode properties of porous-core honeycomb bandgap THz fibers by semi-analytical theory [J]. **Journal of Lightwave Technology**, 2015, 33(10): 1931-1936.
- **Fan J**, Li Y, Hu M, et al. Design of Broadband Porous-Core Bandgap Terahertz Fibers [J]. **IEEE Photonics Technology Letters**, 2016, 28(10): 1096-1099.
- **Fan J**, C Wei, Gu C, et al. Noise characteristics of high-power fiber-laser pumped femtosecond optical parametric generation [J]. **Optics Express**, 2017, 25, 24594-24603
- **Fan J**, Gu C, Zhao J, et al. Dielectric-mirror-less femtosecond optical parametric oscillator with ultrabroad-band tunability[J]. **Optics Letters**, 2018, 43(10): 2316-2319.
- **Fan J**, Gu C, Shi H, et al. Generation of 3.9-cycle pulses from the coherent synthesis of two continuous-wave injection seeded optical parametric amplifiers at 53 MHz[J]. **Optics Letters**, 2018, 43(22): 5579-5582.
- **Fan J**, Gu C, Liao R, et al. High power 4.2-cycle mid-infrared pulses from a self-compression optical parametric oscillator[J]. **IEEE Photonics Journal**, 2018, 10(6), 1-7
- **Fan J**, Chu Y, Shi H, et al. Compact V-Type Cavity for Harmonically Pumped 1-GHz Femtosecond Optical Parametric Oscillator[J]. **IEEE Photonics Technology Letters**, 2018, 30(24): 2159-2162.
- Chen Y[†], **Fan J**[†], Yang W, et al. 910-MHz, watt-level, signal-power-enhanced, compact femtosecond optical parametric oscillator based on bidirectional pumping technique[J]. **Optics Letters**, 2019, 44(7): 1638-1641
- Zhao Y, **Fan J**, Shi H, et al. Intracavity cylindrical vector beam generation from all-PM Er-doped mode-locked fiber laser[J]. **Optics Express**, 2019, 27(6): 8808-8818.
- Zhao J, **Fan J**, et al Wavelength insensitive, ultra-broadband second harmonic generation in ZnO nano-tetrapod [J]. **IEEE Photonics Technology Letters**, 2019, 31(3), 250-252
- W. Liu, **J. Fan**, C. Xie, et al. Programmable controlled mode-locked fiber laser using a digital micromirror device [J]. **Opt. Lett.** 42, 1923-1926 (2017)
- **Fan J**, Gu C, Zhao J, et al. Relative CEP-Locking Laser Source: Narrowband CW Injection Seeded Optical Parametric Amplifier. in **Conference on Lasers and Electro-Optics**. (2017, poster presentation)
- **Fan J**, Chen W, Gu C, et al. Noise Characteristics of Fiber-Laser Pumped Femtosecond Optical Parametric Generation. in **Conference on Lasers and Electro-Optics**. (2017, poster presentation)
- **Fan J**, Gu C, Liu B, et al, " Few-cycle near-infrared pulses from a narrowband cw injection-seeded femtosecond optical parametric amplifier," in **Ultrafast Optics**, (UFO, 2017). (Oral Presentation)

AWARDS & HONORS

- Merit Graduate Student of Tianjin University 2013
- Chiang Chen Scholarship 2013-2015
- Innovation funding of excellent doctoral dissertations. 2017-2018