

# Complete list of publications of Pengcheng Zhao (Zhao, P.)

## Further publications:

### A) Publications with peer review process

#### Journal Articles

1. **Zhao, P.**<sup>†</sup>, Krishnaiah, K. V.<sup>†</sup>, Guo, L., Li, T., Ho, H. L., Zhang, A. P.\* , and Jin, W.\* (2024). Ultraminiature optical fiber-tip 3D-microprinted photothermal interferometric gas sensors. *Laser & Photonics Reviews*, 2301285.
2. Guo, L., Bao, H.\* , Chen, F., **Zhao, P.**, Jiang, S., Ho, H.L., and Jin, W.\* , (2024) Ultra-Compact Optical Fiber Gas Sensor with High Sensitivity, Fast Response and Large Dynamic Range. *Journal of Lightwave Technology*, 42(7), 2617-2624.
3. Guo, L., **Zhao, P.\***, Ho, H.L., Jiang, S., Bao, H., Gao, S., Wang, Y., and Jin, W.\* (2023). Pump-probe-alternating photothermal interferometry for two-component gas sensing. *Optics Letters*, 48(24), 6440-6443.
4. **Zhao, P.\***, Ho, H. L., Fan, S., and Jin, W.\* . (2023). Evanescent Wave Lab-on-Fiber for High Sensitivity Gas Spectroscopy with Wide Dynamic Range and Long-Term Stability. *Laser & Photonics Reviews*, 2200972.
5. **Zhao, P.**, Ho, H. L., Jin, W.\* , Fan, S.\* , Gao, S., and Wang, Y. (2021). Hollow-core fiber photothermal methane sensor with temperature compensation. *Optics Letters*, 46(11), 2762-2765.
6. Jin, W.\* , Bao, H., **Zhao, P.**, Zhao, Y., Qi, Y., Wang, C., and Ho, H. L. (2021). Recent advances in spectroscopic gas sensing with micro/nano-structured optical fibers. *Photonic Sensors*, 11, 141-157.
7. Jin, W., Bao, H., Qi, Y., Zhao, Y., **Zhao, P.**, Gao, S., and Ho, H. L. (2021). Micro/nano-structured optical fiber laser spectroscopy. *Acta optica Sinica*, 41 (1), 1-18.
8. **Zhao, P.**, Ho, H. L., Jin, W.\* , Fan, S.\* , Gao, S., Wang, Y., and Wang, P. (2020). Gas sensing with mode-phase-difference photothermal spectroscopy assisted by a long period grating in a dual-mode negative-curvature hollow-core optical fiber. *Optics Letters*, 45(20), 5660-5663.
9. **Zhao, P.**, Zhao, Y., Bao, H., Ho, H. L., Jin, W.\* , Fan, S.\* , Gao, S., Wang, Y., and Wang, P. (2020). Mode-phase-difference photothermal spectroscopy for gas detection with an anti-resonant hollow-core optical fiber. *Nature communications*, 11(1), 847.

#### Conference Proceedings

10. **Zhao, P.**<sup>†</sup>, Krishnaiah, K. V.<sup>†</sup>, Guo, L., Li, T., Ho, H. L., Zhang, A. P.\* , and Jin, W.\* (2023, November). High-sensitivity fiber-tip photothermal gas sensor based on a 3D  $\mu$ -printed fabry-pérot microcavity. In *Optical Fiber Sensors* (pp. Th5-2). Optica Publishing Group.
11. Guo, L., **Zhao, P.\***, Ho, H. L., Jiang, S., Bao, H., Gao, S., Wang, Y., and Jin, W.\* (2023, November). Two-component photothermal gas sensor with a pump-probe-

- alternating technique. In *Optical Fiber Sensors* (pp. Tu3–16). Optica Publishing Group.
12. **Zhao, P.**, Fan, S., Ho, H. L., and Jin, W.\* (2022, August). Microfiber evanescent-wave photothermal methane sensor with sub-ppm sensitivity. In *Optical Fiber Sensors* (pp. Th3-5). Optica Publishing Group.
  13. **Zhao, P.\***, Ho, H. L., Jin, W., Fan, S., Gao, S., Wang, Y., and Wang, P. (2020, October). LP<sub>01</sub>-LP<sub>11</sub> mode conversion in a negative curvature hollow-core fiber by use of a long-period grating. In *Asia Communications and Photonics Conference* (pp. M4A-118). Optica Publishing Group.
  14. Jin, W.\*, Bao, H., **Zhao, P.**, Qi, Y., and Ho, H. L. (2020, July). High Sensitivity Gas Detection with Microstructured Optical Fibres. In 2020 22nd *International Conference on Transparent Optical Networks (ICTON)* (pp. 1-4). IEEE.
  15. **Zhao, P.\***, Zhao, Y., Bao, H., Ho, H. L., Jin, W., Fan, S., Gao, S., Wang, Y., and Wang, P. (2020, June). Ultrasensitive photothermal gas sensor with a dual-mode anti-resonant hollow-core fiber. In *Optical Fiber Sensors* (pp. W3-7). Optica Publishing Group.

#### **B) Submitted publications with peer review process**

#### **C) Submitted manuscripts without peer review process**

#### **D) Patents**

1. Jin W., **Zhao P.**, Ho H.L. System and method for the concentration detection of fluid. Submitted as: CN Patent (Application No. CN201911243218.9A, application date 06.12.2019)

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The following above mentioned publications have evolved from my doctoral dissertation: A4-9, A12-A15, D1