

## 教师介绍

## 张鹏飞

来源: 更新时间: 2020-02-21

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## 个人经历或学术经历

## 工作经历:

2018年05月-至今, 天津大学精密仪器与光电子工程学院, 副教授。  
 2017年04月-2018年04月, 北京邮电大学, 讲师。  
 2016年01月-2017年01月, 圣路易斯华盛顿大学, 访问副研究员。  
 2012年06月-2015年06月, 洛斯阿拉莫斯国家实验室, 博士后副研究员。  
 2009年02月-2011年12月, 美国东卡莱罗纳大学, 博士后。  
 2008年07月-2009年01月, 上海广电光电子技术有限公司, 研发工程师。

## 学习经历:

2002.09-2008.07 中科院上海光学精密机械研究所, 博士, 光学。  
 1998.09-2002.07 西北工业大学, 本科, 应用物理。

## 研究方向

光谱成像、单分子检测、光声成像、激光与物质相互作用

## 科研项目、成果和专利

## 科研项目:

- “口岸食品快检产品和智能监控系统优化通用性评价研究”, 国家重点研发计划课题(2019YFC1605501), 2019/12-2022/12, 315万元, 主持。
- “表面等离激元调控与量子体系的耦合及其量子态调控研究”, 国家重大研发计划(2016YFA0301304), 2016/07-2021/06, 参与。
- “Fast High-Resolution Deep Photoacoustic Tomography of Action Potentials in Brains”, 美国健康卫生研究所(NIH)项目(1U01NS090579-01), 09/30/2014-07/31/2018, 参与。
- “Whole Body Small Animal Photoacoustic-Ultrasonic Computed Tomography”, 美国健康卫生研究所(NIH)项目(5R01EB016963-02), 05/01/2013-3/31/2018, 参与。
- “Time-gated super-resolution imaging”, 洛斯阿拉莫斯国家实验室LDRD项目(20120227ER), 2011/10-2014/10, 参与。
- “Bet-hedging in pathogens: Targeting bacterial persistence to combat infectious disease”, 美国防恐总署(Defense Threat Reduction Agency)项目, 2014/02-2017/02, 参与。

## 论文、专著

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- Zhang P.**, Wang, G., Zhang, X., Li, Y.-Q., “Single-acquisition 2-D multifocal Raman spectroscopy using compressive sensing,” *Analytical Chemistry*, 92 (1), 1326-1332 (2020). 中科院分区: 一区, 影响因子: 6.35.
- Zhang P.**, Huang, Z., Ma, Y., Li, Y., All, N., Li, Q., Chen, D., “On-line detection of radioactive and non-radioactive heavy metals in tobacco smoke using portable laser-induced breakdown spectroscopy,” *Analyst*, 144, 3567-3572 (2019). 中科院分区: 二区, 影响因子: 4.019.
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- Zhang, P.**, Li, L., Lin, L., Shi, J., and Wang, L. V., “In vivo superresolution photoacoustic computed tomography by localization of single dyed droplets,” *Light: Science & Applications*, 8(1), 36 (2019). 中科院分区: 一区, 影响因子: 14.00.
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- Zhang, P.**, Song, G., and Yu, L., “Optical Trapping of Single Quantum Dots for Cavity Quantum Electrodynamics,” *Photonics Research*, 3, 6(3): 182-185 (2018). 中科院分区: 一区, 影响因子: 5.522.
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- Zhang, P.**, Li, L., Lin, L., Hu, P., Shi, J., He, Y., Zhu, L., Zhou, Y., and Wang, L.V., “High-resolution deep functional imaging of the whole mouse brain by photoacoustic computed tomography in vivo,” *Journal of Biophotonics*, 11(1): e201700024 (2018). 中科院分区: 二区, 影响因子: 3.768.
- Lin, L.T., **Zhang, P.**, Xu, S., Shi, J., Li, L., Yao, J., Wang, L., and Wang, L.V., “Hand-held optical-resolution photoacoustic microscopy,” *Journal of Biomedical Optics*, 22(4), 041002(2017). 中科院分区: 三区, 影响因子: 2.367.
- Zhang, P.**, Goodwin, P.M., and Werner, J.H., “Light-sheet Microscopy by confocal line scanning of dual-Bessel Beams,” *Journal of Biomedical Optics*, 21 (10), 100502 (2016). 中科院分区: 三区, 影响因子: 2.367.
- Tao, Z., **Zhang, P.**, Qin, Z., Li, Y.Q. and Wang, G., “Poly(3-hydroxybutyrate) anabolism in *Cupriavidus necator* cultivated at various carbon-to-nitrogen ratios: insights from single-cell Raman spectroscopy,” *Journal of Biomedical Optics*, 21(9), 097005-097005 (2016). 中科院分区: 三区, 影响因子: 2.367.
- Tao, Z., Peng, L., **Zhang, P.**, Li, Y.Q. and Wang, G., “Probing the Kinetic Anabolism of Poly-Beta-Hydroxybutyrate in *Cupriavidus necator* H16 Using Single-Cell Raman Spectroscopy,” *Sensors*, 16(8), 1257 (2016). 中科院分区: 三区, 影响因子: 2.475.
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- 张鹏飞, 许忻平, 张海滔, 周善廷, 王育竹, “紫外光诱导原子阱技术在单腔磁阱装载中的应用,” *物理学报*, 56 (6), 3205-3211 (2007). 中科院分区: 三区, 影响因子: 3.219.
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## 奖励、荣誉和学术兼职

担任Optica, Photonics Research, Optics Letters, Optics Express, Journal of Biomedical Optics, Optical Engineering, Applied Optics以及Review of Scientific Instruments等学术期刊审稿人。

