

## **Dr. Sanshui Xiao**

Associate Professor  
DTU Fotonik, Department of Photonics Engineering  
Technical University of Denmark  
Ørstedss Plads, building 343, 2800 Lyngby  
Denmark

### **Personal Data**

Phone number: +45 4525 6362 (office)  
Email: saxi@fotonik.dtu.dk, sanshuixiao@gmail.com

### **Education & Academic Degree**

Ph.D in Photonics, Zhejiang University, P.R. China, 2004.  
B. S in Physics, Zhejiang University, P.R. China, 1999.

### **Employment**

- Associate Professor (tenure), DTU Fotonik, Technical University of Denmark (DTU), Denmark (Nov. 2011 - present).
- Assistant Professor, DTU Nanotech/Fotonik, Technical University of Denmark (DTU), Denmark (Jan. 2008 - Oct. 2011).
- Postdoctoral Fellow, DTU Nanotech, Technical University of Denmark (DTU), Denmark (Aug. 2006 - Dec. 2007).
- Postdoctoral Researcher, FMI, Royal Institute of Technology (KTH), Sweden (Aug. 2004 - Jul. 2006).
- Research Assistant, COER, Zhejiang University, China (Sept. 2001 - Jun. 2004).
- Visiting Researcher, FMI, Royal Institute of Technology (KTH), Sweden (Jul. 2002 - Oct. 2002).
- Research Assistant in Condense Matter, Department of Physics, Zhejiang University, China (Sept. 1999 - Jun. 2001).

### **Research Interests**

Graphene | plasmonics | nanophotonics

### **Journal Publications Lists**

1. X. Wang, Y. Zhao, Y. Ding, S. Xiao, and J. Dong, Tunable optical delay line based on integrated grating-assistedcontradirectional couplers, *Photon. Res.*, 6, 880 (2018).
2. S. Yan, S. Gao, F. Zhou, S. Xiao, Y. Ding, X. Cai, J. Dong, and X. Zhang, Efficient thermal tarning employing metal microheater with slow light effect, *IEEE Photon. Tech. Lett.*, 30, 1151 (2018).
3. M. Gu, B. Xiao, and S. Xiao, Tunable terahertz perfect absorber with two absorption peaks based on graphene micro-ribbons, *Micro Nano Lett.*, 13, 631 (2018).
4. P. A .D. Gonçalves, L. P. Bertelsen, S. Xiao, and N. A. Mortensen, Plasmon-exciton polaritons in 2D semiconductor/metal interfaces, *Phys. Rev. B*, 97, 041402 (R) (2018).
5. P.A.D. Goncalves, S. Xiao, N.M.R. Peres, and N.A. Mortensen, Hybridized plasmons in 2D nano-slits: From graphene to anisotropic 2D materials, *ACS Photonics* 4, 3045 (2017).
6. Y. Ding, X. Guan, X. Zhu, H. Hu, S.I. Bozhevolnyi, L.K. Oxenlowe, K. J. Jin, N.A. Mortensen, and S. Xiao, Efficient electro-optic modulation in low-loss graphene-plasmonic slot waveguides, *Nanoscale*, 9, 15576 (2017).
7. C. Frydendahl, T. Repan, M. Geisler, S.M. Novikov, J. Beermann, A. Lavrinenko, S. Xiao, S.I. Bozhevolnyi, N.A. Mortensen, and N. Stenger, Optical reconfiguration and polarization control insemi-continuous gold films close to the percolation threshold, *Nanoscale* 9, 12014 (2017).

8. B. Xiao, M. Gu, and S. Xiao, Broadband, wide-angle and tunable THz absorber based on cross-shaped grapheme arrays, *App. Opt.*, 56, 5468 (2017).
9. B. Xiao, M. Gu, K. Qin, and S. Xiao, Absorption enhancement in grapheme with an efficient resonator, *Opt. Quant. Electron*, 49, 177 (2017).
10. S. Yan, X. Zhu, L.H. Frandsen, S. Xiao, N.A. Mortensen, J. Dong and Y. Ding, Slow-light-enhanced energy efficiency for graphene microheaters on silicon photonic crystal waveguides, *Nature Communications*, 8, 14411 (2017).
11. P.A.D. Goncalves, E.J.C Dias, S. Xiao, M.I. Vasilevskiy, N.A. Mortensen, and N.M.R. Peres, Graphene Plasmons in Triangular Wedges and Grooves, *ACS Photonics*, 3, 2176 (2016).
12. Z. Wang, T. Li, K. Almdal, N.A. Mortensen, S. Xiao, and S. Ndoni, Experimental demonstration of graphene plasmons working close to the near-infrared window, *Opt. Lett.* 41, 5345 (2016).
13. B. Xiao, J. Chen, Z. Xie, and S. Xiao, Graphene-based THz modulator analysed by equivalent Circuit model, *Micro Nano Lett.*, 11, 439 (2016).
14. B. Xiao, S. Kong, and S. Xiao, Spoof surface plasmon polaritons based notch filter for ultra-wideband microwave waveguide, *Opt. Commun.* 374, 13 (2016).
15. W. Wang, S. Xiao, and N.A. Mortensen, Localized plasmons in bilayer graphene nanodisks, *Phys. Rev. B*, 93, 165407 (2016).
16. S. Xiao, X. Zhu, B.-H. Li, and N.A. Mortensen, Graphene-plasmon polaritons: From fundamental properties to potential applications, *Front. Phys.* 11, 117801 (2016).
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18. B. Xiao, K. Qin, S. Xiao, and Z. Han, Metal-loaded graphene surface plasmon waveguides working in the terahertz regime, *Opt. Commun.* 355, 602 (2015).
19. Y. Yang, H. Chen, S. Xiao, N.A. Mortensen, and J. Zhang, Ultrathin 90-degree sharp bends for spoof surface plasmon polaritons, *Opt. Express*, 23, 19074 (2015).
20. Y. Ding, X. Zhu, S. Xiao, H. Hu, L.H. Frandsen, N.A. Mortensen, and K. Yvind, Effective electro-optical modulation with high extinction ratio by a grapheme-silicon microring resonator, *Nano. Lett.*, 15, 4393 (2015).
21. K. Wu, T. Rindzevicius, M.S. Schmidt, K.B. Morgensen, S. Xiao, and A. Boisen, Plasmon resonances of Ag capped Si nanopillars fabricated using mask-less lithography, *Opt. Express*, 23, 12965 (2015).
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29. M. Hashemi, M.H. Farzad, N.A. Mortensen, and S. Xiao, Enhanced plasmonic light absorption for silicon Schottky-barrier photodetectors, *Plasmonics*, 8, 1059 (2013).
30. X. Zhu, W. Yan, P.U. Jepsen, O. Hansen, N.A. Mortensen, and S. Xiao, Experimental observation of plasmons in a graphene monolayer resting on a two-dimensional subwavelength silicon grating, *Appl. Phys. Lett.* 102, 131101 (2013).
31. M. Hashemi, M.H. Farzad, N.A. Mortensen, and S. Xiao, Enhanced absorption of graphene in the visible region by use of plasmonic nanostructures, *J. Opt.*, 15, 055003 (2013).
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