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Plasmonic enhancement of one-photon- and two-photon-excited single-molecule fluorescence by single gold nanorods

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Curriculum Vitæ

I was born on 4th February 1989 in Anhui Province, China. I obtained my BSc degree in Optical Science at China Jiliang University (Hangzhou, China) in 2011. I then enrolled in a master project at Zhejiang University in the same city under the supervision of Prof. Dr. Min Qiu. I obtained my master's degree in March 2014 with the thesis entitled "Research on the photothermal properties of metal nanoparticles". In July 2014, I was awarded a scholarship from the China Scholarship Council and started my Ph.D. in the single-molecule optics group at Leiden University under the supervision of Prof. Dr. Michel Orrit. During my Ph.D. I studied the enhancement of linear and nonlinear light emission of single molecules by gold nanorods.

List of Publications

10. **W. Zhang**, M. Caldarola, X. Lu, M. Orrit, *Plasmonic Enhancement of Two-Photon-Excited Luminescence of Single Quantum Dots by Individual Gold Nanorod*, under review.
9. **W. Zhang**, M. Caldarola, X. Lu, B. Pradhan, M. Orrit, *Plasmonic enhancement of a near-infrared fluorophore using DNA transient binding*, under review.
8. **W. Zhang**, M. Caldarola, B. Pradhan, M. Orrit, *Gold Nanorod-Enhanced Fluorescence Enables Single-Molecule Electrochemistry of Methylene Blue*, *Angewandte Chemie International Edition* **56**, 3566 (2017).
7. **W. Zhang**, Q. Li, L. Meng, M. Qiu, *Universal scaling behavior of the temperature increase of a heat nanoparticle on a substrate*, *Journal of Nanophotonics* **9**, 093046 (2015).
6. Z. Liu, Q. Li, **W. Zhang**, Y. Yang, M. Qiu, *Nanoscale Control of Temperature Distribution Using a Plasmonic Trimer*, *Plasmonics* **10**, 900 (2015).
5. K. Du, Q. Li, **W. Zhang**, M. Qiu, *Wavelength and thermal distribution selectable microbolometers based on metamaterial absorbers*, *Photonics Journal, IEEE* **7**, 6800908 (2015).
4. Q. Li, **W. Zhang**, H. Zhao, M. Qiu, *Photothermal enhancement in core-shell structured plasmonic nanoparticles*, *Plasmonics* **9**, 623 (2014).
3. **W. Zhang**, Q. Li, M. Qiu, *A plasmon ruler based on nanoscale photothermal effect*, *Optics Express* **21**, 172 (2013).
2. Q. Wang, H. Zhao, X. Du, **W. Zhang**, M. Qiu, Q. Li, *Hybrid photonic-plasmonic molecule based on metal/Si disks*, *Optics Express* **21**, 11037 (2013).
1. Q. Li, **W. Zhang**, H. Zhao, M. Qiu, *Two-dimensional Analysis Photothermal Properties in Nanoscale Plasmonic Waveguides for Optical Interconnect*, *Journal of Lightwave Technology* **31**, 4051 (2013).

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