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Photothermal circular dichroism studies of single nanoparticles

Späth, P.R.

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Curriculum Vitæ

I was born on 20th July 1990 in Aalen, Germany. I received my Bachelor in Physics at the University of Ulm in 2015, where I also followed a Master program in Physics. During my Master project I joined an exchange program to spend half a year at Southeast University in Nanjing (China), where I used a nanoprinter to develop materials for the study of cellular forces. In January 2018, I joined the single molecule optics group with Prof. dr. Michel Orrit at Leiden University where I developed an optical technique to study the minute circular dichroism effects of plasmonic and magnetic nanoparticles via photothermal imaging. From 2018 to 2021 I assisted in teaching the 1st year's physics Bachelor course 'Elektrische en Magnetische Velden', taught by Prof. dr. Jan van Ruitbenbeek and Dr. Jelmer Wagenaar. From 2020 to 2021 I served the LION institute's council.

List of Publications

1. Martin Dieter Baaske, Nasrin Asgari, Patrick Spaeth, Subhasis Adhikari, Deep Punj, Michel Orrit. *Photothermal Spectro-Microscopy as Benchmark for Optoplasmonic Bio-Detection Assays*, *The Journal of Physical Chemistry C* **2021**, 125(45), 25087-25093.
2. Patrick Spaeth, Subhasis Adhikari, Martin Dieter Baaske, Sergii Pud, Jacco Ton, Michel Orrit. *Photothermal Circular Dichroism of Single Nanoparticles Rejecting Linear Dichroism by Dual Modulation*. *ACS Nano* **2021**, 15(10), 16277-16285.
3. Subhasis Adhikari, Patrick Spaeth, Ashish Kar, Martin Dieter Baaske, Saumyakanti Khatua, Michel Orrit. *Photothermal Microscopy: Imaging the Optical Absorption of Single Nanoparticles and Single Molecules*. *ACS Nano* **2020**, 14(12), 16414-16445.
4. Patrick Spaeth, Subhasis Adhikari, Laurent Le, Thomas Jollans, Sergii Pud, Wiebke Albrecht, Thomas Bauer, Martín Caldarola, L Kuipers, Michel Orrit, *Circular Dichroism Measurement of Single Metal Nanoparticles Using Photothermal Imaging*. *Nano Letters* **2019**, 19(12), 8934-8940.

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