

# Curriculum Vitae of Peter Zijlstra

<b>Personal information:</b>	<b>Professional information:</b>
Surname: Zijlstra	Molecular Plasmonics group
First name: Peter	Department of Applied Physics &
Nationality: Dutch	Institute for Complex Molecular Systems
	Eindhoven University of Technology
	Postbus 513
	5600 MB, Eindhoven, The Netherlands

## EDUCATION

- 2005 – 2009: **PhD degree in photonics and physics (group: Centre for Micro-Photonics)**  
Swinburne University of Technology, Melbourne, Australia.  
*Thesis title:* Photothermal properties of gold nanorods and their application to five-dimensional optical recording.  
Date of completion: 25 June 2009  
Supervisors: Dr. J.W.M. Chon and Prof. Min Gu
- 2000 – 2005: **M.Sc Applied Physics (group: Complex Photonic Systems)**  
University of Twente, Enschede, The Netherlands  
*Thesis title:* The spherical laser: Experiments on lasing resonances in microspheres compared to Mie theory.  
Date of completion: 12 May 2005  
Supervisors: Prof. A.P. Mosk and Prof. A. Lagendijk

## WORK EXPERIENCE

- 2012 – now : **Assistant professor** (tenured 2015),  
Molecular Biosensors for Medical Diagnostics, Department of Applied Physics, &  
Institute for Complex Molecular Systems,  
Eindhoven University of Technology, The Netherlands
- 2010 – 2012: **Veni Fellow**, Single-molecule Optics group, Leiden University,  
The Netherlands ( Prof. M. Orrit).  
*Research:* Plasmonics, biosensing, optical tweezing
- 2009: Postdoc, Single-molecule Optics group, Leiden University,  
The Netherlands ( Prof. M. Orrit).
- 2005: Research assistant, COMplex Photonic Systems, University of Twente,  
The Netherlands (Prof. A.P. Mosk, Prof. A. Lagendijk, and. Prof. W.L. Vos).

## BOOKS & BOOK CHAPTERS

P. Zijlstra, M. Orrit, A.F. Koenderink, *Metal nanoparticles for microscopy and spectroscopy*, in *Nanoparticles: workhorses of nanoscience* (edited by C. de Mello Donegá, Springer Verlag, 2014, ISBN: 978-3-662-44822-9)

J.W.M. Chon, A. Taylor, P. Zijlstra, *Plasmonic nanoparticle based optical recording and storage*, in *Nanoplasmonics: Advanced device applications* (edited by Chon and Iniewski, CRC Press, Boca Raton, USA, 2013, ISBN: 978-1-4665-1426-3)

P. Zijlstra, *Five-dimensional optical recording: Photothermal properties of individual gold nanorods and their application to five dimensional optical recording* (LAP Lambert Academic Publishing AG & Co. KG, Köln, Germany, 2009, ISBN: 978-3-8383-2449-4).

## PATENTS

M. Gu, P. Zijlstra, J.W.M. Chon, and W. Min  
Optical recording, storage and retrieval product, process, system and medium  
WO2010127386 (based on PhD work and publication Z9. Nature **459**, 410-413 (2009))

P. Zijlstra, M.W.J. Prins  
Plasmonic biosensor based on molecular conformation  
TUE-174 / WO2016075226A1

M.W.J. Prins, M. Merkx, L.J. van Ijzendoorn, P. Zijlstra, and E.W.A. Visser  
Biosensor based on a tethered particle  
TUE-178 / WO2016096901A1

L. Albertazzi, M.W.J. Prins, and P. Zijlstra  
Biosensor based on single-molecule fluorescence detection  
TUE-179 / WO2016096908A1

M.W.J. Prins, P. Zijlstra, and L. Brunsveld  
Dynamic switching biosensor  
TUE-186 / WO2016075229A1