

Short Biography of Prof. Dr. Bert Hecht

Affiliation and Address

Prof. Dr. Bert Hecht

Nano-Optics and Bio-Photonics Group
Experimental Physics V
Physics Institute, University of Würzburg
Am Hubland
D- 97074 Würzburg, Germany

Tel.: +49 931 318 5863
Fax.: +49 931 888 5507
E-mail: hecht@physik.uni-wuerzburg.de
WWW: www.nanoscale-optics.de



Personal data

Name: Bert Hecht
Date of birth: 23.01.1968
Place of birth: Markdorf am Bodensee (Germany)
Nationality: German
Marital status: married, 2 sons, 1 daughter

Professional experience / Education

- since 01.10.06 **Associate Professor (W2)**, Experimental Physics 5, Physics Institute, **University of Würzburg, Germany. PI of the Wilhelm-Conrad-Röntgen Research Center for Complex Material Systems (RCCM).**
- 01.10.01 - 30.09.06 **Assistant Professorship of the Swiss National Science Foundation¹**
Institute of Physics, **University of Basel, Member of the National Competence Center for Research in 'Nanoscale Science'**
- 10.2004 *Venia docendi*, Experimental Physics/Optics, University of Basel
- 09.96 - 09.01 **Postdoc and Habilitation, Venia legendi, Physical Chemistry, ETH Zürich.** Prof. Dr. U.P. Wild. Habilitation thesis: "Nanoscopic Interactions probed by Single Molecules"².
- 02.93 - 08.96 PhD, **IBM Research Laboratory Rüschlikon / University of Basel**, Dr. D.W. Pohl / Prof. Dr. H.J. Güntherodt
PhD thesis: "Forbidden Light Scanning Near-Field Optical Microscopy"
- 10.87 - 01.93 **Diploma in Physics, University of Konstanz.**
Prof. Dr. O. Marti / Prof. Dr. J. Mlynek

Awards

- Professorship of the Swiss National Science Foundation (2001 - 2006)

Books

- Principles of Nano-Optics (~500 pages) - Text book –
L. Novotny and **B. Hecht**, Cambridge University Press, (2006)

Research Interests

- Nano-Optics/Optical antennas/Plasmonic circuitry
- Single-emitter microscopy and spectroscopy
- BioPhotonics
- Optical Ultrasensors

¹ <http://www.snf.ch/E/funding/individuals/SNSFProfessorships/>

² <http://e-collection.ethbib.ethz.ch/cgi-bin/show.pl?type=habil&nr=3>

PUBLICATIONS

1. Near-Field Optical Measurement of the Surface Plasmon Field.
O. Marti, H. Bielefeldt, **B. Hecht**, S. Herminghaus, P. Leiderer, and J. Mlynek,
Optics Commun. **96**, 225-228 (1993).
2. Direct Measurement of the Field Enhancement Caused by Surface Plasmons with the Scanning Tunneling Optical Microscope.
H. Bielefeldt, **B. Hecht**, S. Herminghaus, J. Mlynek, and O. Marti
in *Near Field Optics*, edited by D.W. Pohl and D. Courjon,
NATO ASI Series **242**, 281-286 (Kluwer, Dordrecht, 1993).
3. Near-Field Optical Spectroscopy of Individual Molecules in Solids.
W.E. Moerner, T. Plakhotnik, T. Irngartinger, U.P. Wild, D.W. Pohl, **B. Hecht**
Phys. Rev. Lett. **73**, 2764-2767 (1994).
4. Combined Aperture SNOM/PSTM: The Best of Both Worlds?
B. Hecht, H. Heinzelmann, and D.W. Pohl
Ultramicroscopy **57**, 228-234 (1995).
5. Forbidden Light Scanning Near-Field Optical Microscopy.
H. Heinzelmann, **B. Hecht**, L. Novotny, and D.W. Pohl
J. Microscopy **177**, 115-118 (1995).
6. 'Tunnel' Near-Field Optical Microscopy: TNOM-2.
B. Hecht, D.W. Pohl, H. Heinzelmann, and L. Novotny
in *Photons and Local Probes*, edited by O. Marti and R. Möller, pp. 93-107 (Kluwer, Dordrecht, 1995).
7. Tunnel Near-Field Optical Microscopy: TNOM-2.
B. Hecht, D.W. Pohl, H. Heinzelmann, and L. Novotny
in *Near-Field Optics*, edited by M.A. Paesler and P.J. Moyer, Vol. **2535**, pp. 61-68 (SPIE, Bellingham, 1995) .
8. Scanning Near-Field Optical Microscopy in Basel, Rüschiikon and Zurich.
H. Heinzelmann, Th. Huser, Th. Lacoste, H.-J. Güntherodt, D.W. Pohl, **B. Hecht**, L. Novotny, O.J.F. Martin, Ch. Hafner, H. Baggenstos, U.P. Wild, and A. Renn
Optical Engineering **34**, 2441-2545 (1995).
9. Scanning Near-Field Optical Probe with Ultrasmall Spot Size.
L. Novotny, D.W. Pohl, and **B. Hecht**
Opt. Lett. **20**, 970-972 (1995).
10. Light Confinement in Scanning Near-Field Optical Microscopy.
L. Novotny, D.W. Pohl, and **B. Hecht**
Ultramicroscopy **61**, 1-9 (1995).
11. 'Tunnel' Near-Field Optical Microscopy: TNOM-2.
B. Hecht, D. Pohl, H. Heinzelmann, and L. Novotny
Ultramicroscopy **61**, 99-104 (1995).
12. Piezoresistive Cantilevers as Optical Sensors for Scanning Near-Field Microscopy.
P. Bauer, **B. Hecht**, and C. Rossel
Ultramicroscopy **61**, 127-130 (1995).
13. Local Excitation of Surface Plasmons by TNOM.
B. Hecht, D.W. Pohl, and L. Novotny
in *Optics at the Nanometer Scale: Imaging and Storing with Photonic Near Fields*, M. Nieto-Vesperinas and N. Garcia (eds.), NATO ASI Series E, pp. 151-161 (Kluwer, Dordrecht, 1996).

14. Instrumental Developments and Recent Experiments in Near-Field Optical Microscopy.
H. Heinzelmann, Th. Lacoste, Th. Huser, H.J. Güntherodt, **B. Hecht**, and D.W. Pohl
Thin Solid Films **273**, 149-153 (1996).
15. Radiation Coupling and Image Formation in Scanning Near-Field Optical Microscopy.
D.W. Pohl, L. Novotny, **B. Hecht**, and H. Heinzelmann
Thin Solid Films **273**, 161-167 (1996).
16. Local Excitation, Scattering, and Interference of Surface Plasmons.
B. Hecht, H. Bielefeldt, L. Novotny, Y. Inouye, and D.W. Pohl
Phys. Rev. Lett. **77**, 1889-1892 (1996).
17. Facts and Artifacts in Near-Field Optical Microscopy.
B. Hecht, H. Bielefeldt, Y. Inouye, L. Novotny, and D.W. Pohl
J. Appl. Phys. **81**, 2492-2498 (1997).
18. Interference of locally excited surface plasmons.
L. Novotny, **B. Hecht**, and D.W. Pohl
J. Appl. Phys. **81**, 1798-1806 (1997).
19. Quo Vadis, Near-Field Optics?
D.W. Pohl, **B. Hecht**, and H. Heinzelmann
Proceedings of the Nato Forum on "Nanoscale Science and Technology",
N. Garcia, M. Nieto-Vesperinas, and H. Rohrer (eds.), Toledo, Spain, 11-16 May 1997, NATO ASI Series E: Applied Sciences **348** (1998) 175 (Kluwer Academic Publishers).
20. Optical Microscopy in the Nano-World.
D.W. Pohl, **B. Hecht** et al.
Chimia **51**, 760-767 (1997).
21. Implications to high resolution in near-field optical microscopy.
L. Novotny, **B. Hecht**, and D.W. Pohl
Ultramicroscopy **71**, 341-344 (1998).
22. Influence of Detection Optics on Near-field Optical Imaging.
B. Hecht, H. Bielefeldt, L. Novotny, H. Heinzelmann, and D.W. Pohl
J. Appl. Phys. **84**, 5873-5882 (1998).
23. Einzelne Moleküle im Brennpunkt.
B. Hecht, B. Sick und U.P. Wild
Bulletin ETHZ **269**, 44-47 (1998).
24. High Photo-stability of Single Molecules in an Organic Crystal at Room Temperature observed by Scanning Confocal Optical Microscopy.
L. Fleury, B. Sick, G. Zumofen, **B. Hecht**, and U.P. Wild
Mol. Phys. **95**, 1333-1338 (1998).
25. High-quality Near-Field Optical Probes by Tube Etching.
R. Stöckle, C. Fokas, V. Deckert, R. Zenobi, B. Sick, **B. Hecht**, and U.P. Wild
Appl. Phys. Lett. **75**, 160-162 (1999).
26. Non-classical Photon Statistics in Single-Molecule Fluorescence at Room Temperature.
L. Fleury, J.M. Segura, G. Zumofen, **B. Hecht**, and U.P. Wild
Phys. Rev. Lett. **84**, 1148 (2000).
27. Deformation-induced Formation of Polymer Molecular Blends probed by Single-Molecule Microscopy.
W. Trapesinger, A. Renn, A. Montali, P. Smith, C. Weder, **B. Hecht**, and U.P. Wild,
J. Phys. Chem. B **104**, 5221 (2000).

28. A Sample-Scanning Confocal Optical Microscope for Cryogenic Operation.
J.-M. Segura, A. Renn, and **B. Hecht**
Rev. Sci. Instrum. **71**, 1706 (2000).
29. Scanning Near-Field Optical Microscopy with Aperture Probes: Fundamentals and Applications.
B. Hecht, B. Sick, U.P. Wild, V. Deckert, R. Zenobi, O.J.F. Martin, and D.W. Pohl
J. Chem. Phys. **112**, 7761-7774 (2000).
30. Single-Molecule Identification by Spectrally and Time-Resolved Fluorescence Detection.
M. Prummer, C. Hübner, B. Sick, **B. Hecht**, A. Renn, and U.P. Wild
Anal. Chem. **72**, 443 (2000).
31. Phase Behavior and Anisotropic Optical Properties of Photoluminescent Polarizers.
A. Montali, A. Palmans, M. Eglin, C. Weder, P. Smith, W. Trabesinger, A. Renn, **B. Hecht**, U.P. Wild
Macromol. Symp. **154**, 105-116 (2000).
32. Orientational Imaging of Single Molecules by Annular Illumination Scanning Confocal Optical Microscopy.
B. Sick, L. Novotny, **B. Hecht**,
Phys. Rev. Lett. **85**, 4482 (2000).
33. Optical Microscopy of Single Ions and Morphological Inhomogeneities in Samarium-doped CaF₂ Thin Films.
R. Rodrigues-Herzog, F. Trotta, H. Bill, H.J. Güntherodt, J.-M. Segura and **B. Hecht**
Phys. Rev. B **62**, 11163-11169 (2000).
34. Statistical Analysis of Single-Molecule Colocalization Assays.
W. Trabesinger, **B. Hecht**, U.P. Wild, G.J. Schütz, H.J. Schindler and T. Schmidt
Anal. Chem. **73**, 1100-1105 (2001).
35. Probing Confined Fields with Single Molecules and *Vice Versa*.
B. Sick, L. Novotny, **B. Hecht**, U.P. Wild,
J. of Microscopy **202**, 365-374 (2001).
36. Molecular Rearrangements observed by Single-Molecule Microscopy.
W. Trabesinger, A. Renn, **B. Hecht**, U. P. Wild, A. Montali, P. Smith, Ch. Weder
Synthetic Metals **124**, 113-115 (2001).
37. Tip-induced Spectral Dynamics of Single Molecules.
J.-M. Segura, G. Zumofen, A. Renn, **B. Hecht**, and U.P. Wild
Chem. Phys. Lett. **340**, 77-82 (2001).
38. Photon statistics in single-molecule fluorescence at room temperature.
L. Fleury, J.M. Segura, G. Zumofen, **B. Hecht**, and U.P. Wild
J. of Lumin. **94**, 805-809 (2001).
39. Single-Molecule Near-Field Optical Energy Transfer Microscopy.
W. Trabesinger, M. Kreiter, A. Kramer, **B. Hecht**, and U.P. Wild
Appl. Phys. Lett. **81**, 2118-2120 (2002).
40. Continuous realtime measurements of fluorescence lifetimes.
W. Trabesinger, C.G. Hübner, **B. Hecht**, and U.P. Wild
Rev. Sci. Instrum. **73**, 3122-3124 (2002).
41. Optical near-field enhancement at a metal tip probed by a single fluorophore.
A. Kramer, W. Trabesinger, **B. Hecht** and U.P. Wild
Appl. Phys. Lett. **80**, 1652-1654 (2002).
42. A cryogenic scanning near-field optical microscope with shearforce gapwidth control.
A. Kramer, J.-M. Segura, A. Hunkeler, A. Renn, and **B. Hecht**
Rev. Sci. Instrum. **73**, 2937-2941 (2002).

43. Orientation-dependent lifetime of single dye molecules at a dielectric interface.
M. Kreiter, M. Prummer, **B. Hecht** and U.P. Wild
J. Chem. Phys., **117**, 9430-9433 (2002).
44. Fabricating arrays of single proteins on glass using microcontact printing.
J.P. Renault, A. Bernard, A. Bietsch, B. Michel, H.R. Bosshard, E. Delamarche, M. Kreiter, **B. Hecht**, and U.P. Wild
J. Phys. Chem. B **107**, 703-711 (2003).
45. Single-molecule near-field optical energy transfer microscopy with dielectric tips.
W. Trapesinger, A. Kramer, M. Kreiter, **B. Hecht**, U.P. Wild
J. of Microscopy **209**, 249-253 (2003).
46. Three-dimensional Optical Polarization Tomography of Single Molecules.
M. Prummer, **B. Hecht**, and U.P. Wild
J. Chem. Phys., **118**, 9824-9829 (2003).
47. Synthesis and conformational switching of novel asymmetrically-bridged resorcin[4]arenes.
V.A. Azov, F. Diederich, Y. Lill and **B. Hecht**
Helv. Chim. Acta **86**, 2149-2155 (2003).
48. Single dye molecules in an oxygen-depleted environment as photostable organic triggered single-photon source.
Y. Lill and **B. Hecht**
Appl. Phys. Lett. **84**, 1665-1667 (2004).
49. Nano-Optics with single quantum systems.
B. Hecht
Review article (invited) for the Nano-Optics theme issue of
Phil. Trans. Roy. Soc. Lond. A **362**, 881-899 (2004).
50. Excitation and superfocusing of surface plasmon polaritons on a silver-coated optical fiber tip
N.A. Janunts, K.S. Baghdasaryan, Kh.V. Nerkararyan and **B. Hecht**
Optics Commun. **253**, 118-124 (2005).
51. Resonant optical antennas.
P. Mühlischlegel, H.-J. Eisler, O.J.F. Martin, **B. Hecht** and D.W. Pohl
Science **308**, 1607-1609 (2005).
52. Single quantum dot coupled to a scanning optical antenna: A tunable super-emitter.
J. Farahani, H.-J. Eisler, D.W. Pohl, and **B. Hecht**
Phys. Rev. Lett. **95**, 017402 (2005).
53. Kinetics of the initial steps of G-protein coupled receptor mediated cellular signaling revealed by single molecule imaging
Y. Lill, K.L. Martinez, M.A. Lill, B.H. Meyer, M. Lill, H. Vogel, **B. Hecht**
Chem. Phys. Chem. **6**, 1633-1640 (2005).
54. Optische Antennen.
B. Hecht, H.-J. Eisler, O.J.F. Martin, D.W. Pohl
Physik in unserer Zeit **5**, 209 (2005).
55. Glue-free tuning fork shear-force microscope
P. Mühlischlegel, J. Toquant, D.W. Pohl, and **B. Hecht**
Rev. Sci. Instrum. **77**, 016105 (2006).
56. Resorcin[4]arene Cavitand-Based Molecular Switches: Switching Mechanisms, Monolayer Investigations, Molecular Recognition, and Large Multinanometer-Sized Expansion/Contraction Motions,
V.A. Azov, A. Beeby, M. Cacciarini, A. G. Cheetham, F. Diederich, M. Frei, J. K. Gimzewski, V. Gramlich, **B. Hecht**, B. Jaun, T. Latychevskaia, A. Lieb, Y. Lill, F. Marotti, A. Schlegel, R. R. Schlittler, P. J. Skinner, P. Seiler, Y. Yamakoshi
Adv. Funct. Mater. **16**, 147-156 (2006).

57. Uniaxial orientation of terrylene in polyethylene
J. Butter, B.R. Crenshaw, C. Weder, and **B. Hecht**
Chem. Phys. Chem. **7**, 261-265 (2006).
58. Aperture scanning near-field optical microscopy and spectroscopy of single terrylene molecules at 1.8K
J. Butter and **B. Hecht**
Nanotechnology **17**, 1547-1550 (2006).
59. Stark-shift microscopy.
S. Karotke, A. Lieb and **B. Hecht**
Appl. Phys. Lett. **89**, 023106 (2006).
60. Absorption and fluorescence of single molecules.
J. Butter, B.R. Crenshaw, C. Weder, and **B. Hecht**
J. Chem. Phys. **125**, 154710 (2006).
61. Single Hepatitis-B virus core capsid binding to individual nuclear pore complexes in HeLa cells.
Y. Lill, M. Lill, B. Fahrenkrog, K. Schwarz-Herion, S. Paulillo U. Aebi, and **B. Hecht**
Biophys. J. **91**, 3123-3130 (2006).
62. Fast determination of saturation intensity and maximum emission rate by single-emitter imaging.
J.Y.P. Butter and **B. Hecht**
Optics Express **14**, 9350-9357 (2006).
63. Prospects of Resonant Optical Antennas for Nano-Analysis
B. Hecht, P. Mühlischlegel, J.N. Farahani, H.-J. Eisler, D.W. Pohl, O.J.F. Martin, P. Biagioni
Chimia **60**, 765-769 (2006).
64. Bowtie antenna probes for single-emitter scanning near-field optical microscopy.
J. Farahani, H.-J. Eisler, D.W. Pohl, and **B. Hecht**
Nanotechnology **18**, 125506 (2007)
65. Detecting transient events in the presence of strong background.
W. Grange, P. Haas, A. Wild, A. Lieb, M. Hegner, M. Calame, and **B. Hecht**
J. Phys. Chem. B **112**(23), 7140 -7144 (2008)
66. A simple method for producing flattened atomic force microscopy tips
P. Biagioni, J.N. Farahani, P. Mühlischlegel, H.-J. Eisler, D.W. Pohl, and **B. Hecht**
Rev. Sci. Instrum. **79**, 016103 (2008).
67. Detection of transient events in the presence of background noise
W. Grange, P. Haas, A. Wild, M.A. Wild, M. Calame, M. Hegner, and **B. Hecht**
J. Phys. Chem. B **112**, 7140 -7144 (2008).
68. Deterministic spatio-temporal control of nano-optical fields in optical antennas and nano transmission lines
J.S. Huang, D.V. Voronine, P. Tuchscherer, T. Brixner, and **B. Hecht**
Phys. Rev. B **79**, 195441 (2009).
69. Impedance matching and emission properties of optical antennas in a nanophotonic circuit
J.-S. Huang, T. Feichtner, P. Biagioni, and **B. Hecht**
Nano Letters **9**(5), 1879-1902 (2009).
70. Cross resonant optical antenna
P. Biagioni, J.-S. Huang, L. Duo, M. Finazzi, and **B. Hecht**
Phys. Rev. Lett. **102**, 256801 (2009).

71. Dependence of the two-photon photoluminescence yield of gold nanostructures on the laser pulse duration
P. Biagioni, M. Celebrano, M. Savoini, G. Grancini, D. Brida, S. Matefi-Tempfi, M. Matefi-Tempfi, L. Duo, **B. Hecht**, G. Cerullo, M. Finazzi
Phys. Rev. B **80**, 045411 (2009).
72. Near-field polarization shaping by a cross plasmonic antenna.
P. Biagioni, M. Savoini, J.-S. Huang, L. Duo, M. Finazzi, **B. Hecht**
Phys. Rev. B **80**, 153409 (2009).
73. Reports on Progress in Nanoantennas and their Applications. (Review article, invited)
B. Hecht, P. Biagioni, J.-S. Huang
Rep. Prog. Phys., in preparation.
74. Mode imaging and selection in strongly coupled nanoantennas
J.-S. Huang, J. Kern, P. Geisler, P. Weinmann, M. Kamp, A. Forchel, P. Biagioni, and **B. Hecht**
Nano Letters, in press (2010)
arXiv:1002.3887v1
75. Fast quantitative single-molecule detection at ultralow concentrations
P. Haas, P. Then, A. Wild, W. Grange, S. Zorman, M. Hegner, M. Calame, U. Aebi, J. Flammer and **B. Hecht**
Submitted to *Analytical Chemistry* (2010)
76. Ultrafast splitters and switches on subwavelength plasmonic waveguides
A. Reiserer, J.-S. Huang, B. Hecht and T. Brixner
Submitted to *Optics Express* (2010)
77. Atomically flat single-crystalline gold nanostructures for plasmonic nanocircuitry
J.-S. Huang, V. Callegari, P. Geisler, C. Brünig, J. Kern, J.C. Prangma, P. Weinmann, M. Kamp, A. Forchel, P. Biagioni, U. Sennhauser & B. Hecht
Submitted to *Nature Nanotechnology* (2010)

Scientific output parameter $h = 25$ according to Hirsch³ (based on ISI).
Total citations: 2786
average citations/paper = **42.86** (based on ISI).

Theses

1. Forbidden Light Scanning Near-Field Optical Microscopy.
B. Hecht
Dissertation, University of Basel (1996), Hartung-Gorre Verlag, Konstanz,
ISBN 3-89649-072-9. <http://www.nano-optics.ch/docs/diss.pdf>
2. Nanoscopic Interactions probed by Single Molecules.
B. Hecht
Habilitation, Swiss Federal Institute of Technology (2002),
<http://e-collection.ethbib.ethz.ch/show?type=habil&nr=3>

Books

- Principles of Nano Optics (~500 pages) - Text book –
L. Novotny and **B. Hecht**, Cambridge University Press, (2006)

³ <http://www.pnas.org/cgi/content/abstract/102/46/16569>

Book chapters

- Optical Detection of Single Molecules at Interfaces
B. Hecht
book chapter (invited) in "Properties of Single Organic Molecules on Crystal Surfaces",
F. Rosei, W. Hofer and P. Grütter, eds., World Scientific, (2006). ISBN 1-86094-628-3
- Resonant optical antennas and single emitters.
B. Hecht
book chapter (invited),
Series: "Advances in Nano-Optics and Nano-Photonics", Tip Enhancement, S. Kawata & V.M. Shalaev, eds., Elsevier
(2007).
- Nano-Optics with single quantum systems.
B. Hecht
book chapter (invited),
in "Nano-Optics and Near-Field Microscopy", A. Zayats, D. Richards,, eds., Artech House (2008).

Patents

1. Near-field optical microscope.
B. Hecht and H. Heinzelmann and L. Novotny and D. W. Pohl
Europ. Patent Application, Internat. Publication Nr. WO 95/10060 (1993)
United States Patent **#5,739,527** April 14, 1998.
2. Sensor for remote optical single-molecule detection using near-field coupling
P. Haas, **B. Hecht**, A. Wild, M. Calame, M. Hegner, WO 2006/018706 (2006)
3. Cross optical antenna, preliminary application

5 most important publications

Most cited: (together more than 1261 citations)

Resonant optical antennas.

P. Mühlischlegel, H.-J. Eisler, O.J.F. Martin, **B. Hecht** and D.W. Pohl
Science **308** (2005) 1607-1609.

Facts and Artifacts in Near-Field Optical Microscopy.

B. Hecht, H. Bielefeldt, Y. Inouye, L. Novotny, and D.W. Pohl
J. Appl. Phys. **81**(6) (1997) 2492-2498.

Scanning Near-Field Optical Microscopy with Aperture Probes: Fundamentals and Applications.

B. Hecht, B. Sick, U.P. Wild, V. Deckert, R. Zenobi, O.J.F. Martin, and D.W. Pohl
J. Chem. Phys. **112**(18) (2000) 7761-7774.

Local Excitation, Scattering, and Interference of Surface Plasmons.

B. Hecht, H. Bielefeldt, L. Novotny, Y. Inouye, and D.W. Pohl
Phys. Rev. Lett. **77** (1996) 1889-1892.

Scanning Near-Field Optical Probe with Ultrasmall Spot Size.

L. Novotny, D.W. Pohl, and **B. Hecht**
Opt. Lett. **20**(9) (1995) 970-972.

Invited lectures at international conferences and plenary talks:

- ❑ Workshop "Surface and Interface Optics", Sainte-Maxime, 4-9 May, 1999.
- ❑ Gordon Research Conference, Lasers in Medicine, Connecticut College, New London, USA, 2000.
- ❑ Plenary lecture at the joint symposium of Polymer Physics and Chemical Physics at the German Physical Society Spring Meeting, Potsdam, 2000.
- ❑ 10th International Conference on Unconventional Photoactive Systems UPS, Les Diablerets, Switzerland, 04-08.09.2001
- ❑ Joint meeting of the European societies of physical chemistry, Venedig (Italien), October 3-6, 2001.
- ❑ SMARTON Concluding symposium, Leuven, Belgium, 20.10. – 23.10.2002
- ❑ Solar'03, 23-28 February 2003 Luxor, Egypte (not attended)
- ❑ Spring meeting of the Swiss Physical Society, Basel, Switzerland, 20/21.03.2003
- ❑ Swiss/US Nano-forum, Basel, Switzerland, 13./14.10.2003
- ❑ American Chemical Society National Meeting, Symposium on "Microscopy and Dynamics Beyond the Diffraction Limit" Anaheim, California, March 28-April 1, 2004.
- ❑ Japanese/Swiss Nano-forum, Nara, Japan, June 23 - 25, 2004.
- ❑ Annual meeting of the Swiss Society for Optics and Microscopy, 12. November 2004, Biozentrum, Universität Basel
- ❑ MRS Fall meeting 2004, Boston, USA, Nov. 29- Dec. 3, 2004
- ❑ Fourth Asian Photochemistry Conference, January 05. – 10., 2005, Taipei, Taiwan
- ❑ 2004 EMCCD Symposium – Discover new ways of seeing, Waters Edge, Connecticut, USA, 14-16. April 2005.
- ❑ Seventh Giambiagi Winter School: "New Trends in Complex Materials", Physics Department of the School of Sciences of the University of Buenos Aires, July 25th to July 29th, 2005, Buenos Aires, Argentina (not attended)
- ❑ Workshop of the European project "Advanced Scanning Probes for Innovative Nanoscience and Technology" (ASPRINT), Dijon, 24-25.10 2005, France.
- ❑ 'Near field optical, infrared and Raman imaging:' from molecules to nanoparticles, March 23-24, 2006, Jyväskylä, Finland
- ❑ EOS Topical meeting: "Molecular plasmonic devices", April 27-29, 2006, Engelberg, Switzerland
- ❑ 16th International Microscopy Congress (IMC16), Sept. 3 to 8, 2006, Sapporo, Japan
- ❑ 9th International Conference on Near-field optics, Nanophotonics and related techniques, 10-15 September 2006, Lausanne Switzerland
- ❑ Research Conference on Photonic Nano-Objects, 22-26 January 2007, Les Houches, France
- ❑ European MRS Spring conference 2007, "Sub-wavelength energy localization throughout the spectrum: Materials and Techniques", May28th - June 1st, 2007, Strasbourg, France

- ❑ 7th Pacific Rim Conference on Lasers and Electro-Optics (CLEO®/Pacific Rim 2007, Seoul, Korea, August 26 - 31, 2007.
- ❑ Workshop on Frontiers in Nanophotonics and Plasmonics, Guarujá (Sao Paulo), Brazil, November 10 -14, 2007.
- ❑ 2nd International Congress on Advanced Electromagnetic Materials in Microwaves and Optics, Pamplona, Spain, September 21-26, 2008.
- ❑ 8th International Conference on Nano-Molecular Electronics, Kobe, Japan, 16. – 18.12.2008
- ❑ International workshop on Nanoantennas, Paris, France, 16.01.2009
- ❑ Progress in Electromagnetics Research Symposium (PIERS 2009), Moscow, Russia, 18. - 21.08.2009 (not attended).
- ❑ Metamaterials'2009, London, Great Britain, 30.08. – 04.09.2009 (not attended)
- ❑ 4th European Conference on Antennas and Propagation, EuCAP 2010, Barcelona, Spain, 12-16 April 2010.
- ❑ OSA Metamaterials and Plasmonics (META) Topical Meeting and Tabletop Exhibit, The Westin La Paloma Hotel, Tucson, AZ, USA, June 7-10, 2010.
- ❑ Frontiers in Plasmonics" Xi'an (China) Sept 3-7, 2010.
- ❑ Nano 2010, September 13-17, 2010, Rome, Italy