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University Education

03/92	Diploma in Chemistry " <i>Raman-Mie-Streuung an levitierten Mikrotröpfchen</i> "
1989-1992	Studies of chemistry, Julius Maximilians University Würzburg
1986-1989	Studies of chemistry (<i>Vordiplom</i>), Friedrich Alexander University Erlangen

Scientific Degrees

2000	Habilitation in physical chemistry with Prof. Dr. Dr. h.c. Wolfgang Kiefer, Julius Maximilians University Würzburg Topic: " <i>Physik und Chemie sphärischer Mikroteilchen</i> "
02.95	PhD graduation ("summa cum laude")
1992-1995	PhD project under supervision of Prof. Dr. Dr. h.c. Wolfgang Kiefer, Würzburg Topic: " <i>Elastische und inelastische Lichtstreuung an einzelnen sphärischen Mikropartikeln</i> "

Professional career since final degree

2006-	Scientific director, Leibniz Institute of Photonic Technology, Jena
2002-	Chair of Physical Chemistry, FSU Jena
1997-2002	Research associate, University of Würzburg, Institute of Physical Chemistry
1996	Postdoc, Department of Applied Physics, Yale University, New Haven, USA

Interdisciplinary affiliations, administrative experience, honours and awards

Awards/fellowships:

2016	Pittsburgh-Spectroscopy Award
2013	Robert-Kellner-Lecture Award
2013	Research Award for Applied Sciences of the Free State of Thuringia, Germany
2012	Awarding honorary doctor's degree at Babes-Bolyai University Cluj-Napoca
2012	Fellow of the International Society for Optical Engineering (SPIE, 2012)
2011-	Guest professor Wuhan University, China

2009-	Member Board of Stakeholders European Technology Platform Photonics21
2009	Fellow of the Society for Applied Spectroscopy
2006	Call for chair of Physical Chemistry (W3) at the University of Würzburg (declined)
2002	Bunsen-Kirchhoff Award by the German Bunsen-Society
2001	Cooperation Prize of the University of Würzburg
1997	Zehetmaier Award (Habilitation scholarship) awarded by the <i>Freistaat Bayern</i>
1996	DFG Research scholarship
1994	Award of the Faculty for Chemistry and Pharmacy, University of Würzburg

Editorships/positions at scientific organizations/committees:

2012-	Member of the university council of the University of Applied Sciences Jena, Germany
2013-	Member Board of Directors "Abbe Center of Photonics"
2011-	Member Board of Directors "Center for Medical Optics and Photonics"
2008-2012	Coordinator of PHOTONICS4LIFE a European Network of Excellence for Biophotonics
2008	Board of Stakeholders - „Photonics 21“
2008-	Member of the Board of Trustees of the "Stiftung für Technologie, Innovation und Forschung Thüringen (STIFT)"
2008-	Member of the Board of Management of the „Wirtschaftsförderungsgesellschaft Jena mbH“
2007-	Member Federal Ministry of Education and Research (BMBF) program committee „Optical Technology“
2007-	Member of the scientific advisory board JENOPTIK AG
2005-2007	Vice dean of the School of Chemical and Earth Sciences, FSU Jena
2003-	Member of the faculty board, School of Chemical and Earth Sciences, FSU Jena
2002-	Coordinator of the main research framework "Biophotonic" supported by the German Ministry of Education and Research (BMBF)

Member of the editorial advisory board of:

Analytical and Bioanalytical Chemistry, Scientific Reports, Journal of Biophotonics (Editor-in-Chief and founding editor), J. Raman Spectrosc. (associate editor)

Graduate teaching and supervisory experience:

2009- Abbe School of Photonics
 2009- Center for Medical Optics and Photonics
 Member of PhD committee and external examiner at the ETH Zürich, University of Varanasy (India), Monash University (Australia), University of Valladolid (Spain), University of Twente (Netherlands); invited lecturer at several summer schools, e.g. Doctoral School of Biophotonics, Summer School of Nanobiology; PI of the research training group GRK 1257 "Alteration and element mobility at the micro-mineral interface"; PI of the International Max Planck Schol for Biogeochemistry; PI of Jena School for Microbial Communication – DFG Graduate School of Excellence.

Five most important publications in international refereed journals (5, last 10 years)

1. T. Press, A. Traeger, C. Pietsch, A. Mosig, M. Wagner, M. G. Clemens, N. Jbeily, N. Koch, M. Gottschaldt, N. Beziere, V. Ermolayev, V. Ntziachristos, J. Popp, M. M. Kessels, B. Qualmann, Ulrich S. Schubert, M. Bauer "Cell type-specific delivery of short interfering RNAs y dye-functionalised theranostic nanoparticles" *Nature Communication*, **2015**, DOI: 10.1038/ncomms6565.
2. P. Vargas Jentzsch, V. Ciobota, P. Rösch, J. Popp "Reactions of Alkaline Minerals in the Atmosphere" *Angew. Chem. Int. Ed.* **2013**, 52, 1410 –1413.
3. S. Stöckel, S. Meisel, M. Elschner, P. Rösch, J. Popp, "Raman-spectroscopic detection of Anthrax endospores in hoax material" *Angew. Chem. Int. Ed.* **2012**, 51, 5339 -5342.
4. S. Dochow, M. Becker, R. Spittel, C. Beleites, S. Stanca, I. Latka, K. Schuster, J. Kobelke, S. Unger, T. Henkel, G. Mayer, J. Albert, M. Rothhardt, C. Krafft, J. Popp "Raman-on-chip device and detection fibres with fibre Bragg grating for analysis of solutions and particles" *Lab Chip*, **2013**, 13, 1109-1113.
5. S. Tschierlei, M. Karnahl, M. Presselt, B. Dietzek, J. Guthmuller, L. González, M. Schmitt, S. Rau, J. Popp "Photochemical fate: the first step determines efficiency of H₂ formation with a supramolecular photocatalyst" *Angew. Chem. Int. Ed.* **2010**, 49, 3981-3984.

Scientific ranking

567 publications in peer refereed journals, 9031 citations, h-index: 44 (Source: Web of Science 07/15)

List of Publications

Book contributions

- M. H. Fields, J. Popp, R. K. Chang "Nonlinear Optics" in *Microdroplets in Progress in Optics Vol. 41*, ed E. Wolf, Elsevier Amsterdam, **2000**, 3.
- J. Popp, W. Kiefer "Fundamentals of Raman Spectroscopy" in *Encyclopedia of Analytical Chemistry*, Wiley Chichester, **2000**, 13104.
- J. Popp, W. Kiefer "Morphology-Dependent Raman measurements" in J. M. Chalmers and R. G. Peter, eds., *Handbook of Vibrational Spectroscopy Vol. 2*, Wiley Chichester, **2002**, 1318-1328.
- M Schmitt, J Popp, W Kiefer "Applications of Raman Spectroscopy in Life Sciences and Mineralogy" in *Perspectives in Engineering Optic*, eds. K. Singh, V. K. Rastogi, Anita Publications New Delhi, **2003**, 392.
- P. Rösch, M. Harz, M. Krause, R. Petry, K.-D. Peschke, O. Ronneberger, H. Burkhardt, A. Schüle, G. Schmutz, M. Lankers, S. Hofer, H. Thiele, H.-W. Motzkus and J. Popp, "Online-monitoring and identification of bioaerosols (OMIB)", in J. Popp, M. Strehle, ed., *Biophotonics: Vision for a better Health Care*, Wiley-VCH, Weinheim, **2006**, 89.
- S. Liedtke, J. Popp, "*Laser, Licht und Leben. Techniken in der Medizin*" Wiley VCH, Weinheim, **2006**.
- C. Krafft, P. Rösch and J. Popp, "Raman Spectroscopy in Medicine", in H. G. Bohr, ed., *Handbook of Molecular Biophysics. Methods and Applications*, Wiley-VCH, Weinheim, **2009**, 985-1017.
- M. Harz, S. Stöckel, V. Ciobota, D. Cialla, P. Rösch and J. Popp, "Applications of Raman spectroscopy to virology and microbial analysis", in P. Matousek and M. Morris, eds., *Emerging Raman Applications and Techniques in Biomedical and Pharmaceutical Fields (Biological and Medical Physics, Biomedical Engineering)*, Springer, Heidelberg, **2010**, 439-466.
- S. Stöckel, A. Walter, A. Boßecker, S. Meisel, V. Ciobotă, W. Schumacher, P. Rösch and J. Popp, "Identification and characterization of Microorganisms by Vibrational Spectroscopy", in J. Popp, V. V. Tuchin, A. Chiou and S. Heinemann, eds., *Handbook of Biophotonics 2: Photonics for Health Care*, Wiley, Berlin, **2011**, 105-141.
- J. Popp, V. V. Tuchin, A. Chiou and S. Heinemann, eds., *Handbook of Biophotonics Vol. 1: Basics and Techniques*, Wiley, Berlin, **2011**.
- J. Popp, V. V. Tuchin, A. Chiou and S. Heinemann, eds., *Handbook of Biophotonics Vol. 2 : Photonics for Health Care*, Wiley, Berlin, **2011**.
- J. Popp, V. V. Tuchin, A. Chiou and S. Heinemann, eds., *Handbook of Biophotonics Vol. 3: Photonics in Pharmaceutics, Bioanalysis and Environmental Research*, Wiley, Berlin, **2012**.
- P. Rösch, U. Münchberg, S. Stöckel and J. Popp, "Tracing bioagents – a vibrational spectroscopic approach for a fast and reliable identification of bioagents", in J. Chalmers, H. G. W. Edwards and M. Hargreaves, eds., *Infrared and Raman Spectroscopy in Forensic Science*, Wiley-Blackwell, **2012**, 233-250.
- A. März, P. Rösch, T. Henkel, D. Malsch and J. Popp, "Raman Spectroscopy Lab-on-a-Chip Surface Enhanced Raman Spectroscopy (LOC-SERS)", in W. Fritzsche and J. Popp, eds., *Optical Nano- and Microsystems for Bioanalytics*, Springer, Berlin Heidelberg, **2012**, 229-246.
- W. Fritzsche and J. Popp, eds., "*Optical Nano- and Microsystems for Bioanalytics*", Springer, **2012**.
- T. Bocklitz, M. Schmitt and J. Popp, "*Image Processing-Chemometric Approaches to Analyze Optical Molecular Images*", in J. Popp, ed., *Ex-vivo and In-vivo Optical Molecular Pathology*, Wiley-VCH Verlag, Weinheim, Germany, **2014**, 215-248.
- M. Diem, A. Mazur, K. Lenau, J. Schubert, J. Fore, B. Bird, M. Miljkovic, C. Krafft and J. Popp, "*Molecular pathology via infrared and Raman spectral imaging*", in J. Popp, ed., *Ex-Vivo and In-Vivo Optical Molecular Pathology*, Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim, Germany, **2014**, 45-102.
- C. Krafft and J. Popp, "*Vibrational Spectroscopic Imaging of Soft Tissue*", in R. Salzer and H. W. Siesler, eds., *Infrared and Raman Spectroscopic Imaging* Wiley-VCH Verlag Weinheim, Germany, **2014**, 111-152.

U. Münchberg, S. Kloß, D. Kusić, S. Meisel, R. Heinke, S. Stöckel, P. Rösch and J. Popp, "IR and Raman Spectroscopy for Pathogen Detection", in J. Popp and M. Bauer, eds., *Modern techniques for pathogen detection*, Wiley-VCH, Weinheim, **2015**, 253-294.

J. Popp and M. Bauer, eds., "*Modern techniques for pathogen detection*", Wiley-VCH, Weinheim, **2015**.

Patents:

W. Kiefer, J. Popp, R. Geßner, P. Rösch. „Method and modular device for Raman- and SER-spectroscopic measurements of biological and chemical samples using a glass fiber probe with metal-coated tip” Ger. Offen. **2003**, 12 pp.

J. Popp, P. Rösch, R. Petry, S. Hofer, A. Schuele, G. Schmauz, M. Lankers, H. Burkhardt, O. Ronneberger, K.-D. Peschke. „Method and device for detection and for identification of bioparticles by Raman spectroscopy” Ger. Offen. **2005**, 15pp.

R. Riesenberger, A. Wuttig, J. Popp, „Ultracompact Raman spectrometers” Ger. Offen. **2006**, 10 pp.

J. Popp, P. Rösch, T. Bartels, M. Krause and M. Harz, "Verfahren zur Bestimmung des Geschlechts bei Vögeln", *Ger. Offen.* , DE 102007013107, Deutschland, **2007**, 12 pp.

J. Popp and T. Siebert, "Coherent anti-Stokes Raman scattering (CARS) microscopes", *Ger. Offen.*, DE 102005044422, **2007**.

R. A. Claus, C. Bockmeyer, H.-P. Daigner, M. Harz, P. Rösch, J. Popp and R. Riesenberger, "Diagnostic tool detecting the degradation status of von Willebrand factor multimers", *U.S. Pat. Appl. Publ.*, (Germany). US 2007-713863, **2008**.

T. Henkel, J. Popp, K. Strehle, "Measuring arrangement for surface-enhanced resonance Raman spectroscopy", *Ger. Offen.* , DE 102006045618, **2008**.

J. Popp, V. Deckert, D. Naumann, R. Möller and D. Cialla, "Method for identifying individual viruses in a sample by Raman spectroscopy" *Ger. Offen.* , DE1031 2010028614, **2010**.

A. März, T. Bocklitz und J. Popp, "Verfahren zur Korrektur von Raman-spektroskopischen Daten in einem Mehrphasensystem", *Ger. Offen.*, DE 10 2011 016 059.0, **2011**.

A. Friedberger, J. Popp, P. Rösch and M. Lankers, "Device for identifying biotic particles", *Ger. Offen.*, DE102010053749A1. **2012**, 9pp.

A. Friedberger, J. Popp, P. Rösch and M. Lankers, "Device for identifying biotic particles", *PCT Int. Appl.*, WO2012075998A1. **2012**, 20pp.

J. Popp, A. Maerz and T. W. Bocklitz, "*Methods for the correction of Raman spectroscopic data in a multi-phase system*", *Ger. Offen.* DE102011016059A1. **2012**, 12pp.

J. Popp, C. Krafft and S. Dochow, „Anordnung zur Durchführung einer Einzelprobenanalyse und -manipulation für die Raman-Mikrospektroskopie“. *Ger. Offen.*, DE201110008788 20110114 **2012**.

M. Becker, S. Dochow, J. Kobelke, I. Latka, K. Schuster, R. Spittel and J. Popp, "*Optical fibers for the filtered collection of light, in particular Raman scattered light and method for the production thereof*", *PCT Int. Appl.* WO2013067996A1. **2013**, 42pp.

Scientific papers

1993

1. K. Schaschek, J. Popp, W. Kiefer "Observation of Morphology-Dependent Input and Output Resonances in Time-Dependent Raman Spectra of Optically Levitated Microdroplets", *J. Raman Spectrosc.* **1993**, 24, 69-75.
2. K. Schaschek, J. Popp, W. Kiefer "Morphology-Dependent Resonances in Raman Spectra of Optically Levitated Microdroplets: Determination of Radius and Evaporation Rate of Single Glycerol/Water Droplets by means of Internal Mode Assignment", *Ber. Bunsenges. Phys. Chem.* **1993**, 97, 1007-1011.

1994

3. G. Bringmann, U. Dauer, O. Schupp, M. Lankers, J. Popp, A. Weippert, W. Kiefer "The Influence of Aluminiumtrichloride on a Configurately Labile Lactone-Bridged Biaryl: Quantum Chemical Calculations and Optical Spectroscopy", *Inorg. Chim. Acta* **1994**, 222, 247-253.
4. M. Trunk, M. Lankers, J. Popp, W. Kiefer "Simple and Inexpensive Design of an Uniform-Size Droplet Generator", *Appl. Spectrosc.* **1994**, 48, 1291-1293.
5. M. Lankers, J. Popp, W. Kiefer, "Raman and Fluorescence Spectra of Single Optically Trapped Microdroplets in Emulsions", *Appl. Spectrosc.* **1994**, 48, 1166-1168.
6. E. Urlaub, M. Lankers, I. Hartmann, J. Popp, M. Trunk, W. Kiefer, "Raman Investigation of Styrene Polymerization in Single Optically Trapped Emulsion Particles", *Chem. Phys. Lett.* **1994**, 231, 511-514.

1995

7. J. Popp, M. Lankers, K. Schaschek, W. Kiefer, J.T. Hodges, "Observation of Sudden Temperature Jumps in Optically Levitated Microdroplets due to Morphology-Dependent Input Resonances", *Appl. Opt.* **1995**, 34, 2380-2386.
8. J. Popp, M. Trunk, I. Hartmann, M. Lankers, W. Kiefer, "Characterization of the Interaction between Morphology Dependent In- and Output Resonances in Laser Trapped Microparticles", *J. Mol. Struct.* **1995**, 349, 281-284.
9. I. Hartmann, J. Popp, M. Lankers, M. Trunk, W. Kiefer, "Theory for Morphology Dependent Resonances in the Raman Spectra of Optically Levitated Dielectric Microspheres", *J. Mol. Struct.* **1995**, 349, 203-206.
10. G. Bringmann, U. Dauer, M. Lankers, J. Popp, U. Posset, W. Kiefer, "Structural and Electronic Influence of Aluminium Trichloride on a Benzonaphthopyranone", *J. Mol. Struct.* **1995**, 349, 431-434.
11. M. Lankers, J. Popp, E. Urlaub, H. Stahl, G. Rößling, W. Kiefer, "Investigations of Multiple Component Systems by means of Optical Trapping and Raman Spectroscopy", *J. Mol. Struct.* **1995**, 348, 265-268.
12. W. Kiefer, M. Lankers, J. Popp, M. Trunk, E. Urlaub, "Physics and Chemistry in Laser-Trapped Single Microparticles Studied by Light Scattering", *Chin. J. Light Scattering* **1995**, 7, 65.

1996

13. E. Urlaub, M. Lankers, I. Hartmann, J. Popp, M. Trunk, W. Kiefer, "Applications of the Optical Trapping Technique to Analyse Chemical Reactions in Single Emulsion Particles", *Fresenius J. Anal. Chem.* **1996**, 355, 329-331.
14. M. Trunk, J. Popp, I. Hartmann, M. Lankers, E. Urlaub, W. Kiefer, "Chemical Composition and Reaction Analysis of Single Aerosol Particles", *Fresenius J. Anal. Chem.* **1996**, 355, 354-356.
15. M. Trunk, J. Popp, J. Musick, W. Kiefer, "Investigations of Ammonia Salt Aerosols by means of Optical Levitation and Elastic/Inelastic Light Scattering", *J. Aerosol Sci.* **1996**, 27, 509-510.
16. J. Musick, J. Popp, M. Trunk, W. Kiefer, "Polymerization and Copolymerization Reaction Observed in Optically Levitated Aerosol Particles", *J. Aerosol Sci.* **1996**, 27, 561-562.
17. M. H. Fields, J. Popp, R. K. Chang, "External Seeding of SRS in Microdroplets," *Opt. Lett.*, **1996**, 21, 1457-1459.
18. W. Kiefer, A. Materny, J. Popp, M. Schmitt, "Resonant Light Scattering: from Diatomic Molecules to Laser-Trapped Microparticles", *J. Braz. Chem. Soc.* **1996**, 7, 411-434.

1997

19. J. Popp, M. H. Fields, R. K. Chang, "Injection Seeding of Lasing in Microdroplets", *Opt. Lett.* **1997**, *22*, 139-141.
20. M. Trunk, J. Popp, M. Lankers, W. Kiefer, "Microchemistry: Time Dependence of an Acid-Base Reaction in a Single Optically Levitated Microdroplet", *Chem. Phys. Lett.* **1997**, *264*, 233-237.
21. M. Lankers, E. Khaled, J. Popp, G. Rößling, H. Stahl, W. Kiefer, "Determination of Size Changes of Optically Trapped Gas Bubbles by Elastic Light Scattering", *Appl. Opt.* **1997**, *36*, 1638-1643.
22. M. Trunk, J. F. Lübben, J. Popp, B. Schrader, W. Kiefer, "Investigation of a Phase Transition in a Single Optically Levitated Microdroplet by Raman-Mie Scattering", *Appl. Opt.* **1997**, *36*, 3305-3309.
23. J. Popp, I. Hartmann, M. Lankers, M. Trunk, W. Kiefer, "Double Resonance Raman Scattering from Optically Levitated Microdroplets: Influence of Input Resonances on Output Resonances", *Ber. Bunsenges. Phys. Chem.* **1997**, *101*, 809-813.
24. J. Popp, M. Trunk, M. Lankers, I. Hartmann, K. Schaschek, W. Kiefer, "Observability of Morphology-Dependent Output Resonances in Raman Spectra of Optically Levitated Microdroplets", *J. Raman Spectrosc.* **1997**, *28*, 531-536.
25. I. Hartmann, M. Lankers, J. Popp, M. Trunk, E. Urlaub, W. Kiefer, "Simulation of Morphology-Dependent Resonances in the Raman Spectra of Optically Levitated Microspheres", *J. Raman Spectrosc.* **1997**, *28*, 547-550.
26. W. Kiefer, J. Popp, M. Lankers, M. Trunk, I. Hartmann, E. Urlaub, J. Musick, "Raman-Mie Scattering from Single Laser Trapped Microdroplets", *J. Mol. Structure.* **1997**, *408/409*, 113-120.
27. J. Popp, M. H. Fields, R. K. Chang, "Q Switching by Saturable Absorption in Microdroplets: Elastic Scattering and Laser Emission", *Opt. Lett.* **1997**, *22*, 1296-1298.
28. M. Lankers, J. Popp, G. Rößling, W. Kiefer, "Raman Investigations on Laser-Trapped Gas Bubbles", *Chem. Phys. Lett.* **1997**, *277*, 331-334.

1998

29. E. Urlaub, J. Popp, W. Kiefer, G. Bringmann, D. Koppler, U. Zimmermann, H. Schneider, B. Schrader "FT-Raman Investigation of Alkaloids in the *Liana Ancistrocladus heyneanus*" *Biospectroscopy* **1998**, *4*, 113-120.
30. M. Trunk, J. Popp, W. Kiefer "Investigations of the Composition Changes of an Evaporating, Single Binary-Mixture Microdroplet by Inelastic and Elastic Light Scattering" *Chem. Phys. Lett.* **1998**, *284*, 377-381.
31. J. Musick, J. Popp, M. Trunk, W. Kiefer "Investigations of Radical Polymerization and Copolymerization Reactions in Optically Levitated Microdroplets by Simultaneous Raman Spectroscopy, Mie Scattering, and Radiation Pressure Measurements" *Appl. Spectrosc.* **1998**, *52*, 692-701.
32. K. Angoni, J. Popp, W. Kiefer "A Vibrational Spectroscopy Study of 'Urinary Sand'" *Spectrosc. Lett.* **1998**, *31*, 1771-1772.
33. E. Urlaub, J. Popp, V. Roman, W. Kiefer, M. Lankers, G. Rößling "Raman Spectroscopic Monitoring of the Polymerization of Cyanacrylate" *Chem. Phys. Lett.* **1998**, *298*, 177-182.
34. J. Popp, M. Lankers, M. Trunk, et al. "High-Precision Determination of size, refractive index, and dispersion of single microparticles from morphology dependent resonances in optical processes" *Appl. Spectrosc.* **1998**, *52*, 284-291.

1999

35. V.E. Roman, J. Popp, and W. Kiefer "Species Identification of Multicomponent Microdroplets by seeding of Stimulated Raman Scattering" *J. Opt. Soc. Am. B.* **1999**, *16*, 370-375.
36. V.E. Roman, J. Popp, and W. Kiefer "Minority Species Detection in Aerosols by Stimulated Anti-Stokes Raman Scattering and External Seeding" *Appl. Opt.* **1999**, *38*, 1418-1422.

37. J. Popp and V.E Roman "Species Detection in Single Microparticles Using Nonlinear Raman Scattering" J. Mol. Struct. **1999**, 480-481, 323-327.
38. J. Musick, J. Popp, and W. Kiefer "Raman Spectroscopic and Elastic Light Scattering Investigations of Chemical Reactions in Single Electrostatically Levitated Microparticles" J. Mol. Struct. **1999**, 480-481, 317-321.
39. V.E Roman, J. Popp, E. Urlaub, S. Schlücker, M. Lankers, G. Rößling, and W. Kiefer "Raman Spectroscopic Investigation of Polycyanacrylate Capsules" J. Mol. Struct. **1999**, 482-483, 497-501.
40. P. Rösch, J. Popp, and W. Kiefer "Raman and SERS Investigations on Lamiaceae Plants" J. Mol. Struct. **1999**, 480-481, 121-124.
41. V. E. Roman, and J. Popp "In-situ Microparticle Diagnostics by Stimulated Raman Scattering" PCCP **1999**, 1, 5491-5495.
42. J. Musick, and J. Popp "Investigation of Chemical Reactions between Single Levitated Magnesium Chloride Microdroplets with SO₂ and NO_x by means of Raman Spectroscopy and Elastic Light Scattering" PCCP **1999**, 1, 5497-5502.

2000

46. O. Sbanski, V. E. Roman, W. Kiefer, and J. Popp "Elastic Light Scattering from Single Microparticles on a Femtosecond Timescale" J. Opt. Soc. Am. A, **2000**, 17, 313-319.
47. J. Musick, J. Popp, and W. Kiefer "Observation of a phase transition in an electrostatically levitated NH₄NO₃ microparticle by Mie and Raman scattering" J. Raman. Spectrosc. **2000**, 31, 217-219.
48. P. Meuer, A. Wolf, R. Hansch, M. Okrusch, J. Popp, U. Posset, W. Kiefer "FT-Spectroscopic Study on the Luminescence of Synthetic and Mineral Apatites" J. Microchim. Acta, **2000**, 133, 203-2017.
49. N. Nissum, S. Schlücker, J.-M. Funk, J. Popp, and W. Kiefer "Symmetry Considerations on Free-base Porphyrins by Polarization-Sensitive Resonance CARS Spectroscopy" Asian Chem. Lett., **2000**, 4, 91-99.
50. J. Musick, W. Kiefer, and J. Popp "Chemical Reactions of Electrostatically Levitated Inorganic Salt Particles with Ammonia Gas" Appl. Spectrosc. **2000**, 54, 1136-1141.
51. O. Sbanski, V. E. Roman, W. Kiefer, and J. Popp "Sizing of Polymer-Coated Spherical Air Bubbles" Appl. Spectrosc. **2000**, 54, 1075-1083.
52. O. Sbanski, V. E. Roman, W. Kiefer, J. Popp "Morphology-dependent Resonances in a Dielectric Microsphere and Femtosecond Laser Pulses" J. Chin. Chem. Soc. **2000**, 47, 863-864.

2001

53. S. Schlücker, V. E. Roman, and W. Kiefer, J. Popp "Detecting Pesticide Model Compounds in Ethanol and aqueous Microdroplets by nonlinear Raman Spectroscopy" Anal. Chem. **2001**, 73, 3146-3152.
54. S. Schlücker, J. Koster, M. Nissum, J. Popp, and W. Kiefer "Structural Investigations on Octaethylporphyrin using Density Functional Theory and Polarization-Sensitive CARS Spectroscopy" J. Phys. Chem. A, **2001**, 105, 9482-9488.
55. S. Schlücker, R. K. Singh, B. P. Asthana, J. Popp, and W. Kiefer "Hydrogen-Bonded Pyridine-Water Complexes Studied by Density Functional Theory and Raman Spectroscopy" J. Phys. Chem. A, **2001**, 105, 9983-9989.
56. J. Popp, N. Tarcae, W. Kiefer, M. Hilchenbach, N. Thomas, S. Hofer, T. Stuffer "Investigations on Mars Model Minerals by in situ Laser Raman Spectroscopy" ESA Publication, **2001**, ESA SP-496, 193-196.

2002

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