

Publication List Karsten König (Karsten Koenig)

- 1. Peer-reviewed papers**
- 2. Proceedings**
- 3. Books/ book chapters**
- 4. Conference talks (bold: invited talks)**
- 5. International seminars**
- 6. Patents**

1. Peer-reviewed papers

1985

1. H.J. Fitting, K. König, D. Hecht. Exoelectron Emission Due to Alkali Ions on Insulating Layers. *Phys. stat. sol. a* 97 (1985) 77-79.

1987

2. K. König, V. Bockhorn, W. Dietel, H. Schubert. Photochemotherapy of animal tumors with the photosensitizer Methylene Blue using a krypton laser. *J. Cancer Res. Clin. Oncol.* 113 (1987) 301-303.

1988

3. E. Knoth, K. König, W. Grassme, W. Dietel, K.H. Donnerhacke. HpD-induzierte Tumorfluoreszenz. *Z. Erkrank. Atm. Org.* 170 (1988) 170-184.

4. K. König, W. Dietel. Lichtleiterekopplungsgerät zur Fluoreszenzdiagnostik, Phototherapie und Photochemotherapie. *medizintechnik* 1 (1988) 1-2.

5. K. König: Johann Wilhelm Ritter -der Entdecker der UV-Strahlung. *Dermatol. Monatszeitschr.* 174 (1988) 493-497.

1989

6. K. König, E. Welsch, H.G. Walter. Photoakustisches Absorptionsspektrometer. *medizintechnik* 1 (1989) 15-18.

7. K. König, V. Bockhorn, U. Krause, W. Dietel, H. Schubert, P. Lotz, L.P. Löbe. Photodynamic therapy with HpD on mice with solid Ehrlich carcinoma. *Arch. Geschw.* 1 (1989) 1-6.

8. K. König, W. Dietel, V. Bockhorn, A. Möller. Laserpilotanlage zum Einsatz in der Urologie. *medizintechnik* 2 (1989) 50-51.

9. K. König, W. Dietel. In vivo autofluorescence investigations on animal tumors. *Neoplasma* 36 (1989) 135-138.

10. I. Bugiel, K. König, H. Wabnitz: Investigation of cells by fluorescence laser scanning microscopy with subnanosecond time resolution. *Lasers Life Sciences* 3 (1989) 1-7.

11. V. Bockhorn, A. Möller, W. Dietel, K. König. Lasergestützte transurethrale Resektion von Uroterverschlüssen. *Z. Urol. Nephrol.* 82 (1989) 361-362.

12. K. König, V. Bockhorn. The effect of Nitroimidazoles and photochemotherapy on solid Ehrlichcarcinomas. *Radiobiol. Radiother.* 30 (1989) 535-539.

13. K. König, V. Bockhorn, W. Dietel, H. Schubert. Photochemotherapie an tierexperimentellen Tumoren mit verschiedenen Photosensibilisatoren. *Zeitschr. Urol. Nephrol.* 82 (1989) 601-608.

1990

14. K. König, W. Dietel. Laserinduzierte Tumorfluoreszenzdiagnostik am Beispiel des soliden Ehrlichcarcinoms. *Arch. Geschw.* 60 (1990) 1-9.

15. K. König, A. Felsmann, W. Dietel, M. Boschmann, S.N. Cherenkevich, T. Zorina. Photodynamic activity of the HpD photoproducts. *studia biophysica* 138 (1990) 219-228.

16. W. Dietel, K. König, E. Zenkevich. Photobleaching of HpD Fluorescence and Formation of Photoproduct In-vivo and in Solution. *Lasers Life Sciences* 3 (1990) 197-203.

17. K. König, H. Wabnitz. Fluoreszenzuntersuchungen mit hoher zeitlicher, spektraler und räumlicher Auflösung. *Labortechnik* 23 (1990) 26-31.

18. K. König, H. Wabnitz, W. Dietel. Variation in the fluorescence decay properties of HpD during its conversion to photoproducts. *J. Photochem. Photobiol. B.* 8 (1990) 103-111.

19. L.P. Löbe, K. Krause, P. Lotz, K. König, W. Dietel, H. Schubert, J. Bart. Photodynamische Tumortherapie. Prinzip und erste experimentelle Ergebnisse. *Otolaryng. Pol.* 3 (1990) 175-178.

1991

20. K. König, S. Auchter. Setup for the determination of the photodynamic activity of dyes on the basis of scattering measurements. *Biomed. Techn.* 9 (1991) 201-205.

1992

21. K. König, E. Welsch, H.G. Walter. Photoacoustic absorption measurements on tumor tissue stained with the sensitizer Methylene Blue. *Lasers Life Sciences.* 4 (1992) 209-218.

22. K. König, H. Meyer. Photodynamically Induced Inactivation of *Propionibacterium Acnes* using the Photosensitizer Methylene Blue and Red Light.

Dermatol. Monatsschr. 178 (1992) 209-218.

23. H. Schneckenburger, K. König. Fluorescence decay kinetics and imaging of NAD(P)H and flavins as metabolic indicators. *Opt. Eng.* 31 (1992) 1447-1451.

24. K. König, H. Schneckenburger, A. Rück. Fluorescence detection and photodynamic activity of endogeneous protoporphyrin in human skin. *Opt. Eng.* 31 (1992) 1470-1474.

1993

25. K. König, F. Genze, K. Miller, A. Rück, E. Reich, D. Repassy. Photodynamic activity of liposome-delivered Cd-texaphyrin using tumor-bearing nude mice.

Lasers Surg. Med. 5 (1993) 522-527.

26. K. König, H. Meyer, H. Schneckenburger, A. Rück. The Study of Endogeneous Porphyrins in Human Skin and Their Potential for Photodynamic Therapy by Laser Induced Fluorescence Spectroscopy. *Lasers in Medical Science* 8 (1993) 127-132.

27. K. König, H. Meyer. Photodynamische Aktivität von Methylenblau.

Akt. Dermatol. 19 (1993) 195-198.

28. K. König, H. Meyer, H. Schneckenburger, A. Rück. Fluoreszenzverhalten und photodynamische Wirksamkeit von *Propionibacterium acnes*. *Akt. Dermatol.* 19 (1993) 199-201.

29. K. König, F. Genze, K. Miller. Photodynamic lasertherapy using aminolaevulinic acid and desferrioxamine. *Dermatol. Monatsschr.* 179 (1993) 132-134.

30. K. König, H. Schneckenburger, A. Rück. In vivo photoproduct formation during PDT with ALA-induced endogenous porphyrins. *J. Photochem. Photobiol. B* 18(1993) 287-290.

31. H. Schneckenburger, K. König, K. Kunzi-Rapp, C. Westphal-Frösch. Time-resolved in-vivo fluorescence of photosensitizing porphyrins. *J. Photochem. Photobiol. B* 21 (1993) 143-147.

32. W. Strauss, K. König, K. Mller, W. Mohr, A. Rück, H. Schneckenburger, R. Steiner: Meso-Tera (4-carboxyphenyl)porphyrin – Fluoreszenzverhalten und photodynamische Therapie an xenotransplantierten Urothelkarzinomen, (Januar 1993).

1994

32. W-H Boehncke, K. König, A. Rück, R. Kaufmann, W. Sterry. In vitro and In vivo Effects of Photodynamic Therapy in Cutaneous T Cell Lymphoma. *Acta Derm.Venerol.* 74(1994) 201-205.

33. W-H Boehncke, K. König, R. Kaufmann, W. Scheffold, O. Prümmer, W. Sterry.

Photodynamic therapy in psoriasis: Suppression of cytokine production in vitro and recording of fluorescence modifications during treatment in vivo. *Arch. Dermatol. Res.* 286 (1994) 300-303.

34. K. König, H. Schneckenburger. Laser-Induced Autofluorescence for Medical Diagnosis. *J. Fluorescence* 4 (1) (1994) 17-40.

35. R. Fischer, K. König, A. Rück, W. Puhl, R. Steiner. Einsatz der Fluoreszenzspektroskopie zur selektiven perkutanen Nukleotomie mit dem Excimer-Laser - Experimentelle Untersuchungen. *Z. Orthop.* 132 (1994) 9-15.

36. H. Schneckenburger, T. Dienersberger, K. König, M. Gschwend. Time-Gated Microscopic Imaging and Spectroscopy in Photobiology and Diagnostics.

Lietuvos fizikos zurnalas, 34 (1-2) (1994) 121-125.

37A. K. Orth, K. König, F. Genze, A. Rück. Photodynamic therapy of experimental colonic tumours with 5-aminolevulinic-acid-induced endogenous porphyrins.

J. Cancer Res. Clin. Oncol. 120 (1994) 657-661.
37B. K. König, A. Kienle, W-H. Boehncke, R. Kaufmann, A. Rück, T. Meier, R. Steiner. Photodynamic tumour therapy and on-line fluorescence spectroscopy after ALA administration using 633 nm-light as therapeutic and fluorescence excitation radiation. Optical Engineering 33(1994) 2945-2952

1995

38. K. König, Y. Liu, GJ. Sonek, MW. Berns, B. Tromberg. Autofluorescence spectroscopy of optically-trapped cells during light stress. Photochem. Photobiol. 62 (5) (1995) 830-835.
39. K. König, H. Liang, MW. Berns, B. Tromberg. Cell damage by near-IR microbeams. Nature. 377 (1995) 20-21.
40. Y. Liu, GJ. Sonek, MW. Berns, K. König, BJ Tromberg: Two-Photon fluorescence excitation in continuous-wave infrared optical tweezers. Optics Lett. 20 (21) (1995) 2246-2248.

1996

41. K. König, L. Svaasand, Y. Liu, GJ. Sonek, P. Patrizio, J. Tadir, MW. Berns, B. Tromberg. Determination of motility forces of human spermatozoa using an 800nm optical trap. Cell. Mol. Biol. 42 (4) (1996) 501-509.
42. K. König, T.Krasieva, E. Bauer, U. Fiedler, MW. Berns, BJ. Tromberg, KO. Greulich. Cell Damage by UVA Radiation of a Mercury Microscopy Lamp Probed by Autofluorescence Modifications, Cloning Assay, and Comet Assay. J. Biomedical Optics 1 (2) (1996) 217-222.
43. K. König, H. Liang, M.W. Berns, B.J. Tromberg. Cell damage in near infrared multimode optical traps due to multi-photon absorption. Optics Letters 21 (14) (1996) 1090-1092.
44. K. König, S. Kimel, MW. Berns. Photodynamic effects on human and chicken erythrocytes studied with microirradiation and confocal laser scanning microscopy. Lasers Surg Med. 19 (1996) 284-298.
45. K. König, P.T.C. So, W.W. Mantulin, BJ Tromberg, E Gratton. Two-photon excited lifetime imaging of autofluorescence in cells during UVA and NIR photostress. J. Microsc. 183 (1996) 197-204.
46. K.König, Y. Tadir, P. Patrizio, M.W. Berns, B.J. Tromberg. Effects of Ultraviolet Exposure and Near Infrared Optical Traps on Spermatozoa. Human Reproduction. 11 (1996) 2162-2164.
47. K.-J. Halbhuber, K. König: Laser-Mikroskopie in Histochemie und Zellbiologie. MTA 11 (1996) 872-877.
48. K. König, U. Simon, K.-J. Halbhuber. 3D-resolved two-photon fluorescence microscopy of living cells using a modified confocal laser scanning microscope. Cell. mol. Biol. 42 (1996) 1181-1194.

1997

49. K. König, MW. Berns, BJ. Tromberg. Time-resolved and steady-state fluorescence measurements of NADH-alkohol dehydrogenase complex during UV-A Exposure. J. Photochem. Photobiol. B. 11 (1997) 91-95.
50. K. König, P. So, W.W. Mantulin, E. Gratton. Cellular response to near-infrared femtosecond laser pulses in two-photon microscopes. Opt. Lett. 22 (1997) 135-136.
51. R. Sailer, W.S.L. Strauss, K. König, A. Rück, R. Steiner. Correlation between porphyrin biosynthesis and photodynamic inactivation of Pseudomonas aeruginosa after incubation with 5-aminolaevulinic acid. J. Photochem. Photobiol. B. 39 (1997) 236-242.
52. K. König. Two-photon near infrared excitation in living cells. J. Near Infrared Spectrosc. 5 (1997) 27-34.

1998

53. K. König. Laser tweezers are sources of two-photon excitation. Cell. mol. Biol. 44 (1998) 721-734.

54. P. So, K. König, K. Berland, C.Y. Dong, T. French, C. Buehler, T. Ragan, E. Gratton. New time-resolved techniques in two-photon microscopy. *Cell. mol. Biol.* 44 (1998) 771-794.
55. K.J. Halbhauer, W. Krieg, K. König. Laser scanning microscopy in enzyme histochemistry. Visualization of cerium-based and DAB-based primary reaction products of phosphatases, oxidases and peroxidases by reflectance and transmission laser scanning microscopy. *Cell. mol. Biol.* 44 (1998) 807-826.
56. K. König, S. Boehme, N. Leclerc, R. Ahuja. Time-gated autofluorescence microscopy of motile green microalga in an optical trap. *Cell. mol. Biol.* 44 (1998) 763-770.
57. S. Hellwig, D. Petzoldt, K. König, C. Raulin. Aktueller Stand der Lasertherapie in der Dermatologie. *Hautarzt.* 49 (1998) 690-704.
58. K. König, K.J. Halbhauer. Introduction of the guest editors with a short review on history of optics in Jena. *Cell. mol. Biol.* 44 (1989) 657-672.
59. J. Kampmeier, K. König, T. Meier, E. Schütte, R. Steiner. Intraocular light intensity and spectral analysis using 308 nm excimer lasers via quartz fiber. *Lasers and Light.* 8 (1998) 203-209.
60. K. König, G. Flemming, R. Hibst. Laser-induced autofluorescence spectroscopy of dental caries. *Cell. mol. Biol.* 44 (1998) 1293-1300.

1999

61. K. König, H. Schneckenburger, R. Hibst. Time-gated in vivo imaging of dental caries. *Cell. Mol. Biol.* 45 (1999) 233-239.
62. K. König, T.W. Becker, I. Riemann, P. Fischer, K.J. Halbhauer. Pulse-length dependence of cellular response to intense near-infrared laser pulses in multiphoton microscopes. *Opt. Lett.* 24 (1999) 113-115.
63. K. König, I. Riemann, P. Fischer, K.J. Halbhauer. Intracellular nanosurgery with near infrared femtosecond laser pulses. *Cell. Mol. Biol.* 45 (1999) 195-201.
64. U. Tirlapur, K. König. Near-infrared femtosecond laser pulses as a novel non-invasive means for dye permeation and 3D imaging of localised dye-coupling in the Arabidopsis root meristem. *The Plant Journal.* 20 (1999) 363-370.

2000

65. H. Oehring, I. Riemann, P. Fischer, K.-J. Halbhauer, K. König. Ultrastructure and reproduction behaviour of single CHO-K1 cells exposed to near infrared femtosecond laser pulses. *Scanning* 22 (2000) 263.
66. K. König: Femtosecond Laser Microscopy in Biomedicine. *Laser und Optoelectronics.* 2 (2000) 40-45.
67. K. König, I. Riemann, P. Fischer, K.-J. Halbhauer. Multiplex FISH and three dimensional DNA imaging with near infrared femtosecond laser pulses. *Histochem. Cell Biol.* 114 (2000) 337-345. DOI. 10.1007/s004180000185.
68. K. König. Invited Review: Multiphoton Microscopy in Life Sciences. *J. Microsc.* 200 (2000) 83-104. + Cover Page.
69. K. König, A. Göhlert, T. Liehr, I.F. Loncarevic, I. Riemann. Two-Photon Multicolour FISH: A technique to detect specific sequences on single DNA molecules in biological cells. *Single Molecules* 1 (2000) 41-52.
70. S. Russwurm, K.J. Böhm, P. Mühlig, M. Wiederhold, K. König, K. Reinhart. Lipopolysaccharide induce distinct alterations in the microtubule cytoskeleton of monocytes. *Cell Biology & Toxicology* 16 (2000) 339-346.
71. K. König. Robert Feulgen Prize Lecture 2000. Laser Tweezers and Multiphoton Microscopes in Life Sciences. *Histochem Cell Biol* 114 (2000) 79-92. DOI 10.1007/s004180000179.
72. K. König, M. Teschke, B. Sigusch, E. Glockmann, S. Eick, W. Pfister. Red light kills bacteria via photodynamic action. *Cell. Mol. Biol.* 46 (2000) 1297-1303.

2001

73. U.K. Tirlapur, K. König, C. Peuckert, R. Krieg, K.J. Halbhuber. Femtosecond near-infrared laser pulses elicit generation of reactive oxygen species in mammalian cells leading to apoptosis-like death. *Experimental Cell Research*. 263 (2001) 88-97. DOI:10.1006/excr.2000.5082.
74. U.K. Tirlapur, K. König: Femtosecond near infrared laser pulses induce DNA strand breaks in mammalian cells. *Cell.Mol.Biol.* 47 (2001) OL131-OL134, DOI 10.1170/18.
75. K. König, I. Riemann, W. Fritzsche: Nanodissection of human chromosomes with near infrared femtosecond laser pulses. *Optics Letters*. 26 (2001) 819-821.
76. U. Tirlapur, K. König: Femtosecond near infrared lasers as a novel tool for non-invasive real time high resolution time-lapse imaging of chloroplast division in living bundle sheath cells of *Arabidopsis*. *Planta*. 214 (2001) 1-10.

2002

77. U.K. Tirlapur, K. König: Femtosecond near-infrared laser pulses as a versatile non-invasive tool for intratissue nanoprocessing in plants without compromising viability. *The Plant Journal*. 31 (2002) 365-374.
78. K. König, O. Krauss, I. Riemann. Intratissue surgery with 80 MHz nanojoule femtosecond laser pulses in the near infrared. *Optics Express*. 10 (2002) 171-176.
79. U. Tirlapur, K. König. Targeted transfection of cells by femtosecond near-infrared laser pulses. *Nature*. 418 (2002) 290-291.
80. K.J. Halbhuber, K. König. Moderne Laser-Scanning-Mikroskopie in Biologie, Biotechnologie und Medizin. *Ärztebl. Thüring*. 13 (6) (2002) 338-343.

2003

81. C.Y. Dong, K. König, P.T.C. So. Characterizing point-spread-functions of two-photon fluorescence microscopy in turbid medium. *Journal Biomedical Optics* 8 (3) (2003) 450-459.
82. K.J. Halbhuber, K. König. Modern Laser Scanning Microscopy in Biology, Biotechnology and Medicine. *Annals of Anatomy* 185 (2003) 1-20.
83. K. König, I. Riemann. High-resolution multiphoton tomography of human skin with subcellular spatial resolution and picosecond time resolution. *Journal Biomedical Optics* 8 (3) (2003) 432-439.
84. D. Volkmann, T. Mori, U.K. Tirlapur, K. König, T. Fujiwara, J. Kendrick-Jones, F. Baluska. Unconventional myosins of the plant-specific class VIII: endocytosis, cytokinesis, plasmodesmata/pit-fields, and cell-to-cell coupling. *Cell Biology Intern* 27(2003) 289-291.
85. K. Schenke-Layland, O. Vasilevski, F. Opitz, K. König, I. Riemann, K.J. Halbhuber, T. Wahlers, U.A. Stock. Impact of decellularization on xenogenic tissue on extracellular matrix integrity for tissue engineering of heart valves. *J Struc Biol* 142 (2003) 201-208.

2004

86. V. Ulrich, P. Fischer, I. Riemann, K. König. Compact multiphoton/single photon laser scanning microscope für spectral imaging and fluorescence lifetime imaging. *Scanning* 26 (2004) 217-225.
87. W. Becker, A. Bergmann, M.A. Hink, K. König, K. Benndorf, C. Biskup. Fluorescence lifetime imaging by time-correlated single-photon counting. *Microscopy Research and Technique* 63 (2004) 58-66.
88. K. Schenke-Layland, I. Riemann, F. Opitz, K. König, K.J. Halbhuber, U. A. Stock. Comparative Study of Cellular and Extracellular Matrix Composition of Native and Tissue Engineered Heart Valves. *Matrix Biology* 23 (2004) 113-225.
89. T. Richter, C. Peuckert, M. Sattler, K. König, I. Riemann, U. Hintze, K.P. Wittern, R. Wiesendanger, R. Wepf. Dead but highly dynamic – the stratum corneum is divided into three hydration zones. *Skin Pharmacol Physiol*. 17 (2004) 246-257. DOI:10.1159/000080218

2005

90. K. König, K. Schenke-Layland, I. Riemann, U.A. Stock. Multiphoton autofluorescence imaging of intratissue elastic fibers. *Biomaterials* 26 (2005) 495-500. DOI:10.1016/j.biomaterials.2004.02.059
91. K. Schenke-Layland, Iris Riemann, Ulrich A. Stock, Karsten König. Imaging of cardiovascular structures using near-infrared femtosecond multiphoton laser scanning microscopy. *Journal of Biomedical Optics*. 10 (2005) 240171-240175 + Cover page.
92. K. König, I. Riemann, F. Stracke, R. Le Harzic. Nanoprocessing with nanojoule near infrared femtosecond laser pulses. *Med. Laser Appl.* 20 (2005) 169-184.
93. F. Garwe, A. Czaki, G. Maubach, A. Steinbrück, A. Weise, K. König, W. Fritzsche. Laser pulse energy conversion on sequence-specifically bound metal nanoparticles and its application for DNA manipulation. *Med. Laser Appl.* 20 (2005) 201-206.
94. R. LeHarzic, R. Bückle, C. Wüllner, C. Donitzky, K. König. Laser safety aspects for refractive eye surgery with femtosecond laser pulses. *Med. Laser Appl.* 20 (2005) 233-238.
95. R. LeHarzic, D. Breitling, S. Sommer, C. Föhl, K. König, F. Dausinger, E. Audouard. Processing of metals by double pulses with short laser pulses. *Appl. Phys. A*. 81(6) (2005) 1121-1125. DOI 10.1007/s00339-005-3307-0.
96. F. Stracke, I. Riemann, K. König. Optical nano-injection of macromolecules into vital cells. *Journal Photochem Photobiol.* 81 (2005) 136-142.
97. R. Le Harzic, H. Schuck, D. Sauer, T. Anhut, I. Riemann, T. Velten, K. König. Sub-100nm nanostructuring of silicon by ultrashort laser pulses. *Optics Express* 13 (2005) 6651-6656.

2006

98. K. König, A. Ehlers, F. Stracke, I. Riemann. In vivo drug screening in human skin using femtosecond laser multiphoton microscopy. *Skin Pharmacol. Physiol.* 19(2) (2006) 78-88. DOI: 10.1159/000091974
99. F. Stracke, B. Weiss, C.M. Lehr, K. König, U.F. Schäfer, M. Schneider. Multiphoton microscopy for the investigation of dermal penetration of nanoparticle-borne drugs. *J Invest Dermatol* 126 (2006) 2224-2233. DOI: 10.1038/sj.jid.5700374
100. M.J. Köhler, K. König, P. Elsner, R. Bückle, M. Kaatz. In vivo assessment of human skin aging by multiphoton laser scanning tomography. *Optics Letters* 31(19) (2006) 2879-81.
101. K. König, M.T. Wyss-Desserich, Y. Tadir, U. Haller, B. Tromberg, M.W. Berns, P. Wyss. Modifications of protoporphyrin IX fluorescence during ALA-based photodynamic therapy of endometriosis. *Medical Laser Application*. *Medical Laser Application* 21(4) (2006) 291-297.
102. W. Becker, A. Bergmann, E. Haustein, Z. Petrasek, P. Schwille, C. Biskup, L. Kelbauskas, K. Benndorf, N. Klöckner, T. Anhut, I. Riemann, K. König. Fluorescence lifetime images and correlation spectra obtained by multidimensional time-correlated single photon counting. *Microscopy Research and Technique* 68(3) (2006) 186-195.
103. J. Luengo, B. Weiss, M. Schneider, A. Ehlers, F. Stracke, K. König, K.H. Kostka, C.M. Lehr, U.F. Schäfer. Influence of nanoencapsulation on human skin transport of flufenamic acid. *Skin Pharmacol Physiol.* 19(4) (2006) 190-197.
104. K. Schenke-Layland, N. Madershahian, I. Riemann, B. Starcher, K.J. Halhuber, K. König, U.A. Stock. Impact of cryopreservation on extracellular matrix structures of heart valve leaflets. *The Annals of Thoracic Surgery*. 81(3) (2006) 918-926.
105. K. Schenke-Layland, I. Riemann, O. Damour, U. A. Stock, K. König. Two-photon microscopes and in vivo multiphoton tomographs – novel diagnostic tools for tissue engineering and drug delivery. *Advanced Drug Delivery Reviews: Multiphoton Imaging: Diseases and Therapies* 58(7) (2006) 878-896. DOI: 10.1016/j.addr.2006.07.004.
106. Wang, K. König, I. Riemann, R. Krieg, K.J. Halhuber. Intraocular multiphoton microscopy with subcellular spatial resolution by femtosecond lasers. *Histochem. Cell. Biol.* 126(4) (2006) 507-515. DOI: 10.1007/s00418-006-0187-0.

2007

107. A. Ehlers, I. Riemann, M. Stark, K. König. Multiphoton fluorescence lifetime imaging of human hair. *Microscopy Research and Technique*. 70 (2007) 154-161.
108. A. Ehlers, I. Riemann, S. Martin, R. LeHarzic, A. Bartels, C. Janke, K. König. High (1GHz) repetition rate compact femtosecond laser: a powerful multiphoton tool for nanomedicine and nanobiotechnology. *J Applied Physics* 102 (2007) 014701.
109. A. Czaki, F. Garwe, A. Steinbrück, G. Maubach, G. Festag, A. Weise, I. Riemann, K. König, W. Fritzsche. A parallel approach for sub-wavelength molecular surgery using gene-specific positioned metal nanoparticles as laser light antennas. *Nanoletters* 2 (2007) 247-253.
110. B.G. Wang, I. Riemann, H. Schubert, D. Schweitzer, K. König K.J. Halbhuber. Multiphoton microscopy for monitoring intratissue femtosecond laser surgery effects. *Lasers Surgery Medicine* 39 (2007) 527-533.
111. B.G. Wang, I. Riemann, H. Schubert, K.J. Halbhuber, K. König. In vivo intratissue ablation by nanojoule near infrared femtosecond laser pulses. *Cell Tissue Res* 328 (2007) 515-520. DOI:10.1007/s0041-006-0367-1
112. K. König, A. Ehlers, I. Riemann, S. Schenkl, R. Bückle, M. Kaatz. Clinical two-photon microendoscopy. *Microscopy Research and Technique* 70 (5) (2007) 398-402.
113. R. Le Harzic, I. Riemann, K. König, C. Wüllner, C. Donitzky: Influence of femtosecond laser pulse irradiation on the viability of cells at 1035, 517, and 345 nm. *J. Appl. Phys.* 102(2007) / DOI 10.1063/1.2818107
114. M. Stark, B. Manz, A. Ehlers, M. Küppers, I. Riemann, F. Volke, U. Siebert, W. Weschke, K. König. Multiparametric high-resolution imaging of barley embryos by multiphoton microscopy and magnetic resonance micro-imaging. *Microscopy Research and Technique*. 70 (2007) 426-432.
115. S. Schenkl, E.C. Weiss, F. Stracke, D. Sauer, M. Stark, I. Riemann, R.M. Lemor, K. König. In vivo observation of cells with a combined high-resolution multiphoton-acoustic scanning microscope. *Microscopy Research and Technique* 70 (2007) 476-480.

2008

116. A. Uchugonova and K. König. Two-photon autofluorescence and second-harmonic imaging of adult stem cells. *J Biomed Opt* 13 (5) (2008) 054068.
117. A. Uchugonova, K. König, R. Bueckle, A. Isemann, and G. Tempea. Targeted transfection of stem cells with sub-20 femtosecond laser pulses. *Opt Express* 16 (13) (2008) 9357-9364.
118. A. Uchugonova, A. Isemann, E. Gorjup, G. Tempea, R. Bückle, W. Watanabe, K. König. Optical knock out of stem cells extremely ultrashort femtosecond laser pulses. *J. Biophotonics* 1 (6) (2008) 463-469.
119. B.G. Wang, C.P. Lohmann, I. Riemann, H. Schubert, K.J. Halbhuber, K. König. Multiphoton-mediated corneal flap generation by 80 MHz nanojoule femtosecond near infrared laser pulses. *J. Refrac. Surg.* 24(8) (2008) 833-839.
120. F. Garwe, U. Bauerschäfer, A. Czaki, A. Steinbrück, K. Ritter, A. Bochmann, A. Weise, D. Akimov, G. Maubach, K. König, G. Hüttmann, W. Pass, J. Popp, W. Fritzsche. Optically controlled thermal management on the nanometer length scale. *Nanotechnology* 19 (2008) 055207. DOI: 10.1088/0957-4484/19/05/055207
121. K. König. Clinical Multiphoton Tomography. *J. Biophoton.* 1 (2008) 13-23. DOI:10.1002/jbo.200710022
122. B. Hoffmann, T. Zimmer, N. Klöcker, L. Kelbaskas, K. König, K. Benndorf, C. Biskup: Prolonged irradiation of enhanced cyan fluorescent protein or Cerulean can invalidate Förster resonance energy transfer measurements. *J. Biomed. Opt.* 13(2008) / DOI 10.1117/1.2937829
123. R. LeHarzic, M. Weinigel, I. Riemann, K. König, B. Messerschmidt. Nonlinear optical endoscope based on a compact two axes piezo scanner and a miniature objective lens. *Optics Express* 16(25) (2008) 20588-20596.

124. R. Le Harzic, M. Stark, H Schuck, P Becker, . Lai, D. Bruneel, F. Bauerfeld, D. Sauer, T. Velten, K. König. Nanostructuring with nanojoule femtosecond laser pulses. *Journal of laser micro/nanoengineering: JLMN*. 3(2008)106-113.
125. M. Hild, M. Krause, I. Riemann, P. Mestres, S. Toropygin, U. Low, K. Bruckner, B. Seitz, C. Jonescu-Cuypers, and K. König. Femtosecond laser-assisted retinal imaging and ablation: experimental pilot study. *Curr Eye Res* 33(2008)351-363 / DOI 10.1080/02713680801956452
126. M. J. Koehler, S. Hahn, A. Preller, P. Elsner, M. Ziemer, A. Bauer, K. König, R. Buckle, J. W. Fluhr, and M. Kaatz. Morphological skin ageing criteria by multiphoton laser scanning tomography: non-invasive in vivo scoring of the dermal fibre network. *Exp Dermatol* 17(6) (2008) 519-523.
127. S. Toropygin, M. Krause, I. Riemann, B. Seitz, P. Mestres, K. W. Ruprecht, and K. König. In vitro femtosecond laser-assisted nanosurgery of porcine posterior capsule. *J Cataract Refract Surg* 34 (12) (2008) 2128-2132.
128. S. Toropygin, M. Krause, I. Riemann, M. Hild, P. Mestres, B. Seitz, E. Khurieva, K. W. Ruprecht, U. Low, Z. Gatziofias, and K. König. In vitro noncontact intravascular femtosecond laser surgery in models of branch retinal vein occlusion. *Curr Eye Res* 33 (3) (2008) 277-283.
129. S. Toropygin, M. Krause, I. Riemann, K. Hille, K.W. Ruprecht, K.P. Mestres, K. König. Femtosecond laser scanning microscopy and ablation of the retinal limiting membrane: an experimental pilot study. In press.
130. K. König, M. Weinigel, D. Hoppert, R. Bückle, H. Schubert, M.J. Köhler, M. Kaatz, P. Elsner. Multiphoton tissue imaging using high-NA microendoscopes and flexible scan heads for clinical studies and small animal research. *J. Biophoton*. 1(2008)506-513.

2009

131. E. Dimitrow, I. Riemann, A. Ehlers, M.J. Koehler, J. Norgauer, P. Elsner, K. König, M. Kaatz. Spectral fluorescence lifetime detection and selective melanin imaging by multiphoton laser tomography for melanoma diagnosis. *Exp. Dermatol*. 18(2009)509-515. DOI 10.1111/j.1600-0625.2008.00815.x
132. Z. Földes-Papp, K. König, H. Studier, R. Bückle, H.G. Breunig, A. Uchugonova, G.M. Kostner: Trafficking of mature miRNA-122 into the nucleus of live liver cells. *Current Pharmaceutical Biotechnology* 10(2009)569-578 / DOI 10.2174/138920109789069332
133. K. König, M. Speicher, R. Bückle, J. Reckfort, G. McKenzie, J. Welzel, M. J. Koehler, P. Elsner, M. Kaatz: Clinical optical coherence tomography combined with multiphoton tomography of patients with skin diseases. *Journal of Biophotonics* 2(2009)389-397 / DOI 10.1002/jbio.200910013
134. M. J. Köhler, A Preller, P. Elsner, N. Kindler, K. König, Karsten, R. Bückle, M. Kaatz: Intrinsic, solar and sunbed-induced skin aging measured in vivo by multiphoton laser tomography and biophysical methods. *Skin Research and Technology* 15(2009)357-363 / DOI 10.1111/j.1600-0846.2009.00372.x
135. E. Dimitrow, M. Ziemer, M.J. Koehler, J. Norgauer, K. König, P. Elsner, M. Kaatz: Sensitivity and specificity of multiphoton laser tomography for in vivo and ex vivo diagnosis of malignant melanoma. *Journal of Investigative Dermatology* 129(2009)1752-1758 / DOI 10.1038/jid.2008.439
136. R. Le Harzic, I. Riemann, M. Weinigel, K. König, B. Messerschmidt: Rigid and high-numerical-aperture two-photon fluorescence endoscope. *Applied Optics* 48(2009)3396-3400 / DOI 10.1364/AO.48.003396
137. R. Le Harzic, K. König, C. Wüllner, K. Vogler, C. Donitzky: Ultraviolet femtosecond laser creation of corneal flap. *Journal of Refractive Surgery* 25(2009)

2010

138. B.-G. Wang, K. König, K.-J. Halbhuber: Two-photon microscopy of deep intravital tissues and its merits in clinical research.

- Journal of Microscopy 238(2010)1-20 / DOI 10.1111/j.1365-2818.2009.03330.x
139. M. Kaatz, A. Sturm, P. Elsner, K. König, R. Bückle, M.J. Koehler: Depth-resolved measurement of the dermal matrix composition by multiphoton laser tomography. *Skin Research and Technology* 16 (2010) 131-136 / DOI 10.1111/j.1600-0846.2009.00423.x
140. M. Kaatz, K. König: Multiphotonenmikroskopie und In-vivo-Multiphotonentomographie in der dermatologischen Bildgebung. *Der Hautarzt* 61 (2010) 397-409 / DOI 10.1007/s00105-009-1880-4
141. H. G. Breunig, H. Studier, K. König: Multiphoton excitation characteristics of cellular fluorophores of human skin in vivo. *Optics Express* 18 (2010) 7857-7871 / DOI 10.1364/OE.18.007857
142. R. Bazin, F. Flament, A. Colonna, R. Le Harzic, R. Bückle, B. Piot, F. Laizé, M. Kaatz, K. König, J. W. Fluhr: Clinical study on the effects of a cosmetic product on dermal extracellular matrix components using a high-resolution multiphoton tomograph. *Skin Research and Technology* 16 (2010) 305-310 / DOI 10.1111/j.1600-0846.2010.00432.x
143. M.J. Koehler, T. Vogel, P. Elsner, K. König, R. Bückle, M. Kaatz: In vivo measurement of the human epidermal thickness in different localizations by multiphoton laser tomography. *Skin Research and Technology* 16 (2010) 259-264 / DOI 10.1111/j.1600-0846.2010.00437.x
144. K. König, M. Speicher, M.J. Köhler, R. Scharenberg, M. Kaatz: Clinical application of multiphoton tomography in combination with high-frequency ultrasound for evaluation of skin diseases. *J. Biophotonics* 3 (2010) 759–773 / DOI 10.1002/jbio.201000074
145. D. Bruneel, G. Matras, R. Le Harzic, N. Huot, K. König, E. Audouard: Micromachining of metals with ultra-short Ti-Sapphire lasers: Prediction and optimization of the processing time. *Optics and Lasers in Engineering* 48 (2010) 268-271 / DOI 10.1016/j.optlaseng.2009.10.010
146. D. Bruneel, E. Audouard, K. König, R. Le Harzic: Flexible tool for two-photon laser nanoprocessing and large area mapping with high resolution. *Optics and Lasers in Engineering* 48 (2010) 1278-1284 / DOI: 10.1016/j.optlaseng.2010.06.003
147. M. Kirillin, K. König, N. Shakhova, B. Tromberg, A. Semyanov: Optical bioimaging and neuroimaging: from whole-body inspection to brain sensing. *Journal of Biophotonics* 3 (2010) 741–742 / DOI 10.1002/jbio.201000523

2011

148. K. König, H.G. Breunig, R. Bückle, M. Kellner-Höfer, M. Weinigel, E. Büttner, W. Sterry, J. Lademann: Optical skin biopsies by clinical CARS and multiphoton fluorescence/SHG tomography, *Laser Physics Letters* 8 (2011) 1-4 / DOI: 10.1002/lapl.201110014
149. H. Studier, H.G. Breunig, K. König: Comparison of broadband and ultrabroadband pulses at MHz and GHz pulse-repetition rates for nonlinear fs-laser scanning microscopy. *Journal of Biophotonics* 4 (2011) 84–91.
150. M. S. Roberts, Y. Dancik, T. W. Prow, C. A. Thorling, L. L. Lin, J. E. Grice, T. A. Robertson, K. König, W. Becker: Non-invasive imaging of skin physiology and percutaneous penetration using fluorescence spectral and lifetime imaging with multiphoton and confocal microscopy, *European Journal of Pharmaceutics and Biopharmaceutics* 77 (2011) 469-488 / DOI: 10.1016/j.ejpb.2010.12.023.
151. M. Roberts, T.W. Prow, L. Lin, Y. Dancik, J.E. Grice, T. Robertson, C. Throling, K. König, W. Becker: Using Fluorescence Lifetime Imaging Microscopy (FLIM) and its Application in Skin, *European Journal of Pharmaceutics and Biopharmaceutics*. In Press
152. M. Straub, M. Afshar, D. Feili, H. Seidel, K. König, Efficient nanostructure formation on silicon surfaces and in indium tin oxide thin films by sub-15 fs near-infrared laser light. *Physics Procedia*. 12(2011)16-23.
153. J. Koehler, S. Zimmerman, S. Springer, P. Elsner, K. König, M. Kaatz: Keratinocyte morphology of human skin evaluated by in vivo multiphoton laser tomography. *Skin Research and Technology* 17(2011)479-486 / DOI: 10.1111/j.1600-0846.2011.00522.x

154. J. Köhler, K. König, M. Speicher, S. Astner, E. Stockfleth, P. Elsner, M. Kaatz: Clinical application of multiphoton tomography in combination with confocal laser scanning microscopy for evaluation of skin diseases. *Skin Research and Technology*. 20(2011)589-594.
155. F. Liu, A. Uchugonova, H. Kimura, C. Zhang, M. Zhao, L. Zhang, K. König, J. Duong, R. Aki, N. Saito, S. Mii, Y. Amoh, K. Katsuoka, R. M. Hoffman: The bulge area is the major hair follicle source of nestin-expressing pluripotent stem cells which can repair the spinal cord compared to the dermal papilla, *Cell Cycle* 5 (2011), 830-9
156. A. Uchugonova, J. Duong, N. Zhang, K. König, R.M. Hoffman, The bulge area is the origin of nestin-expressing pluripotent stem cells of the hair follicle. *J Cell Biochem*. (2011). In Press
157. A. Uchugonova, R. M. Hoffman, M. Weinigel, K. Koenig, Watching stem cells in the skin of living mice non-invasively, *Cell Cycle* 10(2011)2017-2020.
158. K. König, A. Uchugonova, E. Gorjup: Multiphoton fluorescence lifetime imaging of 3D-stem cell spheroids during differentiation. *Microscopy Research and Technique* 74 (2011) 9–17 / DOI 10.1002/jemt.20866
159. K. König, A.P. Raphael, L. Lin, J.E. Grice, H.P. Soyer, H.G. Breunig, M.S. Roberts, T.W. Proh. Applications of multiphoton tomographs and femtosecond laser nanoprocessing microscopes in drug delivery research. *Advanced Drug Delivery Research*. 63(2011)388-404.
160. E. Benati, Bellini V, Borsari S, Dunsby C, Ferrari C, French P, Guanti M, Guardoli D, [Koenig K](#), Pellacani G, Ponti G, Schianchi S, Talbot C, [Seidenari S](#). Quantitative evaluation of healthy epidermis by means of multiphoton microscopy and fluorescence lifetime imaging microscopy. *Skin Res Technol*. 2011 Apr 25. doi: 10.1111/j.1600-0846.2011.00496.x.
161. K. König, A. Uchugonova, E. Gorjup: Multiphoton fluorescence lifetime imaging of 3D-stem cell spheroids during differentiation. *Microscopy Research and Technique* 74 (2010) 9-17 / DOI 10.1002/jemt.20866. print: 7(2011)9-17.
162. S.G. Toropygin, M. Krause, A. Akkaya, I. Riemann, B. Seitz, P. mestres, KW. Ruprecht, L. Trober, Z. Gatziofas, K. König. Experimental femtosecond laser-assisted nanosurgery of anterior lens capsule. *Eur. J. Ophthalmol*. 3(2011)237-242.
163. C.B. Talbot, R. Patalay, I. Munro, S. Warren, F. Ratto, P. Matteini, R. Pini, HG. Breunig, K. König, AC. Chu, GW. Stamp, MAA. Neil, PM. French, C. Dunsby. Application of ultrafast gold luminescence to measuring the instrument response function for multispectral multiphoton fluorescence lifetime imaging. *Optics Express*. 19(2011)13848-13861.
164. R. Patalay, C. Talbot, Y. Alexandrov, I. Munro, MAA. Neil, K. König, PMW. French, A. Chu, GW. Stamp, C. Dunsby. Quantification of cellular autofluorescence of human skin using multiphoton tomography and fluorescence lifetime imaging in two spectral detection channels. *BIOMEDICAL OPTICS EXPRESS* 2(12)(2011)3295. Published online Nov 10, 2011.
165. W. Werncke, I. Latka, S. Sassning, B. Dietzek, M.E. Darvin, J. Popp, K. König. J.W. Fluhr, J. Lademann. Two-color Raman spectroscopy for the simultaneous detection of chemotherapeutics and antioxidative status of human skin. *Laser Physics Letters* 8(2011)895-900.

2012

166. H. Zhang, M. Afshar, K. König, D. Feili, H. Seidel; Nanometer-size dots-chains at and beneath surfaces of glasses written by picjoule 12-fs laser scanning microscope; *Appl. Phys. A*; 107(2012)339-343.
167. [M. Straub](#), [M. Afshar](#), [D. Feili](#), [H. Seidel](#), K. König. Periodic nanostructures on Si(1100) surfaces generated by high-repetition rate sub-15 fs pulsed near-infrared laser light. *Optics Letters* 37(2012) 190-192.
168. M. Afshar, M. Straub, H. Völlm, D. Feili, K. König, H. Seidel; Sub-100 nanometer structuring of indium-tin-oxide thin films by sub-15 femtosecond pulsed near-infrared laser light; *Optics Letters* 37(2012)563-565.
169. K. König, A. Uchugonova, M. Straub, H. Zhang, M. Licht, M. Afshar, D. Feili, H. Seidel.

Sub-100nm material processing and imaging with a sub-15 femtosecond laser scanning microscope. *Journal of Laser Application*. July 2012, 042009-1-042009-9.

170. A. Uchugonova, M. Zhao, Y. Zhang, M. Weinigel, K. König, R. Hoffman. Cancer-cell killing by engineered Salmonella Imaged by multiphoton tomography in live mice. *Anticancer Research* 32(2013)4331-4338.

171. S. Seidenari, F. Arginelli, S. Bassoli, J. Cautela, P.M.W. French, M. Guanti, D. Guardoli, K. König, C. Talbot, C. Dunsby. Multiphoton Laser Microscopy and Fluorescence Lifetime Imaging for the Evaluation of the Skin. *Dermatol Res Pract Vol* 2012, 810749, doi:10.1155/2012/810749.

172. H.G. Breunig, R. Bückle, M. Kellner-Höfer, M. Weinigel, J. Lademann, W. Sterry, K. König. Combined In Vivo Multiphoton and CARS Imaging of Healthy and Disease-Affected Human Skin. *Microsc Res Tech* 75(2012)492–498.

173. M. Licht, A. Uchugonova, K. König, M. Straub. Sub-15 fs multiphoton lithography of three-dimensional structures for live cell applications. *J. Opt.* 14(2012)065601-07.

174. A. Uchugonova, M. Lessel, S. Nietzsche, C. Zeitz, K. Jacobs, C. Lemke, K. König. Nanosurgery of cells and chromosomes using near infrared twelve femtosecond laser pulses. *J Biomed Optics* 17(2012)101502.

175. M.E. Darvin, K. König, M. Kellner-Höfer, H.G. Breunig, W. Werncke, M.C. Meinke, A. Patzelt, W. Sterry, J. Lademann. Safety Assessment by Multiphoton Fluorescence/ Second Harmonic Generation/Hyper-Rayleigh Scattering Tomography of ZnO Nanoparticles Used in Cosmetic Products. *Skin Pharmacol Physiol* 2012;25:219–226.

176. M. Straub, M. Afshar, H. Seidel, K. König. Surface plasmon polariton model of high-spatial frequency laser-induced periodic surface structure generation in silicon.

Journal of Applied Optics 111(2012)124315-1 -6.

177. C. Huss, M. Krause, U. Löw, I. Riemann, F. Stracke, P. Mestres, B. Seitz, K. König. Experimental corneal imaging and corneal surgery with non-amplified femtosecond laser pulses. *Ophthalmologie*. [Der Ophthalmologe 2012/10: 995](#).

178. M.J. Koehler, A. Preller, P. Elsner, K. König, UC. Hipler, M. Kaatz. Non-invasive evaluation of dermal elastosis by in vivo multiphoton tomography with autofluorescence lifetime measurements. *Exp. Dermatol.* 2012 Jan;21(1):48-51.

179. R. Patalay, C. Talbot, Y. Alexandrov, MO. Lenz, S. Kumar, S. Warren, I. Munro, MAA. Neil, K. König, PMW. French, A. Chu, GW. Stamp, C. Dunsby. Multispectral fluorescence lifetime imaging using multiphoton tomography for the evaluation of basal cell carcinomas. *PLoS ONE* 7(9): e43460. doi:10.1371/journal.pone.0043460.

2013

180. A. Uchugonova, K. König, R. Hoffmann. Multiphoton tomography visualizes collagen fibers in the tumor microenvironment that maintain cancer cell anchorage and shape.

J. Cellular Biochemistry. Published online 6.8.2012, printed 114(2013)99-102.

181. H.G. Breunig, F. Tümer, K. König. Multiphoton imaging of freezing and heating effects in plant leaves. *J. Biophotonics*, online: doi 10.1002/jbio.201200093.

182. M. Manfredini, F. Arginelli, C. Dunsby, P. French, C. Talbot, K. König, G. Ponti, G. Pellacani, S. Seidenari. High-resolution imaging of basal cell carcinoma: a comparison between multiphoton microscopy with fluorescence lifetime imaging and reflectance confocal microscopy. Online doi: 10.1111/j.1600-0846.2012.00661

183. S. Seidenari, F. Arginelli, C. Dunsby, P.M.W. French, K. König, C. Magnoni, M. Manfredini, C. Talbot, G. Ponti. Multiphoton laser tomography and fluorescence lifetime imaging of basal cell carcinoma: morphological features for non-invasive diagnostics. *Experimental Dermatology*. Published online DOI: 10.1111/j.1600-0625.2012.01554.

184. A. Alex, J. Weingast, M. Weingel, M. Höfer, R. Nemecek, M. Binder, H. Pehamberger, K. König, W. Drexler. Three-dimensional multiphoton/optical coherence tomography for diagnostic applications in dermatology. *J Biophotonics*. Published online DOI: 10.1002/jbio.201200085.
185. H.G. Breunig, M. Weinigel, R. Bückle, M. Kellner-Höfer, J. Lademann, M.E. Darvin, W. Sterry, K. König. Clinical coherent anti-stokes Raman scattering and multiphoton tomography of human skin with femtosecond laser and photonic crystal fiber. *Laser Physics Letters*. 10(2013)025604.
186. F. Arginelli, M. Manfredini, S. Bassoli, C. Dunsby, P. French, K. König, C. Magnoni, G. Ponti, C. Talbot, S. Seidenari. High resolution diagnosis of common nevi by Multiphoton Laser Tomography and Fluorescence Lifetime Imaging. Submitted.
187. In Vivo Multiphoton NADH Fluorescence Reveals Depth-Dependent Keratinocyte Metabolism in Human Skin
Mihaela Balu,† Amaan Mazhar,‡ Carole K. Hayakawa,†§ Richa Mittal,†§ Tatiana B. Krasieva,† Karsten König, §j Vasanth Venugopalan,†§** and Bruce J. Tromberg†*** *Biophys J* 104(2013)258-267.

Proceedings

1988

1. I. Bugiel, K. König, H. Wabnitz: Fluoreszenzmikroskopische Untersuchungen an Zellen mit sub-ns Zeitauflösung. PDT-Schule (1988) Berlin
2. W. Dietel, K. König: Laser stimulated in vivo Fluorescence of animal tumors, PDT-Schule (1988?) Berlin.

1991

3. K. König, H. Schneckenburger, A. Rück, S. Auchter. Photoproduct formation of endogeneous protoporphyrin and its photodynamic activity. SPIE-Proceedings vol. 1525 (1991) 412-419.

1993

4. K. König, R. Hibst, G. Flemming, H. Schneckenburger. Laser induced autofluorescence of caries. SPIE -Proceedings, vol. 1880 (1993) 125-131.
5. K. König, H. Schneckenburger, A. Rück, R. Steiner, H. Walt. Laser-induced autofluorescence of cells and tissue. SPIE-Proceedings, vol. 1887: "Physiological Imaging, Spectroscopy, and Early-Detection Diagnostic Methods", (1993) 213-221
6. K. König, R. Hibst, H. Meyer, G. Flemming, H. Schneckenburger. Laser-induced autofluorescence of carious regions of human teeth and caries-involved bacteria. SPIE-Proceedings, vol. 2080 (1993) 170-180.
7. K. König, A. Kienle, W-H. Boehncke, R. Kaufmann, A. Rück, T. Meier, R. Steiner. Photodynamic tumour therapy and on-line fluorescence spectroscopy after ALA administration using 633 nm-light as therapeutic and fluorescence excitation radiation. SPIE-Proceedings, vol. 2078 (1993) 438-446.
8. W. Strauss, W. Mohr, K. König, K. Miller, A. Rück, H. Schneckenburger, R. Steiner. Meso-tetra (4-carboxyphenyl) porphyrin –fluorescence behaviour, photodynamic treatment, and tissue distribution. SPIE-Proceedings, vol. 2078 (1993) 515-520.
9. E.D. Reich, R. Bachor, K. Miller, K. König, D. Repassy, R.E. Hautmann. Liposome-administered tetramethylhematoporphyrin (TMPH) as a photodynamic agent. SPIE-Proceedings, vol. 2078 (1993) 229-238.
10. A. Rück, WS. Strauss, MH. Gschwend, K. König, B. Brunner, H. Schneckenburger, H. Walt, RW. Steiner. Observation of photodynamically-induced cell destruction probed by video microscopy, laser scanning microscopy, and fluorescence spectroscopy. SPIE Vol 1882: 53-59 (1993).
11. K. König, W-H. Boehncke, A. Rück, R. Kaufmann, R. Steiner, W. Sterry. Photodynamic effects on T-cells and skin lesions of a patient with mycosis fungoides using porphyrin photosensitizers. SPIE-Proceedings, vol. 2086 (1994) 268-276.
12. K. König, G. Beck, W-H Boehncke, R. Kaufmann, R. Hibst. In vivo remission spectroscopy on tattoos and topically applied photosensitizers in man, SPIE-Proceedings, vol. 2086 (1993/1994) 248-256.
13. Herbert Schneckenburger, Michael H. Gschwend, Karsten Koenig, Angelika C. Rueck, Reinhard Sailer, Wolfgang S. Strauss. Subcellular distribution of photodynamic sensitizers, SPIE-Proceedings, vol. 2078 (1994) 251-257

1994

14. K. König, H. Schneckenburger, H. Walt, T. Leemann, M.T. Wyss-Desserich, A. Rück, B. Tromberg. Microscopic Studies on ALA-incubated tumor cells and tumor spheroids. SPIE-Proceedings, vol. 2133: Optical Methods for Tumor Treatment and Detection (1994) 238-248.
15. K. König, H. Schneckenburger, J. Hemmer, B. Tromberg, R. Steiner. In-vivo fluorescence detection and imaging of porphyrin-producing bacteria in the human skin and in the oral cavity for diagnosis of acne vulgaris, caries, and squamous cell carcinoma. SPIE -Proceedings, vol.

2135: Advances in Laser and Light Spectroscopy to Diagnose Cancer and other Diseases (1994) 129-138.

16. K. König, H. Schneckenburger. Laser-induced dental caries and plaque diagnosis on patients by sensitive autofluorescence spectroscopy and time-gated video imaging. Preliminary studies. SPIE-Proceedings, vol. 2128: Lasers in Surgery (1994) 403-408.

17. K. König, H. Schneckenburger, A. Rück, R. König. Studies on Porphyrin Photoproducts in Solution, Cells, and Tumor Tissue. SPIE-Proceedings vol. 2133: Optical Methods for Tumor Treatment and Detection (1994) 226-237.

18. K. König, H. Schneckenburger, H. Boehncke, R. Hibst. In vivo fluorescence spectroscopy and imaging of ALA-induced endogenous porphyrins in skin after Er:YAG ablation of stratum corneum. SPIE-Proceedings, vol. 2128: Lasers in Surgery (1994) 218-224.

19. K. König. NAD(P)H and porphyrin attributed laser induced autofluorescence. Proceedings of the International Conference: Lasers & Applications. Advances in science, medicine and technology, NILES 1994, Cairo, March 26-30, 1994

20. Ella D. Reich, Ruediger Bachor, Kurt Miller M.D., Karsten Koenig, Denes Repassy, Richard E. Hautmann. Liposome-administred tetramethylhematoporphyrin (TMHP) as a photodynamic agent. SPIE-Proceedings, vol. 2078, Photodynamic Therapy of Cancer, Mar 1994

21. H. Schneckenburger, K. König, T. Dienersberger, R. Hahn. Time-gated microscopic imaging and spectroscopy. SPIE Proc 2083: 124-130.

22. A. Rück, W. Strauss, M. Gschwend, K. König, R. Sailer, R. Steiner, H. Schneckenburger: Photoproducts and new spectral bands during PDT probed by cw and time-gated microscopy and spectroscopy. SPIE Vol. 2134 (1994)

1995

23. K. König, Y. Liu, G.J. Sonek, MW. Berns, B.J. Tromberg. Photoinduced autofluorescence modifications of cells in an optical trap. SPIE-Proceedings, vol. 2329: Optical and Imaging Techniques in Biomedicine (1995) 193-203.

24. S. Kimel, K. König, MW. Berns. Photodynamic effects on human and chicken erythrocytes. SPIE-Proceedings, vol. 2329: Optical and Imaging Techniques in Biomedicine (1995) 269-279.

25. K. König, Y. Liu, T. Krasieva, P. Patrizio, Y. Tadir, G.J. Sonek, MW. Berns, B.J. Tromberg. Invited Paper: Fluorescence imaging and spectroscopy of motile cells and CHO cells in an optical trap ("optical tweezers"). SPIE-Proceedings, vol. 2391: Laser-Tissue Interaction VI (1995) 238-249.

26. K. König, P. So, WW. Mantulin, E. Gratton, T. Krasieva, MW. Berns, B.J. Tromberg. Two-photon excited cellular autofluorescence induced by cw- and femtosecond NIR microradiation. SPIE-Proceed. vol. 2628 (1995/96) 12-19.

27. K. König, T.Krasieva, E. Bauer, U. Fiedler, MW. Berns, B.J. Tromberg, KO. Greulich. UVA-Induced Oxidative Stress in Single Cells Probed by Autofluorescence Modifications, Cloning Assay, and Comet Assay. SPIE-Proceed. vol. 2628 (1995/96) 43-49.

28. K.O. Greulich, E. Bauer, U. Fiedler, C. Hoyer, K. König, S. Monajembashi. Single cell and single cell biotechnology. SPIE-Proceed. vol. 2629 (1995) 62-69.

29. H. Schneckenburger, M. Gschwend, K. König, R. Sailer, W. Strauss. Fluorescence Lifetime Imaging and Spectroscopy in Photobiology and Photomedicine. In: Fluorescence Microscopy and Fluorescent Probes, J. Slavik (ed.), Plenum Press, 1995, New York – London.

30. H. Schneckenburger, M. Gschwend, K. König, K. Kunzi-Rapp, R. Sailer, W. Strauss. Laser in der Diagnostik am Beispiel der Fluoreszenz-Diagnostik und Laser-Mikroskopie. In: Lasertechnik und Lasermedizin, H.D. Reichenbach (ed.), Ecomed-Verlag, Lundsberg.

31. L. T. Norvang, E. J. Fisherstrand, K. König, B. Bakken, D. Grini, Standahl, T. E. Milner, M. W. Berns, J. S. Nelson, L. O. Svaasand: Comparison between reflectance spectra obtained with an integrating sphere and a fiber-optic collection system. BIOS Sept. 1995, Barcelona, SPIE-Proceed. 2624. (1995) 1155-64.

1996

32. K. König, T. Krasieva, Y. Liu, M.W. Berns, B.J. Tromberg. Invited Paper: Two-photon excitation in living cells induced by low-power CW laser beams. SPIE Proceedings, vol. 2678: Optical Diagnostics of Living Cells and Biofluids. (1996) 30-37.
33. K. König. Invited Paper: Porphyrin- and NAD(P)H attributed autofluorescence for medical diagnosis. Proceedings "LASER 95" of the Society for Optical and Quantum Electronics. Charleston. 413-419.
34. K. König, P. So, W.W. Mantulin, E. Gratton. Cell damage in Two-Photon Microscopes. SPIE-Proceedings, vol. 2926 (1996) 172-176.
35. K. König, L. Svaasand, Y. Tadir, B. Tromberg, M.W. Berns. Optical determination of motility forces in human spermatozoa with laser tweezers. SPIE-Proceed, 2926 (1996) 251-256.

1997

36. K. König, S. Kimel, L.O. Svaasand, B. Tromberg, T. Krasieva, M.W. Berns, P. So, W.W. Mantulin, E. Gratton, K.J. Halhuber: Cell damage in UVA and cw/femtosecond NIR microscopes. SPIE-Proceedings, vol. 2983 (1997) 37-44.
37. K. König, H. Oehring, K.-J. Halhuber, U. Fiedler, E. Bauer, K.O. Greulich. Comet assay, cloning assay, histochemistry, light- and electron microscopy on one preselected cell. SPIE-Proceedings, vol. 3199 (1998) 148-155.
38. K. König. Laser tweezers as novel nonlinear tools in cell and biomolecule diagnostics. SPIE-Proceedings, vol. 3199 (1997/98) 178-182.

1998

39. K. König, M. Teschke, W. Pfister, H. Meyer. Photodynamically inactivation of propionibacterium acnes. SPIE-Proceedings, vol. 3247 (1998) 106-110.
40. K. König. How safe is the gamete micromanipulation by laser tweezers? SPIE-Proceedings, vol. 3260 (1998) 30-36.

1999

41. K. König. Invited paper: Cloning assay thresholds on cells exposed to ultrafast laser pulses. SPIE-Proceedings, vol. 3616 and vol. 3604 (1999) 40-50.
42. K. König, P. Fischer. I. Riemann, K.-J. Halhuber. PDT by non-resonant two-photon excitation. SPIE-Proceedings, vol. 3592 (1999) 43-49.
43. K. König, P. Fischer. I. Riemann, K.-J. Halhuber. Intracellular nanosurgery with compact femtosecond laser. In: 18th Congress of the International Commission for Optics: Optics for the next Millenium, SPIE-Proceedings, vol. 3749 (1999) 390.

2000

44. K. König, I. Riemann, A. Göhlert, P. Fischer, T. Liehr, I.F. Loncarevic, U. Claussen, K.J. Halhuber. Multiphoton Multicolor FISH. SPIE-Proceedings, vol. 4164 (2000).

2001

45. K. König, I. Riemann. Intrazelluläre Nanochirurgie. Bioforum 3 (2001) 124-125.
46. C.Y. Dong, E.A. Bevan, L. Hsu, K. König, P.T.C. So. Invited paper: Characterization of two-photon point spread function in turbid medium by direct measurements, multicoloc imaging, and blind deconvolution. SPIE-Proceedings, vol. 4262 (2001) 73-81.
47. W. Becker, A. Bergmann, K. König, U. Tirlapur. Picosecond Fluorescence Lifetime Microscopy by TCSPC Imaging. SPIE-Proceedings, vol. 4262 (2001) 414-419.
48. W. Becker, K. Benndorf, A. Bergmann, C. Biskup, K. König, U. Tirlapur, T. Zimmer. FRET measurements by TCSPC laser scanning microscopy. SPIE-Proceedings, vol. 4431

2002

49. K. König, I. Riemann, O. Krauss, W. Fritzsche. Invited paper: Nanodissection of human chromosomes and ultraprecise eye surgery with anojoule near infrared femtosecond laser pulses. SPIE-Proceedings, vol. 4633 (2002) 11-22.
50. K. König, U. Wollina, I. Riemann, C. Peuckert, K.J. Halbhuber, V. Fünfstück, T.W. Fischer, P. Elsner. Optical tomography of human skin with subcellular spatial and picosecond time resolution. SPIE-Proceedings, 4620 (2002) 191-201.

2003

51. K. König, I. Riemann, U.K. Tirlapur. Optical gene transfer by femtosecond laser pulses. SPIE-Proceedings, vol. 4963 (2003) 81-88.

2004

52. F. Fischer, K. König, S. Puschmann, R. Wepf, I. Riemann, V. Ulrich, P. Fischer. Characterization of multiphoton laser scanning device optical parameters for image restoration. SPIE-Proceedings, vol. 5463: Femtosecond Laser Applications in Biology. (2004) 140-145.
53. W. Becker, A. Bergmann, G. Biscotti, K. König. High-Speed FLIM Data Acquisition by Time-Correlated Single Photon Counting. SPIE-Proceeding, vol. 5323: Multiphoton Microscopy in the Biomedical Sciences IV (2004) 27-35.
54. K. Schenke-Layland, F. Opitz, I. Riemann, U. A. Stock, V. Ulrich, K. König. Multiphoton imaging of cardiovascular structures. Proceedings of the SPIE, vol. 5463: Femtosecond Laser Applications in Biology (2004) 29-36.
55. K. Schenke-Layland, I. Riemann, U. A. Stock, K. König. Non-invasive multiphoton imaging of cardiovascular structures using NIR femtosecond laser scanning microscopy. SPIE-Proceeding 5312 (2004) 300-308.
56. K. König. Multiphoton tomography, transfection and nanosurgery with $<2\text{nJ}$, 80 MHz Femtosecond Laser Pulses. SPIE-Proceedings, vol. 5340 (2004) 37-46.
57. K. König. Femtosecond laser application in biotechnology and medicine. LPM 2004 in Nara, Japan. SPIE-Proceedings, vol. 5662 (2004) 255-267.
58. K. König, I. Riemann, G. Ehrlich, V. Ulrich, P. Fischer. Multiphoton FLIM and Spectral Imaging of Cells and Tissues. SPIE-Proceed., vol. 5323: Multiphoton Microscopy in the Biomedical Sciences IV (2004) 240-251.
59. K. König, F. Garwe, A. Czaki, G. Maubach, I. Riemann, W. Fritzsche. Nanoprocessing of DNA with femtosecond laser. SPIE-Proceedings, vol. 5462: Biophotonics Micro- and Nano-Imaging. (2004) 27-36.
60. K. König, B. Wang, O. Krauss, I. Riemann, H. Schubert, S. Kirste, P. Fischer. First in vivo animal studies on intraocular nanosurgery and multiphoton tomography with low-energy 80 MHz near infrared femtosecond laser pulses. SPIE-Proceedings, vol. 5314: Ophthalmic technology XIV (2004) 262-269.
61. I. Riemann, P. Fischer, M. Kaatz, T.W. Fischer, P. Elsner, E. Dimitrov, A. Reif, K. König. Optical Tomography of pigmented human skin biopsies. SPIE-Proceedings, vol. 5312 (2004) 24-34 doi: 10.1117/12.528278.
62. I. Riemann, P. Fischer, K. König. Photodynamic therapy and knocking out of single tumor cells by multiphoton excitation processes. SPIE-Proceedings, vol. 5462: Biophotonics Micro- and Nano-Imaging (2004) 103-109.
63. I. Riemann, E. Dimitrov, P. Fischer, A. Reif, M. Kaatz, P. Elsner, K. König. High resolution multiphoton tomography of human skin in vivo and in vitro. SPIE-Proceeding, vol. 5312 (2004) 21-28.
64. T. Velten, H. Schuck, I. Riemann, F. Bauerfeld, D. Sauer, K. König. Time-Resolved and Spectrally-Resolved 5D Multiphoton Microscopy for Analysis and Nanoprocessing of Biological and Non-Biological Materials, LANE 2004.

2005

65. H. Schuck, R. Le Harzic, T. Anhut, F. Bauerfeld, D. Sauer, T. Velten, K. König. Processing of Polymers and Silicon by means of a Laser scanning microscope. WLT-Conference Munich, 2005
66. H. Schuck, T. Velten, T. Anhut, D. Sauer, R. Le Harzic, K. König. Multiphoton assisted micro- and nanoprocessing of materials. 2005
67. T. Anhut, I. Riemann, K. König, R. LeHarzic, A. Killi, U. Morgner. Nonlinear laser-scanning microscopy and microprocessing of biological and technical materials using a new diode-pumped solid-state femtosecond laser pulses with cavity dumping. ECBO 2005
68. K. König. Femtosecond laser application in biotechnology and medicine. SPIE-Proceedings, vol. 5662: Fifth International Symposium on Laser Precision Microfabrication (2005) 255-267.
69. K. König, F. Garwe, A. Csaki, G. Maubach, I. Riemann, W. Fritzsche. Nanoprocessing of DNA with NIR femtosecond laser. Proc. SPIE, Vol. 5462, 27 (2004); doi:10.1117/12.545730
70. K. König, I. Riemann, H. Schuck, D. Sauer, T. Velten, R. LeHarzic. Time-resolved and spectrally resolved 5D multiphoton microscopy for analysis and nanoprocessing of materials. SPIE-Proceedings, vol. 5713: Photon Processing in Microelectronics and Photonics IV (2005) 552-559.
71. K. König, B. Wang, I. Riemann, J. Kobow. Cornea surgery with nanojoule femtosecond laser pulses. SPIE-Proceedings, vol. 5688: Ophthalmic technologies XV (2005) 288-293.
72. K. König, I. Riemann, A. Ehlers, R. LeHarzic. In vivo non-invasive multiphoton tomography of human skin. SPIE-Proceedings, vol. 5990: Optically Based Materials and Optically Based Biological and Chemical Sensing for Defence II (2005) 220-232.
73. A. Czaki, G. Maubach, F. Garwe, A. Steinbrück, K. König, W. Fritzsche. A novel DNA restriction technology based on laser pulse energy conversion on sequence-specific bound metal nanoparticles. SPIE-Proceedings, vol. 5699: Imaging, Manipulation, and Analysis of Biomolecules and Cells (2005) 436-441.
74. W. Becker, A. Bergmann, E. Haustein, Z. Petrasek, P. Schwille, C. Biskup, T. Anhut, I. Riemann, K. König. Fluorescence lifetime imaging and correlation spectra obtained by multi-dimensional TCSPC. SPIE Proceedings, vol. 5700 (2005) 144-151.
75. A. Ehlers, I. Riemann, T. Anhut, J. Kobow, K. König. Multiphoton tomography of epidermis and dermis. SPIE-Proceedings, vol. 5700 (2005) 197-204. SPIE Proceedings, vol. 5860 (2005).
76. T. Anhut, K. Hassler, T. Lasser, K. König, R. Rigler. Fluorescence Correlation Spectroscopy on dielectric surfaces in total internal reflection geometries. SPIE-Proceedings, vol. 5699 (2005) 159-166.
77. W. Fritzsche, A. Czaki, A. Steinbrück, F. Garwe, K. König, M. Raschke. Metal nanoparticles as passive and active tools for bioanalytics. SPIE-Proceedings, vol. 5699 (2005) 414-418.
78. B. Wang, I. Riemann, H. Schubert, S. Kirste, K. König. In vivo animal follow-up studies on intrastromal surgery with near infrared nanojoule femtosecond laser pulses. SPIE-Proceedings, vol. 5695: Optical Interactions with Tissue and Cells XVI (2005) 292-302.
79. B. Wang, K.-J. Halhuber, I. Riemann, K. König. In-vivo corneal nonlinear optical tomography based on second harmonic and multiphoton autofluorescence imaging induced by near-infrared femtosecond lasers with rabbits. SPIE Proceedings, vol. 5964, 2005.
80. I. Riemann, A. Ehlers, A. Reif, J. Kobow, K. König. In vivo multiphoton tomography of skin as a tool to study the effects of topically applied probes and UV exposure. SPIE-Proceedings, vol. 5686: Photonic Therapeutics and Diagnostics (2005) 105-110.
81. I. Riemann, E. Dimitrow, M. Kaatz, J. Fluhr, P. Elsner, J. Kobow, K. König. In vivo multiphoton tomography of inflammatory tissue and melanoma. SPIE-Proceedings, vol. 5686: Photonic Therapeutics and Diagnostics (2005) 97-104.
82. I. Riemann, A. Killi, T. Anhut, R. Le Harzic, U. Morgner, K. König. Imaging and nanosurgery of biological specimen with a new diode pumped femtosecond laser at a wavelength of 1040 nm", Beyer E, Dausinger F, Ostendorf A, Otto A (eds.). Proc. 3rd international WLT-

conference on lasers in manufacturing, Munich, June 2005. AT-Fachverlag GmbH, Stuttgart, (2005) 781-784.

83. I. Riemann, T. Anhut, F. Stracke, R. LeHarzic, K. König. Multiphoton nanosurgery in cells and tissues. SPIE-Proceedings, vol. 6089: Optical Interactions with Tissue and Cells XVI (2005) 216-224.

84. R. LeHarzic, D. Breitling, S. Sommer, C. Fohl, S. Valette, K. König, F. Dausinger, E. Audouard. Pulse duration and energy density influence on laser processing of metals with short and ultrashort pulses. SPIE-Proceedings, vol. 5713: Photon Processing in Microelectronics and Photonics IV (2005) 115-122.

85. R. LeHarzic, D. Sauer, I. Riemann, K. König. Nanoprocessing of semiconductors and metals with nJ femtosecond laser pulses. SPIE-Proceed., vol. 5989 (2005).

2006

86. K. König, H. Schuck, D. Sauer, F. Bauerfeld, F. Stracke, T. Velten, A. Tchernook, S. Martin, R. LeHarzic. Invited paper: Femtosecond laser nanoprocessing using near infrared nanojoule pulses at MHz repetition frequency. SPIE-Proceedings, vol. 6400: Femtosecond phenomena and nonlinear optics III (2006) 64000C.

87. K. König, I. Riemann, A. Ehles, R. Bückle, E. Dimitrow. In vivo multiphoton tomography of skin cancer. SPIE-Proceedings, vol. 6089: Multiphoton Microscopy in the Biomedical Sciences VI (2006) 60890R.

88. B.G. Wang, K. König, I. Riemann, H. Schubert, K.-J. Halbhuber. Multiphoton imaging of corneal tissue with near-infrared femtosecond laser pulses: corneal optical tomography and its use in refractive surgery. SPIE-Proceedings, vol. 6089: Multiphoton microscopy in the biomedical sciences VI (2006) 11S.

89. R. LeHarzic, S. Martin, R. Bückle, C. Wullner, C. Donitzky, I. Riemann, K. König. New developments in corneal refractive surgery with femtosecond laser pulses. SPIE-Proceed. 2006, vol. 6138: Ophthalmic Technologies XVI (2006) 353-362.

90. I. Riemann, K. Schenke-Layland, A. Ehlers, E. Dimitrov, M. Kaatz, P. Elsner, S. Martin, K. König. High-resolution multiphoton optical tomography of tissues – an in vitro and in vivo study. SPIE-Proceedings, vol. 6142: Medical Imaging 2006: Physics of Medical Imaging (2006) 61420N-1.

91. I. Riemann, F. Stracke, D. Sauer, S. Martin, K. König. Multiphoton nanosurgery in cells and tissues. SPIE-Proceedings, vol. 6089: Multiphoton Microscopy in the Biomedical Sciences VI (2006) 608918.

92. A. Ehlers, I. Riemann, T. Anhut, M. Kaatz, P. Elsner, K. König. Fluorescence lifetime imaging of human skin and hair. SPIE-Proceedings, vol. 6089: Multiphoton Microscopy in the Biomedical Sciences VI (2006) 60890N.

93. A. Csaki, F. Garwe, A. Steinbrück, A. Weise, K. König, W. Fritzsche. Localization of laser energy conversion by metal nanoparticles: basic effects and applications. SPIE-Proceedings, vol. 6191: Biophotonics and New Therapy Frontiers (2006) 61911K.

2007

94. B. Messerschmidt, A. Kraeplin, S. Schenkl, I. Riemann, M. Stark, A. Ehlers, A. Tchernook, R. LeHarzic, K. König. Novel concept of GRIN optical systems for high resolution microendoscopy: Part 1. Physical aspects. SPIE-Proceedings, vol. 6432 Endoscopic microscopy II (2007) paper 643202.

95. A. Uchugonova, I. Riemann, F. Stracke, E. Gorjup, R. LeHarzic, K. König. The influence of NIR femtosecond laser radiation on the viability of 3D stem cell clusters and tumor spheroids. SPIE-Proceedings, vol. 6442: Multiphoton Microscopy in the Biomedical Sciences VII (2007) 64421Z.

96. A. Ehlers, S. Schenkl, I. Riemann, B. Messerschmidt, M. Kaatz, R. Bückle, K. König. In vivo multiphoton endoscopy of endogenous skin fluorophores. SPIE-Proceedings, vol. 6442: Multiphoton Microscopy in the Biomedical Sciences VII (2007) 64421Y.
97. F. Stracke, M. Schneider, B. Weiss, C.-M. Lehr, U. F. Schäfer, K. König. Multiphoton microscopy for the investigation of trans-cutaneous drug delivery. SPIE-Proceedings, vol. 6630: Confocal, Multiphoton, and Nonlinear Microscopic Imaging III (2007) 663010.
98. M. Stark, B. Manz, I. Riemann, F. Volke, W. Weschke, K. König. Multiphoton and magnetic resonance imaging of barley embryos: comparing micro-imaging techniques across scale and parameter barriers. SPIE-Proceedings, vol. 6442: Multiphoton Microscopy in the Biomedical Sciences VII (2007) 644227.
99. M. Stark, D. Dörr, A. Ehlers, D. Sauer, R. Bückle, S. Martin, F. Ehrhart, J. Baunach, A. Katsen-Globa, H. Zimmermann, K. König. Multiphoton imaging and fluorescence lifetime studies on unstained cells and tissue at cryogenic conditions. SPIE-Proceedings, vol. 6628: Optical Spectroscopy in Biomedicine IV (2007) 662809.
100. I. Riemann, A. Ehlers, R. LeHarzic, S. Martin, A. Reif, K. König. In vivo multiphoton tomography of skin during wound healing and scar formation. SPIE-Proceedings, vol. 6442: Multiphoton Microscopy in the Biomedical Sciences VII (2007) 644226.
101. I. Riemann, A. Ehlers, D. Dill-Müller, S. Martin, K. König. Multiphoton tomography of skin tumors after ALA application. SPIE-Proceedings, vol. 6424: Photonic Therapeutics and Diagnostics III (2007) 642405.
102. I. Riemann, F. Stracke, A. Uchugonova, S. Martin, R. Bückle, K. König. Optical nanoinjection into cells and 3D stem cell-clusters via a NIR femtosecond laser. SPIE-Proceedings, vol. 6442: Multiphoton Microscopy in the Biomedical Sciences VII (2007) 64421F.
103. H. Schuck, F. Bauerfeld, D. Sauer, R. LeHarzic, T. Velten, I. Riemann, K. König. Rapid prototyping of 3D micro- nanostructures to explore cell behaviour. Vortrag anlässlich der 3rd International Conference on Multi-Material Micro Manufacture (4M) in Borovets (Bulgarien), 03.-05.10.2007 Proceedings (2007).
104. S. Schenkl, A. Ehlers, I. Riemann, B. Messerschmidt, K. König. Rigid and high NA fluorescence GRIN-endoscopes. SPIE-Proceedings, vol. 6631: Novel Optical Instrumentation for Biomedical Applications III (2007) 66310Q.
105. S. Schenkl, E. Weiss, M. Stark, F. Stracke, I. Riemann, R. Lemor, K. König. Imaging living cells with a combined high-resolution multi-photon-acoustic microscope. SPIE-Proceedings, vol. 6437: Photons Plus Ultrasound: Imaging and Sensing 2007: The Eighth Conference on Biomedical Thermoacoustics, Optoacoustics, and Acousto-optics (2007) 64372A.
106. S. Schenkl, A. Ehlers, I. Riemann, B. Messerschmidt, R. Bückle, K. König. Applications of rigid and flexible GRIN-endoscopes. SPIE-Proceedings, vol. 6433: Optical Fibers and Sensors for Medical Diagnostics and Treatment Applications VII (2007) 64330N.
107. K. König, A. Ehlers, I. Riemann, S. Schenkl, B. Messerschmidt, R. Bückle, R. Le Harzic, P. Elsner, M. Kaatz. SPIE-Proceedings, 6442: Clinical in vivo two-photon microendoscopy for intradermal high-resolution imaging with GRIN optics (2007) 644215.
108. R. Le Harzic, C. Wüllner, C. Donitzky, K. König. New developments in femtosecond laser corneal refractive surgery. SPIE-Proceedings, vol. 6460: Commercial and Biomedical Applications of Ultrafast Lasers VII (2007) 64600E.
109. R. Le Harzic, C. Wüllner, D. Bruneel, C. Donitzky, K. König. Femtosecond refractive eye surgery: study of laser parameters for even more efficiency and safety. SPIE-Proceedings, vol. 6633: Therapeutic Laser Applications and Laser-Tissue Interactions III (2007) 663217.
110. R. Le Harzic, A. Colonna, R. Bückle, A. Ehlers, C. Hadjur, F. Leroy, F. Flament, R. Bazin, B. Piot, I. Riemann, K. König. In vivo multiphoton tomography: a non invasive powerful tool for biochemical investigation of human skin. SPIE-Proceedings, vol. 6630: In vivo multiphoton tomography: a non invasive powerful tool for biochemical investigation of human skin (2007) 66300V.

111. F. Ehrhart, D. Dörr, M. Stark, K. König, H. Zimmermann. Laser assisted processing of cross-linked alginate hydrogel. WLT Conference, München 2007.
112. M Stark ^{a1}, D Dörr ^{a1}, F Ehrhart ^{a1}, J Schulz ^{a1}, J Baunach ^{a1}, A Katsen-Globa ^{a1}, A Ehlers ^{a2}, K König ^{a2} and H Zimmermann. Multiphoton Fluorescence Imaging at Cryogenic Conditions. [Microscopy and Microanalysis](#) / Volume13 / SupplementS03 / September 2007, pp 110-111

2008

113. A. Uchugonova, J. Müller, R. Bückle G. Tempea, A. Isemann, A. Stingl, K. König. Negatively chirped laser enables nonlinear excitation and nanoprocessing with sub-20-fs pulses. Proc. SPIE 6860, 686015 (2008) / doi:10.1117/12.763709
114. A. Uchugonova, K. König. Two-photon imaging of stem cells. Proc. SPIE 6860, 68601W (2008) / doi:10.1117/12.762734
115. P. Becker, D. Sauer, F. Bauerfeld, K. König, R. LeHarzic. Surface and bulk micro- and nano-structuring with nanojoule femtosecond laser pulses at high repetition rate. Proc. SPIE 6879, 68791R (2008) / doi:10.1117/12.767638
116. K. König: Multiphoton tomography for tissue engineering. Proc. SPIE 6858, 68580C (2008) / doi:10.1117/12.771187
117. K. König, J. Müller, M. Höfer, C. Müller, M. Weinigel, R. Bückle, P. Elsner, M. Kaatz, B. Messerschmidt. Invited review: Two-photon scanning systems for clinical high-resolution in vivo tissue imaging. Proc. SPIE 6860, 686014 (2008) / doi:10.1117/12.762986
118. I. Riemann, S. Schenkl, R. LeHarzic, D. Sauer, A. Ehlers, B. Messerschmidt, R. Bückle, K. König. Two-photon imaging using a flexible endoscope. Proc. SPIE 6851, 68510B (2008) / doi:10.1117/12.762970
119. I. Riemann, A. Ehlers, R. LeHarzic, E. Dimitrow, M. Kaatz, P. Elsner, R. Bückle, K. König. Non-invasive analysis/diagnosis of human normal and melanoma skin tissues with two-photon FLIM in vivo Proc. SPIE 6842, 684205 (2008) / doi:10.1117/12.762937
120. V.K. Pustovalov, K. König, L.G. Astafyeva, W. Fritzsche. Optical properties of core-shell gold-silver and silver-gold nanoparticles for some laser wavelengths. Proc. SPIE 6879, 687915 (2008) / doi:10.1117/12.761551
121. V.K. Pustovalov, K. König, L.G. Astafyeva. Distributions of laser radiation intensity inside gold nanoparticles during laser radiation. Proc. SPIE 6879, 687916 (2008) / doi:10.1117/12.761515
122. K. König, J. Müller, M. Höfer, C. Müller, M. Weinigel, R. Bückle, P. Elsner, M. Kaatz, B. Messerschmidt: Two-photon scanning systems for clinical high resolution in vivo tissue imaging. Proc. SPIE, Vol. 6860, 686014 (2008); doi:10.1117/12.762986

2009

123. K. König, R. Bückle, M. Weinigel, P. Elsner, M. Kaatz: Clinical multiphoton tomography and clinical two-photon microendoscopy. Proc. SPIE 7183, 718319 (2009) doi:10.1117/12.813395
124. K. König, R. Bückle, M. Weinigel, J. Köhler, P. Elsner, M. Kaatz: In vivo multiphoton tomography in skin aging studies. Proc. SPIE 7161, 71610H (2009) / doi:10.1117/12.813398
125. M. Schwarz, I. Riemann, M. Weinigel, K. König, B. Messerschmidt, R. Le Harzic: New developments in two photon endoscopy. Proc. SPIE 7172, 717204 (2009) / doi:10.1117/12.808781
126. A. Uchugonova, A. Isemann, R. Bückle, W. Watanabe, K. König: Two-photon imaging and nanoprocessing of stem cells with sub-20 fs laser pulses. Proc. SPIE 7183, 71831A (2009) / doi:10.1117/12.812950
127. D. Bruneel, M. Schwarz, E. Audouard, K. König, R. Le Harzic: Development of a powerful tool for nanostructuring and multiphoton imaging with nanojoule femtosecond laser pulses. Proc. SPIE 7201, 720117 (2009) / doi:10.1117/12.808800

128. I. Riemann, M. Schwarz, F. Stracke, A. Ehlers, E. Dimitrow, M. Kaatz, K. König, R. Le Harzic: New developments in two-photon analysis of human skin in vivo. Proc. SPIE 7203, 720306 (2009) / doi:10.1117/12.808770

2010

129. K. König, M. Weinigel, H. G. Breunig, A. Gregory, P. Fischer, M. Kellner-Höfer, R. Bückle, M. Schwarz, I. Riemann, F. Stracke, V. Huck, C. Gorzelanny, S. W. Schneider: 5D-intravital tomography as a novel tool for non-invasive in-vivo analysis of human skin. Proc. SPIE 7555, 75551I (2010) / doi:10.1117/12.841861

130. K. König, A. Uchugonova, M. Schug, H. Zhang, S. Saremi, D. Feili, H. Seidel: Two-photon lithography and nanoprocessing with picojoule extreme ultrashort 12 femtosecond laser pulses. Proc. SPIE 7584, 75840K (2010) / doi:10.1117/12.841993

131. A. Uchugonova, Z. Földes-Papp, G. M. Kostner, K. König: Long-term marker-free multiphoton imaging, targeted transfection, optical cleaning of stem cell clusters, and optical transport of microRNA with extreme ultrashort laser pulses. Proc. SPIE 7569, 756916 (2010) / doi:10.1117/12.842024

132. K. König, M. Weinigel, H. G. Breunig, A. Gregory, P. Fischer, M. Kellner-Höfer, R. Bückle: Current developments in clinical multiphoton tomography. Proc. SPIE 7569, 756915 (2010) / doi:10.1117/12.843117

133. M. Schwarz, I. Riemann, F. Stracke, V. Huck, C. Gorzelanny, S. W. Schneider, K. König, S. Puschmann, V. Lutz, N. Sommer, C. Rahn, S. Gallinat, H. Wenck, K.-P. Wittern, F. Fischer: A comparative study of different instrumental concepts for spectrally and lifetime-resolved multiphoton intravital tomography (5D-IVT) in dermatological applications. Proc. SPIE 7568, 75680D (2010) / doi:10.1117/12.840843

134. K. König, M. Speicher, M. J. Koehler, R. Scharenberg, P. Elsner, M. Kaatz: Clinical combination of multiphoton tomography and high frequency ultrasound imaging for evaluation of skin diseases. Proc. SPIE 7564, 75642K (2010) / doi:10.1117/12.840961

135. V. Huck, C. Gorzelanny, K. Thomas, V. Niemeyer, T. A. Luger, K. König, S. W. Schneider: Intravital multiphoton tomography as a novel tool for non-invasive in vivo analysis of human skin affected with atopic dermatitis. Proc. SPIE 7548, 75480B (2010) / doi:10.1117/12.841973

136. K. König, M. Speicher, R. Bückle, J. Reckfort, G. McKenzie, J. Welzel, M. J. Koehler, P. Elsner, M. Kaatz: Clinical optical coherence tomography combined with multiphoton tomography for evaluation of several skin disorders. Proc. SPIE 7554, 75542I (2010) / doi:10.1117/12.841765

137. H. G. Breunig, H. Studier, K. König: Excitation-wavelength dependence of multiphoton excitation of fluorophores of human skin in vivo. Proc. SPIE 7548, 754806 (2010) / doi:10.1117/12.840955

138. H. Studier, H. G. Breunig, K. König: Two-photon imaging with 80 MHz and 1-GHz repetition rate Ti:sapphire oscillators. Proc. SPIE 7569, 75691D (2010) / doi:10.1117/12.841106

139. M. Weinigel, H. G. Breunig, A. Gregory, P. Fischer, M. Kellner-Höfer, R. Bückle, K. König: A novel flexible clinical multiphoton tomograph for early melanoma detection, skin analysis, testing of anti-age products, and in situ nanoparticle tracking.

2011

140. K. König, A. Uchugonova, M. Straub, H. Zhang, M. Afshar, D. Feili, H. Seidel: Sub-100 nm material processing with sub-15 femtosecond picojoule near infrared laser pulses. Proc. SPIE 7903, 79031M (2011)

141. M. Straub, K. König: Nanostructure formation on silicon surfaces by high repetition rate sub-15 femtosecond near infrared laser pulses. Proc. SPIE 7920, 79200P (2011)

142. H. Zhang, M. Straub, K. König, M. Afshar, D. Feili, H. Seidel: Nanoprocessing of glass and PMMA by means of near-infrared sub-15 femtosecond laser pulses. Proc. SPIE 7921, 79210L (2011)
143. M. Licht, M. Straub, K. König, M. Afshar, D. Feili, H. Seidel: Three-dimensional nanostructures for applications in cell biology generated by high-repetition rate sub-15 fs near-infrared laser pulses. Proc. SPIE 7908, 79080M (2011)
144. A. Uchugonova, H. Zhang, C. Lemke, K. König: Nanosurgery with near-infrared 12-femtosecond and picosecond laser pulses. Proc. SPIE 7903, 79031N (2011)
145. M. Afshar, S. Saremi, H. Völlm, D. Feili, H. Seidel, M. Straub, H. Zhang, K. König: Multiphoton lithography and ITO structuring by high-repetition-rate sub-15 femtosecond laser pulses. Proc. SPIE 7920, 792015 (2011)
146. C.B. Talbot, R. Patalay, I. Munro, H.G. Breunig, K. König, Y. Alexandrov, S. Warren, A. Chu, G.W. Stamp, M.A.A. Neil, P.M.W. French, C. Dunsby: A multispectral FLIM tomograph for in-vivo imaging of skin cancer. Proc. SPIE 7903, 79032B (2011) / doi:10.1117/12.873567
147. K. König: High-resolution multimodal clinical multiphoton tomography of skin. Proc. SPIE 7883, 78830D (2011) / doi:10.1117/12.874899
148. K. König: New developments in multimodal clinical multiphoton tomography. Proc. SPIE 7903, 790305 (2011) / doi:10.1117/12.874965
149. V. Huck, C. Gorzelanny, K. Thomas, C. Mess, V. Dimitrova, M. Schwarz, I. Riemann, V. Niemeyer, T.A. Luger, K. König, S.W. Schneider: Intravital multiphoton tomography as an appropriate tool for non-invasive in vivo analysis of human skin affected with atopic dermatitis. Proc. SPIE 7883, 78830R (2011) / doi:10.1117/12.874218
150. R. Patalay, C. Talbot, I. Munro, H.G. Breunig, K. König, Y. Alexandrov, S. Warren, M.A.A. Neil, P.M.W. French, A. Chu, G.W. Stamp and C. Dunsby: Fluorescence lifetime imaging of skin cancer. Proc. SPIE 7883, 78830A (2011) / doi:10.1117/12.873298
151. H.G. Breunig, K. König: Spectral characteristics of two-photon autofluorescence and second harmonic generation from human skin in vivo. Proc. SPIE 7883, 788311 (2011) / doi:10.1117/12.874990
152. H.G. Breunig, M. Weinigel, J. Lademann, W. Sterry, I. Latka, B. Dietzek, J. Popp, K. König: Combining multiphoton and CARS microscopy for skin imaging. Proc. SPIE 7903, 79031A (2011) / doi:10.1117/12.874969
153. Patalay, C. Talbot, Y. Alexandrov, I. Munro, H. G. Breunig, K. König, S. Warren, M. A. A. Neil, P. M. W. French, A. Chu, G. W. Stamp, C. Dunsby: Non-invasive imaging of skin cancer with fluorescence lifetime imaging using two photon tomography. Proc. SPIE 8087, 808718 (2011) / doi:10.1117/12.889314

2012

154. K. König. Multiphoton Tomography if Intratissue Tattoo Nanoparticles. Proc. SPIE 8207.
155. M. Weinigel, H.G. Breunig, P. Fischer, M. Kellner-Höfer, R. Bückle, K. König. Compact clinical high-NA multiphoton endoscopy. Proc. SPIE 8217.
156. H. G. Breunig, M. Weinigel, K. König. Multiphoton Spectroscopy of human skin in vivo. Proc. SPIE 8225.
157. H.G. Breunig, C. Köhler, K. König. Two-photon cryomicroscope. Proc. SPIE 8225.
158. K. König. Clinical multiphoton FLIM tomography. SPIE Proceed. 8226.
159. A. Uchugonova, R. Hoffmann, M. Weinigel, K. König. Watching stem cells at work with a flexible multiphoton tomograph. Proc. SPIE 8226.
160. H.G. Breunig, M. Weinigel, M.E. Darwin, J. Lademann, K. König. Clinical multiphoton and CARS microscopy. Proc. SPIE 8226

161. M. Weinigel, H.G. Breunig, P. Fischer, M. Kellner-Höfer, R. Bückle, K. König. Studies on wide-field-of-view multiphoton imaging using the flexible clinical multiphoton tomograph MPTflex. Proc. SPIE 8226.
162. M. Straub, A. Uchugonova, K. König. Silicon cell culture templates with nanotopography: Periodic nanostructures and random nanoporous topologies generated by high-repetition rate sub-15 fs pulsed near-infrared laser light. Proc. SPIE 8231.
163. K. König, M. Licht, M. Straub, A. Uchugonova. Material Processing with 12 Femtosecond Picojoule Laser Pulses. Proc. SPIE 8249.
164. M. Straub, B. Weigand, K. König. Nanostructure formation on lithium niobate surfaces by high-repetition rate sub-15 fs near-infrared laser pulses.
165. K. König. In vivo CARS tomography combined with two-photon autofluorescence and SHG imaging in Patients with dermatological disorders. Proceedings of the 30th International Congress on High Speed Imaging & Photonics, Pretoria, South Africa, September 2012.
166. A. Uchugonova, R. Hofmann, K. König. Multiphoton Tomography with Submicron Spatial Resolution of Living Tumor-Bearing Mice. Proceedings of the 30th International Congress on High Speed Imaging & Photonics, Pretoria, South Africa, September 2012.
167. M. Afshar, D. Feili, H. Voellm, M. Straub, K. Koenig, H. Seidel. Nanoscale Laser Writing of Indium-Tin-Oxide Nanowires. NEMS 2012, Kyoto, Japan, März 2012.

A. Uchugonova, K. König, M. Zhao, R. Hoffmann. High-resolution non-invasive multiphoton tomography of the tumor microenvironment in live mice. Poster 5531, Journal of the American Academy of Dermatology 66(2012)AB37

A. Uchugonova, K. König, M. Zhao, R. Hoffmann. Bacterial tumor targeting visualized by high-resolution noninvasive fluorescence tomography in live mice. Poster 5555, Journal of the American Academy of Dermatology 66(2012)AB35

K. König, E. Dimitrow, M. Kaatz. Clinical multiphoton tomography of malignant melanoma. Poster 5545, Journal of the American Academy of Dermatology 66(2012)AB142

R. Patalay, A. Chu, C. Dunsby, C. Talbot, K. König, P. French, Y. Alexandrov. A noninvasive imaging study of skin using two photon microscopy of cellular autofluorescence. Poster 5058, Journal of the American Academy of Dermatology 66(2012)AB83

Buchbeiträge

1985

A. K. König, Diplomarbeit: Beiträge zur Laser-Tumordiagnostik und Laser-Tumorthérapie mit Photosensibilisatoren. Friedrich-Schiller-Universität Jena.

1989

1. K. König, Promotion: Beiträge zur selektiven Photochemotherapie von Tumoren. Archiv Friedrich-Schiller-Universität Jena.

1992

2. W. Strauss, A. Rück, T. Köllner, K. König, H. Schneckenburger. Photoinduced reactions of porphyrin photosensitizers. (B) Hydrophilic meso-tetraphenylporphyrins. In: Laser in Medicine, eds. W. Waidelich, R. Waidelich, A. Hofstetter, Springer Verlag, 1992, pp.122-127.
3. K. König, A. Rück, S. Auchter, W. Strauss, H. Schneckenburger. Photoinduced reactions of porphyrin photosensitizers. (A) Hematoporphyrin Derivative (HpD). In: Laser in Medicine, eds. W. Waidelich, R. Waidelich, A. Hofstetter, Springer Verlag, 1992, pp.117-121.
4. K. König, J. Hemmer, H. Schneckenburger. Laser-induced autofluorescence of squamous cell carcinoma. In: P. Spinelli, M. Dal Fante, R. Marchesini: Photodynamic Therapy and Biomedical Lasers. Elsevier Science Publishers, 1992, pp. 903-906.
5. K. König et al.. Photodynamic therapy with texaphyrins. In: P. Spinelli, M. Dal Fante, R. Marchesini: Photodynamic Therapy and Biomedical Lasers. Elsevier Science Publishers, 1992.
6. K. König, H. Schneckenburger, A. Rück, H. Meyer. Fluorescence Diagnosis and Photodynamic Therapy of Acne vulgaris. In: P. Spinelli, M. Dal Fante, R. Marchesini: Photodynamic Therapy and Biomedical Lasers. Elsevier Science Publishers, 1992.
7. K. König, F. Genze, E. Reich, R. Miller, A. Rück, D. Repassy. PDT of tumor-bearing mice using liposome delivered texaphyrins. In: P. Spinelli, M. Dal Fante, R. Marchesini (eds.) Photodynamic therapy and biomedical lasers. Excerpta Medica, 1992, pp. 802-805. ISBN:0444814302
8. H. Schneckenburger, K.König, K. Kunzi-Rapp, A. Rück, W. Strauss, C. Westphal-Frösch, V. Gottfried and S. Kimel. Time resolved and microscopic detection of porphyrin sensitizers and their photodynamic action in-vivo. In: P. Spinelli, M. Dal Fante, R. Marchesini (eds.) Photodynamic therapy and biomedical lasers. Excerpta Medica, 1992, pp. 893-897. ISBN: 0444814302,

1994

9. K. König, F. Nowak, F. Genze, H. Schneckenburger. In-vivo autofluorescence measurements during photodynamic damage of cells and tumor tissue. In: Laser in Medicine 1993. W. Waidelich, R. Waidelich, A. Hofstetter (eds.), Springer Verlag, 1994, pp. 95-99.
10. K. König, K. Kunzi-Rapp. On-line measurement of photodynamically induced lysis of erythrocytes with and without nucleus by small angle light scattering and video-intensified microscopy. In: Laser in Medicine 1993, W. Waidelich, R. Waidelich, A. Hofstetter (eds.), Springer Verlag, 1994, 91-94.
11. R. Sailer, W. Strauss, K. König, A. Rück, R. Steiner. Untersuchungen zu Porphyrinstoffwechsel und photodynamische Inaktivierung am Gram-negativen Bakterium Pseudomonas aeruginosa. In: Laser in Medicine 1993, W. Waidelich, R. Waidelich, A. Hofstetter (eds.), Springer Verlag, 1994, pp. 109-112.
12. H. Schneckenburger, K. König, T. Dienersberger, R. Hahn. Time-gated video microscopy and spectroscopy. In: Laser in Medicine 1993, W. Waidelich, R. Waidelich, A. Hofstetter (eds.), Springer Verlag, 1994, pp.497-501.

13. G. Beck, K. König, R. Steiner. Optical detection of topically applied photosensitizers by in vivo remission spectroscopy. In: Laser in Medicine 1993, W. Waidelich, R. Waidelich, A. Hofstetter (eds.), Springer Verlag, 1994, pp.469-472.
14. W. Strauss, W. Mohr, K. König, K. Miller, R. Sailer, M. Gschwend, A. Rück, H. Schneckenburger, R. Steiner. MesoTetra(4-Carboxyphenyl)Porphyrin-Organverteilung und photodynamische Therapie. In: Laser in Medicine 1993, W. Waidelich, R. Waidelich, A. Hofstetter (eds.), Springer Verlag, 1994, pp.104-108.

1995

- 15.. K. König, BJ. Tromberg, MW. Berns. One- and Two Photon Excited Fluorescence of Motile Cells in the Optical Trap. In: Laser in Medicine 1995, W. Waidelich, H. Hügel, H. Opower, H. Tiziani, R. Wallenstein, W. Zinth (eds.), Springer Verlag 1995, 164-167.

1997

16. K. König, K.-J. Halbhuber: Zwei-Photonen-Femtosekundenmikroskopie vitaler Zellen. In: W. Waidelich, R. Waidelich, A. Hofstetter (eds.). Laser in Medicine. Proceedings of the 13th International Congress LASER 97. Springer-Verlag, 1997.

1999

17. K. König, Habil-Arbeit: Biomedizinische Applikationen der optischen Mikromanipulation und Zweiphotonen-Anregung vitaler Zellen mittels Naher-Infrarot Laser-Mikroskopie. Shaker Verlag, 1999, ISBN: 3-8265-6788-9

2000

18. K. König. Photoproduct formation during porphyrin photodynamic therapy. In: PiusWyss, Yona Tadir and Bruse J. Tromberg, Urs Haller (eds.): Photomedicine in Gynecology and Reproduction. Karger, 2000, pp. 86-95. ISBN: 3-8055-6905-X

2001

19. K. König. Cellular response to laser radiation in fluorescence microscopes. In: Periasamy (ed.). Methods in Cellular Imaging, Oxford, UK 2001, pp 236-251.

2002

20. K. König and Uday K. Tirlapur. Cellular and Subcellular Perturbations During Multiphoton Microscopy. In: Diaspro (ed.) Confocal and Two-Photon Microscopy, Foundations, Applications and Advances. 2002. pp. 191-205, ISBN: 0-471-40920-0
21. Uday K. Tirlapur and K. König. Two-Photon Near-Infrared Femtosecond Laser Scanning Microscopy in Plant Biology. In: Diaspro (ed.) Confocal and Two-Photon Microscopy, Foundations, Applications and Advances. 2002. pp. 449-468. ISBN: 0-471-40920-0

2003

22. K. König. Lasertechnik. Biophysikalische Grundlagen. In: Raulin, Greve (eds.): Laser und IPL-Technologie in der Dermatologie und Ästhetischen Medizin. Schattauer, 2003, pp. 4-14. ISBN 3-7945-2236-2
23. K. König. High-resolution multiphoton imaging and nanosurgery of the cornea using femtosecond laser pulses. In: Lasers in ophthalmology. Basics, diagnostic and surgical aspects. Eds. F. Fankhauser & S. Kwasniewska. Kugler Publications (2003) 79-89. ISBN:9062991890.

2005

24. K. König. Multiphoton Multicolor FISH and nanoprocessing of chromosomes with near infrared femtosecond laser pulses. In: Hemmerich and Stephan Diekmann (eds.). Visions of the cell nucleus. American Scientific Publishers. 2005. pp. 268-280, ISBN: 1-5883-027-6

2006

25. K. König. Cell damage during multi-photon microscopy. In: J.B. Pawley (ed.). Handbook of biological confocal microscopy. Third edition. Springer Science+Business Media, NY, USA 2006 pp. 680-689. ISBN 987-0387-25921-5

26. K. König. High resolution in vivo multiphoton tomography of skin. In: K.P. Wilhelm, E. Berardesca, P. Elsner, H.I. Maibach (eds.): Bioengineering of the skin. Skin imaging and analysis. Informa healthcare. New York and London, 2006, pp. 111-126. ISBN: 978-0-8493-3817-5

2007

27. K. König. Minimal Invasive Medizin. In: H.J. Bullinger (editor): Technologie-Führer. Springer-Verlag. Berlin, Heidelberg, New York, 2007, pp. 218-221. ISBN 103-540-33788-1
K. König. Femtosecond Laser Nanoprocessing. In: P. So and B.R. Masters (eds.): Handbook of Biological Nonlinear Optical Microscopy. Oxford University Press. 2008 pp. 689-706. ISBN 987-0-19-516260-8

28. K. König, F. Bauerfeld, D. Sauer, H. Schuck, A. Uchugonova, E. Lei, M. Stark, T. Velten, R. Bückle, R. LeHarzic. Femtosecond laser nanomachining of silicon wafers and two-photon nanolithography for stem cell research. In: Satoshi Kawata, Hiroshi Masuhara and Fumio Tokunaga (eds.): Handai Nanophotonics: Nano Biophotonics: Science and Technology. Volume 3. First edition. Elsevier, 2007, pp. 287-296. ISBN-13: 978-0-444-52878-0, ISBN-10: 0-444-52878-4, ISSN: 1574-0641

2008

29. K. König: Femtosecond Laser Nanoprocessing. In: Barry R. Master and Peter T.C. So (eds.): Biomedical nonlinear optical microscopy. Oxford University Press, Inc., 2008, pp. ????. ISBN: 987-0-19-516260-8

30. K. König. Multiphoton-induced cell damage. In: Barry R. Master and Peter T.C. So (eds.): Biomedical nonlinear optical microscopy. Oxford University Press, Inc., 2008, pp. 334-347. ISBN: 987-0-19-516260-8

2009

31. K.König and A. Uchugonova. Multiphoton Fluorescence Lifetime Imaging at the Dawn of Clinical Application. In: Ammasi Periasamy and Robert M. Clegg (eds.): FLIM in Biology and Medicine. Taylor & Francis (CRC Group). Expected date of Publication: March 2009

Tagungsvorträge

1986:

E. Knoth, H. Kneipp, M. Rentsch, K. König: Kupfer- und Golddampflaser zur bronchiolog. Verwendung. Symposium "Neue Diagnostik- und Therapieverfahren in der Bronchol. (1986) Bad Berka

V. Bockhorn, W. Dietel, K. König, U. Krause: Erste Erfahrungen im Forschungsprojekt: Laserinduzierte Fluoreszenz- und Photochemotherapie des Harnblasencarcinoms. III. Symposium: Methoden und Ergebnisse tierexperimenteller Arbeiten (1986) Jena

1987:

V. Bockhorn, W. Dietel, K. König: Fluoreszenzdiagnostik und Photochemotherapie maligner Tumoren. Workshop mit internationaler Beteiligung: Laseranwendung in der Medizin (1987) Dresden

L.P. Löbe, U. Krause, P. Lotz, W. Dietel, K. König, H. Schubert: Photodynamische Tumortherapie im HNO-Gebiet. Prinzip und erste experimentelle Ergebnisse. 34. Gemeinschaftstagung der med.-wissensch. Gesellschaft für HNO-Heilkunde (1987) Rostock
V. Bockhorn, W. Dietel, K. König, A. Werth, H. Schubert: Laserinduzierte Fluoreszenz und Photochemotherapie von Tumoren. (Poster) VII. Onkologie-Symposium (1987) Jena

1988:

K. König, W. Dietel: Fluorescence Investigations on Animal Tumors. (Poster) 5. Symposium Optical Spectroscopy (1988) Eisenach

K. König, E. Welsch, H.G. Walther: Photoacoustic absorption measurements on marked tissue. (Poster) Fifth Symposium Optical Spectroscopy (1988) Eisenach

I. Bugiel, K. König, H. Wabnitz: Fluoreszenzmikroskopische Untersuchungen an Zellen mit sub-ns Zeitauflösung. PDT-Schule (1988) Berlin

W. Dietel, K. König: Laserinduzierte in-vivo Fluoreszenz tierexperimenteller Tumoren. PDT-Schule (1988) Berlin

K. König, V. Bockhorn, W. Dietel, H. Schubert: Photochemotherapie tierexperimenteller Tumoren. PDT-Schule (1988) Berlin

E. Knoth, H. Kneipp, M. Rentsch, K. König: Experimentelle PDT mittels Kupfer- und Golddampflaser. PDT-Schule (1988) Berlin

E. Knoth, K. König, W. Grassme, W. Dietel: HpD-induzierte Tumorfluoreszenz. PDT-Schule (1988) Berlin

U. Krause, P. Lotz, L.P. Löbe, K. König, H. Schubert: Versuche zur Darstellung von HpD und seines Einsatzes zur PDT an Mäuse-Ascites-Tumoren. PDT-Schule (1988) Berlin

U. Krause, L.P. Löbe, P. Lotz, J. Barth, H. Schubert, K. König: Die Wirkung klassischer Strahlungsquellen in der photodynamischen HpD-Therapie von malignen Geschwülsten. 35. Gemeinschaftstagung der med.-wissensch. Gesellschaft für HNO-Heilkunde (1988) Rostock

L.P. Löbe, U. Krause, P. Lotz, K. König, W. Dietel, J. Barth: Photodynamic therapy with the HpD-Halle II. Results of animal experiments. International Conference: Photodynamic Therapy and Medical Laser Application (1988) London Proceedings: Vortrag 141

U. Krause, L.P. Löbe, P. Lotz, K. König, H. Schubert, J. Barth: Tierexperimentelle Untersuchungen zur PDT mit dem HpD-Typ Halle. 4. Photodynamisches Kolloquium mit intern. Beteiligung der AG Photodermatologie der Gesellsch. für Dermatologie der DDR (1988) Wilthen

L.P. Löbe, U. Krause, P. Lotz, K. König, H. Schubert, J. Barth: Photodynamische Tumortherapie im HNO-Gebiet mit einem Hämatoporphyrinderivat. III. Symposium über Tumorforschung in der HNO-Heilkunde (1988) Mannheim

W. Dietel, K. König: Laser stimulated in vivo Fluorescence of animal tumors. Second Intern. Conference on Laser Scattering Spectroscopy of Biological Objects. (1988) Pecs, Hungaria.

V. Bockhorn, W. Dietel, K. König, H. Schubert: Fluoreszenzdiagnostik und PCT oberflächlicher Tumoren. XIX. Urologenkongress der DDR (1988) Erfurt

1989:

W. Dietel, K. König: Photobleaching of the HpD fluorescence and photoproduct formation in-vivo and in solution. Third Congress of the European Society for Photobiology. (Poster) (27.8.-2.9.1989) Budapest

W. Dietel, K. König, P. Dorn: HPD-Photoproducts: Formation & Photochemical Activity, Poster. Sofia (Oktober 1989)

1991:

K. König, H. Schneckenburger, A. Rück, S. Auchter: Photoproduct formation of endogeneous protoporphyrin and its photodynamic activity. SPIE: Future Trends in Biomedical Applications of Lasers (Poster) (1991) Berlin, Proceedings vol. 1525, 412-419

K. König, A. Rück, S. Auchter, W. Strauss, H. Schneckenburger: Photoinduced reactions of porphyrin photosensitizers. (A) HpD. Laser in Medicine (Laser 91) (1991) München

W. Strauss, A. Rück, T. Köllner, K. König, H. Schneckenburger: Photoinduced reactions of porphyrin photosensitizers. (B) Hydrophile Tetraphenylporphyrines. Laser in Medicine (Laser 91) (1991) München

C. Westphal, K. König, J. Krauter, G. Heil: Morphological changes of human leukaemic cells during photodynamic therapy. Jahrestagung der Deutschen und Österreichischen Gesellsch. für Hämatologie und Onkologie (1991) Innsbruck.

K. König, E. Welsch, H.G. Walther: Photoacoustic absorption measurements on tumor tissue stained with the photosensitizer Methylene Blue. Fourth Congress of the European Society for Photobiology (Poster) (1991) Amsterdam

K. König, H. Schneckenburger, H. Meier, A. Rück, R. Kaufmann: Laser induced in-vivo autofluorescence of the human skin caused on the porphyrin production of Propionibacterium acnes. Fourth Congress of the European Society for Photobiology (Poster) (1991) Amsterdam

K. König, R. Fischer, Puhl, A. Rück, R. Steiner: Selective Excimer ablation of intervertebral discs using fluorescence spectroscopy. 2nd Conference on Methods and Applications of Fluorescence Spectroscopy (Poster) (1991) Graz

K. König, H. Schneckenburger, H. Meier, A. Rück, R. Kaufmann: Laserinduced in-vivo autofluorescence of the human skin caused on the porphyrin production of Propionibacterium acnes. 2nd Conference on Methods and Applications of Fluorescence Spectroscopy (Poster) (1991) Graz

R. Fischer, K. König, Puhl, A. Rück, R. Steiner: Selective Excimer ablation of intervertebral discs using fluorescence spectroscopy. 1st Conference of the European Orthopaedic Research Society (EORS) (11.-12.11.1991) Paris

1992:

R. Fischer, K. König, W. Puhl: Selektive Ablation von Bandscheibengewebe mit dem Excimer-Laser mittels Fluoreszenz-spektroskopie - eine in vitro Untersuchung. 40. Jahrestagung der Vereinigung Süddeutscher Orthopäden e.V. (30.4.-3.5.1992) Baden-Baden

A. Rück, H. Schneckenburger, K. König, C. Westphal-Frösch, K. Kunzi-Rapp, W. Strauss, H. Wald: Observation of light-induced intracellular reactions and photodynamic organelle destruction of cationic and anionic mesotetraphenylporphyrins. Gordon Conference, New Hampshire, 1992

K. König, H. Meyer: Photodynamische Aktivität von Methylenblau. Photodermatologie-Kongreß (1992) Düsseldorf

K. König, H. Meyer, H. Schneckenburger, A. Rück: Fluoreszenzverhalten und photodynamische Wirksamkeit von Propionibacterium acnes. Photodermatologie-Kongreß (1992) Düsseldorf

A. Rück, H. Schneckenburger, W. Strauß, C. Westphal-Frösch, K. König, K. Kunzi-Rapp: Detektion von intrazellulären photodynamischen Reaktionen mit Hilfe hochauflösender mikroskopischer Techniken. Jahreskongreß der Deutschen Gesellschaft für Lasermedizin (1992) Münster, Abstract: Laser in Medicine and Surgery 8(1992)127

W.H. Boehncke, K. König, A. Rück, R. Kaufmann, W. Sterry: Proliferationsinhibition einer menschlichen T-Zell-Linie durch Photodynamische- und PUVA-Therapie. Jahreskongreß der Deutschen Gesellschaft für Lasermedizin (1992) Münster, Abstract: Laser in Medicine and Surgery 8(1992)93

K. König, A. Rück, W. Strauß, H. Schneckenburger, H. Wabnitz: Photobleaching and Photoproduct Formation of HPD. International Conference Photodynamic Therapy and Medical Laser Applications (1992) Mailand, Abstract: Lasers in Medical Science 7(1992)251

K. König, F. Genze, E. Reich, R. Miller, A. Rück, d. Repassy: PDT of tumor-bearing mice using liposome-delivered texaphyrins. International Conference Photodynamic Therapy and Medical Laser Applications (1992) Mailand, Abstract: Lasers in Medical Science 7(1992)268

K. König, J. Hemmer, H. Schneckenburger: Laser-induced autofluorescence of squamous cell carcinoma. International Conference Photodynamic Therapy and Medical Laser Applications (1992) Mailand, Abstract: Lasers in Medical Science 7(1992)233

K. König, H. Schneckenburger, A. Rück, H. Meyer: Fluorescence diagnosis and photodynamic therapy of acne vulgaris. International Conference Photodynamic Therapy and Medical Laser Applications (1992) Mailand, Abstract: Lasers in Medical Science 7(1992)291

A. Rück, K. König, W. Strauss, H. Schneckenburger: Light-induced reactions of cationic and anionic meso-tetraphenylporphyrins in-vitro and in-vivo probed by different spectroscopic techniques. International Conference Photodynamic Therapy and Medical Laser Applications (1992) Mailand, Abstract: Lasers in Medical Science 7(1992)280

R. Fischer, K. König, W. Puhl, A. Rück, R. Steiner: Selective Ablation of Intervertebral Discs using Fluorescence Spectroscopy - an in-vitro Examination. 3rd World Congress of the International Society for Low Power Laser Application in Medicine. Bologna, 9.-12.9.1992

A. Rück, H. Schneckenburger, C. Westphal-Frösch, K. Kunzi-Rapp, K. König, W. Strauss: Direct observation of photodynamically induced organelle destruction probed by video-enhanced contrast microscopy and fiber optical spectroscopy. 11th International Congress on Photobiology (1992) Kyoto (Abstract V 09-13)

E. Reich, K. Miller, D. Repassy, K. König, A. Rück, R. Bachor: Liposome-administered tetramethylhematoporphyrin (TMHP) as a photodynamic agent for bladder tumor cells. 11th International Congress on Photobiology (1992) Kyoto (Abstract P201)

R. Bachor, E.Reich, K. Miller, A. Rück, K. König, R. Hautmann: Phototoxicity of aminolevulinic acid (ALA) in vitro. 11th International Congress on Photobiology (1992) Kyoto (Abstract V 17-02)

K. König, E. Reich, F. Genze, R. Miller: In-vivo fluorescence behaviour and photodynamic activity of liposomal Tetramethyl-Hematoporphyrin (TMHP). 11th International Congress on Photobiology (1992) Kyoto (Abstract P 144)

K. König, A. Rück, F. Genze, E. Reich, K. Miller, R. Bachor. Distribution and photodynamic activity of ALA-induced endogeneous protoporphyrin. 11th International Congress on Photobiology (1992) Kyoto (Abstract P 145)

K. König, H. Schneckenburger, A. Rück, E. Reich, K.Miller, R. Bachor: On-line fluorescence spectroscopy during photodynamic therapy with ALA-induced endogeneous porphyrin. 11th International Congress on Photobiology (1992) Kyoto (Abstract V 09-12)

H. Schneckenburger, K. König, P. Gessler, I. Pavenstädt-Grupp: Laser-induzierte Autofluoreszenz für die Diagnostik. Jahreskongreß der Deutsch. Gesellsch. für Lasermedizin 1992, Münster, Abstract: Laser in Medicine and Surgery 8(1992)128

W. Strauss, K. König, K. Miller, W. Mohr, A. Rück, H. Schneckenburger, R. Steiner: Meso-Tetra(4-carboxyphenyl)porphyrin-Fluoreszenzverhalten und photodynamische Therapie an

xenotransplantierten Blasen-tumoren. Jahreskongreß der Deutsch. Gesellsch. für Lasermedizin 1992, Münster, Abstract: Laser in Medicine and Surgery 8(1992)135

K. König, H. Schneckenburger, A. Rück, R. Steiner, E. Reich, K. Miller, R. Bachor: On-line Fluoreszenzspektroskopie während der PDT nach ALA-Applikation. Jahreskongreß der Deutsch. Gesellsch. für Lasermedizin 1992, Münster, Abstract: Laser 92. Reihe Medizin. Eds.: G.H. Willital, M. Maragakis, R.R. Lehmann. Verlag Shaker, Aachen 1992, Seite 22

K. König, A. Rück, F. Genze, E. Reich, K. Miller, R. Bachor: Pharmakokinetik-photodynamische Aktivität von ALA-induziertem Protoporphyrin IX. Jahreskongreß der Deutsch. Gesellsch. für Lasermedizin 1992, Münster, Abstract: Laser 92, Seite 241

K. König, E. Reich, F. Genze, K. Miller: In-vivo Fluoreszenzverhalten und photodynamische Wirkung von Tetramethyl-Hämatoporphyrin. Jahreskongreß der Deutsch. Gesellsch. für Lasermedizin 1992, Münster, Abstract: Laser 92, Seite 242

R. Fischer, K. König, W. Puhl: Möglichkeiten und Grenzen der percutanen Nukleotomie mit dem Excimer Laser - Ergebnisse von in-vitro Untersuchungen. Kongreß der Deutsch. Gesellsch. für Orthopädie und Traumatologie. Mannheim, 16.-20.9.1992

W.H. Boehncke, K. König, A. Rück, K. Kaltoft, R. Kaufmann, W. Sterry: Proliferationsinhibition einer menschlichen T-Zell Linie durch photodynamische und PUVA Therapie. Lasermedizin 8(1992)93

1993:

K. König, R. Hibst, H. Schneckenburger, G. Flemming: Laserinduced autofluorescence of caries. SPIE (Januar 1993) Los Angeles

K. König, H. Schneckenburger, A. Rück, H. Wald, R. Steiner: Autofluorescence of cells and tissue. SPIE (Januar 1993) Los Angeles

A. Rück, H. Schneckenburger, K. König, W. Strauss, C. Westphal-Frösch, H. Walt: Observation of photodynamically induced cell destruction probed by video-microscopy, laser-scanning microscopy and fluorescence spectroscopy. SPIE (Januar 1993) Los Angeles.

R. Kaufmann, W.H. Boehncke, K. König, R. Hibst: Comparative study of Q-switched Nd:YAG- and Alexandrite laser treatment of tattoos. 13th annual meeting of the American Society for Laser Medicine and Surgery (April 1993) New Orleans

K. König (invited), H. Schneckenburger, A. Rück: The Nature and Role of Protoporphyrin Photoproducts: In Vitro and In Vivo. 21st Annual Meeting of the American Society for Photobiology (26.-30.6.93) Chicago, abstract: Photochem. Photobiol. 57(1993)76S-77S

W.H. Boehncke, K. König, A. Rück, K. Kaltoft, R. Kaufmann, W. Sterry: Inhibitory effects of photodynamic therapy on malignant transformed T cells suggest its potential in the treatment of cutaneous T cell lymphomas. Kongress der Arbeitsgemeinschaft Dermatol. Forschung, ADF. Mainz, 1992. Abstract: Arch Dermatol Res 285(1993)64-65.

R. Kaufmann, W-H Boehncke, K. König, R. Hibst: Comparative study of Q-switched Nd:YAG- and alexandrite laser treatment of tattoos. Congress of the American Society of Lasermedicine, New Orleans, 1993. Abstract: Laser Surg Med 1993, Suppl 5:54

W.H. Boehncke, K. König, W. Scheffold, W. Sterry: Application of photodynamic therapy in psoriasis. Tricontinental Meeting, Kyoto, 1993. Abstract: J Invest Dermatol 101(1993)465.

W. Sterry, K. König, A. Rück, R. Kaufmann, W-H Boehncke: Application of photodynamic therapy in mycosis fungoides. Tricontinental Meeting, Kyoto, 1993. Abstract: J Invest Dermatol 101(1993)464

W-H Boehncke, K. König, W. Scheffold, W. Sterry. Photodynamic therapy in psoriasis. Meeting of the Skin Pharmacology Society, Hongkong, 1993. Abstract: Skin Pharmacol.

W-H Boehncke, K. König, A. Rück, K. Kaltoft, R. Kaufmann, W. Sterry: Proliferationsinhibition einer menschlichen T-Zell Linie durch photodynamische und PUVA Therapie. Kongress der Deutsch. Gesellschaft für Lasermedizin, Münster. Abstract: Lasermedizin 8(1992)93

K. König, R. Hibst, H. Meyer, G. Flemming, H. Schneckenburger: Laser-induced autofluorescence of carious regions of human teeth and caries-involved bacteria. International Symposium on Biomedical Optics Europe '93, 1993, Sept 1-5, Budapest.

K. König, A. Kienle, W-H. Boehncke, R. Kaufmann, A. Rück, T. Meier, R. Steiner: Photodynamic tumour therapy and on-line fluorescence spectroscopy after ALA administration using 633 nm-light as therapeutic and fluorescence excitation radiation. International Symposium on Biomedical Optics Europe '93, 1993, Sept 1-5, Budapest.

K. König, G. Beck, R. Steiner: International Symposium on Biomedical Optics Europe '93, 1993, Sept 1-5, Budapest.

K. König, W-H. Boehncke, A. Rück, R. Kaufmann, R. Steiner, W. Sterry: Photodynamic effects on T-cells and skin lesions of a patient with mycosis fungoides using porphyrin photosensitizers. International Symposium on Biomedical Optics Europe '93, 1993, Sept 1-5, Budapest.

H. Schneckenburger, M. Gschwend, K. König, A. Rück, R. Sailer, W. Strauss: Subcellular distribution of photodynamic photosensitizers. International Symposium on Biomedical Optics Europe '93, 1993, Sept 1-5, Budapest.

A. Rück, W.H.Boehncke, K.König, K. Kunzi-Rapp, T.Meier, R.Kaufmann: Polychromatic vs. monochromatic PDT – comparative effects in vitro and in vivo. 10th Congress, International Society for Laser Surgery and Medicine, Bangkok, Thailand (1993).

H. Schneckenburger, K. König, T. Dienersberger, R. Hahn: Zeitaufgelöste Video-Mikroskopie und Mikrospektralanalyse. Internationaler Kongress Laser Medizin, München (1993).

A. Rück, K. König, W. Boehncke, C. Westphal-Frösch, R. Kaufmann, R. Steiner, W. Sterry: Photodynamic Therapy vs. Puva- A high Resolution Video-Microscopy Study of malignant transformed T cells. Universität Ulm (1993).

E. Reich, R. Bachor, K. Miller, K. König, D. Rêpàssy, R. Hautmann: Liposome-administered Tetramethylhematoporphyrin (TMHP) as a photodynamic agent, Budapest (September 1993)

1994:

K. König, K. Kunzi-Rapp, H. Schneckenburger, A. Rück: Natural and ALA stimulated autofluorescence and PDT of xenotransplanted tumors in the CAM of chicken embryos.(Poster), International Congress on Photobiology, Marburg, 1994, Sept., abstract: V-10/P 10

R. Sailer, W. Strauss, K. König, A. Rück, R. Steiner: Fluorescence properties and photodynamic inactivation of the gram-negative bacterium *Pseudomonas aeruginosa* in comparison to the amount of endogenous porphyrins. International Congress on Photobiology, Marburg, 1994, Sept., abstract: V-10/p15

H. Schneckenburger, K. König, T. Dienersberger, M. Gschwend: Time-gated microscopic imaging and spectroscopy in photobiology and medical diagnosis. International Congress on Photobiology, Marburg, 1994, Sept., abstract: VI-6/01

A. Rück, M. Gschwend, K. König, H. Schneckenburger, R. Sailer, W. Strauss: Photoproducts and formation of molecular species during PDT, International Congress on Photobiology, Marburg, 1994, Sept., abstract: V-2/03

H. Schneckenburger, K. König, T. Dienersberger, M. Gschwend: Time-gated microscopic imaging and spectroscopy in photobiology and diagnostics. UPS 93, 1993, Sept 26-30, Vilnius

A. Rück, W.H. Boehncke, K. König, K. Kunzi-Rapp, T. Meier, R. Kaufmann: Polychromatic vs. monochromatic PDT-comparative effects in vitro and in vivo. 10th Congress, International Society for Laser Surgery and Medicine, 1993, Nov 12-15, Bangkok, Thailand

K. König (invited), H. Schneckenburger: Laser-Induced Autofluorescence for Medical Diagnosis. Congress on Fluorescence. Prag, Febr. 1994

K. König, H. Schneckenburger, H. Walt, T. Leemann, M.T. Wyss-Desserich, A. Rück, B. Tromberg: Microscopic Studies on ALA-incubated tumor cells and tumor spheroids. 1994, Los Angeles, Jan 22-29, abstract: 2133-40

K. König, H. Schneckenburger, J. Hemmer, B. Tromberg, R. Steiner: In-vivo fluorescence detection and imaging of porphyrin-producing bacteria in the human skin and in the oral cavity

for diagnosis of acne vulgaris, caries, and squamous cell carcinoma. SPIE 1994, Los Angeles, Jan 22-29, abstract: 2135-16

K. König, H. Schneckenburger: Laser-induced dental caries and plaque diagnosis on patients by sensitive autofluorescence spectroscopy and time-gated video imaging. Preliminary studies. SPIE 1994, Los Angeles, Jan 22-29, abstract: 2128-64

K. König, H. Schneckenburger, A. Rück, R. König: Studies on Porphyrin Photoproducts in Solution, Cells, and Tumor Tissue. SPIE 1994, Los Angeles, Jan 22-29, abstract: 2133-39

K. König, H. Schneckenburger, H. Boehncke, R. Hibst: In vivo fluorescence spectroscopy and imaging of ALA-induced endogenous porphyrins in skin after Er:YAG ablation of stratum corneum. SPIE 1994, Los Angeles, Jan 22-29, abstract: 2128-38

A. Rück, W. Strauss, M. Gschwend, K. König, R. Sailer, R. Steiner, H. Schneckenburger: Photoproducts and new spectral bands during PDT probed by cw and time-gated microscopy and spectroscopy. SPIE 1994, Los Angeles, Jan 22-29, abstract.

H. Schneckenburger, K. König, K. Kunzi-Rapp, M. Gschwend: Zeitaufgelöste Untersuchungen zur Intrazellulären Verteilung und Licht-induzierten Reaktion von ALA-induziertem Protoporphyrin. 1. Münchner ALA-Workshop, 17./18.3.94, München

K. König: Laser-induced autofluorescence in medicine. International Conference: Lasers & Applications. Advances in science, medicine and technology, NILES 1994, Cairo, March 26-30, 1994

BJ. Tromberg, TB. Krasieva, SJ. Madsen, K. König: Principles of Laser Based Diagnostics. 14th Annual meeting of the American Society for Laser Medicine and Surgery, Ontario, April 8-10, 1994, abstract 305, Lasers Surg Med, Suppl 6, 1994, 58

K. König, T. Krasieva, B. Tromberg: Spectrally-resolved fluorescence imaging of porphyrin-producing bacteria in human skin. CLEO, May 8-13, 1994, Anaheim, abstract: CTuA3 in "Biomedical Optical Imaging"

BJ. Tromberg, C. Chapman, K. König, MW. Berns, Y. Liu, G. Sonek: Microirradiation effects on cells. Gordon Conference, New Hampshire, July, 1994

K. König, Y. Liu, GJ. Sonek, MW. Berns, BJ. Tromberg: Photoinduced modifications of cells in an optical trap. BIOS Europe '94, Lille, Sept 6-10, 1994, abstract: 2329-40

S. Kimel, K. König, MW. Berns: Photodynamic effects on human and chicken erythrocytes. SPIE-Proceedings, BIOS Europe '94, Lille, Sept 6-10, 1994, abstract: 2329-46

H. Schneckenburger, K. König, T. Dienersberger, R. Hahn: [Time-gated microscopic imaging and spectroscopy](#), SPIE (Jan 1994)

1995:

K. König: Fluorescence imaging and spectroscopy of motile sperm cells and CHO cells in an optical trap, SPIE '95, San Jose, Febr 4-10, 1995, abstract.

K. König, BJ Tromberg, MW Berns: One- and Two Photon Excited Fluorescence of Motile Cells in the Optical Trap, LASER 95, München

K. König, P. Fergin, MW. Berns, BJ. Tromberg: Spectrally-resolved Fluorescence Imaging of Skin after Topical ALA-Administration, LASER 95, München

K. König. Two-Photon Excited Autofluorescence in CHO Cells and Motile Spermatozoa. Third International Symposium on Innovative Fluorescence Methodologies in Biochemistry and Medicine. July 30-Aug 2, 1995, Kaanapali, Maui, Hawaii, USA

L. T. Norvang, E. J. Fisherstrand, K. König, B. Bakken, D. Grini, Standahl, T. E. Milner, M. W. Berns, J. S. Nelson, L. O. Svaasand: Comparison between reflectance spectra obtained with an integrating sphere and a fiber-optic collection system. BIOS Sept. 1995, Barcelona

K. König, P. So, W. W. Mantulin, E. Gratton, M. W. Berns, B. J. Tromberg: Two-Photon Excited Cellular Autofluorescence Induced by CW and Femtosecond NIR Microirradiation. BIOS Sept. 1995, Barcelona

K. König, T. Krasieva, E. Bauer, U. Fiedler, M. W. Berns, B. J. Tromberg: UVA-Induced Oxidative Stress Probed by Autofluorescence Imaging, Cloning Assay, and Comet Assay. BIOS Sept. 1995, Barcelona

K. König. NAD(P)H- and Porphyrin-Attributed Autofluorescence for Medical Diagnosis. Laser 95. Charleston, Dez. 95, South Carolina, USA

K. König. Continuous Wave Induced Two-Photon Excitation in Living Cells. SPIE. Jan. 1996. San Jose, Kalifornien

K. König: Multiphotonen-Effekte in der Lichtfalle. 60. Physikertagung der DPG. 11.-15.3.1996, Jena. (Interview mit dem Deutschlandfunk zu Fragen der Optischen Mikromanipulation von Vitalzellen anlässlich der Physikertagung, 14.3.96 (Sendung 15.3.96))

K. König, P. So, W.W. Mantulin, M.W. Berns, B.J. Tromberg, E. Gratton: Two-photon excited fluorescence in living cells. (Poster) Tripartite Meeting der Anatomischen Gesellschaft (91. Versammlung), Anatomical Society of Great Britain and Ireland, Nederlandse Anatomen Vereniging. 24.3.-27.3.1996, Jena.

K. König (invited): Two-photon excitation in a single motile sperm cell confined in an optical trap. Annual Meeting German Society for Cell Biology. 24.3.-28.3.1996, Hamburg.

K. König, P. So, W.W. Mantulin, E. Gratton: Cell damage in Two-Photon Microscopes. BiOS Sept 1996, Wien

K. König, L. Svaasand, Y. Tadir, B. Tromberg, M.W. Berns: Optical determination of motility forces in human spermatozoa with laser tweezers. BiOS Sept 1996, Wien

K. König: Two-photon femtosecond microscopy in living cells. 6th International Conference on Laser Applications in Life Sciences (LALS), Sept 1996, Jena

K. König, T. Krasieva, B. Tromberg, U. Diedler, E. Bauer, M.W. Berns, K.O. Greulich. UVA-induced oxidative stress in living cells. (Poster). 6th International Conference on Laser Applications in Life Sciences (LALS), Sept 1996, Jena

K.J. Halbhuber, K. König, Ch. Scheven, A. Aschoff, H. Feuerstein. Visualization of enzymatic primary reaction products by laser scanning microscopy. (Poster). 6th International Conference on Laser Applications in Life Sciences (LALS), Sept 1996, Jena

K. König, U. Simon, K.-J. Halbhuber. Three-Dimensional Two-Photon Femtosecond Fluorescence Microscopy using a modified Confocal Laser Scanning Microscope. 166. WE-Heraeus-Seminar: Multiphoton Photochemistry in Biological Systems. 28.-30.10.1996, Bad Honnef

K. König, S. Kimel, L.O. Svaasand, B. Tromberg, T. Krasieva, M.W. Berns, P. So, W.W. Mantulin, E. Gratton, K.J. Halbhuber: Cell damage in UVA and cw/femtosecond NIR microscopes. SPIE Photonics West Febr. 1997, San Jose, California

K. König. Zweiphotonenanregung vitaler Zellen mittels CW und Femtosekunden-NIR-Mikroskopie. 5. Kolloquium des DFG-Schwerpunktprogramms: Neue mikroskopische Techniken für Biologie und Medizin. 4.-6.3.1997, Rostock

König. Eigenfluoreszenz-Spektroskopie an lebenden Zellen: NADH als Bioindikator für Lichtstress. 1. Rostocker Biosystemtechnik-Symposium des Innovationskollegs: Komplexe und zelluläre Sensorsysteme. 6.-7.3.1997, Rostock

K. König, K.-J. Halbhuber: Zwei-Photonen-Femtosekundenmikroskopie vitaler Zellen. 13th International Congress LASER 97. Munich, June 1997.

K. König, H. Oehring, K.-J. Halbhuber, U. Fiedler, E. Bauer, K.O. Greulich. Comet assay, cloning assay, histochemistry, light- and electromicroscopy on one preselected cell. SPIE-EUROPTO'97, San Remo, 4.-8.9.97.

K. König. Laser tweezers as novel nonlinear tools in cell and biomolecule diagnostics. SPIE-EUROPTO'97, San Remo, 4.-8.9.97.

K. König, K.-J. Halbhuber. Multiphoton femtosecond microscopy of living cells. XXXIX. Symposium of the Society for Histochemistry, Jena, 24.-27.9.97, Abstract: Histochem. Cell. Biol. 108(1997)276.

K. König, P. So, W. Mantulin, M. Berns, B. Tromberg, E. Gratton. Two-photon excited fluorescence in living cells. XXXIX. Symposium of the Society for Histochemistry, Jena, 24.-27.9.97, abstract: Histochem. Cell. Biol. 108(1997)277.

K. König, M. Schüler, K.-J. Halbhüser. Autofluorescence of cells and tissues as a diagnostic tool. XXXIX. Symposium of the Society for Histochemistry, Jena, 24.-27.9.97, abstract: Histochem. Cell. Biol. 108(1997)277.

K. König. Two-photon effects in living cells. International Practical Course on Modern Laser Microscopy. Jena, 18.-21.11.1997.

K. König. How safe is the gamete micromanipulation by laser tweezers? Photonics West. SPIE-Tagung. 23.1.-30.1.1998, San Jose, California.

K. König, M. Teschke, W. Pfister, H. Meyer: Photodynamically inactivation of propionibacterium acnes. Photonics West. SPIE-Tagung. 23.1.-30.1.1998, San Jose

K. König. Photoproduct formation during porphyrin PDT. First World Congress of Photomedicine in Gynecology. 19.-21.2.98. Zurich.

K. König. Cell damage in UV and Multiphoton NIR microscopes. Scanning 98. 9.-12.5.98, Baltimore.

K. König, P. So, W.W. Mantulin, B. Tromberg, E. Gratton. Two-Photon Excitation in Living Cells. Deutsche Gesellschaft für Biophysik. Jahrestagung. 21.-23.9.1998, Frankfurt/M.

K.-J. Halbhüser, R. Krieg, K. König. Fluorescence laser microscopical demonstration of endogenous and immunobond phosphatase activity using metallo-azo dye complexes. 40. Symposium of the Society of Histochemistry. 22.-25.9.1998, Giessen.

K. König, P. Fischer, I. Riemann, K.-J. Halbhüser. Multiphoton-excited fluorescence in histochemistry. 40. Symposium of the Society of Histochemistry. 22.-25.9.1998, Giessen.

K. König, P. Fischer, I. Riemann, K.-J. Halbhüser. Femtosecond versus picosecond multiphoton microscopy. 23.-29.1.1999, San Jose, California.

K. König. Cloning assay thresholds on cells exposed to ultrafast laser pulses. 23.-29.1.1999, San Jose, California.

K. König, P. Fischer, I. Riemann, K.-J. Halbhüser. PDT by non-resonant two-photon excitation. 23.-29.1.1999, San Jose, California.

K. König. Nahe Infrarot Laserscanningmikroskopie an vitalen Zellen. Deutscher MTA-Kongress. 10.-12.3.1999, Mannheim.

K. König. Plenarvortrag: Cellular response to ultrashort laser pulses in multiphoton microscopes. Focus on Microscopy 1999. 11.-15.4.1999, Heidelberg.

K. König. Femtosecond multiphoton microscopy for cell and tissue diagnostics. Optical Society of America (OSA) Topical Meeting at Laser 99. 14.-16.6.1999. München.

K. König. Multiphoton near infrared microscopy: optical trapping, 4D microscopy, and nanosurgery. Third Conference on Fluorescence Microscopy and Fluorescent Probes. 20.-23.6.1999. Prag. Tschechische Republik.

K. König. Intracellular nanosurgery with compact femtosecond laser. 18. Congress of the International Commission for Optics (ICO XVIII): Optics for the next Millennium. 02.-06.8.1999, San Francisco, USA.

K. König. Anwendung optischer Mikroskopien in den Biowissenschaften. W.E. Heraeus Fereinkurs: Moderne Fernfeld- und Nahfeld- Mikroskopien. 20.9-01.10.1999, Chemnitz.

K. König, I. Riemann, P. Fischer, H. Oehring, Th. Becker, K.-J. Halbhüser. Apoptosis induced by continuous wave ultraviolet and red radiation as well as by near infrared femtosecond laser pulses. 41st Symposium of the International Society for Histochemistry. 22.9.-25.9.1999, Gargellen, Austria.

K.-J. Halbhüser, K. König. 41st Symposium of the International Society for Histochemistry. 22.9.-25.9.1999, Gargellen, Austria.

Oehring, K. König. (Poster). 41st Symposium of the International Society for Histochemistry. 22.9.-25.9.1999, Gargellen, Austria.

K. König, I. Riemann, W. Fritzsche, P. Fischer, K.-J. Halbhuber. Intracellular nanosurgery with femtosecond laser pulses. Jahrestagung der Deutschen Gesellschaft für Biophysik. 03.-06.9.1999, Ulm.

K. König. Multiphoton femtosecond laser microscopy for 4D fluorescence diagnostics and nanosurgery of living cells.. XI International Symposium "Ultrafast Phenomena in Spectroscopy (UPS '99)", 25.-29.10.1999, Taipei, Taiwan, ROC.

K. König. Intracellular nanosurgery using near infrared femtosecond laser pulses. Focus on Microscopy 2000 (FOM2000). 09.-13.4.2000, Shirahama, Japan.

K. König. Intracellular nanosurgery using near infrared femtosecond laser pulses. OPTO und IRS2. 9-11.5.2000, Erfurt.

K. König, I. Riemann, W. Fritzsche, U. Tirlapur, P. Fischer, K.J. Halbhuber. Nanochirurgie mittels NIR-Femtosekundenlaser-Lasermikroskopie. 101. Tagung der Deutschen Gesellschaft für angewandte Optik. 13.-17.7.2000, Jena (mit Beteiligung von Japan, Österreich, Schweiz).

K. König, I. Riemann, A. Göhlert, P. Fischer, T. Liehr, I.F. Loncarevic, U. Claussen, K.J. Halbhuber. Multiphoton Multicolor FISH. SPIE-EBIOS 2000, 04.-08.7.2000, Amsterdam.

K. König. Multiphoton Microscopy to study macromolecules in living cells. Cordon Research Conference on Macromoleuclar Organization and Cell Function, 06.-11.8.2000, Oxford, U.K.

K. König, C. Peuckert, I. Riemann, U. Wollina. Non-invasive 3D optical biopsy of human skin with NIR femtosecond laser pulses for diagnosis of dermatological disorders. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

K. König, U. Tirlapur, C. Peuckert, I. Riemann, A. Bergmann, W. Becker. Time-resolved two-photon fluorecence imaging of living cells and tissues. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

C. Peuckert, I. Riemann, U. Wollina, K. König. (Poster) Remission microscopy with near femtosecond laser pulses for 3D in vivo imaging of human skin. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

C. Peuckert, I. Riemann, K. König. Two-photon induced autofluorescence of in vivo human skin with femtosecond laser pulses - a novel imaging tool of high spatial, spectral and temporal resolution. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

A. Göhlert, I. Riemann, T. Liehr, I.F. Lomcarevic, U. Claussen, K.H. Halbhuber, K. König. (Poster). Multiphoton multicolor FISH (MM-FISH): A verstaile technique to detect specific sequences within single DNA molecules. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

M. Rothammel, M. Teschke, W. Pfister, K.J. Halbhuber, K. König. (Poster) Inactivation of Porphyromonas gingivalis by red light evaluated by laser scanning microscopy. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000.

I. Riemann, A. Göhlert, U. Claussen, K.J. Halbhuber, K. König. Three dimensional imaging of specific DNA sequences in cells and tissues by multiphoton multicolor FISH using near infrared femtosecond laser pulses. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

U.K. Tirlapur, K. König. Multiphoton microscopy in plant cells. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

N. Rubtsov, I. Riemann, V. Trifonov, T. Karamysheva, T. Liehr, U. Claussen, K. König. (Poster) Chromosome microdissection using NIR femtosecond laser pulses and generation of band specific DNA-libraries with DOP-PCR. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

M. Wiederhold, U.K. Tirlapur, K. König, S. Russwurm (Poster). Association of procalcitonin in HEPG2 cells studied with confocal laser scanning microscopy. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

U.K. Tirlapur, K. König, R. Krieg, K.J. Halbhuber. Femtosecond NIR laser pulses elicit generation of ROS in marsupial cells leading to apoptosis-like cell death. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

M. Wiederholt, I. Riemann, S. Russwurm, K. König. (Poster). The uptake of fluoresceinisothiocyanate-lipopoly-saccharide by cultivated human mononuclear cells using two-photon fluorescence microscopy. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

K. König, U. Tirlapur, I. Riemann, W. Fritzsche. Nanosurgery of chromosomes, living cells and tissues with femtosecond laser pulses in the near infrared. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

D. Volkmann, U.K. Tirlapur, K. König, T. Mori, T. Fujiwara, F. Baluska. Plant plasmodesmata:myosin VIII-supported cell-to-cell channels for macromolecular trafficking. 3rd World Conference on Cellular and Molecular Biology, 08.-13.10.2000, Jena.

K. König. Diagnosis and knocking out of genomic regions with multiphoton microscopes. SPIE-Photonics West 2001. San Jose, California.

K. König. Time-resolved multiphoton microscopy. First symposium on FRET and FLIM: Advanced fluorescence techniques for biological imaging. 08.-10.6.2001. Austin, Texas.

K.König. Multiphoton microscopy of cells and tissues. European Conference on Biomedical Optics. Laser 2001. 17.-20.6.2001, München.

K. König, O. Krauss, I. Riemann, D. Schweitzer. Poster. Corneal surgery with 80 MHz nanojoule femtosecond laser pulses in the near infrared. European Conference on Biomedical Optics. Laser 2001. 17.-20.6.2001, München.

K. König. Optical biopsy with femtosecond laser pulses: in vivo skin diagnostics and 3D gene imaging with submicron resolution. 47th Annual Paediatric Pathology Society Meeting. 13.-15.9.2001. Warsaw, Poland.

I. Riemann, A. Göhlert, T. Liehr, I.F. Loncarevic, U. Claussen, K.J. Halbhuber, K. König. Poster. 3D imaging of specific DNA sequences in cells, tissues and within single DNA molecules with multiphoton multicolor FISH (MM-FISH). 43rd Symposium of the Society for Histochemistry. 26.-29.9.2001, Vienna, Austria.

R. Krieg, U.K. Tirlapur, K. König, C. Peuckert, K.J. Halbhuber. Poster. In situ localization of femtosecond near-infrared laser induced ROS with a new NLO fluorochrome after two-photon excitation at 800 nm. 43rd Symposium of the Society for Histochemistry. 26.-29.9.2001, Vienna, Austria.

K. König. Möglichkeiten der intrastromalen Hornhautchirurgie mit Femtosekunden-Laserpulsen. 99. Tagung der Deutschen Ophthalmologischen Gesellschaft (internationale Beteiligung). 29.9.-02.10.2001, Berlin.

K. König. Optical tomography of human skin with subcellular spatial and picosecond time resolution using intense near infrared femtosecond laser pulses. 3rd International Symposium Lasers in Dermatology. 01.-02.10.2001, Ulm.

K. König, U. Wollina, I. Riemann, C. Peuckert, K.J. Halbhuber, V. Fünfstück, T.W. Fischer, P. Elsner. Optical tomography of human skin with subcellular spatial and picosecond time resolution. SPIE-Photonics West 2002. 19.-25.1.2002, San Jose, California.

K. König, I. Riemann, O. Krauss, W. Fritzsche. Nanodissection of human chromosomes and ultraprecise eye surgery with nanojoule near infrared femtosecond laser pulses. SPIE-Photonics West 2002. 19.-25.1.2002, San Jose, California.

K. König. Fluorescence Lifetime Imaging. Focus on Microscopy 2002. April 2002. Kaohsiung, Taiwan.

K. König, O. Krauss, I. Riemann. Optical Tomography of the Eye by Multiphoton Autofluorescence and SHG Imaging. 100. Tagung der Deutschen Ophthalmologischen Gesellschaft (internationale Beteiligung). 26.9.-29.9.2001, Berlin.

O. Krauss, I. Riemann, K. König. Intrastromal surgery of the cornea with 80 MHz nanojoule femtosecond laser pulses in the near infrared. 100. Tagung der Deutschen Ophthalmologischen Gesellschaft (internationale Beteiligung). 26.9.-29.9.2001, Berlin.

K. König. Photonics West 2003, Jan.

K. König, FOM2003. April 12-19, 2003. Genua, Italy.

K. König, Skin. May 21-24, 2003. Hamburg, Germany

K. König. Biomedical Optics, Laser2003, June 24-25, 2003. Munic, Germany.

K. König, July 21-23, 2003. Banff, Canada.

K. König. Imaging and manipulation on a micron scale. Microscopes, Laser Tweezers, Multiphoton Effects. Graduate Summer Scholl Bio-Photonics `03, June 15-21, 2003, Ven, Sweden.

K. König. Femtosecond Lasers in Dermatology. The 87th OSA Annual Meeting: Frontiers in Optics. Laser Science XIX. Oct 5-9, 2003, Arizona, Florida

I. Riemann, E. Dimitrow, P. Fischer, A. Reif, M. Kaatz, P. Elsner, K. König. High resolution multiphoton tomography of human skin in vivo and in vitro. SPIE-Photonics West 2004, 24.-29.01.2004, San José, USA.

K. König: Multiphoton Fluorescence/SHG imaging of cells, skin and heart tissue. Berkeley W. Becker, A. Bergmann, G. Biscotti, K. König. High-Speed FLIM Data Acquisition by Time-Correlated Single Photon Counting. SPIE-Photonics West 2004, 24.-29.01.2004, San José, USA.

K. Schenke-Layland, I. Riemann, U. A. Stock, K. König. Non-invasive multiphoton imaging of cardiovascular structures using NIR femtosecond laser scanning microscopy. PIE-Photonics West 2004, 24.-29.01.2004, San José, USA.

A. Czaki, G. Maubach, F. Garwe, A. Bochmann, K. König, W. Fritzsche. Poster: Metal nanoparticles for nanooptics and nanoanalytics. SPIE-Photonics West 2004, 24.-29.01.2004, San José, USA.

M. Kaatz, J. Fluhr, E. Dimitrow, P. Elsner, I Riemann, J. Kobow, K. König. Monitoring of the accumulation and pharmacokinetics of fluorescent dyes through the stratum corneum by high-resolution multiphoton tomography. Stratum Corneum, May 19, 2004.

I. Riemann, K. König. High Resolution Multiphoton Tomography of the Epidermis with Submicron Resolution. Stratum Corneum, May 19, 2004.

K. König: Femtosecond laser application in biotechnology and medicine. The 5th International Symposium on Laser Precision Microfabrication, 11.-14. Mai 2004 in Nara, Japan (2004).

K. König. 1) Photodamage during light microscopy. 2) Multiphoton microscopy. International Summer School on Microscopy, Vancouver, Canada

T. Velten, H. Schuck, I. Riemann, F. Bauerfeld, D. Sauer, K. König. Time-Resolved and Spectrally-Resolved 5D Multiphoton Microscopy for Analysis and Nanoprocessing of Biological and Non-Biological Materials. LANE 2004, 21.-24.09.2004, Erlangen, Germany.

I. Riemann, K. König. High-resolution multiphoton tomography of human skin in vivo and in vitro. Photonics Europe, 26.-30. April 2004, Straßburg, France.

K. Schenke-Layland, F. Opitz, I. Riemann, U.A. Stock. Multiphoton imaging of cardiovascular structures. Photonics Europe, 26.-30. April 2004, Straßburg, France.

V. Ulrich, P. Fischer, E. Haupt, I. Riemann, K. König. Spectral Imaging and fluorescence lifetime imaging with a compact. Photonics Europe, 26.-30. April 2004, Straßburg, France.

K. König, F. Fischer, P. Fischer, S. Puschmann, I. Riemann, V. Ulrich, R. Wepf. Characterization of multiphoton laser scanning microscope optical parameters. Photonics Europe, 26.-30. April 2004, Straßburg, France.

K. König, G. Maubach, A. Csaki, W. Fritzsche. Specific cutting of DNA with NIR fs-laser. Photonics Europe, 26.-30. April 2004, Straßburg, France.

K. König, F. Garwe, O. Krauss, B. Wang, W. Fritzsche, I. Riemann. Nanoprocessing of DNA, cells and tissues. Photonics Europe, 26.-30. April 2004, Straßburg, France.

B. Wang, I. Riemann, H. Schubert, K. König. Intraocular optical tomography of the cornea in vitro and in vivo. Photonics Europe, 26.-30. April 2004, Straßburg, France.

K. Schenke-Layland, I. Riemann, V. Ulrich, F. Opitz, U.A. Stock, K. König. Multiphoton Imaging of collagen and elastin of native and tissue-engineered heart valves. Photonics Europe, 26.-30. April 2004, Straßburg, France.

K. König, F. Garwe, O. Krauss, B. Wang, W. Fritzsche, I. Riemann. Nanoprocessing of DNA, cells and tissues. Photonics Europe, 26.-30. April 2004, Straßburg, France.

B. Wang, I. Riemann, H. Schubert, K. König. Intraocular optical tomography of the cornea in vitro and in vivo. Photonics Europe, 26.-30. April 2004, Straßburg, France.

K. König. Transfection and nanosurgery with 80 MHz femtosecond lasers. Photonics Europe, 26.-30. April 2004, Straßburg, France.

K. König. Multiphoton microscopy and tomography of human skin. FOM2004, Philadelphia, USA

K. König. Lasertechnik: konventionell und photodynamisch. Internet-Übertragung. Zurich, Switzerland

K. König, I. Riemann, A. Ehlers, J. Kobow. In vivo non-invasive multiphoton tomography of human skin with subcellular resolution to detect bio- and chemohazards. SPIE Conference on Defence, Oct 10, 2004, London, UK

K. König. In vivo confocal microscopy of the skin and its application in cosmetology. International Society for Bioengineering and the Skin. Oct 28-30, 2004, Orlando, FL, USA

K. König. Multiphoton laser microscopy with compact femtosecond lasers. Biomaterials 2004, Nov 4-5, 2004, Erfurt, Germany

K. König. Plenary talk sponsored by Coherent Inc. In vivo multiphoton tomography of skin cancer. The 8th International Conference on Optics Within Life Sciences (OWLS8), Nov 28- Dec 1, 2004, Melbourne, Australia

K. König. Multiphoton tomography with subcellular resolution. First Scientific Skin Workshop, Jan 14-15, 2005, Reyjakvik, Iceland

K. König. In vivo multiphoton time-resolved fluorescence/SHG imaging in human skin. International Workshop: Advanced optical methods: molecular machines to cells. Molecular Imaging Center, Nanomedicine Center Initiative, University of California, Jan 20-21, 2005, Berkeley, USA.

A. Czaki, G. Maubach, F. Garwe, A. Steinbrück, K. König, W. Fritzsche. A novel DNA restriction technology based on laser pulse energy conversion on sequence-specific bound metal nanoparticles. Photonics West, Jan 22-27, 2005, San Jose, USA

W. Fritzsche, A. Czaki, A. Steinbrück, F. Garwe, K. König, M. Raschke. Metal nanoparticles as passive and active tools for bioanalytics. Photonics West, Jan 22-27, 2005, San Jose, USA

T. Anhut, K. Hassler, T. Lasser, K. König, R. Rigler. Fluorescence Correlation Spectroscopy on dielectric surfaces in total internal reflection geometries. Photonics West, Jan 22-27, 2005, San Jose, USA

B. Wang, I. Riemann, H. Schubert, S. Kirste, K. König. In vivo animal follow-up studies on intrastromal surgery with near infrared nanojoule femtosecond laser pulses. Poster. Photonics West, Jan 22-27, 2005, San Jose, USA

K. König, I. Riemann, H. Schuck, D. Sauer, T. Velten, R. LeHarzic. Time-resolved and spectrally resolved 5D multiphoton microscopy for analysis and nanoprocessing of materials. Photonics West, Jan 22-27, 2005, San Jose, USA.

I. Riemann, A. Ehlers, A. Reif, J. Kobow, K. König. In vivo multiphoton tomography of skin as a tool to study the effects of topically applied probes and UV exposure. Photonics West, Jan 22-27, 2005, San Jose, USA

I. Riemann, T. Anhut, F. Stracke, R. LeHarzic, K. König. Multiphoton nanosurgery in cells and tissues. Photonics West, Jan 22-27, 2005, San Jose, USA

I. Riemann, E. Dimitrow, M. Kaatz, J. Fluhr, P. Elsner, J. Kobow, K. König. In vivo multiphoton tomography of inflammatory tissue and melanoma. Photonics West, Jan 22-27, 2005, San Jose, USA

K. König, B. Wang, I. Riemann, J. Kobow. Cornea surgery with nanojoule femtosecond laser pulses. Photonics West, Jan 22-27, 2005, San Jose, USA

W. Becker, K. König. Fluorescence lifetime images and correlation spectra obtained by multi-dimensional TCSPC. Photonics West, Jan 22-27, 2005, San Jose, USA

K. König. From a physics point of view: Are femtosecond lasers safe for ophthalmic applications? 6th International Congress of Wavefront Sensing&Optimized Refractive Corrections. Feb 11-13, 2005. Athens, Greece

T. Anhut, I. Riemann, K. König. Nonlinear laser-scanning-microscopy and microprocessing of biological and technical materials using a new diode-pumped solid state femtosecond laser with cavity dumping. European Conference on Biomedical Optics (ECBO)2005, World of Photonics Congress 2005, June 12-17, 2005, Munich.

K. König (Tutorial). Multiphoton tomography and nanoprocessing of biological targets with near-infrared femtosecond laser pulses. European Conference on Biomedical Optics (ECBO)2005, World of Photonics Congress 2005, June 12-17, 2005, Munich.

R. Le Harzic, H. Schuck, T. Anhut, F. Bauerfeld, D. Sauer, T. Velten, K. König. Processing of polymers and silicon by means of a laser scanning microscope. Lasers in Manufacturing LIM 2005. World of Photonics Congress 2005, June 12-17, 2005, Munich.

M. Hild, M. Krause, P. Mestres, K. König, K. Ruprecht, I. Riemann. Experimental intraretinal tissue ablation using fs laser pulses. Lasers in Manufacturing LIM 2005. World of Photonics Congress 2005, June 12-17, 2005, Munich.

K. König, I. Riemann, G. Maubach, W. Fritzsche, F. Garwe, A. Czaki. Nanoprocessing of DNA with fs laser. Lasers in Manufacturing LIM 2005. World of Photonics Congress 2005, June 12-17, 2005, Munich.

R. Le Harzic, B. Wang, KJ. Halbhuber, H. Schubert, K. König, I. Riemann. Intrastromal ablation with near infrared femtosecond nanojoule laser pulses. Lasers in Manufacturing LIM 2005. World of Photonics Congress 2005, June 12-17, 2005, Munich.

R. LeHarzic, S. Martin, A. Ehlers, I. Riemann, K. König. DermaInspect: In vivo high resolution multiphoton tomography of human skin. 15th Annual Meeting of the German Society of Lasermedicine. World of Photonics Congress 2005, June 12-17, 2005, Munich.

K. König, J. Kobow, R. LeHarzic, S. Martin, I. Riemann. Taumap: A system for fluorescence lifetime imaging with submicron spatial resolution. 15th Annual Meeting of the German Society of Lasermedicine. World of Photonics Congress 2005, June 12-17, 2005, Munich.

R. LeHaric, S. Martin, J. Kobow, K. König. Femtocut: A system for nanoprocessing with femtosecond laser pulses. 15th Annual Meeting of the German Society of Lasermedicine. World of Photonics Congress 2005, June 12-17, 2005, Munich.

I. Riemann, Andreas Killi, T. Anhut, R. Le Harzic, Uwe Morgner, K. König. Imaging and nanosurgery of biological specimen with a new diode pumped femtosecond laser at a wavelength of 1040 nm. Lasers in Manufacturing LIM 2005. World of Photonics Congress 2005, June 12-17, 2005, Munich.

K. König. Multiphoton tomography of human skin. 32nd Annual meeting of the Controlled Release Society, June 18-22, 2005, Miami, USA.

I. Riemann, A. Ehlers, E. Dimitrow, M. Kaatz, J. Fluhr, P. Elsner, J. Kobow, K. König. High resolution multiphoton tomography of skin and hairs to study structural changes and pharmacokinetics of topically applied probes in vivo and in vitro. IVth World Congress of the International Academy of Cosmetic Dermatology (IACD), July 2-5, 2005, Paris, France. Abstract: Les Nouvelles Dermatologiques 24(2005)48.

K. König, I. Riemann, A. Ehlers, M. Kaatz, P. Elsner. High resolution in vivo multiphoton tomography of melanoma. 6th World Congress on Melanoma. Sept 6-10,2005, Vancouver, Canada.

102. I. Riemann, E. Dimitrow, M. Kaatz, J. Fluhr, P. Elsner, J. Kobow, K. König. In vivo multiphoton tomography of skin to study accumulation and pharmacokinetics of topically applied probes. SPIE-Proceed. 2005.
87. K. König, D. Sauer, I. Riemann, R. Le Harzic. Nanoprocessing of polymers, semiconductors and metals with nJ femtosecond laser pulses. SPIE-Proceedings, vol. 5989 (2005) 189-198.
93. W. Becker, A. Bergmann, G. Biscotti, K. König, I. Riemann, L. Kalbauskas, C. Biskup. High-speed FLIM data acquisition by time-correlated single photon-counting. SPIE-Proceedings, vol. 5323: Multiphoton microscopy in the biomedical sciences IV (2005) 27-35.
- K. König, I. Riemann, R. LeHarzic. In vivo Multiphoton Tomography of Human Skin with Subcellular Resolution to Detect Bio- and Chemohazards. SPIE Conference on Security and Defence. Sept 2005, Brugge, Belgium.
- K. König, D. Sauer, I. Riemann, R. Le Harzic. Nanoprocessing of polymers, semiconductors and metals with nJ femtosecond laser pulses. SPIE Conference on Security and Defence. Sept 2005, Brugge, Belgium.
- K. König, I. Riemann, C. Huss, M. Krause, B. Wang, R. LeHarzic. Multiphoton microscopy. EVER 2005, Oct 5-8, 2005, Vilamoura, Portugal. Abstract: Ophthalmic Research 37 S1(2005)124.
- K. König. Poster. High-resolution multiphoton tomography of human skin with subcellular spatial resolution and picosecond time resolution. SPIE Conference on Laser Applications in Europe, Nov 2005, Dresden, Germany.
- K. König, I. Riemann, A. Ehlers. Multiphoton Tomography of skin cancer. Photonics West 2006, 23.01.2006, San José, USA.
- W. Becker, A. Bergmann, K. König, C. Biskup. Multispectral fluorescence lifetime imaging by TCSPC. Photonics West 2006, 23.01.2006, San José, USA.
- A. Ehlers, I. Riemann, T. Anhut, M. Kaatz, P. Elsner, K. König. Fluorescence lifetime-imaging of human skin and hair. Photonics West, 2006, 23.01.2006, San José, USA.
- I. Riemann, F. Stracke, D. Sauer, S. Martin, K. König. Multiphoton nanosurgery in cells and tissues. Photonics West 2006, 24.01.2006, San José, USA.
- K. König. Multiphoton imaging of human skin. 64th Annual Meeting, American Academy of Dermatology, March 3-7, 2006, San Francisco, USA.
- K. König, I. Riemann, F. Stracke, R. LeHarzic. Nanoprocessing with nanojoule near-infrared femtosecond laser pulses. Focus on Microscopy FOM2006, 10.04.2006, Perth, Australia.
- K. König. Two-photon excited optical tomography of human skin. 1st Annual Advanced Optical Methods Workshop, May 26-28, 2006, Shenzhen University, China.
- K. König. Clinical two-photon microscopy. International Workshop on Advanced Fluorescence Lifetime Microscopy. June, 2006, St. Ingbert, Germany.
- M. Kaatz, I. Riemann, K. König. Multiphoton tomography of melanoma.
- A. Uchugonova, K. König. Poster. International Workshop on Advanced Fluorescence Lifetime Microscopy. June, 2006, St. Ingbert, Germany.
- K. König. Multiphoton Analysis and Nanostructuring with the Femtosecond Laser Microscope FemtOcut. The 3rd International Nanophotonics Symposium Handai. Nano Biophotonics, July 6-8, 2006, Icho-kaikan, Osaka University, Japan.
- K. König. Research Activities of the Fraunhofer Society in Life Sciences. 25.-29.09.2006, St. Petersburg, Russia.
- K. König. In vivo non-invasive Multiphoton Tomography of Human Skin with Subcellular Spatial and Picosecond Time Resolution. 12th NSRRC User Meeting & Workshops. October 3-4, 2006, Hsinchu, Taipei, Taiwan.
- Ehlers, K. König. In vivo Multiphoton-Endoscopy based on a GRIN-lens. EOS 2006, 18.10.2006, Paris, France.
- K. König. Poster. Multiphoton tomography in medicine using femtosecond lasers. EOS 2006, 18.10.2006, Paris, France.

K. König. Time-resolved autofluorescence imaging of human skin. International FLIM workshop, Berkeley, January 2007

K. König. Two-photon endoscopy. Photonics West 2007, Jan 2007, San José, USA

K. König. Optical nanoprocessing of biomaterials using fs lasers. ESF-FWF Conference in Partnership with LFUI. Trends in optical micromanipulation. Febr 4-7, 2007, Universitätszentrum Obergurgl, Ötz Valley, Austria

K. König. Multiphoton Tomography and Femtosecond laser nanoprocessing. Focus on Microscopy. FOM 2007, April 09-13, 2007, Valencia, Spain

R. LeHarzic, Nanostructuring with nanojoule femtosecond laser pulses. 8th International Symposium on Laser Precision Microfabrication (LPM2007). April 24-28, 2007, Vienna, Austria.

R. LeHarzic, C. Wüllner, C. Donitzky, K. König. New developments in Femtosecond laser refractive eye surgery: towards even more efficiency and safety. 2nd International Conference on Femtosecond Lasers in Ophthalmology. June 1, 2007, Montreal, Canada.

K. König. State of the art multiphoton tomography and microendoscopy. International Workshop on Advanced Fluorescence Lifetime Microscopy. June, 2007, Saarbrücken, Germany

K. König, High-resolution imaging of human skin. Munic 2007

K. König. Multiphoton Diagnostics in Medicine. Topical Problems of Biophotonics-2007, August 4-11, 2007, Nishni Novgorod-Moscow, Russia

K. König, I. Riemann, F. Stracke, A. Uchugonova, R. Bückle, R. LeHarzic, K. Schenke-Layland, M. Kaatz, P. Elsner. Multiphoton tomography in medicine using femtosecond lasers. 12th Congress of the European Society for Photobiology ESP 2007, Sept 1-6, 2007, Bath, England

K. König, I. Riemann, F. Stracke, A. Uchugonova, R. Bückle, R. LeHarzic, K. Schenke-Layland, M. Kaatz, P. Elsner. Multiphoton tomography in medicine and nanoprocessing using femtosecond lasers. Advanced Laser Technologies ALT'07, Sept 3-7, 2007, Levi, Finland

K. König, I. Riemann, F. Stracke, A. Uchugonova, R. Bückle, R. LeHarzic, K. Schenke-Layland, M. Kaatz, P. Elsner. Multiphoton tomography in medicine using femtosecond lasers. 1st workshop Looking skin deep – clinical and technical aspects of skin imaging. Sept 6-7, 2007, Göteborg, Sweden

K. König. Time-resolved single photon counting for multidimensional multiphoton skin tomography with submicron spatial resolution, sub-300ps temporal resolution and 10nm spectral resolution. SPIE Optics East, Sept 7-12, 2007, Boston.

K. König. Clinical Time-resolved multiphoton tomography. 1st Boston Workshop on Advanced TCSPC Techniques. Sept 13-14, 2007, Boston

K. König. Femtosecond laser nanomedicine. 105. DOG (Deutsche Ophthalmologische Gesellschaft) Kongress 2007. 20. Sept, Berlin

K. König. Femtosecond lasers for high resolution imaging and nanoprocessing of tissues. Optics and Laser Applications in Medicine and Environmental Monitoring for Sustainable Development. Nov 19-24, 2007, University of Cape Coast, Cape Coast, Ghana.

K. König. Clinical multiphoton tomography and multiphoton endoscopy. International FLIM workshop. Berkeley, January 2008.

K. König. Multiphoton tomography for tissue engineering. Photonics West 2008.

K. König, V.K. Pustovalov, L.G. Astafyeva, W. Fritzsche. Optical properties of core-shell gold-silver and silver-gold nanoparticles for some laser wavelengths. Photonics West 2008.

K. König, J. Müller, M. Höfer, C. Müller, M. Weinigel, R. Bückle, P. Elsner, M. Kaatz, B. Messerschmidt. Two-photon scanning systems for clinical high-resolution in vivo tissue imaging. Photonics West 2008.

K. König, V.K. Pustovalov, L.G. Astafyeva. Distributions of laser radiation intensity inside gold nanoparticles during laser radiation. Photonics West 2007

K. König. Einsatz der Multiphotonen-Tomographie (Spektroskopie) zur Untersuchung der Penetration von kosmetischen Produkten. Jahrestagung der Gesellschaft für Dermatopharmazie. April 2008, Berlin.

K. König. Clinical Molecular Imaging using Multiphoton Tomography and Two-Photon Microendoscopy. Europhotonics. April 2008. Strassburg, France
K. König. Hybrid Multiphoton/CARS tomography for small animal research and in vivo clinical applications. Advanced Imaging Methods Workshop. Berkeley, Jan 18-20, 2012.
K. König. Talk and poster. Clinical multiphoton tomography of malignant melanoma. American Academy of Dermatology. March 2012, San Diego.
A. Uchugonova, K. König. Talk and poster. High-resolution non-invasive multiphoton tomography. American Academy of Dermatology. March 2012, San Diego.
A. Uchugonova, K. König, R. Hoffmann. Talk and poster. Bacterial tumor targeting studied by multiphoton tomography. American Academy of Dermatology. March 2012, San Diego.

Internationale Seminare

"Time-resolved and time-gated spectroscopy and imaging in cancer diagnosis" Hamamatsu, Japan, September 1992.
"Laser-induced fluorescence of ALA-induced endogenous porphyrins" Wellman Labs/Harvard University, Boston, USA, Januar 1993
"Photodynamic Tumor Therapy" Universitätsspital Zürich, Schweiz, Mai 1993
"Laser-induced diagnosis and imaging of dental caries" Ravenswood Hospital, Chicago, USA, Juni 1993
"Photodynamic activity of porphyrin photoproducts" Royal Military College, Kingston, Canada, Juni 1993
"Laser-Induced Autofluorescence" Beckman Laser Institute, Irvine, California, USA, Oktober 1993
"Cell Damage Induced by Near Infrared Microbeams" Dept. of Physics, LFD, Univ. of Illinois, Urbana-Champaign, USA, 11.8.95
"Cell Damage in Two-Photon Microscopes" Firma Spectra Physics, Mountain View, California, USA, Dezember 1995
"Multi-Photon Excitation in Living Cells" Lawrence Livermore National Laboratory, Livermore, California, USA, 26. Januar 1996
"Cell Damage by NIR microbeams" Firma Coherent, Santa Clara, California, USA, 30. Januar 1996
"Two-Photon Excitation in Living Cells by CW and Femtosecond NIR laser beams" Beckman Laser Institute, Irvine, California, USA, 1. Februar 1996
"Femtosecond Two-Photon Microscopy" Karolinska Institute (Prof. Rigler), Stockholm, August 1997
"Two-Photon Excitation in Living Cells" Massachusetts Institute of Technology (MIT), Cambridge, USA, 5.2.1998
"3D Mikroskopie mit gepulstem NIR Laser" Universität Zürich, 23.6.98
"Near infrared lasers for optical trapping, three dimensional data storage/imaging, and nanosurgery". Massachusetts Institute of Technology (MIT), Cambridge, USA, 17.9.98.
„Nanosurgery of chromosomes“ Beckman Laser Institute, Irvine, California, USA, 16. August 1999
„Multiphoton Microscopy: Fluorescence imaging and Nanosurgery" Laser Medical Center, Portland, Oregon, USA, 23. August 1999
„Femtosecond Lasers in Medicine and Biotechnology“ Academy of Sciences, Hanoi, Vietnam, April 2002
„Multiphoton Effects for 5D Diagnostics and Nanoprocessing of biomolecules“ MIT, Cambridge/Boston, USA, 04.07.2002

„Nanosurgery with Femtosecond Lasers“ Beckman Laser Institute and Medical Clinic of UCI, Irvine, USA, 17.07.2002
“Optical Gene Transfer with Femtosecond Lasers” CalTech, Pasadena, USA, 19.07.2002
“Femtosecond laser microscopes for targeted transfection” National Institute on Deafness and Other Communication Disorders, NIH, Rockville, Maryland, USA, March 2, 2003
“Femtosecond lasers in nanobiotechnology, cell biology and medicine. Firma , Forster City, CA, USA
“Near Infrared femtosecond laser pulses for optical gene transfer, gene diagnostics and multiphoton tomography of skin cancer” Tel Aviv, Israel, April 14, 2004
„Femtosecond lasers in nanobiotechnology and biomedicine” Tel Aviv, Israel, April 18, 2004
„Femtosecond lasers in nano lasermedicine“ Vilnius, Lithuania, July 28, 2005
“Multiphoton tomography for melanoma detection” Brisbane, April 2006
“Femtosecond laser nanolithography” Osaka, June 2006
“Two-photon microendoscopy and nanoprocessing with femtosecond laser pulses” Cambridge, MIT, 12.9.2007
„Laser-Tissue interactions“ African Workshop on Laser Applications. University of Cape Coast, Ghana, 25.11.2007
“Multiphoton microscopy for stem cell imaging and targeted transfection” Los Angeles, UCLA, January 2008

Patente

1. W. Dietel, K. König: Anordnung zur Photochemotherapie, Phototherapie und Fluoreszenzdiagnostik. DD 254139
2. K. König, W. Dietel: Verfahren zur Herstellung eines Arzneimittels für die thermische Behandlung von tumorösem Gewebe. DD 259351
3. K. König, V. Bockhorn, W. Dietel: Verfahren zur Herstellung eines Arzneimittels zur photochemotherapeutischen Behandlung, gleichzeitiger Diagnose und Grading-Bestimmung. DD 272033
4. R. König, J. Lademann, K. König: Anordnung zur Photochemotherapie und Fluoreszenzdiagnostik. DD 262363
5. K. König. Verfahren zur Herstellung eines Arzneimittels für die photodynamische Behandlung von Tumorerkrankungen. DD 286507
6. R. Hibst, K. König: Einrichtung zum Erkennen von Karies an Zähnen. Deutsche Patentanmeldung 14.01.92/ DE 42 00 741. Europäische Patentanmeldung 13.1.93/ EP 0555645 A1 Anmelder: Kaltenbach&Voigt GmbH&CO
7. K. König, B. Tromberg, DS. Nelson, M. Berns: Photochemical Management of Acne vulgaris. Disclosure. University of California. Jan. 1994
8. P. Wilder-Smith, K. König, C. Wilder-Smith, M.W. Berns: Photodynamically Inactivation of Helicobacter Pylori. Disclosure. University of California. Oct. 1994
9. K. König. Anordnung zur optischen Mikromanipulation, Analyse und Bearbeitung von Objekten. Patentanmeldung: Nr. 19719344.7 vom 7.5.97.

10. K. König. Verfahren zur optischen Bearbeitung von Zellstrukturen und Biomolekülen.
Patentanmeldung: Nr. 19719345.5 vom 7.5.97.

11. K. König. Verfahren zur optischen 3D Speicherung von Daten. Patentanmeldung Nr.
19754254.9 vom 6.12.97.

12. K. König, K.-J. Halbhuber, I. Riemann, P. Fischer.
Verfahren zur optischen Anregung von Fluorophor-markierter DNA und RNA.
Deutsche Patentanmeldung 29.7.99/ DE19935766 A1
Internationale Anmeldung: 11.7.2000/ WO 01/09591 A1, PCT/EP00/06546
United States Patent 04.03.2003/ US 6,528,802 B1
Anmelder: Carl Zeiss Jena GmbH

13. Teuchner, Leupold, Ehlert, König. Fluorophor für die Multi-Photonen-Laser-Scanning-
Mikroskopie. Patentanmeldung 18.8.99/ DE 19939706 A1
Patenterteilung: 05092002/ DE 19939 706

14. W. Fritzsche, J.M. Köhler, K. König. Verfahren zum simultanen positionsspezifischen
Schneiden von fadenförmigen organischen Molekülketten, insbesondere DNA.
13.12.2000/ DE 10162176 A1
Patenterteilung : 23.03.2006/ DE 10162176
Internationale Anmeldung 12.12.2001/ PCT/EPO1/14591

15. K. König. Verfahren und Anordnung zur nicht-invasiven dreidimensionalen optischen
Untersuchung und Therapie der Haut. 22.12.2000/ DE 10065146 A1

16. K. König. Verfahren zur nicht-invasiven optischen Bearbeitung von Geweben des Auges
sowie zu dessen Diagnose und Vorrichtung zur Durchführung dieser Verfahren.
27.03.2002/DE 10115751.7
28.09.2001/ DE 10148783 A1
Internationale Anmeldung: 26.03.2002/ EP0203370
Anmelder: Wavelight AG

17. K. König. Scansystem für die Fluoreszenzdiagnostik humaner Haut.
19.10.2001/ DE 20117294.1

18. K. König. Laser-Anordnung zum Transfer von Molekülen in Zellen.
22.05.2002/ DE 10223992 A1

19. K. König, U. Tirlapur. Laser-Verfahren zum Transfer von Molekülen in vitale Zellen.
23.5.2002/ DE 10223921
Internationale Anmeldung: PCT/DE03/01708
US-Anmeldung: 22.05.2003
Europäische Anmeldung: 23.12.2004
Australische Anmeldung: 22.05.2003
Chinesische Anmeldung: 22.05.2003/ CN 1653185 A1

20. K. König, I. Riemann. Laserverfahren und Anordnung zur Markierung und Gewinnung von
Materialien, Zellbestandteilen, Zellen und Gewebebestandteilen
30.06.2003/ DE 10329674 A1

21. K. König, D. Sanger, R. LeHarzic. Sicherheitsmarkierung in einem transparenten Polymer.
10.01.2005/ 10200501443.7

22. K. Konig, R. LeHarzic, N.N, N.N. Gepulste Laservorrichtung fur die ophthalmologische
Chirurgie. 06.10.2005/EPA-96836. Anmelder: N.N.

23. K. Konig. Verfahren zur Detektion von pathogenen Mikroorganismen und/oder chemischen
Gefahrenstoffen sowie Nachweisvorrichtung. 26.10.2005/ 102005051643.2

24. F. Volke, K. Konig. Vorrichtung zur NMR-Untersuchung intrakorporaler Korperbereiche.
25.07.2005/ DE-102005034838.6

25. K. Konig. Verfahren zur Laserbearbeitung. 14.02.2006/ 10856986 – 102006006630.8

26. K. Konig. Verfahren und Anordnung zur Laserendoskopie fur die Mikrobearbeitung.
29.09.2006, 102006046925A1

Gebrauchsmuster

Zellkammer fur die Mikroskopie 17.12.1999/ 29922587.9

Scansystem 19.10.2001/ 20117294.1

Kompaktes Laser-Scanning-Mikroskop 13.04.2003/ 20306122.5