

References

- 1.1.A.Yariv, "Quantum Electronics", 3rd ed. Wiley&Sons, N.Y.1989.
- 1.2.A. Miller, D.M. Finlayson, "Laser sources and applications", Proceedings of the 47th SUSSP St.Andrews, 1995.
- 1.3.H.Rabin, C.L.Tang, "Quantum electronics: a treatise", 537 p. Acad. Press, N.Y. 1975.
- 1.4.R.A. Alfano, "The Supercontinuum Laser Source", 458 p., Springer Verlag, N.Y.1989.
- 1.5.O.M. Efimov, K.Gabel, S.V.Garnov, L.B. Glebov, S.Grantham, M.Richardson, M.J.Soileau, "Color-center generation in silicate glass exposed to infrared femtosecond pulses", JOSAB15, p.193 (1998).
- 1.6.C.B. Schaffer, PhD thesis, Harvard University (2001).
- 1.7.L.V.Keldish, Sov.Phys.JEPT 20, 1307 (1965).
- 1.8.G.Mie, Ann.Phys.(Leipzig) 25, 377 (1908).
- 1.9.U. Kreibig, M. Vollmer: *Optical Properties of Metal Clusters*, Springer Series in Materials Science, Vol. 25 (Springer Berlin 1995).
- 1.10. V. M. Shalaev: *Optical Properties of Nanostructured Random Media* (Springer Berlin 2001).
- 1.11. J. Tominaga, D.P. Tsai: *The Manipulation of Surface and Local Plasmons*, Topics in Applied Physics (Springer, Berlin, 2003).
- 1.12. J.D.Jackson, "Klassische Elektrodynamik", Walter de Gruyter, Berlin; N.Y., 1982.
- 1.13. V.V. Kresin, "Collective resonances in silver clusters: role of d-electrons and the polarization free surface layer", Phys. Rev. B 51, p.1844 (1995).
- 1.14. K.-J.Berg, A.Berger, , H.Hofmeister, Z. Physik D20, 309(1991).
- 1.15. A. Hilger, M. Tenfelde, U. Kreibig, " Silver nanoparticles deposited on dielectric surfaces ", Appl. Phys. B 73, 361–372 (2001).
- 1.16. J.Postendorfer, "Numerische Berechnung von Extinktions- und Streuspektren sphäroidaler Metallpartikel beliebiger Größe in dielektrischer Matrix", Dissertation, Martin-Luther University Halle-Wittenberg, 1997.
- 1.17. J.P. Marton, J.R. Lemon, Phys. Rev. B 4, 271 (1971).
- 1.18. G. Xu, M. Tazawa, P. Jin, S. Nakao, Appl. Phys. A (online first, 28 January 2004).
- 1.19. V.A. Markel, L.S. Muratov, M.I. Stockman, T.F. George: Phys. Rev. B 43, 8183 (1991).
- 1.20. V.A. Markel, V. Shalaev, E.B. Stechel, W. Kim, R.L. Armstrong: Phys. Rev. B 53, 2425 (1996).
- 1.21. S. V. Karpov, A. L. Bas'ko, A. K. Popov, V. V. Slabko, T. F. George, in: *Recent Research Developments in Optics, vol. 2*, pp.427-463 (Research Signpost, Trivandrum, India, 2002).
- 1.22. J.I. Gittleman, B. Abeles, „Composition of the effective medium and the Maxwell-Garnett predictions for the dielectric constants of granular metals“, Phys.Rev. B 15, p.3273(1977).

References

- 1.23. W.Rechberger, A.Hohenau, A.Leitner, J.R.Krenn, B.Lamprecht, F.R.Aussenegg, „Optical properties of two interacting gold nanoparticles“, *Opt.Comm.* 220, p.137-141 (2003).
- 2.1. P.F. Moulton: *Opt. News* 8, 9 (1982)
- 2.2. P.F. Moulton: *J. Opt. Soc. Am. B* 3, 125 (1986)
- 2.3. P.F. Moulton: In *Tunable Solid-State Lasers*, ed. by P. Hammerling, A.B. Budgor, A.A. Pinto (Springer Ser. Opt. Sci. 47) (Springer, Berlin, Heidelberg 1985) pp. 4–10.
- 2.4. R. Rao, G. Vaillancourt, H.S. Kwok, C.P. Khattak: In *Tunable Solid-State Lasers* (OSA Proceedings Series), Vol. 5, ed. by M.L. Shand, H.P. Jenssen (Optical Society of America, Washington, DC 1989) pp. 39–41.
- 2.5. M.S. Pshenichnikov, A. Baltuska, R. Szipöcz, D.A. Wiersma: *Ultrafast Phenomena XI* (Springer, Berlin 1998) pp. 3–7
- 2.6. Z. Cheng, G. Tempea, T. Brabec, K. Ferenc, C. Spielmann, F. Krausz: *Ultrafast Phenomena XI* (Springer, Berlin 1998) p. 8
- 2.7. A. Baltuska, Z. Wei, M.S. Pshenichnikov, D.A. Wiersma: *Opt. Lett.* **22**, 102 (1997).
- 2.8. M. Nisoli, S. De Silvestri, O. Svelto, R. Szipöcs, K. Ferenc, C. Spielmann, S. Sartania, F. Krausz: *Opt. Lett.* **22**, 522 (1997)
- 2.9. A.E. Siegman, „Analysis of laser beam quality degradation caused by quadratic phase aberrations“, *Appl.Opt.*32, p.5893(1993).
- 2.10. A.E.Siegman, “Lasers”, Mill Valley, CA:Univ.Sci.Books,1986.
- 2.11. W.A.Clarkson, D.C.Hanna, *Opt.Lett.* 21, p.375(1996).
- 2.12. R.A. Alfano, “The Supercontinuum Laser Source”, 458 p., Springer Verlag, N.Y.1989.
- 2.13. S.A. Kovalenko, A.L. Dobryakov, J. Ruthmann, N.P. Ernsing, *Phys.Rev.A* 59, 1999, p.2369.
- 2.14. K.-J. Berg, A. Berger, H. Hofmeister, *Z. Phys. D* 20 (1991) 309
- 2.15. H.Hofmeister, W.-G. Drost, A. Berger, *Nanostruct. Mater.* 12, 207 (1999).
- 3.1.U. Kreibig, M. Vollmer: *Optical Properties of Metal Clusters*, Springer Series in Materials Science, Vol. 25 (Springer Berlin 1995).
- 3.2.V. M. Shalaev: *Optical Properties of Nanostructured Random Media* (Springer Berlin 2001).
- 3.3.J. Tominaga, D.P. Tsai: *The Manipulation of Surface and Local Plasmons*, Topics in Applied Physics (Springer, Berlin, 2003).
- 3.4.T. Wenzel, J. Bosbach, A. Goldmann, F. Stietz, F. Träger: *Appl. Phys. B* **69**, 513 (1999).
- 3.5.F. Stietz: *Appl. Phys. A* **72**, 381 (2001).
- 3.6.R. Jin, Y.W. Cao, C.A. Mirkin, K.L. Kelly, G.C. Schatz, J.G. Zheng: *Science* **249**, 1901 (2001).
- 3.7.M. Kaempfe, H. Graener, A. Kiesow, A. Heilmann: *Appl. Phys. Lett.* **79**, 1876 (2001).
- 3.8.A.L. Stepanov, D.E. Hole, A.A. Bukharaev, P.D. Townsend, N.I. Nurgazizov: *Appl. Surf. Sci.* **136**, 298 (1998).

References

- 3.9.A.L. Stepanov, "Modification of implanted metal nanoparticles in the dielectrics by high-power laser pulses", *Rev.Adv.mater.Sci.*4, p.123(2003).
- 3.10. I. Zergioti, S. Mailis, N.A. Vainos, P. Papakonstantinou, C. Kalpouzos, C.P. Grigoropoulos, C. Fotakis: *Appl. Phys. A* **66**, 579 (1998).
- 3.11. E.J. Bjerneld, F. Svedberg, M. Kaell: *Nano Lett.* **3**, 593 (2003).
- 3.12. M. Kaempfe, G. Seifert, K.-J. Berg, H. Hofmeister, H. Graener: *Eur. Phys. J. D* **16**, 237 (2001).
- 3.13. M. Kaempfe, T. Rainer, K.-J. Berg, G. Seifert, H. Graener: *Appl. Phys. Lett.* **74**, 1200 (1999).
- 3.14. M.Kaempfe, "Laserinduzierte deformation metalischer Nanopartikel in Glaeser", Dissertation, Martin-Luther University Halle-Wittenberg, 2000.
- 3.15. G. Seifert, M. Kaempfe, K.-J. Berg, H. Graener: *Appl. Phys. B* **71**, 795 (2000).
- 3.16. G. Seifert, M. Kaempfe, K.-J. Berg, H. Graener: *Appl. Phys. B.* **73**, 355 (2001).
- 3.17. D.Du, X.Liu, G.Korn, J Squier, G.Mourou, "Laser induced breakdown by impact ionization in SiO₂ with pulse widths from 7 ns to 150 fs", *Appl.Phys.Lett.* 64, 3071-3073 (1994).
- 3.18. D.Du, X.Liu, G.Mourou, "Reduction of multi-photon ionization in dielectrics due to collisions", *Appl.Phys.B*63, 617-621(1996).
- 3.19. A. Akella, T.Honda, A.Y.Liu, L. Hesselink, "Two-photon holographic recording in alumosilicate glass containing silver particles", *Opt. Lett.* 22, p.967(1997).
- 3.20. U. Busolt, E. Cottancin, H. Röhr, L. Socaciu, T. Leisner, L. Wöste, "Two photon photoemission of deposited silver clusters", *Eur. Phys.J D9*, p523-527(1999).
- 3.21. M. Fierz, K. Siegmann, M. Scharte, M. Aeschlimann, "Time resolved 2-photon photoionization on metallic nanoparticles", *Appl. Phys. B* 68, p.415-418(1999).
- 3.22. K. Ertel, U. Kohl, J. Lehmann, M. Merschdorf, W. Pfeiffer, A. Thon, S. Voll, G. Gerber, "Time resolved two photon photoemission spectroscopy of HOPG and Ag nanoparticles on HOPG", *Appl. Phys. B* 68, pp.439-445(1999).
- 3.23. L.Köller, M. Schumacher, J. Köhn, S. Teuber, J. Tiggesbäumker, K.H. Meiwes-Broer, "Plasmon enhanced multi ionization of small metal clusters in strong femtosecond laser fields", *Phys.Rev.Lett.*82, pp.3783-3786(1999).
- 3.24. T. Döppner, S. Teuber, M. Schumacher, J. Tiggesbäumker, K.H. Meiwes-Broer, "Charging dynamics of metal clusters in intense laser fields", *Appl. Phys. B* online 13 July 2000.
- 3.25. J. Lehmann, M. Merschdorf, W. Pfeiffer, A. Thon, S. Voll, G. Gerber, "Surface plasmon dynamics in silver nanoparticles studied by femtosecond time resolved photoemission", *Phys. Rev. Lett.* 85, pp.2921-2924(2000).
- 3.26. J. Lehmann, M. Merschdorf, W. Pfeiffer, A. Thon, S. Voll, G. Gerber, "Silver nanoparticles on graphite studied by femtosecond time resolved multiphoton photoemission", *J. Chem. Phys.* 112, pp.5428-5434(2000).
- 3.27. M. Merschdorf, W. Pfeiffer, A. Thon, S. Voll, G. Gerber, "Photoemission from multiply excited surface plasmons in Ag nanoparticles", *Appl. Phys. A* 71, pp.547-552(2000).
- 3.28. C. Kennerknecht, H. Hövel, M. Merschdorf, S. Voll, W. Pfeiffer, "Surface plasmon assisted photoemission from Au nanoparticles on graphite", *Appl. Phys. B*, online 10 October 2001.

References

- 3.29. W. Pfeifer, C. Kennerknecht, M. Merschorf, "Electron dynamics in supported metal nanoparticles: relaxation and charge transfer studied by time resolved photoemission", *Appl. Phys. A* online 21 January 2004.
- 3.30. O.M.Efimov, A.M.Mekryukov, "Investigation of energy structure of lead silicate glasses by non-linear absorption spectroscopy technique", *Journal of Non-Crystalline Solids* 191, p.94-100(1995).
- 3.31. O.M. Efimov, K.Gabel, S.V.Garnov, L.B. Glebov, S.Grantham, M.Richardson, M.J.Soileau, "Color-center generation in silicate glass exposed to infrared femtosecond pulses", *JOSAB*15, p.193(1998).
- 3.32. O.M. Efimov, L.B. Glebov, S.Grantham, M.Richardson, "Photoionization of silicate glasses exposed to IR femtosecond pulses" *J.Non-Crystalline Solids*253, p.58-67(1999).
- 3.33. J.R.Shulman, W.D.Compton, *Color centers in solids*, Pergamon Press, New York, 1962.
- 3.34. A.V.Dotsenko, L.B.Glebov, V.A.Tsekhomsky, "Physics and Chemistry of Photochromic Glasses", CRC Press, New York, 1998.
- 3.35. V.I.Arbutov, M.N.Tolstoy, "Phototransition of electron in doped glasses", *Fiz. I chim. Stekla* (in russian), 1, p.3 (1988).
- 3.36. S.Munekuni, T.Yamanaka, Y.Shimogaichi, R.Tohmon, Y.Ohki, K.Nagasawa, Y.Hama, "Various types of nonbridging oxygen hole center in high-purity silica glass", *J.Appl.Phys.*68(3), p.1212(1990).
- 3.37. L.B. Glebov, V.G. Dokuchaev, M.A. Petrov, G.T. Petrovskii, "Optical orientation of hole color centers in sodium silicate glass", *Sov. J. Glass Phys. Chem.*, 15, 259 (1989).
- 3.38. V.I.Arbutov, I.K. Vitol, V.J. Grabovskis, Yu.P. Nikolaev, U.T. Rogulis, M.N. Tolstoy, M.A.Elerts, "Degeneracy of activator energy levels with glassy matrix intrinsic states", *Phys.Stat.Sol. (a)*, 91, 199, 1985.
- 3.39. V.I.Arbutov, Yu.P. Nikolaev, M.N. Tolstoy, "Effect of composition of a glass on the relative arrangement of the energy levels of the activator and the intrinsic states of the matrix", *Sov.J.Glass Phys. Chem.*, 16, 91, 1990.
- 3.40. M.A. Villegas, J.M. Fernandez Navarro, S.E. Paje, J. Llopis, *Phys. Chem. Glasses* 37 (1996) 248.
- 3.41. E.Borsella, G. Battaglin, M.A. Garcia, F. Gonella, P. Mazzoldi, R. Polloni, A.Quartana, *Appl. Phys. A* 71 (2000) 125-132.
- 3.42. S.Munekuni, T.Yamanaka, Y.Shimogaichi, K.Nagasawa, Y.Hama "Various types of nonbridging oxygen hole centers in high-purity silica glass" *J. Appl. Phys.* 68 (1990) 1212.
- 3.43. W.Harbich, S.Fedrigo, Mayer, D.M. Lindsay, J.Lingnieres, J.C.Rivoal, D.Kreisle "Deposition of mass selected silver clusters in rare gas matrices" *J.Chem.Phys.* 93(1990)8535.
- 3.44. E. Borsella, E.Cattaruzza, G.De Marchi, F. Gonella, G. Mattei, P. Mazzodi, A. Quaranta, G. Battaglin, R. Polloni "Synthesis of silver clusters in silics-based glasses for optoelectronics applications" *J. Non-Cryst. Solids* 245 (1999) 122-128.
- 3.45. T.Tokizaki, A. Nakamura, S. Kaneko, K. Uchida, S. Omi, H. Tanji, Y. Asahara, *Appl. Phys. Lett.*, 65, 1994, p. 941.
- 3.46. J.Y.Bigot, J.-C. Merle, O. Cregut, A. Daunois, *Phys.Rev.Lett.*, 75, 1995, p. 4702.

References

- 3.47. T.S.Ahmadi, S.L.Logunov, M.A. El-Sayed, *J.Phys.Chem.*, 100, 1996, p.8053.
- 3.48. M.Perner, P.Bost, U.Lemmer, G. von Plessen, J. Feldmann, U. Becker, M. Menning, M. Schmitt, H. Schmidt, *Phys.Rev.Lett.*, 78, 1997, p.2192.
- 3.49. G.V. Hartland, J.H. Hodak, I.Martini, *Phys.Rev.Lett.*, 83, 1998, p.3188.
- 3.50. P.V. Kamat, M. Flumiani, G.V. hartland, *J.Phys.Chem.B*, 102, 1998, p.3123.
- 3.51. G.Seifert, M.Kaempfe, K.J. Berg, H.Graener, *Appl.Phys.B*, 71, 2000, p.795.
- 3.52. N. Del Fatti, F. Vallee, *Appl.Phys. B*, 73, 2001, p.383.
- 3.53. C.Voisin, D.Christofilos, N. del Fatti, F. Vallee, B. Prevel, E. Cottancin, J. Lerme, M. Pellarin, M. Broer, "Size-dependent electron-electron interactions in metal nanoparticles", *Phys Rev Lett.*, 85, 2000, p. 2200.
- 3.54. J.Y.Bigot, V.Halte, J.-C. Merle, A.Daunois, *Chem Phys.*, 251, 2000, p. 181.
- 3.55. K. L. Kelly, E. Coronado, L. L. Zhao, G. C. Schatz, "The Optical Properties of Metal Nanoparticles: The Influence of Size, Shape, and Dielectric Environment", *J. Phys. Chem. B* 2003, 107, 668-677.
- 3.56. A.Melikyan, H.Minassian, "On surface plasmon damping in metallic nanoparticles", *Appl.Phys.B* online February 2004.
- 3.57. J.D.Jackson, "Klassische Elektrodynamik", Walter de Gruyter, Berlin; N.Y., 1982.
- 3.58. A.Yariv, "Quantum Electronics", 3rd edd. J.Wiley&Sons, p.163 (1989).

- 4.1.U. Kreibig, M.Vollmer, "Optical Properties of Metal Clusters" , Springer Series in Materials Science, Vol 25, 1995.
- 4.2.V. M. Shalaev, "Optical properties of nanostructured random media", Springer Verlag, 2001.
- 4.3.H. Xu, J. Aizpurua, M.Kall, P. Apell, "Electromagnetic contributions to single-molecule sensitivity in surface-enhanced Raman scattering", *Phys.Rev.E* 62, p.4318 (2000).
- 4.4.H.Xu, M.Käll, "Surface-Plasmon-Enhanced optical forces in silver nanoaggregates", *Phys.Rev.Lett* 89, p.246802(2002).
- 4.5.A.A. Lalayan, K.S. Bagdasaryan, P.G. Petrosyan, Kh.V. Nerkararyan, J.B. Ketterson, "Anomalous field enhancement from the superfocusing of surface plasmons at contacting silver surfaces", *J. Appl. Phys.* 91, p.2965(2002).
- 4.6.A.J. Babadjanyan, N.L. Margaryan, Kh.V. Nerkararyan, "Superfocusing of surface polaritons in the conical structure", *J. Appl.Phys.* 87, p.3785(2000).
- 4.7.M.I. Stockman, L.N. Pandey, L.S. Muratov, T.F. George, "Optical absorption and localization of eigenmodes in disordered clusters", *Phys.Rev.B* 51, p.185(1995).
- 4.8.M.Quinten, "The color of finely dispersed nanoparticles", *Appl.Phys.B*, on-line October (2001).
- 4.9.M.Quinten, "Local fields close to the surface of nanoparticles and aggregates of nanoparticles", *Appl.Phys.B*, on-line September (2001).
- 4.10. E. Yablonovitch, "Inhibited spontaneous emission in solid-state physics and electronics", *Phys.Rev.Lett.* 58, p.2059(1987).
- 4.11. E. Yablonovitch, "Photonic band-gap structures", *JOSA B* 10, p.283 (1993).
- 4.12. J.D. Joannopoulos, "Photonic crystals: molding the flow of light", Princeton University Press, 1995.

References

- 4.13. A.Moroz, "Three-dimensional complete photonic-band-gap structures in the visible", *Phys.Rev.Lett.*83, p.5274(1999).
- 4.14. W.Y.Zhang, X.Y.Lei, Z.L.Wang, D.G.Zheng, W.Y.Tam, C.T.Chan, P.Sheng, "Robust photonic band gap from tunable scatterers" *Phys.Rev.Lett.* 84, p.2853(2000).
- 4.15. A. Moroz, "Metallo-dielectric diamond and zinc-blende photonic crystals", *Phys.Rev.B* 66, p.115109(2002).
- 4.16. E.Lidorikis, M.M.Sigalas, E.N.Economou, C.M.Soukoulis, "Tight-Binding parametrization for photonic band gap materials", *Phys.Rev.Lett.* 81, p.1405(1998).
- 4.17. E.Lidorikis, M.M.Sigalas, E.N.Economou, C.M.Soukoulis, "Gap deformation and classical wave localization in disordered two-dimensional photonic-band-gap materials", *Phys.Rev. B* 61, p.13458(2000).
- 4.18. C.Jin, X.Meng, B.Cheng, Z.Li, D.Zhang, "Photonic gap in amorphous photonic materials", *Phys.Rev.B* 63, p.195107(2001).
- 4.19. K.Velikov, W.L.Vos, A.Moroz, A. van Blaaderen, "Reflectivity of metalodielectric photonic glasses", *Phys.Rev. B* 69, p.75108(2004).
- 4.20. A. Abdolvand, A.Podlipensky, G.Seifert, O.Deparis, P.Kazansky, H.Graener, "DC electric field assisted modification of optical properties of glass with silver nanoparticles", *Opt.Express*, to be published.
- 4.21. A. Podlipensky, A. Abdolvand, G. Seifert, H. Graener, O. Deparis, P. G. Kazansky, "Dissolution of Silver Nanoparticles in Glass through an Intense DC Electric Field", *J. Phys Chem B* 108, p.17699(2004).
- 4.22. O. Deparis, P. G. Kazansky, A. Abdolvand, A. Podlipensky, G. Seifert, H. Graener, "Poling-assisted bleaching of metal-doped nanocomposite glass", *Applied Phys. Lett.* 85, 872 (2004).
- 4.23. M.Birnbaum, "Semiconductor surface damage produced by ruby lasers", *J. Appl. Phys.*, vol.36, p.3688(1965).
- 4.24. D.C.Emmony, N.J.Phyllips, J.H.Toyer, L.J.Willis, "The topography of laser-irradiated germanium", *J.Phys.D.8*, p.1472(1975).
- 4.25. G.N. Maracas, G.L. Harris, C.A. Lee, R.A. McFarlane, "On the origin of periodic surface structure of laser-annealed semiconductors", *Appl.Phys.Lett.*33, p.453(1978).
- 4.26. Z.Gousheng, P.M.Fauchet, A.E.Siegman, "Growth of spontaneous periodic surface structures on solids during laser illumination", *Phys.Rev.B*26, p.5366(1982).
- 4.27. S.R.J. Brueck, D.J.Ehrlich, "Stimulated Surface-Plasma-Wave scattering and growth of a periodic structure in laser-photodeposited metal films", *Phys.Rev.Lett.*48, p.1678(1982).
- 4.28. H.M. van Driel, J.P.Sipe, J.F.Young, "Laser-induced periodic surface structure on solids: a universal phenomenon", *Phys.Rev.Lett.*49, p.1955(1982).
- 4.29. F.Keilmann, "Laser-driven corrugation instability of liquid metal surface", *Phys.Rev.Lett.*51, p.2097(1983).
- 4.30. J.E.Sipe, J.F.Young, J.S.Preston, H.M. van Driel, "Laser-induced periodic surface structure. I. Theory", *Phys.Rev.B.* 27, p.1141(1983).
- 4.31. J.F. Young, J.S. Preston, H.M. van Driel, J.E.Sipe, "Laser-induced periodic surface structure. II. Experiments on Ge, Si, Al, and brass", *Phys.Rev.B*27, p.1155(1983).

References

- 4.32. A.E.Siegman, P.M.Fauchet, "Stimulated Wood's anomalies on laser-illuminated surfaces", IEEE J. Quant.Electr.22, p.1384(1986).
- 4.33. V.N.Anisimov, V.Yu.baranov, O.N.Derkach, A.M.Dykhne, D.D.Malyuta, V.D. Pismennyi, B.P.Rysev, A.Yu.Sebrant, "Resonant phenomena in laser excitation of surface waves on solids", IEEE J.Quant.Electr. 24, p.675(1988).
- 4.34. J.Reif, F.Costache, M.Henyk, S.V.Pandelov, "Ripples revisited: non-classical morphology at the bottom of femtosecond laser ablation craters in transparent dielectrics", Appl.Surf.Sci.197-198, p.891(2002).
- 4.35. F.Costache, M.Henyk, J.Reif, Appl.Surf.Sci. 208-209, p.486(2003).
- 4.36. S.A.Akhmanov, V.I.Emel'yanov, N.I.Koroteev, "Interaction of strong laser radiation with solids and nonlinear optical diagnostics of surfaces", Teubner-texte zur Physik, Band 24, p.204(1990).
- 4.37. D.Bäuerle, "Laser processing and chemistry", 3rd ed. Springer-Verlag Berlin, 2000.

- 5.1. U. Kreibig, M.Vollmer, "Optical Properties of Metal Clusters" , Springer Series in Materials Science, Vol 25, 1995.
- 5.2. V. M. Shalaev, Optical properties of nanostructured random media, Springer Verlag, 2001.
- 5.3. C.F. Bohren, D.R. Huffman, „Absorption and scattering of light by small particles“, Wiley Science Paperback Series, 1998
- 5.4. J.P. Marton, J.R. Lemon, Phys.Rev.B4, 271 (1971).
- 5.5. G.Xu, M. Tazawa, P. Jin, S. Nakao, "Surface plasmon resonance of sputtered Ag films: substrate and mass thickness dependence", Appl.Phys.A (2004).
- 5.6. M.Kaempfe, "Laserinduzierte deformation metalischer Nanopartikel in Glaeser", Dissertation, Martin-Luther University Halle-Wittenberg, 2000.
- 5.7. J. Tominaga, D.P. Tsai "The Manipulation of Surface and Local Plasmons", Topics in Applied Physics, Springer, 2003.
- 5.8. H. Ditlbacher, J. R. Krenn, B. Lamprecht, A. Leitner, and F. R. Aussenegg, "Spectrally coded optical data storage by metal nanoparticles", Opt.Lett.25, p.563 (2000).
- 5.9. K. Baba, R. Yamada, S. Nakao and M. Miyagi, "Three-dimensional optical disks using metallic island films: A proposal," Elec. Lett. 28, 676(1992).
- 5.10. J. R. Wullert II and P. J. Delfyett, "Multiwavelength, multilevel optical storage using dielectric mirrors," IEEE Photonics Tech. Lett. 6(9), 1133(1994).
- 5.11. S. Homan and A. E. Willner, "High-capacity optical storage using multiple wavelengths, multiple layers and volume holograms," Elec. Lett. 31, 621(1995).
- 5.12. Philipp Hergert, The Data Storage System Center, Carnegie Mellon University, ECE Department Pittsburgh, USA, http://www.ece.cmu.edu/research/dssc/news_events/seminars/lunch04/optical/9-9-04_Optical_Overview.pdf
- 5.13. F.Korte, J.Serbin, J.Koch, A.Egbert, C.Fallnich, A.Ostendorf, B.N.Chichkov, "Towards nanostructuring with femtosecond laser pulses", Appl.Phys.A 77, p.229-235(2003).
- 5.14. J.C. Knight, T.A. Birks, P.St.J. Russell, D.M.Atkin, "All-silica single-mode optical fiber with photonic crystal cladding", Opt. Lett. 21, p.1547(1996).

References

- 5.15. J.K. Ranke, R.S. Windeler, A.J. Stentz, „Visible continuum generation in air-silica microstructure optical fibers with anomalous dispersion at 800 nm“, *Opt. Lett.*25, p.1415(2000).
- 5.16. A.B.Fedotov, A.N. Naumov, A.M. Zheltikov, I. Bugar, D. Chorvat, Jr., D. Chorvat, A.P. Tarasevitch, D. von der Linde, “Frequency-tunable supercontinuum generation in photonic-crystal fibers by femtosecond pulses of an optical parametric amplifier”, *JOSA B*19, p.2156(2002).