

List of Publications

- 1) R.J. Donovan and C. Fotakis
"Isotope effects in the quenching of electronically excited atoms: Photolysis of CD₃I", J. Chem. Phys., 61, 2159 (1974).
- 2) R.J. Butcher, R.J. Donovan, C. Fotakis, D. Fernie and A.G.A. Rae
"Photodissociation Laser Isotope effects", Chem. Phys. Letters, 30, 398 (1975).
- 3) R.J. Donovan, C. Fotakis and M.F. Golde
"Quenching of electronically excited atoms: - Part 4. - Quenching of I(5²P_{1/2}) by Hydrogen and Deuterium Halides", H₂O and D₂O, J.C.S. Faraday II, 72, 2055 (1976).
- 4) R.J. Donovan, C. Fotakis and H.M. Gillespie
"Primary and secondary processes in the photolysis of GeH₃I", J. Photochemistry, 6, 193 (1977).
- 5) C. Fotakis and R.J. Donovan
"Temperature Dependence for the Removal of I(5²P_{1/2}) by HBr", Chem. Phys. Letters, 54, 91 (1978).
- 6) C. Fotakis and R.J. Donovan
"Temperature Dependence for the Quenching of I(5²P_{1/2}) by CH₃I and CD₃I : Evidence for Efficient Electronic to Vibrational Energy Transfer", J.C.S. Faraday II, 74, 2099, (1978).
- 7) M.N. Sanchez Rayo, C. Fotakis and R.J. Donovan
"Yields and Quenching of Excited Iodine atoms following the photodissociation of C₆H₅I and C₆F₅I", J. Photochemistry, 9, 433 (1978).
- 8) M.C. Addison, A.J. Leitch, C. Fotakis and R.J. Donovan
"Reaction of CN(X²Σ⁺) with OCS and formation of SCN", J. Photochemistry, 10, 273 (1979).
- 9) C. Fotakis, M. Trainer and R.J. Donovan
"Time resolved resonance fluorescence study of electronically excited iodine atoms; Removal by HCN, NH₃ and OCS", J. Photochemistry, 10, 231 (1979).
- 10) R.J. Donovan, H.M. Gillespie, W.H. Breckenridge and C. Fotakis
"Isotope effects in the quenching of the electronically excited atoms : Quenching of I(5²P_{1/2}) by Methane and Deuteromethanes studied by Time-resolved Resonance Fluorescence", J.C.S. Faraday II, 75, 1557 (1979).
- 11) C. Fotakis and R.J. Donovan
"Temperature Dependence of the Quenching of I(5²P_{1/2}) by HCl", J.C.S. Faraday II, 75, 1553 (1979).
- 12) C. Fotakis, M. Martin and R.J. Donovan
"Chemiluminescent reactions following the laser photolysis of alkyl iodides", Faraday Discussions, 67, 353 (1979).
- 13) C. Fotakis, M. Martin, K.P. Lawley and R.J. Donovan
"Photofragment fluorescence following ultraviolet laser multiple photon excitation of CH₃X molecules (X=OH, Br, I)", Chem. Phys. Letters, 67, 1 (1979).
- 14) C. Fotakis, M. Martin and R.J. Donovan
"Laser Photolysis of CD₃I in the Ultraviolet : Formation of Highly Excited Iodine Atoms", J.C.S. Chem. Comm. 813, (1979).
- 15) M. Martin, C. Fotakis and R.J. Donovan

- "Optical Pumping and Collisional Quenching of $I_2(D^1\Sigma^+)$ ", IR Nuovo Cimento 63B, 300, (1981).
- 16) M.J. Shaw, C.B. Edwards, F. O'Neil, C. Fotakis and R.J. Donovan
"Efficient Laser Action on the 342 nm band of molecular iodine using ArF Laser pumping", Applied Phys. Letters, 37, 346, (1980).
 - 17) M.C. Addison, R.J. Donovan and C. Fotakis
"Resonance Fluorescence Study of Electronically Excited Sulfur Atoms : Reactions of $S(3^1D_2)$ ", Chem. Phys. Letters, 74, 58 (1980).
 - 18) C. Fotakis, C.B. McKendrick and R.J. Donovan
"Two-Photon Excitation of H_2O and D_2O with a KrF laser (248 nm): Photofragment Fluorescence from OH and OD($A^2\Sigma^+$)", Chem. Phys. Letters, 80, 598 (1981).
 - 19) C. Fotakis
"Multiphoton Laser Excitation of SO_2 at 248 nm", Chem. Phys. Letters, 82, 68 (1981).
 - 20) M.J. Shaw, R.J. Donovan and C. Fotakis
"KrF Laser Pumping of C_6D_6 ", p. 2.16, Annual Report to the Laser Facility Committee, Laser Division, Rutherford Laboratory, (1981).
 - 21) C. Fotakis, M. Martin and R.J. Donovan
"Ultraviolet Laser multiphoton excitation of CH_2I_2 ", J.C.S. Faraday II, 78, 1363 (1982).
 - 22) C.B. McKendrick, C. Fotakis and R.J. Donovan
"Laser photodissociation of NO_2 at 248 nm and production of $NO(A^2\Sigma^+ - X^2\Pi)$ Fluorescence", J. Photochemistry, 20, 175 (1982).
 - 23) C. Fotakis, A. Torre and R.J. Donovan
"Two Photon Ultraviolet Excitation of SO_2 and Laser-Induced Fluorescence from SO", J. Photochem., 23, 97 (1982).
 - 24) R.J. Donovan, C. Fotakis, C.B. McKendrick, A. Hopkirk and I. Torre
"Photochemistry with high power ultraviolet lasers", Can. J. Chem. 61, 1023 (1983).
 - 25) R.J. Donovan, B.V. O Grady, L. Lain and C. Fotakis
"Reactive and Inelastic processes involving $I_2(D^1\Sigma_u)$ with the collision partners CH_4 , CH_3Cl , CF_3Cl and CF_4 ", J. Chem. Phys., 78, 3727 (1983).
 - 26) M. MacDonald, J.P.T. Wilkinson, C. Fotakis, M. Martin and R.J. Donovan
"Oscillatory Continuum Emission from IBr", Chem. Phys. Letters, 99, 250 (1983).
 - 27) C. Fotakis
"Photofragment Fluorescence following U.V. Multiphoton Excitation", Optical Engineering, 22, 554 (1983).
 - 28) C. Fotakis, D. Zevgolis, T. Efthimiopoulos and E. Patsilinaou
"Multiphoton excitation of CS_2 with a narrow-band KrF laser", Chem. Phys. Letters, 110, 73 (1984).
 - 29) G.M. Davis, M.C. Gower, C. Fotakis, T. Efthimiopoulos and P. Argyrakis
"Spectroscopic studies of the ArF laser photoablation of PMMA", Appl. Phys. A 36, 27 (1985).
 - 30) P. Papagiannakopoulos and C. Fotakis
"Collision dynamics of OH($A^2\Sigma$) produced by two-photon excitation of H_2O with a KrF laser", J. Phys. Chem. 89, 3439 (1985).

- 31) P.R. Blazewicz, J.A.D. Stockdale, J.C. Miller, T. Efthimiopoulos and C. Fotakis
"Four photon excitation of even-parity Rydberg states in krypton and xenon", Phys. Rev. A 35, 1092 (1987).
- 32) M.J. Proctor, J.A.D. Stockdale, T. Efthimiopoulos and C. Fotakis
"Third-harmonic generation and ionization processes in Kr", Chem. Phys. Lett., 137, 223 (1987).
- 33) Gy. Farkas, Z. Horvath, Cs. Toth, C. Fotakis and E. Hontzopoulos
"Linear surface photoelectric effect of gold in intense laser as a possible high current electron sources", J. Appl. Phys. 62, 4545 (1987).
- 34) E. Hontzopoulos, D. Charalambidis, C. Fotakis, Gy. Farkas, Z. Gy and Cs. Toth
"Enhancement of Ultraviolet laser plasma emission produced in a strong static electric field", Optics Comm. 67, 124 (1988).
- 35) E. Hontzopoulos, Y.P. Vlahoyiannis and C. Fotakis
"Rotational Effects on the Quenching of Electronically Excited CH", Chem. Phys. Lett. 147, 321 (1988).
- 36) D. Charalambidis, E. Hontzopoulos, C. Fotakis, Gy. Farkas and Cs. Toth
"High current, small divergence electron beams produced by laser induced surface photoelectric effect", J. Appl. Phys. 65, 2843 (1989).
- 37) D. Charalambidis, B.H. Feng and C. Fotakis
"Angular distribution of photoelectrons in resonantly enhanced multiphoton ionization via the 7s and 8s states of Xe", Z. Physik D 14, 223 (1989).
- 38) E. Patsilinakou, R. Wiedmann, E.R. Grant and C. Fotakis
"High Rydberg spectroscopy dynamics of N₂O", J. Chem. Phys., 91, 3916 (1989).
- 39) Y. Vlahoyannis, E. Patsilinakou, C. Fotakis and J.A.D. Stockdale
"Laser-induced particle generation in Carbon Disulfide and Carbonyl Sulfide", Int. J. of Radiation Physics and Chemistry 36, 523 (1990).
- 40) X. Xing, D. Charalambidis and C. Fotakis
"Studies of the influence of space charge on photoelectron angular distribution", Optics Comm., 79, 181 (1990).
- 41) Z. Kollia, V. Zafirooulos, C. Fotakis and J.A.D. Stockdale
"Laser induced clustering in thiophenol", J. Chem. Phys. 94, 2374 (1991).
- 42) D. Charalambidis, X. Xing, J. Petrakis and C. Fotakis
"Cancellation effects in four-photon-resonant five-photon ionization through the nf J=2 states of Xe, Phys. Rev. A. 44, R 24 (1991).
- 43) V. Zafirooulos, G.S. Fu, E. Hontzopoulos, C. Fotakis and M.C. Castex
"Multiphoton ionization of chlorine : the ³Σ_u state", Chem. Phys. Lett., 179, 258 (1991).
- 44) S.D. Moustazis, M. Tatarakis, A.G. Doukas and C. Fotakis
"Small-divergence electron beams produced by multiphoton excitation of metallic surfaces", Appl. Phys. Lett. 58, 194 (1991).
- 45) E. Patsilinakou, D. Proch and C. Fotakis

- "Multiphoton dissociation dynamics of highly excited states of CS₂ and CS₂ clusters" Chem. Phys., 153, 503 (1991).
- 46) Y.L. Shao, V. Zafirooulos, A. P. Georgiadis and C. Fotakis
"Multiphoton ionizations of magnesium and calcium atoms by short and intense laser pulses", Z. Phys. D 21, Atoms. Mol. and Clust., 299, (1991).
- 47) Y.L. Shao, D. Charalambidis, C. Fotakis, Jian Zhang and P. Lambropoulos
"Observation of laser-induced continuum structure in ionization of sodium", Phys. Rev. Lett. 67, 3669 (1991).
- 48) S.D. Moustazis, M. Tatarakis, C. Kalpouzos and C. Fotakis
"High current and directional electron beams produced from gold photocathodes by ultrashort excimer pulses", Appl. Phys. Lett. 60, 1939 (1992).
- 49) V. Zafirooulos, Z. Kollia, C. Fotakis and J.A.D. Stockdale
"Laser-induced micron size clustering in thiophenol vapor", J. Chem. Phys. 98, 5079 (1992).
- 50) Gy. Farkas, Cs. Toth, S.D. Moustazis, N.A. Papadogiannis and C. Fotakis
"Observation of multiple-harmonic radiation induced from a gold surface by picosecond neodymium-doped yttrium aluminum garnet laser pulses", Phys. Rev. A46, R3605 (1992).
- 51) J.P. Girardeau-Montaut, C. Girardeau-Montaut, S.D. Moustazis and C. Fotakis
"High current density produced by femtosecond nonlinear single-photon photoelectric emission from gold", Appl. Phys. Letters, A62, 426 (1993).
- 52) J.P. Girardeau-Montaut, C. Girardeau-Montaut, S.D. Moustazis and C. Fotakis
"Dependence of femtosecond single-photon photoemission from gold on laser beam incidence and polarization", Appl. Phys. Letters 63, 699 (1993).
- 53) J. Solis, F. Vega and C.N. Afonso, E. Georgiou, D. Charalambidis and C. Fotakis
"Evidence of a non thermal mechanism for ions and neutrals ejection driving excimer laser ablation of Ge", J. Appl. Phys. 74, 4271 (1993).
- 54) V. Zafirooulos, Z. Kollia, C. Fotakis and J.A.P. Stockdale
"Laser-induced micron size clustering in thiophenol vapor", J. Chem. Phys. 98, (6), 5079 (1993).
- 55) D. Charalambidis, Y.L. Shao, S.D. Moustazis and C. Fotakis
"Zero- and nonzero-nuclear-spin isotope response in resonantly enhanced multiphoton ionization of Kr and Xe with broad band lasers", Laser Chemistry 13, 29 (1993).
- 56) X. Xing, D. Charalambidis, E. Koutsourelaki and C. Fotakis
"Interference between nearly resonant three-photon excitation and third-harmonic generation probed by the cancellation of four-photon resonances", Phys. Rev. A47, 2296 (1993).
- 57) Y.L. Shao, C. Fotakis and D. Charalambidis
"Multiphoton ionization of Mg in the wavelength region of 300 nm - 214 nm", Phys. Rev. A48, 3636 (1993).
- 58) O. Faucher, D. Charalambidis, C. Fotakis, Jian Zhang and P. Lambropoulos
"Control of laser induced continuum structure in the vicinity of autoionizing states", Phys. Rev. Lett. 70, 3004 (1993).
- 59) J.P. Girardeau-Montaut, C. Girardeau-Montaut, S.D. Moustazis and C. Fotakis

"Nonlinearity and inversion of femtosecond single- and two-photon photoelectric emission sensitivities from gold", Appl. Phys. Lett. 64, 3664 (1994).

- 60) S. Couris, N. Anastasopoulou and C. Fotakis
"Rotational dependence of the quenching of electronically excited $\text{CH}(A^2\Delta)$ and $\text{CH}(B^2\Sigma^-)$ produced by laser photolysis of acetone at 193 nm", Chem. Phys. Lett. 223, 561 (1994).
- 61) S. Couris, E. Patsilinakou, M. Lotz, E.R. Grant, C. Fotakis, C. Cossart-Magos and M. Horani
"The (2+1) multiphoton ionization spectrum of jet-cooled CS_2 between 54000 and 58000 cm^{-1} ", J. Chem. Phys. 100, 3514 (1994).
- 62) M. Jelinek, V. Olsan, L. Soukup, D. Charalambidis, E. Hontzopoulos, E. Georgiou
"Some properties of carbon films deposited by laser ablation", J. Diamond and Related Materials, 3, 8, 1128 (1994).
- 63) O. Faucher, Y.L. Shao, D. Charalambidis and C. Fotakis
"Laser-induced modification of a structured continuum observed in ionization and harmonic generation", Phys. Rev. A 50, 641 (1994).
- 64) D. Charalambidis, P. Lambropoulos, H. Schröder, O. Faucher, H. Xu, M. Wagner and C. Fotakis
"Settling a long standing question on strong field double ionization", Phys. Rev. A 50, R2822 (1994).
- 65) T.G. Papazoglou, W.Q. Liu, A. Katsamouris and C. Fotakis
"Laser-induced fluorescence detection of cardiovascular atherosclerotic deposits via their natural emission and hypocrellin (HA) probing", J. Photochem. Photobiol. B: Biol. 22, 139 (1994).
- 66) D. Charalambidis, J.A.D. Stockdale and C. Fotakis
"Modification of multiphoton ionization spectra via third harmonic generation in focused laser beams", Z. Phys. D 32, 191 (1994).
- 67) Z. Bor, B. Racz, G. Szabo, D. Xenakis, C. Kalpouzou and C. Fotakis
"Femtosecond transient reflection from polymer surfaces during femtosecond UV photoablation" Appl. Phys. A 60 (4), 365 (1995).
- 68) S.D. Moustazis, N.A. Papadogiannis, C. Fotakis, Gy. Farkas and Cs. Toth
"Generation and tuning of second harmonic radiation produced by ultrashort dye laser pulses from a gold surface", Appl. Phys. Lett. 67 (22), 3239 (1995).
- 69) T.G. Papazoglou, W.Q. Liu, A. Vasiliou, R. Grassmel, E. Papagiannakis, C. Fotakis
"Limitations of diffusion approximation in describing femtosecond laser transillumination of highly scattering media of biological significance", Appl. Phys. Lett. 67 (25) (1995).
- 70) C. Fotakis
"Lasers for Art's Sake!", Optics and Photonics News 6, 30 (1995) **Invited Review**.
- 71) V. Zafirooulos, J. Petrakis and C. Fotakis
"Photoablation of polyurethane films using UV Laser pulses", Optical and Quantum Electronics 27, 1359 (1995).
- 72) M. Jelinek, V. Olsan, L. Jastrabik, V. Studnicka, V. Hnatowocz, J. Kvitek, V. Havranek, T. Dostalova, Y. Zergioti, A. Petrakis, E. Hontzopoulos and C. Fotakis
"Effect of processing parameters on the properties of hydroxylapatite films grown by pulsed laser deposition", Thin Solid Films 257, 125 (1995).

- 73) T.G. Papazoglou, W.Q. Liu, A. Vasiliou, R. Grassmel, C. Fotakis
"Effect of early-arriving photons during femtosecond laser transillumination of highly scattering media of biological significance", *Appl. Optics* Vol. 35 (1996).
- 74) D. Anglos, M. Solomidou, I. Zergioti, V. Zafiropoulos, T.G. Papazoglou and C. Fotakis
"Laser induced fluorescence in artwork diagnostics. An application in Pigment analysis", *Appl. Spectroscopy* 50, 1331 (1996).
- 75) D. Xenakis, O. Faucher, D. Charalambidis and C. Fotakis
"Observation of two XUV-photon ionization using harmonic generation from a short intense laser pulse", *J. Phys. B.* 29, L457 (1996).
- 76) N.E. Karapanagioti, D. Xenakis, D. Charalambidis and C. Fotakis
"Coherent control in four-photon excitation schemes", *J. Phys. B: At. Mol. Opt. Phys.* 29, 3599 (1996).
- 77) Y.L. Shao, D. Charalambidis and C. Fotakis
"Studies on coherent effects in double resonance multi-photon ionization of sodium with pulsed lasers", *J. Phys. B: At Mol. Opt. Phys.* 29, 5377 (1996).
- 78) O. Faucher, D. Charalambidis and C. Fotakis
"Laser control of third-harmonic generation by means of an additional EM field", *Optical and Quantum Electronics* 28, 291 (1996).
- 79) N.E. Karapanagioti, D. Charalambidis, C.J.C.J. Uiterwaal, C. Fotakis, H. Bachau, I. Sanchez, E. Cormier
"Effects of coherent coupling of autoionizing states on photoionization", *Phys. Rev. A.* 53, 2587 (1996).
- 80) M. Jelinek, T. Dostalova, C. Fotakis, V. Studnica, L. Jastrabik, V. Havranek, C. Grivas, V. Hnatotowicz, J. Kadlec, A. Patentaki, V. Perina, M. Pospichal
"Laser deposition and analysis of biocompatible ceramic films-experiences and overview", *Laser Physics* 6 (1), 144 (1996).
- 81) P.V. Maravelaki, V. Zafiropoulos, V. Kylikoglou, M.P. Kalaitzaki and C. Fotakis
"Laser induced breakdown spectroscopy as a diagnostic technique for the laser cleaning of marble", *Spectrochimica Acta B* 52, 41 (1997).
- 82) I. Gobernado-Mitre, A.C. Prieto, V. Zafiropoulos, Y. Spetsidou, C. Fotakis
"On-line monitoring of laser cleaning of limestone by laser induced breakdown spectroscopy", *Applied Spectroscopy* 51, 1125 (1997).
- 83) D. Anglos, S. Couris, and C. Fotakis
"Laser Diagnostics of painted artworks: Laser-Induced Breakdown Spectroscopy in Pigment Identification", *Applied Spectroscopy* 51, 1025 (1997).
- 84) I. Zergioti, C. Fotakis and G.N. Haidemenopoulos
"Growth of TiB₂ and TiC coatings using pulsed laser deposition", *Thin Solid Films* 303, 39 (1997).
- 85) W.Q. Liu, N.W. Cao, T.G. Papazoglou and C. Fotakis
"Diagnosis of atherosclerotic plaque by endogenous and exogenous fluorescence", *Chinese Journal of Quantum Electronics*, 14 (1997).
- 86) T.R. Friberg, V. Zafiropoulos, M. Kalaitzaki, R. Kowalski, J. Petrakis, C. Fotakis
"Excimer laser cleaning of mold-contaminated paper: Sterilization and air quality considerations", *Lasers in Medical Science* 12, 55 (1997).

- 87) I. Zergioti, S. Mailis, N.A. Vainos, P. Papakonstantinou, C. Kalpouzos, C.P. Grigoropoulos, and C. Fotakis
"Microdeposition of metal and oxide structures using ultrashort laser pulses", *Appl. Phys. A* 66 (5), 579 (1998).
- 88) R. Sattmann, I. Monch, H. Krause, R. Noll, S. Couris, A. Hatziapostolou, A. Mavromanolakis, C. Fotakis, E. Larrauri, R. Miguel
"Laser induced breakdown spectroscopy for polymer identification", *Appl. Spectroscopy* 52 (3), 456 (1998).
- 89) I. Zergioti, S. Mailis, N.A. Vainos, C. Fotakis, S. Chen and C.P. Grigoropoulos
"Microdeposition of metals by femtosecond excimer laser", *Appl. Surf. Science*, 127-129, 601 (1998)
- 90) S. Georgiou, V. Zafirooulos, D. Anglos, C. Balas, V. Tornari, C. Fotakis
"Excimer laser restoration of painted artworks: Procedures, mechanisms and effects", *Appl. Surf. Science* 127-129, 738 (1998)
- 91) N.A. Vainos, Ch. Grivas, C. Fotakis, R.W. Eason, A.A. Anderson, D.S. Gill, D.P. Shepherd, M. Jelinek, J. Lancok, and J. Sonsky
"Planar waveguides of Ti:Sapphire, Nd:GGG and Nd:YAG grown by pulsed laser deposition", *Appl. Surf. Science* 129, 514 (1998)
- 92) C. Fotakis, S. Svanberg
"Applications of Laser Spectroscopy", *Europhysics News* 29 (4), 151 (1998) **Invited Review**
- 93) S. Geogriou, V. Zafirooulos, V. Tornari and C. Fotakis
"Mechanistic aspects of excimer laser restoration of painted artworks", *Laser Phys.* 8, (1) 307 (1998)
- 94) J. Sonsky, M. Jelinek, P. Hribek, J. Oswald, L. Jastrabik, V. Studnicka, C. Fotakis, C. Grivas
"The experience with pulsed laser deposition of Nd:YAG and Nd:YAP thin films for planar laser waveguides", *Laser Physics*, 8 (1), 285 (1998).
- 95) I. Zergioti, S. Mailis, N.A. Vainos, C.P. Grigoropoulos and C. Fotakis
"Direct Microdeposition of diffractive structures using femtosecond excimer laser", *Laser Physics* 8 (1), 313 (1998).
- 96) D. Xenakis, N.E. Karapanagioti, C. Fotakis and D. Charalambidis
"Coherent control of third harmonic generation through the phase of an additional third harmonic field", *Opt. Comm.* 152, 83 (1998)
- 97) M. Jelinek, R.W. Eason, J. Lancok, AA. Anderson, C. Grivas, C. Fotakis, L. Jastrabik, F. Flory, H. Rigneault
"Waveguiding pulsed laser deposited Ti: sapphire layers on quartz", *Thin Solid Films* 322, 259 (1998).
- 98) Y. Franghiadakis, C. Fotakis and P. Tzanetakos
"Monitoring of the ion energy and current density at the surface of films grown by excimer laser ablation", *J. Appl. Phys.* 84 (2), 1090 (1998).
- 99) D. Anglos, C. Balas and C. Fotakis
"Laser spectroscopic and optical imaging techniques in chemical and structural diagnostics of painted artwork", *American Lab.*, 60-67 (1999) **Invited Review**

- 100) S. Mailis, I. Zergioti, G. Koundourakis, A. Ikiades, A. Patentalaki, P. Papakonstantinou, N. Vainos and C. Fotakis
"Etching and printing of diffractive optical microstructures by a femtosecond excimer laser", *Appl. Optics*, 38, 11, 2301-2308 (1999).
- 101) I. Zergioti, G.N. Haidemenopoulos, C. Fotakis
"Nanocrystalline growth and diagnostics of TiC and TiB₂ hard coatings by Pulsed Laser Deposition", *Appl. Phys. A* 69, 1 (1999).
- 102) B. Hopp, Z. Tóth, K. Gál, Á. Mechler, Zs. Bor, S.D. Moustazis, S. Georgiou, C. Fotakis
"Time-resolved investigation of the transient surface reflection changes of subpicosecond excimer laser ablated liquids", *Appl. Phys. A* 69, S191-S194 (1999).
- 103) A. Athanassiou, E. Andreou, D. Anglos, S. Georgiou, C. Fotakis
"UV laser ablation of halonaphthalene-doped PMMA: chemical modifications above versus below the ablation threshold", *Appl. Phys. A* 69, S285-S289 (1999).
- 104) M. Lassithiotaki, A. Athanassiou, D. Anglos, S. Georgiou and C. Fotakis
"Photochemical Effects in the UV Laser Ablation of Polymers: Implications for Laser Restoration of Artworks", *Appl. Phys. A* 69 (Rapid Communication), 363-367 (1999).
- 105) I. Zergioti, S. Mailis, N.A. Vainos, A. Ikiades, C.P. Grigoropoulos, C. Fotakis
"Microprinting and microetching of diffractive structures using ultrashort laser pulses", *Appl. Surf. Sciences* 138-139, 82 (1999).
- 106) P. Maravelaki-Kalaitzaki, V. Zafirooulos and C. Fotakis
"Excimer laser cleaning of encrustation on Pentelic Marble: procedure and evaluation of the effects", *Appl. Surf. Sciences*, 148, 92-104 (1999).
- 107) P. Papakonstantinou, N.A. Vainos and C. Fotakis
"Microfabrication by UV femtosecond laser ablation of Pt, Cr and indium oxide thin films", *Appl. Surf. Sciences* 151, 159 (1999).
- 108) A. Zocco, A. Perrone, E.D'Anna, G. Leggieri, A. Luches, A. Klini, I. Zergioti, C. Fotakis
"Deposition of carbon nitride films by reactive pulsed-laser ablation at high fluences", *Diamond and Related Materials* 8, 582-585 (1999).
- 109) C.J.G.J. Uiterwaal, D. Xenakis, B. Witzel, C. Fotakis and D. Charalambidis
"Determination of generalized multiphoton ionization cross sections from ponderomotive shifts", *J. Kor. Phys. Soc.* 35, 148 (1999).
- 110) S. Couris, E. Koudoumas, S. Leach and C. Fotakis
"Polarization effects on the ionization and fragmentation of small molecules under psec and fsec laser excitation", *J. Phys. B: At. Mol. Opt. Phys.* 32, L439 (1999).
- 111) E. Koudoumas, R. De Nalda, C. Fotakis and S. Couris
"Multiphoton ionization and fragmentation of CS₂ under intense short pulse laser radiation", *Laser Chem.* 18, 129 (1999).
- 112) I. Alexandrou, I. Zergioti, G.A. Amaratunga, M.J.F. Healy, C.J. Kiely, P. Hatto, M. Velegrakis and C. Fotakis
"A new reactive pulsed laser ablation technique for the deposition of hard carbon and carbon-nitride thin films", *Materials Lett.* 39, 97 (1999).

- 113) A. Zocco, A. Perrone, A. Luches, R. Rella, A. Klini, I. Zergioti, C. Fotakis
"Optical characterisation of CN_x thin films deposited by reactive pulsed laser ablation", *Thin Solid Films* **349**, 100-104 (1999).
- 114) A. Athanassiou, M. Lassithiotaki, D. Anglos, S. Georgiou and C. Fotakis
"A comparative study of the photochemical modifications effected in the UV laser ablation of doped polymer substrates", *Appl. Surf. Sci.* **154**, 89 (2000).
- 115) V. Tornari, A. Bonarou, V. Zafirooulos, C. Fotakis, M. Doulgeridis
"Holographic applications in evaluation of defect and cleaning procedures", *J. Cult. Heritage* **1**, S325-S329 (2000).
- 116) N.A. Papadogiannis, C. Kalpouzos, B. Witzel, C. Fotakis and D. Charalambidis
"Determination of higher-order harmonic generation 'cut-offs' through high-resolution time-domain spectroscopy", (Letter to the Editor), *J. Phys. B: At. Mol. Opt. Phys.* **33**, L79-L83 (2000).
- 117) Z. Tóth, B. Hopp, A. Mechler, Z. Bor, S.D. Moustazis, A. Athanassiou, S. Georgiou, C. Kalpouzos and C. Fotakis
"Reflectivity Transients on Solid Surfaces Induced by 0.5 ps High Power Excimer Laser Irradiation", *Laser Phys.* **10** (1), 241-245 (2000).
- 118) V. Tornari, V. Zafirooulos, A. Bonarou, N.A. Vainos and C. Fotakis
"Modern Technology in Artwork Conservation: A laser based approach for process control and evaluation", *Opt. and Lasers in Engineering (JOLE)*, **34**, 309 (2000) Invited.
- 119) S. Acqaviva, A. Perrone, A. Zocco, A. Klini and C. Fotakis
"Deposition of carbon nitride films by reactive sub-picosecond pulsed laser ablation", *Thin Solid Films*, **373**, 266 (2000).
- 120) A. Bonarou, L. Antonucci, V. Tornari, S. Georgiou, C. Fotakis
"Holographic interferometry for the structural diagnostics of UV laser ablation of polymer substrates", *Appl. Physics A, Rapid Comm.*, **73**, 647 (2001).
- 121) G. Koundourakis, C. Rockstuhl, D. Papazoglou, A. Klini, I. Zergioti, N.A. Vainos and C. Fotakis
"Laser printing of active optical microstructures", *Appl. Phys. Lett.* **78** (7), 868 (2001).
- 122) P.A. Loukakos, C. Kalpouzos, I.E. Perakis, Z. Hatzopoulos, M. Logaki, C. Fotakis
"Ultrafast electron trapping times in low-temperature-grown gallium arsenide: The effect of the arsenic precipitate spacing and size", *Appl. Phys. Lett.*, **79**, 2883 (2001).
- 123) E. Gyorgy, C. Ristoscu, I.N. Mihailescu, A. Klini, N. Vainos, C. Fotakis, C. Ghica, G. Schmerber and J. Faerber
"Role of laser pulse duration and gas pressure in deposition of AlN thin films", *J. Appl. Phys.*, **90** (1), 456 (2001).
- 124) A. Athanassiou, E. Andreou, D. Fragouli, D. Anglos, S. Georgiou and C. Fotakis
"A comparative examination of photoproducts formed in the 248 nm and 193 nm ablation of doped PMMA", *J. Photochem. Photobiol. A* **145**, 229 (2001).
- 125) A. Athanassiou, K. Lakiotaki, V. Tornari, S. Georgiou and C. Fotakis
"Photocontrolled mechanical phenomena in photochromic-doped polymeric systems", *Appl. Phys. A*, **76**, 97, 2002 (Rapid Communication)
- 126) J. Giapintzakis, C. Grigorescu, A. Klini, A. Manousaki, V. Zorba, J. Androulakis, Z. Viskadourakis and C. Fotakis

- "Low-temperature growth of NiMnSb thin films by pulsed-laser deposition", *App. Phys. Lett.*, 80 (15), 2716 (2002).
- 127) D.G. Papazoglou, A. Karaiskou, I. Zergioti and C. Fotakis
"Shadowgraphic imaging of the sub-ps laser-induced forward transfer process" *Appl. Phys. Lett.*, 81, 1594, (2002).
- 128) M. Jelinek, A. Klini, C. Grivas, J. Lančok, V. Studnička, J. Chval, A. Machová, C. Fotakis
"Deposition of Er: YAG(YAP) layers by subpicosecond and nanosecond KrF excimer laser ablation", *Appl. Surf. Science* 197-198, 416 (2002).
- 129) A. Athanassiou, E. Andreou, A. Bonarou, V. Tornari, D. Anglos, S. Georgiou, C. Fotakis
"Examination of chemical and structural modifications in the UV ablation of polymers" *Appl. Surf. Science* 197-198, 757 (2002).
- 130) I. Zergioti, I. Alexandrou, A. Sfounis, G.A.J. Amaratunga, C. Fotakis, M. Velegrakis
"Synthesis of C₃N₄ by the combination of laser ablation of graphite and N₂ molecular beam", *Appl. Surf. Science*, 197-198, 389 (2002).
- 131) J. Giapintzakis, C. Grigorescu, A. Klini, A. Manousaki, V. Zorba, J. Androulakis, Z. Viskadourakis and C. Fotakis
"Pulsed-laser deposition of NiMnSb thin films at moderate temperatures", *Appl. Surf. Science* 197-198, 421 (2002).
- 132) I. Zergioti, D.G. Papazoglou, A. Karaiskou, N.A. Vainos, C. Fotakis
"Laser microprinting of InOx active optical structures and time resolved imaging of the transfer process", *Appl. Surf. Science* 197-198, 868 (2002).
- 133) F. Claeysens, M.N.R. Ashfold, E. Sofoulakis, C.G. Ristoscu, D. Anglos, C. Fotakis
"Plume emissions accompanying 248 nm laser ablation of graphite in vacuum: Effects of pulse duration", *J. Appl. Phys.*, 91 (9), 6162, (2002).
- 134) P.A. Loukakos, C. Kalpouzos, I.E. Perakis, Z. Hatzopoulos, M. Sfindourakis, G. Konstantinidis and C. Fotakis
"Role of As precipitates on ultrafast electron trapping in low-temperature-growth GaAs and AlGaAs alloys", *J. Appl. Phys.*, 91 (12), 9863, (2002).
- 135) D.G. Papazoglou, I. Zergioti, N.A. Vainos, C. Fotakis
"Microfabrication of optically active InOx microstructures by ultrashort laser pulses", *J. Optoelect. & Advanced Mater.* 4 (3), 809 (2002).
- 136) M. Jelinek, T. Dostalova, L. Himmlova, C. Grivas, C. Fotakis
"Dental implants coated with laser deposited hydroxyapatite films – Physical properties and in-vivo study", *Molecular Crystals & Liquid Crystals* 374, 599 (2002).
- 137) A. Athanassiou, K. Lakiotaki, V. Tornari, S. Georgiou, C. Fotakis
"Photocontrolled mechanical phenomena in photochromic doped polymeric systems", *Appl. Phys. A*, 76, 97, (2003).
- 138) E. Majkova, S. Luby, R. Senderak, Y. Chushkin, M. Jergel, I. Zergioti, D. Papazoglou, A. Manousaki, C. Fotakis
"Sub-ps laser microstructuring of soft X-ray Mo/Si multilayer gratings", *Appl. Phys. A* 76, 763, (2003).
- 139) M. Spyridaki, E. Koudoumas, P. Tzanetakis, C. Fotakis, R. Stoian, A. Rosenfeld and I.V. Hertel

- "Temporal pulse manipulation and ion generation in ultrafast laser ablation of silicon", *Appl. Phys. Lett.*, **83** (7), 1474, (2003).
- 140) I. Zergioti, D.G. Papazoglou, A. Karaiskou, C. Fotakis, E. Gamaly, A. Rode
"A comparative schlieren imaging study between ns and sub-ps laser forward transfer of Cr", *Appl. Surf. Sci.*, **208-209**, 177, (2003).
- 141) C.E.A. Grigorescu, S.A. Manea, M. Mitrea, O. Monnereau, R. Notonier, L. Tortet, R. Kescharwarz, J. Giapitzakis, A. Klini, V. Zorba, J. Androulakis and C. Fotakis
"Surface particularities in pulsed laser ablation/deposition of the ferromagnetic alloy NiMnSb", *Appl. Surf. Sci.*, **212-213**, 78, (2003).
- 142) C. Ristoscu, I.N. Mihailescu, M. Velegrakis, M. Massaouti, A. Klini, C. Fotakis
"Optical emission spectroscopy and time-of-flight investigations of plasmas generated from AlN targets in cases of pulsed laser deposition with sub-ps and ns ultraviolet laser pulses", *J. Appl. Phys.* **93**, 2244 (2003).
- 143) A. Karaiskou, I. Zergioti, C. Fotakis, E. Kapsetaki, D. Kafetzopoulos
"Microfabrication of biomaterials by the sub-ps laser induced forward transfer process" *Appl. Surf. Science* **208-209**, 245 (2003).
- 144) O. Madden, P. Pouli, M. Abraham, C. Fotakis
"Removal of dye-based ink stains from ivory: Evaluation of cleaning results based on wavelength dependency and laser type", *J. Cultural Heritage* **4**, 98s-105s, (2003).
- 145) V. Tornari, A. Bonarou, V. Zafirooulos, C. Fotakis, N. Smyrnakis, S. Stassinopoulos
"Structural evaluation of restoration processes with holographic diagnostic inspection", *J. Cultural Heritage* **4**, S347-S354, (2003).
- 146) V. Zorba, A. Klini, E. Gyorgy, C. Ristoscu, V.S. Teodorescu, I.N. Mihailescu and C. Fotakis
"Dependence of Morphology of AlN Thin Films on Laser Irradiation in Pulsed Laser Deposition", *Laser Physics*, **13** (10), 1325, (2003).
- 147) A. Athanassiou, K. Lakiotaki, M. Kalyva, S. Georgiou, C. Fotakis
"Laser-controlled molecular actuators", *Laser Physics*, **13**, 664, (2003).
- 148) G. Filippidis, G. Zacharakis, G.E. Kochiadakis, S.I. Chrysostomakis, P.E. Vardas, C. Fotakis and T.G. Papazoglou,
"Ex vivo laser-induced fluorescence measurements of lamb and human heart tissue", *Laser Physics*, **13**, 769, (2003).
- 149) D. Brodoceanu, A. Manousaki, I. Zergioti, A. Klini, M. Dinescu, C. Fotakis,
"Growth of polycrystalline $Aa_{0.5}Sr_{0.5}CoO_3$ films by femtosecond pulsed laser deposition", *Appl. Phys. A* **79**, 911 (2004).
- 150) C. Ristoscu, E. Gyorgy, I.N. Mihailescu, A. Klini, V. Zorba, C. Fotakis
"Effects of pulse laser duration and ambient nitrogen pressure in PLD of AlN", *Appl. Phys. A* **79**, 927 (2004).
- 151) Z. Toth, B. Hopp, J. Klebniczki, N. Kresz, Z. Bor, D. Anglos, C. Kalpouzos, C. Fotakis
"Expansion velocities of 0.5 ps KrF excimer laser induced plasma by Doppler-shift analysis of pump and probe measurements", *Appl. Phys. A* **79**, 1287 (2004).
- 152) E. György, V.S. Teodorescu, I.N. Mihailescu, A. Klini, V. Zorba, A. Manousaki, C. Fotakis

- "Surface morphology studies of sub-ps pulsed-laser-deposited AlN thin films", *J. Mater. Res.*, Vol. 19, 3, 820 (2004).
- 153) G. Bounos, A. Athanassiou, D. Anglos, S. Georgiou, C. Fotakis
"Product formation in the laser irradiation of doped PMMA at 248 nm: Implications for chemical effects in UV ablation" *J. Phys. Chem. B* 108 (22), 7052 (2004).
- 154) M. Jelinek, A. Klini, J. Oswald, V. Studnika, C. Fotakis, A. Mackova
"Properties of Er-doped layers grown from Er:YAG (YAP) crystalline targets by sub-picosecond laser deposition", *Laser Physics Letters* 1 (5), 248, (2004).
- 155) E. Koudoumas, M. Spyridaki, R. Stoian, A. Rosenfeld, P. Tzanetakis, I.V. Hertel, C. Fotakis
"Influence of pulse temporal manipulation on the properties of laser ablated Si ion beams", *Thin Solid Films*, 453-454, 372, (2004).
- 156) V. Zorba, I. Alexandrou, I. Zergioti, A. Manousaki, C. Ducati, A. Neumeister, C. Fotakis, G.A.J. Amaratunga
"Laser microstructuring of Si surfaces for low-threshold field-electron emission", *Thin Solid Films*, 453-454, 492 (2004).
- 157) A. Athanassiou, M. Kalyva, K. Lakiotaki, S. Georgiou and C. Fotakis
"All-Optical reversible actuation of photochromic-polymer microsystems", *Adv. Mater.* 17(8), 988 (2005).
- 158) D.G. Papazoglou, I. Zergioti, S. Tzortzakis, G. Sgouros, G. Maravelias, S. Christopoulos, C. Fotakis
"Sub-picosecond ultraviolet laser filamentation-induced bulk modifications in fused silica", *Appl. Phys. A*. 81, 241 (2005).
- 159) R. Stoian, A. Mermillod-Blondin, S.W. Winkler, A. Rosenfeld, I.V. Hertel, M. Spyridaki, E. Koudoumas, P. Tzanetakis, C. Fotakis, I.M. Burakov, N.M. Bulgakova
"Temporal pulse manipulation and consequences for ultrafast laser processing of materials", *Optical Engineering* 44(5), 051106-1 (2005).
- 160) I. Zergioti, A. Karaiskou, D.G. Papazoglou, C. Fotakis, M. Kapsetaki, D. Kafetzopoulos
"Femtosecond laser microprinting of biometaterials", *Appl. Phys. Lett.* 86, 163902 (2005).
- 161) R. Stoian, A. Mermillod-Blondin, N.M. Bulgakova, A. Rosenfeld, I.V. Hertel, M. Spyridaki, E. Koudoumas, P. Tzanetakis, C. Fotakis
"Optimization of ultrafast laser generated low-energy ion beams from silicon targets", *Appl. Phys. Lett.* 87, 124105 (2005).
- 162) I. Zergioti, A. Karaiskou, D.G. Papazoglou, C. Fotakis, E. Kapsetaki, D. Kafetzopoulos
"Time resolved schlieren study of sub-picosecond and nanosecond laser transfer of biomaterials", *Appl. Surface Science* 247, 584 (2005).
- 163) A. Athanassiou, K. Lakiotaki, M. Kalyva, S. Georgiou, C. Fotakis
"Photoswitches operating upon ns pulsed laser irradiation", *Appl. Surface Science* 248, 56 (2005).
- 164) S. Zoppel, D. Gray, M. Farsari, R. Merz, G.A. Reider, C. Fotakis
"Elimination of cracking during UV laser ablation of SrTiO₃ single crystals by employing a femtosecond laser", *Appl. Surface Science* 252, 1910 (2005).
- 165) R.R. Thomson, H.T. Bookey, A.K. Kar, M.R. Taghizadeh, A. Klini, C. Fotakis, E. Romano, A.P. Caricato, M. Martino, S. Shen, A. Jha

- "Erbium-doped waveguide fabrication via reactive pulsed laser deposition of erbium-doped oxyfluoride-silicate glass", *Electronics Letters* 41 (25), 1376 (2005).
- 166) A. Klini, A. Manousaki, D. Anglos and C. Fotakis
"Growth of ZnO thin films by ultraviolet pulsed-laser ablation: Study of plume dynamics", *J. Appl. Phys.* 98, 123301 (2005).
- 167) M. Farsari, G. Filippidis, S. Zoppel, G.A. Reider, C. Fotakis
"Efficient femtosecond laser micromachining of bulk 3C-SiC", *J. Micromech. Microeng.* 15, 1786 (2005).
- 168) M. Farsari, G. Filippidis, C. Fotakis
"Fabrication of three-dimensional structures by three-photon polymerization", *Optics Letters*, Vol. 30, 23, 3180 (2005).
- 169) M. Jelinek, A. Klini, T. Kocourek, R. Zeipl, A. Santoni, C. Fotakis, E. Kaminska
"Subpicosecond and enhanced nanosecond PLD to grow ZnO films in nitrogen ambient", *Surf. & Coatings Technology* 200 (1-4), 418 (2005).
- 170) A. Nevin, S. Cather, D. Anglos, C. Fotakis
"Analysis of protein-based binding media found in paintings using laser induced fluorescence spectroscopy", *Analytica Chimica Acta* 573, 341 (2006).
- 171) A. Athanassiou, M. Varda, E. Mele, M.I. Lygeraki, D. Pisignano, M. Farsari, C. Fotakis, R. Cingolani, S.H. Anastasiadis
"Combination of microstructuring and laser-light irradiation for the reversible wettability of photosensitized polymer surfaces", *Appl. Phys. A: Materials Science & Processing, Rapid Communication* 83, 351 (2006).
- 172) V. Zorba, P. Tzanetakis, C. Fotakis, E. Spanakis, E. Stratakis, D.G. Papazoglou, I. Zergioti
"Silicon electron emitters fabricated by ultraviolet laser pulses", *Appl. Phys. Lett.* 88, 081103 (2006).
- 173) E. Mele, D. Pisignano, M. Varda, M. Farsari, G. Filippidis, C. Fotakis and A. Athanassiou
"Smart photochromic gratings with switchable wettability realized by green-light interferometry", *Appl. Phys. Lett.* 88, 203124 (2006).
- 174) E. Spanakis, A. Chimmalgi, E. Stratakis, C.P. Grigoropoulos, C. Fotakis and P. Tzanetakis
"Atomic force microscopy based, multiphoton, photoelectron emission imaging", *Appl. Phys. Lett.* 89, 013110 (2006).
- 175) T.S. Drakakis, G. Papadakis, K. Sambani, G. Filippidis, S. Georgiou, E. Gizeli, C. Fotakis and M. Farsari
"Construction of three-dimensional biomolecule structures employing femtosecond lasers", *Appl. Phys. Lett.* 89, 144108 (2006).
- 176) E. Skantzakis, V. Zorba, D.G. Papazoglou, I. Zergioti, C. Fotakis
"Ultraviolet laser microstructuring of silicon and the effect of laser pulse duration on the surface morphology", *Appl. Surface Science* 252, 4462 (2006).
- 177) N. Jegenyés, Z. Toth, B. Hopp, J. Klebniczki, Z. Bor, C. Fotakis
"Femtosecond pulsed laser deposition of diamond-like carbon films: The effect of double laser pulses", *Appl. Surface Science* 252, 4667 (2006).
- 178) C. Ghica, C. Ristoscu, G. Socol, D. Brodoceanu, L.C. Nistor, I.N. Mihailescu, A. Klini, C. Fotakis

- "Growth and characterization of β -SiC films obtained by fs laser ablation", *Appl. Surface Science* 252, 4672 (2006).
- 179) C. Ristoscu, G. Socol, C. Ghica, I.N. Mihailescu, D. Gray, A. Klini, A. Manousaki, D. Anglos, C. Fotakis
"Femtosecond pulse shaping for phase and morphology control in PLD: Synthesis of cubic SiC", *Appl. Surface Science* 252, 4857 (2006).
- 180) D. Stambouli, E. Stamboulis, T.G. Papazoglou, A. Siafakas, C. Fotakis
"Laser Doppler spectroscopy towards the detection of spontaneous muscle activity", *Clinical Neurophysiology* 117, 2280 (2006).
- 181) G. Filippidis, J. Catherine, M. Farsari, V. Zorba and C. Fotakis
"Construction of micron three-dimensional structures employing multi-photon polymerization", *J. Nanoengineering and Nanosystems* 220, 165 (2006).
- 182) M. Farsari, G. Filippidis, K. Sambani, T.S. Drakakis, C. Fotakis
"Two-photon polymerization of an Eosin Y-sensitized acrylate composite", *J. Photochemistry and Photobiology A: Chemistry* 181, 132 (2006).
- 183) A. Athanassiou, D. Sahinidou, V. Arima, S. Georgiou, R. Cingolani, C. Fotakis
"Influence of laser wavelength and pulse duration on the degradation of polymeric films embedding photochromic molecules", *J. Photochemistry and Photobiology A: Chemistry* 183, 182 (2006).
- 184) D. Pisignano, E. Mele, L. Persano, A. Athanassiou, C. Fotakis, R. Cingolani
"Optical Gain from the Open Form of a Photochromic Molecule in the Solid State", *J. Phys. Chem. B Lett.* 110, 4506 (2006).
- 185) A. Athanassiou, M.I. Lygeraki, D. Pisignano, K. Lakiotaki, M. Varda, E. Mele, C. Fotakis, R. Cingolani, S.H. Anastasiadis
"Photocontrolled Variations in the Wetting Capability of Photochromic Polymers Enhanced by Surface Nanostructuring", *Langmuir* 22, 2329 (2006).
- 186) S. Zoppel, M. Farsari, R. Merz, J. Zehetner, G. Stangl, G.A. Reider, C. Fotakis
"Laser micro machining of 3C-SiC single crystals", *Microelectronic Engineering* 83, 1400 (2006).
- 187) V. Zorba, L. Persano, D. Pisignano, A. Athanassiou, E. Stratakis, R. Cingolani, P. Tzanetakis and C. Fotakis
"Making silicon hydrophobic: wettability control by two-lengthscale simultaneous patterning with femtosecond laser irradiation", *Nanotechnology* 17, 3234 (2006).
- 188) A. Klini, A. Mourka, V. Dinca, C. Fotakis, F. Claeysens
"ZnO nanorod micropatterning via laser-induced forward transfer", *Appl. Phys. A* 87, 17 (2007).
- 189) C. Reinhardt, S. Passinger, V. Zorba, B.N. Chichkov, C. Fotakis
"Replica molding of picosecond laser fabricated Si microstructures", *Appl. Phys. A* 87, 673 (2007).
- 190) A. Athanassiou, R. Cingolani, E. Tsiranidou, C. Fotakis, A.M. Laera, E. Piscopiello and L. Tapfer
"Photon-induced formation of CdS nanocrystals in selected areas of polymer matrices", *Appl. Phys. Lett.* 91, 153108 (2007)
- 191) M. Farsari, G. Filippidis, T.S. Drakakis, K. Sambani, S. Georgiou, G. Papadakis, E. Gizeli, C. Fotakis
"Three-dimensional biomolecule patterning", *Appl. Surface Science* 253, 8115 (2007)

- 192) V. Dinca, E. Kasotakis, J. Catherine, A. Mourka, A. Mitraki, A. Popescu, M. Dinescu, M. Farsari, C. Fotakis
"Development of peptide-based patterns by laser transfer", *Appl. Surface Science* 254, 1160 (2007)
- 193) V. Dinca, A. Ranella, A. Popescu, M. Dinescu, M. Farsari, C. Fotakis
"Parameters optimization for biological molecules patterning using 248-nm ultrafast lasers", *Appl. Surface Science* 254, 1164 (2007)
- 194) A.P. Caricato, A. Luches, F. Romano, S. A. Mulenko, Y.V. Kudryavtsev, N.T. Gorbachuk, C. Fotakis, E.L. Papadopoulou, R. Klini
"Deposition of thin films for sensors by pulsed laser ablation of iron and chromium silicide targets", *Appl. Surface Science* 254, 1288 (2007)
- 195) V. Zorba, E. Stratakis, E. Spanakis, D.G. Papazoglou, I. Zergioti, P. Tzanetakis, C. Fotakis
"Field emission properties of arrayed and continuous areas of laser fabricated Silicon microstructures", *J. Nanoengineering & Nanosystems* 220, 143 (2007)
- 196) A. Nevin, P. Pouli, S. Georgiou, C. Fotakis commentary
"Laser conservation of art", *Nature Materials* 6(5), 320 (2007)
- 197) F. Claeysens, A. Klini, A. Mourka, C. Fotakis
"Laser patterning of Zn for ZnO nanostructure growth: Comparison between laser induced forward transfer in air and in vacuum", *Thin Solid Films* 515, 8529 (2007)
- 198) A. Ovsianikov, J. Viertl, B. Chichkov, M. Oubaha, B. MacCraith, I. Sakellari, A. Giakoumaki, D. Gray, M. Vamvakaki, M. Farsari, C. Fotakis
"Ultra-low shrinkage Hybrid photosensitive material for two-photon polymerization microfabrication", *ACS Nano* 2, 2257 (2008)
- 199) V. Zorba, E. Stratakis, M. Barberoglou, E. Spanakis, P. Tzanetakis, S.H. Anastasiadis, C. Fotakis
"Biomimetic artificial surfaces quantitatively reproduce the water repellency of a lotus leaf", *Advanced Materials* 20, 4049 (2008)
- 200) V. Zorba, N. Boukos, I. Zergioti, C. Fotakis
"Ultraviolet femtosecond, picosecond and nanosecond laser microstructuring of silicon: structural and optical properties", *Appl. Optics* 47 (11), 1846 (2008)
- 201) M.I. Lygeraki, E. Tsiaridou, S.H. Anastasiadis, C. Fotakis, D. Pisignano, R. Cingolani, A. Athanassiou
"Controlling the reversible wetting capability of smart photochromic-polymer surfaces by micro patterning", *Appl. Phys. A* 91, 397 (2008)
- 202) X. Zhang, P. Berdahl, A. Klini, C. Fotakis, S.S. Mao
"Transition of crystalline orientation of yttria-stabilized zirconia films grown by pulsed laser deposition", *Appl. Phys. A* 91, 407 (2008)
- 203) M. Farsari, A. Ovsianikov, M. Vamvakaki, I. Sakellari, D. Gray, B.N. Chichkov, C. Fotakis
"Fabrication of three-dimensional photonic crystal structures containing an active nonlinear optical chromophore", *Appl. Phys. A* 93, 11 (2008).
- 204) B. Hopp, T. Smausz, B. Papdi, Z. Bor, A. Szabó, L. Kolozsvári, C. Fotakis, A. Nógrádi
"Laser-based techniques for living cell pattern formation", *Appl. Phys. A* 93, 45 (2008).
- 205) V. Zorba, E. Stratakis, M. Barberoglou, E. Spanakis, P. Tzanetakis, C. Fotakis
"Tailoring the wetting response of silicon surfaces via fs laser structuring", *Appl. Phys. A* 93, 819, (2008).

- 206) J.-M. Manceau, A. Nevin, C. Fotakis, S. Tzortzakis
"Terahertz time domain spectroscopy for the analysis of cultural heritage related materials", *Appl. Phys. B* 90, 365 (2008)
- 207) P. Pouli, I.-A. Paun, G. Bounos, S. Geogiou, C. Fotakis
"The potential of UV femtosecond laser ablation for varnish removal in the restoration of painted works of art", *Appl. Surface Sciences* 254, 6875 (2008)
- 208) V. Dinca, A. Ranella, M. Farsari, D. Kafetzopoulos, M. Dinescu, A. Popescu, C. Fotakis
"Quantification of the activity of biomolecules in microarrays obtained by direct laser transfer", *Biomed. Microdevices*, 10, 719 (2008).
- 209) S. Georgiou, D. Anglos and C. Fotakis
"Photons in the service of our past: lasers in the preservation of cultural heritage", *Contemporary Physics* 49 (1), 1 (2008) **Invited Review**
- 210) L. Museur, J.-P. Petitet, J.-P. Michel, W. Marine, D. Anglos, C. Fotakis, A.V. Kanaev
"Picosecond laser structuration under high pressures: Observation of boron nitride nanorods", *Journal of Applied Physics* 104, 093504 (2008)
- 211) A. Erdem, A. Cilingiroglu, A. Giakoumaki, M. Castanys, E. Kartsonaki, C. Fotakis, D. Anglos
"Characterization of Iron age pottery from eastern Turkey by laser- induced breakdown spectroscopy (LIBS)", *Journal of Archaeological Science* 35, 2486 (2008)
- 212) E.J. Gualda, G. Filippidis, G. Voglis, M. Mari, C. Fotakis, N. Tavernarakis
"In vivo imaging of cellular structures in *Caenorhabditis elegans* by combined TPEF, SHG and THG microscopy", *Journal of Microscopy* 229, 141 (2008)
- 213) E.J. Gualda, G. Filippidis, M. Mari, G. Voglis, M. Vlachos, C. Fotakis, N. Tavernarakis
"In vivo imaging of neurodegeneration in *Caenorhabditis elegans* by third harmonic generation microscopy", *Journal of Microscopy* 232, 270 (2008)
- 214) I. Osticioli, A. Nevin, D. Anglos, A. Burnstock, S. Cather, M. Becucci, C. Fotakis, E. Castellucci
"Micro-Raman and fluorescence spectroscopy for the assessment of the effects of the exposure to light on films of egg white and egg yolk", *J. Raman Spectroscopy* 39, 307 (2008)
- 215) V. Dinca, E. Kasotakis, J. Catherine, A. Mourka, A. Ranella, A. Ovsianikov, B.N. Chichkov, M. Farsari, A. Mitraki, C. Fotakis
"Directed three-dimensional patterning of self-assembled peptide fibrils", *NanoLetters* 8 (2), 538 (2008)
- 216) G. Filippidis, E.J. Gualda, K. Melessanaki, C. Fotakis
"Nonlinear imaging microscopy techniques as diagnostic tools for art conservation studies", *Optics Letter* 33 (3), 240 (2008)
- 217) V. Dinca, E. Kasotakis, A. Mourka, A. Ranella, M. Farsari, A. Mitraki and C. Fotakis
"Fabrication of Amyloid Peptide Micro-Arrays using Laser-Induced Forward Transfer and Avidin-Biotin mediated Assembly", *Phys. Stat. Sol. (c)*, 5 (12), 3576 (2008)
- 218) E. Spanakis, J. Dialektos, E. Stratakis, V. Zorba, P. Tzanetakakis and C. Fotakis
"Ultraviolet laser structuring of silicon carbide for cold cathode applications", *Phys. Stat. Sol. (c)*, 5 (10), 3309 (2008)
- 219) P. Pouli, C. Fotakis, B. Hermosin, C. Saiz-Jimenez, C. Domingo, M. Oujja, M. Castillejo

- "The laser-induced discoloration of stonework; a comparative study on its origins and remedies", *Spectrochimica Acta A* **71**, 932 (2008).
- 220) A. Nogradi, B. Hopp, T. Smausz, G. Kecskemeti, Z. Bor, L. Kolozsvari, A. Szabo, A. Klini and C. Fotakis "Directed Cell Growth on Laser-Transferred 2D Biomaterial Matrices", *The Open Tissue Engineering & Regenerative Medicine Journal* **1**, 1-7 (2008)
- 221) V. Dinca, M. Farsari, D. Kafetzopoulos, A. Popescu, M. Dinescu, C. Fotakis "Patterning parameters for biomolecules microarrays constructed with nanosecond and femtosecond UV lasers", *Thin Solid Films* **516**, 6504 (2008)
- 222) A. Klini, P.A. Loukakos, D. Gray, A. Manousaki and C. Fotakis "Laser Induced Forward Transfer of metals by temporally shaped femtosecond laser pulses", *Optics Express* **16** (15), 11300 (2008)
- 223) E. Stratakis, N. Misra, E. Spanakis, D.J. Hwang, C.P. Grigoropoulos, C. Fotakis and P. Tzanetakis "Imaging Dielectric Properties of Si Nanowire Oxide with Conductive Atomic Force Microscopy Complemented with Femtosecond Laser Illumination", *NanoLetters* **8** (7), 1949 (2008)
- 224) V. Piñon, C. Fotakis, G. Nicolas, D. Anglos "Double pulse laser-induced breakdown spectroscopy with femtosecond laser pulses", *Spectrochimica Acta Part B* **63** (10), 1006 (2008).
- 225) V. Tornari, E. Bernikola, A. Nevin, E. Kouloumpi, M. Doulgeridis, C. Fotakis "Fully-Non-Contact Masking-Based Holography Inspection on Dimensionally Responsive Artwork Materials", *Sensors* **8**, 8401 (2008).
- 226) G. Filippidis, K. Melessanaki, C. Fotakis "Second and third harmonic generation measurements of glues used for lining textile supports of painted artworks", *Anal. Bioanal. Chem.* **395**, 2161 (2009).
- 227) E.J. Gualda, G. Filippidis, K. Melessanaki and C. Fotakis "Third-Harmonic Generation and Multi-Photon Excitation Fluorescence Imaging Microscopy Techniques for Online Art Conservation Diagnosis", *Applied Spectroscopy*, **63** (3), 280 (2009).
- 228) P. Pouli, A. Nevin, A. Andreotti, P. Colombini, S. Georgiou, C. Fotakis "Laser assisted removal of synthetic painting-conservation materials using UV radiation of *ns* and *fs* pulse duration: Morphological studies on model samples", *Applied Surface Science* **255** (9), 4955 (2009).
- 229) E. Stratakis, V. Zorba, M. Barberoglou, C. Fotakis and G.A. Shafeev "Femtosecond laser writing of nanostructures on bulk Al via its ablation in air and liquids", *Appl. Surf. Sci.* **255**, 5346, (2009).
- 230) M. Barberoglou, V. Zorba, E. Stratakis, E. Spanakis, P. Tzanetakis, S.H. Anastasiadis and C. Fotakis "Bio-inspired water repellent surfaces produced by ultrafast laser structuring of Silicon", *Applied Surface Science* **255**, 5425 (2009).
- 231) V. Dinca, J. Catherine, A. Mourka, S. Georgiou, M. Farsari and C. Fotakis "2D and 3D biotin patterning by ultrafast lasers", *International Journal of Nanotechnology (IJNT)* **6**, 88 (2009).
- 232) D. Anglos, S. Georgiou, C. Fotakis "Lasers in the Analysis of Cultural Heritage Materials", *Journal of Nano Research*, **8**, 47 (2009).

- 233) E.L. Papadopoulou, M. Barberoglou, V. Zorba, A. Manousaki, A. Pagkozidis, E. Stratakis and C. Fotakis
"Reversible Photoinduced Wettability Transition of Hierarchical ZnO Structures", *J. Phys. Chem. C* **113**, 2891, (2009).
- 234) F. Claeysens, E.A. Hasan, A. Gaidukeviciute, D.S. Achilleos, A. Ranella, C. Reinhardt, A. Ovsianikov, X. Shizhou, C. Fotakis, M. Vamvakaki, B.N. Chichkov, M. Farsari
"Three-Dimensional Biodegradable Structures Fabricated by Two-Photon Polymerization", *Langmuir* **25** (5), 3219, (2009).
- 235) G. Filippidis, K. Troulinaki, C. Fotakis and N. Tavernarakis
"*In vivo* polarization dependant Second and Third harmonic generation imaging of *Caenorhabditis elegans* pharyngeal muscles", *Laser Physics* **19**(7), 1475, (2009).
- 236) G. Filippidis, E.J. Gualda, M. Mari, K. Troulinaki, C. Fotakis, N. Tavernarakis
"*In vivo* imaging of cell morphology and cellular processes in *Caenorhabditis elegans*, using non-linear phenomena", *Micron* **40**, 876 (2009).
- 237) E. Stratakis, V. Zorba, M. Barberoglou, C. Fotakis and G.A. Shafeev
"Laser writing of nanostructures on bulk Al via its ablation in liquids", *Nanotechnology* **20**, 105303 (2009).
- 238) A. Ovsianikov, X. Shizhou, M. Farsari, M. Vamvakaki, C. Fotakis and B.N. Chichkov
"Shrinkage of microstructures produced by two-photon polymerization of Zr-based hybrid photosensitive materials", *Optics Express* **17**(4), 2143, (2009).
- 239) E. Stratakis, M. Barberoglou, C. Fotakis, G. Viau, C. Garcia and G.A. Shafeev
"Generation of Al nanoparticles via ablation of bulk Al in liquids with short laser pulses", *Optics Express* **17**(15), 12650, (2009).
- 240) E. Stratakis, A. Ranella, M. Farsari, C. Fotakis
"Laser-based micro/nanoengineering for biological applications", *Progress in Quantum Electronics* **33**, 127, (2009) **Invited Review**.
- 241) E.V. Barmina, M. Barberoglou, V. Zorba, A.V. Simakin, E. Stratakis, C. Fotakis and G.A. Shafeev
"Surface nanotexturing of tantalum by laser ablation in water", *Quantum Electronics* **39**, 89, (2009).
- 242) E.L. Papadopoulou, V. Zorba, A. Pagkozidis, M. Barberoglou, E. Stratakis and C. Fotakis
"Reversible wettability of ZnO nanostructured thin films prepared by pulsed laser deposition", *Thin Solid Films* **518**, 1267, (2009).
- 243) P. Pouli, A. Selimis, S. Georgiou, C. Fotakis,
"Recent studies of laser science in paintings conservation and research", *Accounts of Chemical Research* **43** (6), 771 (2010) **Invited Review**.
- 244) A. Ranella, M. Barberoglou, S. Bakogianni, C. Fotakis, E. Stratakis
"Tuning cell adhesion by controlling the roughness and wettability of 3D micro/nano silicon structures", *Acta Biomaterialia*, **6**, 2711, (2010).
- 245) E. Magoulakis, E.L. Papadopoulou, E. Stratarakis, C. Fotakis, P.A. Loukakos
"Ultrafast electron dynamics in ZnO/Si micro-cones", *Appl. Phys. A* **98**(4), 701, (2010).
- 246) I. Sakellari, A. Gaidukeviciute, A. Giakoumaki, D Gray, C. Fotakis, M. Farsari, M. Vamvakaki, C. Reinhardt, A. Ovsianikov, B.N. Chichkov

- "Two-photon polymerization of titanium-containing sol-gel composites for three-dimensional structure fabrication", *Appl. Phys. A* 100, 359, (2010).
- 247) A. Nevin, D. Comilli, I. Osticioli, G. Filippidis, K. Melessanaki, G. Valentini, R. Cubeddu, C. Fotakis
"Multiphoton excitation fluorescence and Third Harmonic generation microscopy measurements combined with Confocal Raman Microscopy for the analysis of layered samples of varnished oil films", *Applied Physics A* 100, 599 (2010).
- 248) P. Vounisiou, A. Selimis, G. J. Tserevelakis, K. Melessanaki, P. Pouli, G. Filippidis, C. Beltsios, S. Georgiou and C. Fotakis
"The use of model probes for assessing in-depth modifications induced during the laser cleaning of modern paintings", *Applied Physics A* 100, 647 (2010).
- 249) E. Spanakis, M. Barberoglou, V. Zorba, P. Tzanetakis and C. Fotakis
"Metal coated silicon spike cold-electron emitters show improvement of performance with operation", *Applied Physics Lett.* 96, 033501, (2010).
- 250) M. Oujja, P. Pouli, C. Domingo, C. Fotakis, M. Castillejo
"Analytical spectroscopic investigation of wavelength and pulse duration effects on laser-induced changes of egg-yolk-based tempera paints", *Applied Spectroscopy* 64 (5), 528, (2010).
- 251) E.L. Papadopoulou, E. Axente, E. Magoulakis, C. Fotakis, P.A. Loukakos
"Laser induced forward transfer of metal oxides using femtosecond double pulses", *Applied Surface Science* 257, 508, (2010).
- 252) E. Stratakis, A. Mateescu, M. Barberoglou, M. Vamvakaki, C. Fotakis and S.H. Anastasiadis
"From superhydrophobicity and water repellency to superhydrophilicity: smart polymer-functionalized surfaces", *Chem. Commun.* 46, 4136, (2010).
- 253) C. Schizas, V. Melissinaki, A. Gaidukeviciute, C. Reinhardt, C. Ohrt, V. Dedoussis, B.N. Chichkov, C. Fotakis, M. Farsari, D. Karalekas
"On the design and fabrication by two-photon polymerization of a readily assembled micro-valve", *International Journal of Adv. Manuf. Technol.* 48, 435 (2010).
- 254) E.V. Barmina, M. Barberoglou, V. Zorba, A.V. Simakin, E. Stratakis, C. Fotakis, G.A. Shafeev
"Laser control of the properties of nanostructures on Ta and Ni under their ablation in liquids", *Journal of Optoelectronics and Advanced Materials* 12, 495, (2010).
- 255) E.L. Papadopoulou, A. Pagkozidis, M. Barberoglou, C. Fotakis, E. Stratakis
"Electrowetting properties of ZnO and TiO₂ nanostructured thin films", *J. Phys. Chem C* 114, 10249, (2010).
- 256) M. Barberoglou, V. Zorba, A. Pagozidis, C. Fotakis and E. Stratakis
"Electrowetting properties of micro/nanostructured black Silicon", *Langmuir* 26 (15), 13007, (2010).
- 257) G.J. Tserevelakis, G. Filippidis, A.J. Krmpot, M. Vlachos, C. Fotakis, N. Tavernarakis
"Imaging *Caenorhabditis elegans* embryogenesis by third-harmonic generation microscopy", *Micron* 41, 444 (2010).
- 258) M. Guillermin, A. Klini, J.P. Colombier, F. Garrelie, D. Gray, C. Liebig, E. Audouard, C. Fotakis, R. Stoian
"Tuning spectral properties of ultrafast laser ablation brass plasmas using adaptive temporal pulse shaping", *Optics Express* 18 (11), 11159, (2010).

- 259) E.B. Barmina, E. Stratakis, C. Fotakis, G.A. Shafeev
"Generation of nanostructures on metals by laser ablation in liquids: new results", *Quantum Electronics* **40** (11), 1012, (2010).
- 260) M. Sanz, M. Walczak, M. Oujja, C. Domingo, A. Klini, E.L. Papadopoulou, C. Fotakis, M. Castillejo
"Femtosecond laser deposition of TiO₂ by laser induced forward transfer", *Thin Solid Films* **518**, 5525, (2010).
- 261) E.L. Papadopoulou, A. Samara, M. Barberoglou, A. Manousaki, S.N. Pagakis, E. Anastasiadou, C. Fotakis, E. Stratakis
"Silicon scaffolds promoting 3D neuronal web of cytoplasmic processes", *Tissue Engineering: Part C*, Vol. **16** (3), 497, (2010).
- 262) V. Melissinaki, A.A. Gill, I. Ortega, M. Vamvakaki, A. Ranella, J.W. Haycock, C. Fotakis, M. Farsari and F. Claeyssens
"Direct laser writing of 3D scaffolds for neural tissue engineering applications", *Biofabrication* **3**, 045005, (2011).
- 263) S. Turunen, E. Kapyla, K. Terzaki, J. Viitanen, C. Fotakis, M. Kellomaki and M. Farsari
"Pico- and femtosecond laser-induced crosslinking of protein microstructures: evaluation of processability and bioactivity", *Biofabrication* **3**, 045002, (2011).
- 264) N. Koufaki, A. Ranella, K.E. Aifantis, M. Barberoglou, S. Psycharakis, C. Fotakis, E. Stratakis
"Controlling cell adhesion via replication of laser micro/nano-textured surfaces on polymers", *Biofabrication* **3**, 045004, (2011).
- 265) E. Stratakis, A. Ranella and C. Fotakis
"Biomimetic micro/nanostructured functional surfaces for microfluidic and tissue engineering applications", *Biomicrofluidics* **5**, 013411, (2011).
- 266) E. Kymakis, E. Stratakis, E. Koudoumas and C. Fotakis
"Plasmonic organic photovoltaic devices on transparent carbon nanotube films", *IEEE Transactions on Electron Devices* **58**(3), 860, (2011).
- 267) G.J. Tserevelakis, G. Filippidi, E.V. Megalou, C. Fotakis, N. Tavernarakis
"Cell tracking in live *Caenorhabditis elegans* embryos via Third Harmonic Generation imaging microscopy measurements", *J. Biomedical Optics* **16**(4), 046019, (2011).
- 268) C. Kyvelidou, G.J. Tserevelakis, G. Filippidis, A. Ranella, A. Kleovoulou, C. Fotakis, I. Athanassakis
"Following the course of pre-implantation embryo patterning by non-linear microscopy", *J. of Structural Biology* **176**, 379, (2011).
- 269) M. Malinauskas, A. Gaidukeviciute, V. Purlys, A. Zukauskas, I. Sakellari, E. Kambouraki, A. Candiani, D. Gray, S. Pissadakis, R. Gadonas, A. Piskarskas, C. Fotakis, M. Vamvakaki, M. Farsari
"Direct laser writing of microoptical structures using a Ge-containing hybrid material", *Metamaterials* **5**, 135, (2011).
- 270) K. Terzaki, N. Vasilantonakis, A. Gaidukeviciute, C. Reinhardt, C. Fotakis, M. Vamvakaki and M. Farsari
"3D conducting nanostructures fabricated using direct laser writing", *Optical Materials Express* vol. **1** (4), 586, (2011).
- 271) C. Ristoscu, C. Ghica, E.L. Papadopoulou, G. Socol, D. Gray, B. Mironov, I.N. Mihailescu, C. Fotakis
"Modification of AlN thin films morphology and structure by temporally shaping of fs laser pulses used for deposition", *Thin Solid Films* **519**(19), 6381-6387 (2011).

- 272) E. Kymakis, E. Stratakis, M.M. Stylianakis, E. Koudoumas, C. Fotakis
"Spin coated graphene films as the transparent electrode in organic photovoltaic devices", *Thin Solid Films* 520, 1238, (2011).
- 273) I. Sakellari, E. Kabouraki, D. Gray, V. Purlys, C. Fotakis, A. Pikulin, N. Bityuri, M. Vamvakaki, M. Farsari
"Diffusion-assisted high resolution direct fs laser writing", *ACS Nano* 6 (3), 2302, (2012).
- 274) E.V. Barmina, A.A. Serkov, E. Stratakis, C. Fotakis, V.N. Stolyarov, I.N. Stolyarov, G.A. Shafeev
"Nano-textured W shows improvement of thermionic emission properties ", *Applied Physics A (Rapid Communication)* 106, 1 (2012)
- 275) E.V. Barmina, E. Stratakis, M. Barberoglou, V.N. Stolyarov, I.N. Stolyarov, C. Fotakis, G.A. Shafeev
"Laser-assisted nanostructuring of Tungsten in liquid environment ", *Applied Surf. Sciences* 258, 5898 (2012).
- 276) A. Lorusso, M.L. De Giorgi, C. Fotakis, B. Maiolo, P. Miglietta, E.L. Papadopoulou, A. Perrone
"Y thin films by ultrashort pulsed laser deposition for photocathode application ", *Applied Surf. Sciences* 258, 8719 (2012).
- 277) M. Castillejo, E. Rebollar, M. Oujja, M. Sanz, A. Selimis, M. Sigletou, S. Phycharakis, A. Ranella, C. Fotakis
"Fabrication of porous biopolymer substrates for cell growth by UV laser: The role of pulse duration", *Applied Surf. Sciences* 258, 8919 (2012).
- 278) P.G. Kuzmin, G.A. Shafeev, G. Viau, B. Warot-Fonrose, M. Barberoglou, E. Stratakis, C. Fotakis
"Porous nanoparticles of Al and Ti generated by laser ablation in liquids", *Applied Surf. Sciences* 258, 9283 (2012).
- 279) F. Kolyva, E. Stratakis, S. Rhizopoulou, C. Chimona, C. Fotakis
"Leaf surface characteristics and wetting in *Ceratonia siliqua* L.", *FLORA* 207, 551, (2012).
- 280) I. Zerva, C. Simitzi, A. Ranella, E. Stratakis, C. Fotakis, I. Athanassakis
"3-dimensional laser structured scaffolds improve macrophage adherence and antigen-specific response", *Immunology* 137, 654, (2012).
- 281) E.L. Papadopoulou, V. Zorba, E. Stratakis and C. Fotakis
"Properties of Silicon and Metal Oxide Electrowetting Systems", *J. of Adhesion Science and Technology* 26, 2143, (2012).
- 282) H. Pazokian, A. Selimis, J. Barzin, S. Jelvani, M. Mollabashi, C. Fotakis and E. Stratakis
"Tailoring the wetting properties of polymers from highly hydrophilic to superhydrophobic using UV laser pulses", *J. Micromechanics and Microengineering* 22, 035001, (2012).
- 283) C. Simitzi, A. Ranella, E. Stratakis, C. Fotakis, I. Athanassakis
"Regulation of PC12 differentiation by controlled 3D micro/nano laser structuring of culture substrates", *J. of Tissue Engineering and Regenerative Medicine* 6, 231, (2012).
- 284) A. Ranella, C.H. Simitzi, M. Barberoglou, S. Melissinaki, V. Psycharakis, A. Selimis, M. Farsari, E. Stratakis, I. Athanassakis, C. Fotakis
"Controllable and tunable 3D scaffolds fabrication using laser based techniques", *J. of Tissue Engineering and Regenerative Medicine* 6, 369, (2012).
- 285) E. Stratakis, G. Eda, H. Yamaguchi, E. Kymakis, C. Fotakis, M. Chhowalla

- "Free-standing graphene on microscutured silicon vertices for enhanced field emission properties", *Nanoscale* 4, 3069, (2012).
- 286) B. Hopp, T. Smausz, G. Szabo, L. Kolozsvari, D. Kafetzopoulos, C. Fotakis, A. Nogradi
"Femtosecond laser printing of living cells using absorbing film-assisted laser-induced forward transfer", *Optical Engineering* 51 (1), 014302, (2012).
- 287) M. Malinauskas, A. Zukauskas, V. Purlys, A. Gaidukeviciute, Z. Balevicius, A. Piskarskas, C. Fotakis, S. Pissadakis, D. Gray, R. Gadonas, M. Vamvakaki, M. Farsari
"3D microoptical elements formed in a photostructurable germanium silicate by direct laser writing", *Optics and Lasers in Engineering* 50 (2), 1785, (2012).
- 288) A. Selimis, G.J. Tservelakis, S. Kogou, P. Pouli, G. Filippidis, N. Sapogova, N. Bityuring and C. Fotakis
"Nonlinear microscopy techniques for assessing the UV laser polymer interactions", *Optics Express* 20 (4), 3990, (2012).
- 289) G.D. Tsibidis, M. Barberoglou, P.A. Loukakos, E. Stratakis and C. Fotakis
"Dynamics of ripple formation on silicon surfaces by ultrashort laser pulses in subablation conditions", *Phys. Rev. B* 86, 115316, (2012).
- 290) E. Kymakis, E. Koudoumas, M. Stylianakis, G.D. Spyropoulos, C. Fotakis, E. Stratakis
"Spin coated carbon nanotubes as the hole transport layer in organic photovoltaics", *Solar Energy Materials & Solar Cells* 96, 298, (2012).
- 291) E. Kymakis, K. Savva, M.M. Stylianakis, C. Fotakis, E. Stratakis
"Flexible organic photovoltaic cells with in situ nonthermal photoreduction of spin-coated graphene oxide electrodes", *Adv. Funct. Mater.* 23, 2742, (2013).
- 292) F. Faraldi, G.J. Tservelakis, G. Filippidis, G.M. Ingo, C. Riccucci, C. Fotakis
"Multi photon excitation fluorescence imaging microscopy for the precise characterization of corrosion layers in silver-based artifacts", *Appl. Phys. A* 111 (1), 177, (2013).
- 293) M. Barberoglou, G.D. Tsibidis, D. Gray, E. Magoulakis, C. Fotakis, E. Stratakis, P.A. Loukakos
"The influence of ultra-fast temporal energy regulation on the morphology of Si surfaces through femtosecond double pulse laser irradiation", *Appl. Phys. A* 113(2), 273, (2013).
- 294) K. Terzaki, M. Kissamitaki, A. Skarmoutsou, C. Fotakis, C.A. Charitidis, M. Farsari, M. Vamvakaki, M. Chatzinikolaïdou
"Pre-osteoblastic cell response on three-dimensional, organic-inorganic hybrid material scaffolds for bone tissue engineering", *J. of Biomedical Mater. Res.* 101A(8), 2283, (2013).
- 295) M. Barberoglou, D. Gray, E. Magoulakis, C. Fotakis, P.A. Loukakos, E. Stratakis
"Controlling ripples' periodicity using temporally delayed femtosecond laser double pulses", *Optics Express* 21(15), 18501, (2013).
- 296) F. Gontad, A. Lorusso, A. Klini, A. Loufardaki, M. Panareo, C. Fotakis, A. Perrone
"Spin coated carbon nanotubes as the hole transport layer in organic photovoltaics", *Phys. Rev. ST Accel. Beams*, 16, 093401, (2013).
- 297) M. Oujja, M. Sanz, E. Rebollar, J.F. Marco, C. Domingo, P. Pouli, S. Kogou, C. Fotakis, M. Castillejo
"Wavelength and pulse duration effects on laser induced changes on raw pigments used in paintings", *Spectrochimica Acta Part A: Mol. & Biomolec. Spect.* 102, 7, (2013).
- 298) C. Simitzi, E. Stratakis, C. Fotakis, I. Athanassakis, A. Ranella

"Microconical silicon structures influence NGF-induced PC12 cell morphology", J. of Tissue Eng. Regen. Med. (2013), Vol 9, Issue 4.

- 299) G.D. Tsibidis, E. Stratakis, P.A. Loukakos, C. Fotakis
"Controlled ultrashort-pulse laser-induced ripple formation on semiconductors", Appl. Phys. A, Vol. 114, Issue 1, pp 57-68 (2014)
- 300) G. Tserevelakis, E. Megalou, G. Filippidis, B. Petanidou, C. Fotakis, N. Tavernarakis
"Label-Free Imaging of lipid depositions in *C. elegans* using third-harmonic generation microscopy", Plos One, (2014), Vol.9, Issue 1.
- 301) G. Filippidis, G. J. Tserevelakis, A. Selimis, C. Fotakis
"Nonlinear imaging techniques as non-destructive, high-resolution diagnostic tools for cultural heritage studies", Appl. Phys. A, Vol. 118, Issue 2, pp 417-423 (2014)
- 302) G. Filippidis, M. Mari, L. Kelegkouri, A. Philippidis, A. Selimis, K. Melessanaki, M. Sygletou, C. Fotakis
"Assessment of In-Depth Degradation of Artificially Aged Triterpenoid Paint Varnishes Using Nonlinear Microscopy Techniques", Microscopy and Microanalysis, (2015) Vol. 21, Issue 02.
- 303) M. Mari, G. Filippidis, K. Palikaras, B. Petanidou, C. Fotakis, N. Tavernarakis
"Imaging ectopic fat deposition in *caenorhabditis elegans* muscles using nonlinear microscopy", Microscopy Research Technique, (2015), DOI: 10.1002/jemt.22504

Books:

- 1) C. Fotakis, D. Anglos, V. Zafirooulos, S. Georgiou, V. Tornari, "Lasers in the Preservation of Cultural Heritage: Principles and Applications" Taylor & Francis, New York, USA (2006) (text book).
- 2) K. Dickmann, C. Fotakis, J.F. Asmous (Eds), "Lasers in the Conservation of Artworks", Springer Proceedings in Physics, Springer-Verlag Berlin-Heidelberg (2005).
- 3) C. Fotakis, T. Papazoglou and C. Kalpouzos (Eds), "Optics and Lasers in Biomedicine and Culture", Series of the International Society of "Optics Within Life Sciences V" (OWLS V), Springer Verlag Berlin-Heidelberg (2000).
- 4) C. Fotakis, C. Kalpouzos, T. Papazoglou (Eds), Proceedings of the 9th International Conference on "Gas Flow and Chemical Lasers", SPIE Proceedings, Vol. 1810 (1992).
- 5) A.M. Prokhorov, C. Fotakis, ALT'96 Laser Methods for Biomedical Applications, Society of Photo-optical Instrumentation (1996).

Co-editor in dedicated Journal Volumes:

- 1) C. Fotakis (Guest-Editor) of the Special Issue of Applied Physics A on occasion of "Optical Technologies in Art and Archaeology" to be published (2012).
- 2) Co-Guest-Editor of the Special Issue of Applied Physics A on the occasion of "Julius Springer Award for Applied Physics Vol. A96 (2), (2009).
- 3) C. Fotakis, W. Kautek, M. Castillejo (Eds.), Special Issue of the workshop on "Lasers in the Preservation of Cultural Heritage", Hindawi Publishing Corporation, Laser Chemistry, Volume 2006 (2006).
- 4) C. Fotakis, H. Koinuma, d. Lowndes, M. Stuke (Eds), Proceedings of the 7th International "Conference on Laser Ablation", Applied Physics A, Materials, Science & Processing, Vol. A79 (2004).

- 5) D. Charalambidis, C. Fotakis, P. Lambropoulos (Eds), Proceedings of the 9th International Conference on Multiphoton Processes (ICOMP IX), Eur. Phys. J. D., Vol. 26, Number 1 (2003).
- 6) K. Murakami, A. Yabe, J.H. Horowitz, C. Fotakis and J.T. Dickinson (Eds), Proceedings of the 6th International "Conference on Laser Ablation", Applied Surface Science, Vol. 197-198 (2002).
- 7) Editor of the Laser Chemistry in Greece: A special issue of the Journal of Laser Chemistry (1994).

Chapters in books:

- 1) E. Stratakis, E.V. Barmina, P.A. Loukakos, G.A. Shafeev and C. Fotakis, "Ultrafast laser assisted surface micro and nanostructuring" ed. K. Sugioka, Pan Stanford Publishing Pte Ltd, Chapter 1, p. xxx (xxxx).
- 2) G. Bounos, A. Nevin, S. Georgiou, C. Fotakis, "Laser restoration of painted artworks: Fundamentals, Modelling and Advances" in "Laser Ablation and its Applications", ed. C. Phipps, Springer Verlag, Heidelberg (2006).
- 3) D.G. Papazoglou, I. Zergioti, C. Fotakis, "Physical Aspects of Ultra-Fast UV Laser Transfer", in "Excimer Laser Technology", edited by D. Basting and G. Marowsky, Springer-Verlag Berlin-Heidelberg, Chapter 15, p. 285-294 (2005).
- 4) I. Zergioti, G. Koundourakis, N.A. Vainos and C. Fotakis, "Laser-induced Forward Transfer: An Approach to Single-Step Microfabrication" in "Direct-write Technologies for Rapid Prototyping Applications", edited by A. Pique and D.B. Crisbey, Academic Press, Chapter 16, p. 493-514 (2002)
- 5) V. Zafiropoulos and C. Fotakis, "Lasers in the Conservation of Painted Artworks" in "Laser Cleaning in Conservation: An Introduction", edited by M. Cooper and J. Larson, Butterworth Heinemann, Chapter 6, p. 79-90 (1998).
- 6) C. Fotakis, C. Kalpouzios, and T. Papazoglou, "Excimer Lasers" in "Handbook of the Eurolaser Academy", edited by D. Schuöcker, Chapman and Hall, Vol. 1, Chapter 5, p. 227-265 (1998).

Recent Conference Proceedings:

- 1) 1) N. Bityuring, A. Pikulin, I. Sakellari, E. Kabouraki, D. Gray, V. Purlys, C. Fotakis, M. Vamvakaki, M. Farsari, "Spatial resolution in multiphoton laser polymerization", ICPEPA-8, Rochester, August 2012.
- 2) E. Rebollar, M. Oujja, M. Sanz, M. Sigletou, A. Selimis, C. Fotakis, M. Castillejo, "Fabrication of nanoporous biopolymer substrates by UV laser: the role of pulse duration" EMR-S 2011, Strasbourg.
- 3) S.H. Anastasiadis, E. Stratakis, M. Barberoglou, V. Zorba, A. Mateescu, D.S. Achilleos, M. Vamvakaki, C. Fotakis, "From superhydrophobicity and water repellence to superhydrophilicity: smart polymer-functionalized surfaces", 240th National Meeting, American Chemical Society, Boston, August 2010.
- 4) F. Claeysens, E.A. Hasan, A. Gaidukeviciute, D.S. Achilleos, A. Ranella, C. Reinhardt, A. Ovsianikov, X. Shizhou, C. Fotakis, M. Vamvakaki, B.N. Chichkov and M. Farsari, "Three-dimensional polycaprolactone structures fabricated by two-photon polymerization", Presented in ICO Photonics Conference, Delphi, October 2009.
- 5) E. Spanakis, M. Barberoglou, P. Tzanetakos, C. Fotakis, "Metal coated, fs-laser fabricated silicon spikes as electron emitters for cold cathode applications", Presented in MRS Conferences, Boston, December 2009.
- 6) A. Klini, P.A. Loukakos, D. Gray, A. Manousaki, C. Fotakis "Laser induced forward transfer of metals by temporally shaped femtosecond laser pulses", Presented in COLA, Singapore, November 2009.
- 7) M. Barberoglou, A. Ranella, E. Spanakis, V. Zorba, S.H. Anastasiadis, C. Fotakis, E. Stratakis, "Tuning cell adhesion via controlling the roughness and wettability of 3D micro/nano silicon structures", Presented in COLA, Singapore, November 2009.

- 8) M. Oujja, M. Castillejo, P. Pouli, C. Fotakis, C. Domingo, "Spectral analysis of the effects of laser wavelength and pulse duration on tempera paints", Presented in LACONA VIII, Sibiu, Romania, September 2009.
- 9) C. Vasiliadis, M. Gavrinotis, E. Maniadaki, G. Totou, P. Pouli, C. Fotakis, "The Laser cleaning project of the architectural sculptures of the Acropolis Monuments", Presented in LACONA VIII, Sibiu, Romania, September 2009.
- 10) P. Vounisiou, A. Selimis, K. Melessanaki, P. Pouli, G. Filippidis, C. Beltsios, S. Georgiou, C. Fotakis, "Laser cleaning of modern paintings; using model probes for the in depth assessment of laser induced modifications", Presented in LACONA VIII, Sibiu, Romania, September 2009.
- 11) A. Chavalier-Menu, K. Melessanaki, E. Bernikola, V. Tornari, P. Pouli, C. Fotakis, "Laser assisted removal of lining glues from easel paintings", Presented in LACONA VIII, Sibiu, Romania, September 2009.
- 12) M. Oujja, S. Perez, P. Pouli, C. Fotakis, M. Castillejo, "Analysis of wavelength and pulse duration laser effects on tempera paints", Presented in LACONA VIII, Sibiu, Romania, September 2009.
- 13) G. De Cesare, P. Vounisiou, K. Melessanaki, P. Pouli, C. Fotakis, "The application of laser cleaning to the contemporary paintings", Presented in LACONA VIII, Sibiu, Romania, September 2009.
- 14) S. Kogou, A. Selimis, P. Pouli, S. Georgiou, C. Fotakis, "The role of the substrate in the laser cleaning process; a study on the laser assisted removal of polymeric consolidation materials from various substrates", Presented in LACONA VIII, Sibiu, Romania, September 2009.
- 15) E. Stratakis, M. Barberoglou, C. Fotakis, G. Viau, C. Garcia, G.A. Shafeev, "Generation of Al nanoparticles via short pulse laser ablation of Al in liquids", Presented in E-MRS, Strasbourg, France, June 2009.
- 16) P. Vounisiou, A. Selimis, K. Melessanaki, P. Pouli, G. Filippidis, C. Beltsios, S. Georgiou, C. Fotakis, "The use of model probes for assessing in depth modifications induced during the laser cleaning of modern paintings", Presented in E-MRS, Strasbourg, France, June 2009.
- 17) M. Oujja, S. Perez, M. Castillejo, P. Pouli, C. Fotakis, "Wavelength and pulse duration effects on laser induced changes on unvarnished aged tempera paints", Presented in E-MRS, Strasbourg, France, June 2009.
- 18) E. Papadopoulou, M. Barberoglou, A. Manousaki, E. Stratakis, C. Fotakis, "Photoinduced wettability transition and electro-wetting in hierarchical ZnO and TiO₂ structures", Presented in CLEO/Europe-EQEC, Munich, Germany, June 2009.
- 19) C. Reinhardt, K. Terzaki, A. Gaidukeviciute, A. Giakoumaki, V. Melissinaki, A. Seidel, R. Wilhelm, R. Kiyam, M. Vamvakaki, M. Farsari, C. Fotakis, B.N. Chichkov, "Laser fabrication of nonlinear and metallic photonic nanostructures", Presented in CLEO/Europe-EQEC, Munich, Germany, June 2009.
- 20) E. Stratakis, M. Barberoglou, A. Pagkozidis, V. Zorba, A. Mateescu, D. Achilleos, M. Vamvakaki, S. Anastasiadis, C. Fotakis, "Multifunctional and responsive surfaces based on fs laser micro/nano structuring of Silicon", Presented in CLEO/Europe-EQEC, Munich, Germany, June 2009.
- 21) A. Ovsianikov, B. Bhuiyan, M. Oubaha, B. MacCraith, M. Farsari, M. Vamvakaki, C. Fotakis, B. Chichkov, "3D Microstructuring of Hybrid photosensitive materials by two-photon polymerization technique for applications in photonics", Presented in CLEO/Europe-EQEC, Munich, Germany, June 2009.
- 22) M. Barberoglou, E. Stratakis, V. Zorba, E. Spanakis, P. Tzanetakis, S. Anastasiadis, C. Fotakis, "Laser structured biomimetic artificial surfaces that quantitatively reproduce the water repellency of a Lotus leaf", Presented in CLEO/Europe-EQEC, Munich, Germany, June 2009.
- 23) E. Stratakis, M. Barberoglou, V. Zorba, E. Spanakis, S.H. Anastasiadis, N. Misra, D. Hwang, C. Crigoropoulos, P. Tzanetakis, C. Fotakis "Two recent advances in materials structuring and diagnostics at the nanoscale employing ultra fast pulsed lasers", Presented in 27th International Congress on Applications of Lasers & Electro Optics (ICALEO), Temecula, CA, October 2008.

- 24) N. Misra, E. Stratakis, D.J. Hwang, E. Spanakis, C. Fotakis, P. Tzanetakakis, C. Grigoropoulos, "Imaging Dielectric Properties of Silicon Nanowire Oxide by Conductive Atomic Force Microscopy Complemented with Femtosecond Laser Illumination", MRS Fall Meeting, Boston, MA, December (2008).
- 25) M. Barberoglou, V. Zorba, E. Stratakis, E. Spanakis, P. Tzanetakakis, S.H. Anastasiadis, C. Fotakis, "Bio-inspired water repellent surfaces produced by ultrafast laser structuring of silicon", EMRS 2008, Strasbourg, France, May (2008).
- 26) E. Stratakis, V. Zorba, M. Barberoglou, C. Fotakis, G.A. Shafeev, "Femtosecond laser writing of nanostructures on bulk Al via its ablation in air and liquids", EMRS 2008, Strasbourg, France, May (2008).
- 27) C. Fotakis, M. Barberoglou, V. Zorba, E. Stratakis, E.L. Papadopoulou, A. Ranella, K. Terzaki, M. Farsari, "Applications of ultrafast lasers in materials processing: fabrication on self-cleaning surfaces and scaffolds for tissue engineering", 15th International School on Quantum Electronics: Laser Physics and Applications Proceedings of SPIE 7027 DOI: 10.1117/12.822435 (2008).
- 28) V. Zorba, E. Stratakis, M. Barberoglou, E. Spanakis, P. Tzanetakakis, C. Fotakis, "Tailoring the wetting response of silicon surfaces via fs laser structuring", COLA 2007, Tenerrife, Spain, September 2007.
- 29) M. Farsari, G. Filippidis, S. Zoppel, G.A. Reider, C. Fotakis, "Micromachining of Silicon Carbide using Femtosecond Lasers", J. Physics: Conference Series 59, 84 (2007).
- 30) C. Fotakis, V. Zorba, E. Stratakis, A. Athanassiou, P. Tzanetakakis, I. Zergioti, D.G. Papazoglou, K. Sambani, G. Filippidis, M. Farsari, V. Pouli, G. Bounos, S. Georgiou, "Novel Aspects of Materials Processing by Ultrafast Lasers: From Electronic to Biological and Cultural Heritage Applications", J. Physics: Conference Series 59, 266 (2007).
- 31) S. Zoppel, D. Gray, M. Farsari, R. Marz, G.A. Reider, C. Fotakis, "UV-femtosecond laser ablation of SrTiO₃ single crystals", J. Physics: Conference Series 59, 610 (2007).
- 32) M. Farsari, V. Dinca, A. Mourka, J. Catherine, M. Dinescu, S. Georgiou, C. Fotakis, "Surface Functionalization of 2D and 3D Structures Using Biomolecules", Proceedings of LPM2007, the 8th International Symposium on Laser Precision Microfabrication (2007).