

# BIOGRAPHICAL NOTES

- Name** : Costas Fotakis
- Current Address** : Institute of Electronic Structure & Laser (IESL)  
Foundation for Research and Technology-Hellas (FORTH)  
P.O. Box 385, Heraklion 711 10, Crete, Greece  
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- Specialization** : - Laser Photophysics, Laser Spectroscopy, Laser Materials Processing and Diagnostic Applications.
- Degrees** : - B. Sc. in Chemistry (Univ. of Athens, Greece, 1973), Ph. D. in Chemical Physics (Univ. of Edinburgh, UK, 1978).
- Appointments** : - Director of the Institute of Electronic Structure and Laser (IESL) of FORTH (1997 – present) (<http://www.iesl.forth.gr>).  
- Professor of Physics at the University of Crete (1989 - present).  
- Associate Director of the Institute of Electronic Structure & Laser of FORTH and Head of the Laser and Applications Division (1988 - 1997).  
- Chairman of the Scientific Board of the National Research Center “Democritos” (1994 - 1996).
- Distinctions** : - Optical Society of America (OSA): **Leadership Award - New Focus Prize 2004** “for decade-long leadership of, and personal research contribution to, the field of laser applications to art conservation and leadership in establishing and guiding the scientific excellence of the laser science programs at IESL-FORTH”.  
- Member of the Fellows Committee of the European Optical Society  
- Elected Fellow and Life member of the Optical Society of America (OSA) (2005).  
- Springer Professor, Univ. of California, U.C. Berkeley (2005 – 2006)
- Contracts :**
- Director of the “**European Ultraviolet Laser Facility**” (ULF) (1990-present), a Laser Facility open for research focussing on demanding scientific projects and requiring access to state of the art laser technology and relevant know how. Support to European research groups has been provided by the “**Large Installations Plan**”, “**Access to Research Infrastructures**” and “**Integrated Infrastructures Initiative**” Programmes of the DG XII of EU (since 1990). Currently the Laser Facility is part of the **LASERLAB-EUROPE** (2004 – 2007). Amount (in total): 7.5 MEuro.  
Todate 226 research projects involving 349 scientists have been performed in ULF with EU support.
  - Project leader of several major European Union (EU) Programmes for basic and technological research (1986 – 2006). (**BRITE 2449, BRITE 2178, RAW MATERIALS MA1R1, COMETT, INTAS, and 5 HCM, TMR Networks and Marie Curie (EST and TOK)**). Amount (in total): 4.1 MEuro.
  - Project leader or scientific coordinator of several EU Structural Funds programs (1989 – 2006), **IMP 3.13, STRIDE-LATEM, “LATECA”, “LASTOR**”. Amount (in total) 2.5 MEuro.
  - National Coordinator and member of the International Committee of Project Leaders of the **EUREKA - EUROLASER** EU205 Project on High Power Excimer Laser Applications. Amount: 0.5 MEuro.
- Academic Achievements :**
- Author or co-author of more than 200 scientific articles published in international referred journals with over 2000 citations (see list of publications).

- Invited and keynote speaker in many International Conferences (see list), Universities and Research Centers.
- Co-author of a textbook published by Francis and Taylor and contributor of chapters in several books published by Butterworth-Heinemann, Chapman & Hall, Academy Press and Springer (see list of publications).
- Co-editor in the following journals: Applied Physics A (2004 - ), The European Physical Journal D (1998 – 2003), Laser Chemistry (1993 – 2003), Laser Physics (2001 - ), J. Optoelectron. Adv. Mater. (2004), editor-in-chief of Laser Chemistry (2006 – present).
- Co-author in the Encyclopaedia of UNESCO of Life Support Systems (EOLSS).
- Supervision of 12 Ph.D Thesis and 28 Master Thesis.

### Organization of International Scientific Conferences

- Chairman of the CLEO/Europe Conference on “**Fundamentals and Modelling of Materials Processing with Lasers**”, Munich, June (2009).
- Co-chairman of the CLEO/Europe Conference on “**O3A: Optics for Arts, Architecture, and Archaeology**”, Munich, June (2007).
- Co-chairman of EMS-S 2007 Workshop on “**Science & Technology of Cultural Heritage Materials: Art Conservation and Restoration**”, Strasbourg, May (2007).
- Chairman of Symposium within Laser Optics Conference on “**Lasers in the Preservation of Cultural Heritage**”, St. Petersburg, Russia (2006).
- Chairman of Topical Seminar **CLEO-Europe**, Munich, Germany (2005).
- Chairman of the 7<sup>th</sup> International “**Conference on Laser Ablation**” (COLA) (2003), Crete, Greece.
- Co-chairman of LACONA V “**Lasers in the Conservation of Artworks**”, Osnabrueck, Germany, (2003).
- Co-chairman of the 9<sup>th</sup> “**International Conference on Multiphoton Processes**” (ICOMP IX) (2002), Crete, Greece.
- Co-chairman Laser Physics (LPHYS 2002), Bratislava, Slovakia.
- Co-chairman of the 6<sup>th</sup> International “**Conference on Laser Ablation**” (COLA) (2001), Tsukuba, Japan.
- Chairman of the OWLS V (Fifth International Conference on **Optics Within Life Sciences**) on “**Biomedicine and Culture in the Era of Modern Optics and Lasers**” (1998).
- Member of the Steering Committee CLEO/EUROPE (1994 – 2000).
- Chairman of the CLEO/Europe (Conference on Lasers and Electro-optics) on “**Nonlinear optics and applications of laser spectroscopy**” (1996) and “**Lasers in Material Processing**” (1998).
- Co-chairman of the “**Advance Laser Technology**” (ALT'96) Conference (1996).
- Chairman of the “**Lasers in the Conservation of Artworks**” (LACONA I) International Conference (1995), Crete, Greece.
- Co-Chairman of the 2nd European Physical Society (EPS), “**EPS School on Lasers and Applications**” and the **EPS Workshop on Lasers and Applications**” and the **EPS Workshop on Laser Applications in Medicine and Industry**” (1994), Crete, Greece.
- Chairman of the 9th International Conference on “**Gas Flow and the Chemical Lasers**” (GCL) (1992), Crete, Greece.
- Member of the International Scientific Committees of several Conferences: COLA, LACONA, ALT “**Advanced Laser Technologies**”, LPHYS “**Laser Physics**”, GCL-HPL, LIBS, OWLS.

### Consulting :

- National Delegate of the **European Strategy Forum for Research Infrastructures (ESFRI) in Europe** (2002 – 2004) and (2006 – present).
- National Representative in EU in the **Programme Committee for Research Infrastructures** (2004 - 2006).
- Member of the Management Board of **LASERLAB-EUROPE** Project (Integrated Infrastructures Initiative Programme of EU) (2004 – 2007).
- Member of the Scientific Advisory Boards of:
  - ♦ European Laboratory for Non linear Spectroscopy (LENS), Florence, Italy.
  - ♦ Central Laser Facility, Rutherford Appleton Laboratory, Didcot, U.K.
  - ♦ The Photon Science Institute, Manchester University, U.K.
- Board of Stakeholders of “**PHOTONICS 21**” EU Technology Platform (2006 – present).
- Evaluator and Consultant for European Union (EU) Research Programmes (BRITE-EURAM, SCIENCE, HCM, TMR).
- Member of Advisory Committees of EU for issues related to Research Potential and RTD policies.

- Member of the National Research Council of Greece (Natural Sciences Section) (1997 – 2001).
- Chairman of the Steering Committee of EU Conference “Investing in Europe’s Human Research Potential” (2000).
- Chairman of the Management Board of the non-profit organization “Association for Research, Technology & Training (1992-2004).
- Member of the Management Board of “Science and Technology Park of Crete” (1993-2001).

- Associations :**
- Optical Society of America (OSA), Elected Fellow (2005) and Lifemember.
  - European Optical Society (EOS), Member of the Fellows Selection Committee (2004-2007)
  - European Physical Society (Co-opted member of the Board of the Quantum Electronics and Optics Division) (1994 – 2000)
  - European Physical Society (Member of the Board of the Molecular Physics Section) (1989 – 1991)
  - American Physical Society (APS) (1996)
  - Institute of Physics (UK) (2001)

### Recent Invited Presentations in International Conferences

- ICO-21, Sydney 2008 Congress on “Optics for the 21<sup>st</sup> Century”, Sydney, Australia, July 2008, “Micro- and nanoprocessing of materials by ultrafast lasers: From optical to biological and cultural heritage applications” (*Plenary Lecture*).
- 7<sup>th</sup> Conference on “Lasers in the Conservation of Artworks” (LACONA VII), Madrid, Spain, September 2007, “Optical technologies in the service of the future of our past”.
- Conference on “Laser Ablation” (COLA), Banff, Canada, September 2005 “Novel Aspects of Materials Processing by Ultrafast Lasers”.
- 3<sup>rd</sup> International Symposium on Nanomanufacturing (ISNM), Limassol, Cyprus, November 2005 “Novel Aspects of Microprocessing by Ultrafast Lasers: From Microfluidic to Biological and Cultural Heritage Applications” (*Plenary Lecture*).
- “Frontiers in Optics: Laser Science XX”, Rochester, USA, October 10-14, 2004.
- 3<sup>rd</sup> European Conference on Research Infrastructures, Nottingham, U.K., December (2005) (key note).
- Conference on “Advanced Laser Technologies” (ALT), Rome, Italy, September 2004.
- Conference on “Laser Precision Micromachining” (LPM), Munich, Germany, June 2003.
- Symposium “Crossing Borders – Lasers in Physics, Chemistry and Biology”, Amsterdam, The Netherlands, May 30-21, 2002 (key note).
- 19th Congress of the International Commission for Optics (ICO) on “Optics for the Quality of Life”, Firenze, Italy, August 25-30, 2002.
- Gordon Conference on “Laser Interactions with Materials”, New London, NH, June 2002.

### Invited talks in Universities, Research Centers etc.

A great number of seminars and colloquia have been delivered at Universities and Research Centers, including:

Berkeley University, California/Technical Univ. of Aachen, Germany/CERN, Switzerland/University of Pittsburgh, USA/University of Valladolid, Spain/University of London King’s College, U.K./The British Museum, U.K./The Metropolitan Museum of Art, USA/The Canadian Conservation Institute, Canada/The Carnegie Museum, USA/Dublin State University (DCU), Ireland/University of Paris Nord, France/Free University of Amsterdam, The Netherlands/Technical University of Berlin, Germany/University of Marseille, France/CSIC, Madrid, Spain/Free Univ. of Brussels, Belgium/Univ. of Bari, Italy/ Max Planck Institute for Quantum Optics, Garching, Germany/Institute of Physics, Budapest, Hungary/ Free University Brussels, Belgium.

- Other activities:**
- Springer Professor at Berkeley University, California (USA), Ruhr University (Germany), University of Paris-Nord (France), Univ. of Pittsburgh (USA) and coordinator of several international bilateral collaborations (Oak Ridge National Lab. (USA), Lawrence Livermore National Lab. (USA), Purdue Univ. (USA), Univ. of Paris Sud (France), Max- Planck Institute for Quantum Optics (Germany), Institute of Physics (Hungary), Ecole Polytechnique (France).
  - Invited panelist of the European **Industrial Laser Forum** (The Hague, 1991)

## List of Publications

- 1) R.J. Donovan and C. Fotakis  
“Isotope effects in the quenching of electronically excited atoms: Photolysis of  $\text{CD}_3\text{I}$ ”, *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  $\text{I}(5^2\text{P}_{1/2})$  by Hydrogen and Deuterium Halides”,  $\text{H}_2\text{O}$  and  $\text{D}_2\text{O}$ , *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  $\text{GeH}_3\text{I}$ ”, *J. Photochemistry*, 6, 193 (1977).
- 5) C. Fotakis and R.J. Donovan  
“Temperature Dependence for the Removal of  $\text{I}(5^2\text{P}_{1/2})$  by  $\text{HBr}$ ”, *Chem. Phys. Letters*, 54, 91 (1978).
- 6) C. Fotakis and R.J. Donovan  
“Temperature Dependence for the Quenching of  $\text{I}(5^2\text{P}_{1/2})$  by  $\text{CH}_3\text{I}$  and  $\text{CD}_3\text{I}$  : 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  $\text{C}_6\text{H}_5\text{I}$  and  $\text{C}_6\text{F}_5\text{I}$ ”, *J. Photochemistry*, 9, 433 (1978).
- 8) M.C. Addison, A.J. Leitch, C. Fotakis and R.J. Donovan  
“Reaction of  $\text{CN}(X^2\Sigma^+)$  with  $\text{OCS}$  and formation of  $\text{SCN}$ ”, *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  $\text{HCN}$ ,  $\text{NH}_3$  and  $\text{OCS}$ ”, *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  $\text{I}(5^2\text{P}_{1/2})$  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  $\text{I}(5^2\text{P}_{1/2})$  by  $\text{HCl}$ ”, *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  $\text{CH}_3\text{X}$  molecules ( $\text{X}=\text{OH}$ ,  $\text{Br}$ ,  $\text{I}$ )”, *Chem. Phys. Letters*, 67, 1 (1979).
- 14) C. Fotakis, M. Martin and R.J. Donovan  
“Laser Photolysis of  $\text{CD}_3\text{I}$  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  $\text{I}_2(\text{D}^1\Sigma^+)$ ”, *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 Suphur 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. Patsilinacou  
"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 N<sub>2</sub>O”, *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 <sup>3</sup>Σ<sub>u</sub> 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 CS<sub>2</sub> and CS<sub>2</sub> 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. Kalpouzios 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) E. Hontzopoulos, C. Fotakis and M. Doulgeridis  
"Excimer laser in art restoration", *SPIE* 1810, 748 (1992).
- 52) 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).
- 53) 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).
- 54) 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).
- 55) 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).
- 56) 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).
- 57) 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).
- 58) 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).
- 59) 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).
- 60) 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).
- 61) S. Couris, N. Anastasopoulou and C. Fotakis  
"Rotational dependence of the quenching of electronically excited CH(A<sup>2</sup>Δ) and CH(B<sup>2</sup>Σ<sup>-</sup>) produced by laser photolysis of acetone at 193 nm", *Chem. Phys. Lett.* 223, 561 (1994).
- 62) S. Couris, E. Patsilina, M. Lotz, E.R. Grant, C. Fotakis, C. Cossart-Magos and M. Horani  
"The (2+1) multiphoton ionization spectrum of jet-cooled CS<sub>2</sub> between 54000 and 58000 cm<sup>-1</sup>", *J. Chem. Phys.* 100, 3514 (1994).
- 63) 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).

- 64) 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).
- 65) 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).
- 66) 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).
- 67) 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).
- 68) Z. Bor, B. Racz, G. Szabo, D. Xenakis, C. Kalpouzos and C. Fotakis  
"Femtosecond transient reflection from polymer surfaces during femtosecond UV photoablation" Appl.  
Phys. A 60 (4), 365 (1995).
- 69) 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).
- 70) 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).
- 71) C. Fotakis  
"Lasers for Art's Sake!", Optics and Photonics News 6, 30 (1995).
- 72) V. Zafiropoulos, J. Petrakis and C. Fotakis  
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