

1. ALCIVIADES- CONSTANTINOS CEFALAS

2. PUBLICATIONS

3. A. HONORS THESIS

“Energy spectrum of electrons in periodic crystal structures”, Physics Department, National and Capodistrian University of Athens, Greece (1978).

4. B. M.Sc THESIS

“Photodissociation dynamics of molecules with excimer lasers”, Physics Department, Victoria University of Manchester, UK (1983).

5. C. Ph.D. THESIS

“Non-linear optics -phase conjugation in excimer molecules”, Physics Department, Victoria University of Manchester, UK (1983).

6. D. BOOKS CHAPTERS

1. “Magnetic water treatment device. The influence of impurity elements and magnetic fields on the crystallization from calcium carbonate”, S. Kobe, G. Dražić, J. Stražisar and A.C. Cefalas, in *Physikalische und Energetische Wasserbehandlungsverfahren für Wärmeübertrager und Rohrleitungen*, D. Ende (Ed.), Publico Publications, Essen, Germany, pp. 94-100 (2006) ISBN: 3-93 4736-11-4.
2. “Lasers and Biodeterioration”, I. Gomoiu, R. Radvan, E. Sarantopoulou and A. C. Cefalas in “Handbook on the Use of Lasers in Conservation and Conservation Science”, M. Schreiner, M. Strlic (eds.), publisher: COST office, G7 2006. (<http://www.science4heritage.org/COSTG7/booklet/>) ISBN-10: 973 88109 30.
3. “Spectroscopy and Applications of Diatomic and Triatomic Molecules Assisted by Laser Light at 157.6 nm”, E. Sarantopoulou and A. C. Cefalas in “Ultraviolet spectroscopy and UV lasers” edited by Marcel and Dekker, pp.191-227, New York 2002; ISBN: 978-0-8247-0668-5 (hardback) 978-0-8247-4406-9 (electronic).

4. “VUV Laser Spectroscopy of Trivalent Rare Earth Ions in Wide Band-Gap Fluoride Crystals”, E. Sarantopoulou and A. C. Cefalas in “Ultraviolet spectroscopy and UV lasers” edited by Marcel and Dekker, pp. 281-336, New York 2002. ISBN: 978-0-8247-0668-5 (hardback), 978-0-8247-4406-9 (electronic).

7. E. PAPERS IN REFEREED JOURNALS

5. “Charge transport mechanisms and memory effects in amorphous TaNx thin films”, N. Spyropoulos-Antonakakis, E. Sarantopoulou, G. Drazic, Z. Kollia, D.Christofilos, G. Kourouklis, D. Palles and A. C. Cefalas, *Nanoscale Res. Lett.* **8**, 432 (2013).
6. “Pulsed-laser fabrication of gas-filled hollow Co–Pt nanospheres”, S. Sturm, K.Z. Rozman, B. Markoli, N.S. Antonakakis, E. Sarantopoulou, Z. Kollia and S. Kobe, *Acta Mater.* **61**, 7924 (2013).
7. “Thermionic field emission in gold nitride Schottky nanodiodes”, N. Spyropoulos-Antonakakis, E. Sarantopoulou, Z. Kollia, Z. Samardzija, S. Kobe and A. C. Cefalas, *J. Appl. Phys.* **112**, 094301 (2012).
8. “Entropic nanothermodynamic potential from molecular trapping within photon induced nano-voids in photon processed PDMS layers”, A. C. Cefalas, E. Sarantopoulou, Z. Kollia, M. Kitsara, I. Raptis and E. Bakalis, *Soft Matter* **8**, 5561 (2012).
9. “Protein immobilization and detection on laser processed polystyrene surfaces”, E. Sarantopoulou, P.S. Petrou, Z. Kollia, D. Palles, N. Spyropoulos-Antonakakis, S. Kakabakos and A.C. Cefalas, *J. Appl. Phys.* **110**, 064309 (2011).
10. “Interplanetary survival probability of *Aspergillus terreus* spores under simulated solar vacuum ultraviolet irradiation”, E. Sarantopoulou, I. Gomoiu, Z. Kollia and A.C. Cefalas, *Planet. Space Sci.* **59**, 63 (2011).
11. “Magnetic Field Trapping in Coherent Antisymmetric States of Liquid Water Molecular Rotors”, A. C. Cefalas, E. Sarantopoulou, Z. Kollia, C. Riziotis, G. Dražic, S. Kobe, J. Stražičar, and A. Meden, *J. Comput. Theor. Nanosci.* **7**, 1800 (2010).

12. "Formation of core-shell and hollow nanospheres through the nanoscale melt-solidification effect in the Sm-Fe(Ta)-N system", S. Sturm, K.Z. Rozman, B. Markoli, E. Sarantopoulou, Z. Kollia, A.C. Cefalas and S. Kobe, *Nanotechnol.* **21**, 485603 (2010).
13. "Technology Trends and Theory of Nanoscale Devices for Quantum Applications", A .C. Cefalas, C. Riziotis, A. Vasilakos and A. Vourdas, *J. Comput. Theor. Nanosci.* **7**, 1631 (2010).
14. "Determination of oxygen content in pulsed laser deposited InN thin films with analytical electron microscopy", G. Drazic, E. Sarantopoulou, Z. Kollia, A.C. Cefalas and S. Kobe, *Microsc. Microanal.* **15**, 1316 (2009).
15. "Surface modification of polyhedral oligomeric silsesquioxane block copolymer films by 157 nm laser light", E. Sarantopoulou, Z. Kollia, A. C. Cefalas, A. E. Siokou, P. Argitis, V. Bellas, and S. Kobe *J. Appl. Phys.* **105**, 114305 (2009).
16. "Dual purpose laser ablation-inductively coupled plasma mass spectrometry for pulsed laser deposition and diagnostics of thin film fabrication:Preliminary study", M. Janeva Azdejkovic, J. T van Elterena, K. Zuzek Rozman, R. Jacimovic, E. Sarantopoulou, S. Kobe and A. C. Cefalas, *Talanta* **79**, 583 (2009).
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21. "Growth, clustering and morphology of intermetallic alloy core-shell nanodroplets", A. C. Cefalas, S. Kobe, E. Sarantopoulou, Z. Samardžija, M. Janeva, G. Drazič, and Kollia, *Phys. Status Solidi (A)* **205**, 1465 (2008).
22. "Dynamics and Laser Processing of Functional Fluoride Organic Surfaces at VUV wavelengths", E. Sarantopoulou, Z. Kollia, M. Chatzichristidi, A. Douvas A, P. Argitis, S. Kobe and A.C. Cefalas, *J. Laser Micro/Nanoeng.* **3**, 24 (2008).
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28. "Nano-scale spatial control over surface morphology of biocompatible fluoropolymers at 157 nm", E. Sarantopoulou, Z. Kollia, A.C. Cefalas, A. M. Douvas, M. Chatzichristidi, P. Argitis and S. Kobe, *Mater. Sci. Eng. C* **27**, 1191 (2007).

29. "Polymer self-assembled nano-structure and surface relief gratings induced with laser at 157nm", E. Sarantopoulou, Z. Kollia, A. C. Cefalas, A. M. Douvas, M. Chatzichristidi, P. Argitis and S. Kobe, *Appl. Surf. Sci.* **253**, 7884 (2007).
30. "VUV light induced surface interaction and accelerated diffusion of carbon, silicon, oxygen and other composites in LiF crystals", E. Sarantopoulou, C.P.E. Varsamis, Z. Kollia, A.C. Cefalas, J. Kovac and S. Kobe *Appl. Surf. Sci.* **254**, 804 (2007).
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35. "Self assembled structures on fluoro-polymers induced with laser light at 157 nm", Z. Kollia, E. Sarantopoulou, A.C. Cefalas, S. Kobe, P. Argitis and K. Missiakos, *Appl. Surf. Sci.* **248**, 248 (2005).
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