

1. Papers in Refereed Journals

1. “Electronic states of CF^{+} ”,
I.D. Petsalakis, G. Theodorakopoulos,
Chem. Phys. 254, 181 (2000).
2. “Potential energy curves and dipole transition moments to the ground state of the system $Ar^*(3p^5 4s, ^3P, ^1P) + Ne$ ”,
I.D. Petsalakis, R.J. Buenker, H.- P. Liebermann, A.B. Alekseyev, A.Z. Devdariani and G. Theodorakopoulos,
J. Chem. Phys. 113, 5812 (2000).
3. “Predissociation lifetimes of the $E^2\Pi$ and $F^2\Pi$ states of CH^+ ”,
A. Metropoulos and A. Mavridis,
Chem. Phys. Lett. 331, 89 (2000).
4. “Nonperturbative theory and computation of the nonlinear response of He to dc- and ac-fields”,
Th. Mercouris, S.I. Themelis and C.A. Nicolaides,
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5. “Quantum mechanical versus semiclassical calculations of dc-field induced tunneling rates for Helium, for field strengths in the range 0.067-1.0 a.u.”,
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6. “Variation of harmonic generation from He interacting with short laser pulses of 5 eV as a function of pulse rise time and intensity”,
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7. “The continuous spectrum in the solution of the time-dependent Schrödinger equation for laser-atom interactions”,
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8. “Nonperturbative multiphoton detachment rates of H^- and their relation to the electronic structure of the initial state”,
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9. “Dichromatic polyphotonic ionization rate of He $\lambda_1=248$ nm and $\lambda_2=(1/3)248$ nm from the many-electron, many-photon theory”,
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10. “Theoretical resolution of the H⁻ resonance spectrum up to the n=4 threshold, I: States of ¹P⁰, ¹D⁰ and ¹F⁰ symmetries”,
M. Bylicki and C.A. Nicolaides,
Phys. Rev A 61, 052508 (2000).
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12. “Energies, widths and spectral fetures of the ³P resonances of H⁻”,
M. Bylicki and C.A. Nicolaides,
J. Phys. B 33, 911 (2000).
13. “Complex energies and the polyelectronic Stark problem”,
S.I. Themelis and C.A. Nicolaides,
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14. “Order of the phase transition in models of DNA thermal denaturation”,
N. Theodorakopoulos, T. Dauxois and M. Peyrard,
Phys. Rev. Lett. 85, 6 (2000).
15. “Existence of He₂⁻ negative ions with remote electrons in antibonding orbitals”,
N.C. Bacalis,
J. Phys. B 33, 1415 (2000).
16. “Comment on the formation of He²⁻ ⁴I_g states”,
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17. “Determination of working length in endodontic therapy. How accurately can it be achieved with current methods”,
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18. “A revised many-body potential energy function for the description of the H₃O⁺(H₂O)_n clusters”,
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20. “Cluster collisions of water tetramers: A classical dynamical study”,
A. Vegiri and S. C. Farantos,
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21. “Interpretation of the spin glass behaviour of diluted magnetic semiconductors below the nearest-neighbour percolation threshold via realistic Monte Carlo simulations”,
D. Karaoulanis, J.P. Xanthakis and N.C. Bacalis,
J. Magn. Mater. 221, 407 (2000).
22. “Preparation and characterization of $[H_3N(CH_2)_6NH_3]PbI_4$ and similar compounds with a layered perovskite structure”,
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23. “Alternative method for the preparation of 4-5-ethylenedithio-1,3-dithiole-2-thione and related compounds”,
G.C. Papavassiliou, G.A. Mousdis and A. Papadima,
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24. “Optical investigation of a τ -(EDO-(S,S)-DMEDT-TTF) $_2$ (AuBr $_2$)(AuBr $_2$) $_y$ with $y \approx 0.75$ ”,
I. Olejniczak, J.L. Musfeldt, G.C. Papavassiliou and G.A. Mousdis,
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26. “Spectroscopic investigation of AgI-doped borate glasses”,
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Solid State Ionics 136-137, 1031 (2000).
27. “Origins of anomalous mixed-cation effects in ion-exchanged glasses”,
M.D. Ingram, J.E. Davidson, A.M. Coats, E.I. Kamitsos and J.A. Kapoutsis,
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28. “Connection between the microwave and far infrared conductivity of oxide glasses”,
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30. “Mixed cation effect in $xNa_2O \cdot (1-x)Ag_2O \cdot 3B_2O_3$ glasses: structural and dielectric investigation”,
C.P. Varsamis, E.I. Kamitsos and G.D. Chryssikos,
Phys. Chem. Glasses 41, 242 (2000).
31. “Synthesis and vibrational investigation of lithium magnesium metaborate glasses”,
J.A. Kapoutsis, E.I. Kamitsos, G.D. Chryssikos, H. A. Feller, N. Lower, M. Affatigato and S. A. Feller,
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32. “Polarized resonance Raman and FTIR reflectance spectroscopic investigation of molecular orientation in industrial Poly(Vinyl Chloride) specimens”,
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33. “Secondary structure of chorion proteins of the teleostean fish *Dentex dentex* by ATR FT-IR and FT-Raman spectroscopy”,
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J. Structural Biology 132, 112 (2000).
34. “Mass spectroscopic studies and ablation characteristics of nylon 6.6 in the ultraviolet”,
A.C. Cefalas, N. Vassilopoulos, E. Sarantopoulou, Z. Kollia and C. Skordoulis,
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35. “LiCaAlF₆:Nd³⁺ crystal as optical material for 157 nm photolithography”,
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Opt. Commun. 177, 377 (2000).
36. “Wide band gap fluoride dielectric crystals doped with trivalent rare earth ions as optical materials for 157 nm photolithography”,
E. Sarantopoulou, Z. Kollia and A. C. Cefalas,
Microelectron. Eng. 53, 105 (2000).
37. “Absorbance and outgasing of photoresist polymeric materials for UV lithography below 193 nm including 157 nm lithography”,
A.C. Cefalas, E. Sarantopoulou, E. Gogolides and P. Argitis,
Microelectron. Eng. 53, 123 (2000).
38. “157 nm photodissociation of polyamides”,
A.C. Cefalas and E. Sarantopoulou,
Microelectron. Eng. 53, 465 (2000).

2. Papers in Proceedings of International and National Conferences

1. “Optical and related properties of the synthetic quasi-two-dimensional semiconductors K₂Cd₃S₄, Rb₂Cd₃S₄ and Cs₂Cd₃S₄”,
G.C. Papavassiliou, I.B. Koutselas, G. A. Mousdis, J. A. Kapoutsis, E.A. Axtell III and M. G. Kanatzidis,
in ‘Optical Properties of Semiconductor Nanostructures’, M.L. Sandowski, M. Potemski, and M. Grynberg (Eds.), NATO ARW Series, Kluwer Academic Publ., 2000, vol. 81, pp. 97-100.
2. “Properties and structure of germanate glasses”,
Y.D. Yiannopoulos, C.P.E. Varsamis and E.I. Kamitsos,
Proc. 1st Balkan Conference on Glass Science and Technology, G. Kordas, N.S. Vlachos (Eds.), Univ. of Thessaly, Volos, Greece, 2000, pp. 120-125.
3. “A molecular dynamics study of lithium borate glasses”,

- C.P.E. Varsamis, A. Vegiri and E.I. Kamitsos,
Proc. XVI Greek Conf. on Solid State Physics, Nafplio, Greece, September 2000, pp. 121-124 (in Greek).
4. “Excitonic spectra of Organic – Inorganic hybrids based on metal-halide units”,
G.C. Papavassiliou, G.A. Mousdis and I.B. Koutselas,
Proc. XVI Greek Conf. on Solid State Physics, Nafplio, Greece, September 2000, pp. 338-341 (in Greek).
5. “Surface treatment of Cu samples with an Nd:YAG laser”,
C. Panagopoulos, K. Dedes and M. Kompitsas,
Proc. XVI Greek Conf. on Solid State Physics, Nafplio, Greece, Sept. 2000, pp. 257-261 (in Greek).
6. “Real abilities and problems of laser monitoring (in situ) of oip pollution in coastal marine waters”,
I.V. Boychuk, T.A. Dolenko, V.V. Fadeev, M. Kompitsas, and R. Reuter,
Proceedings of EARSeL-SIG-Workshop LIDAR, Dresden, FRG, June 16–17, 2000, pp. 115-121.
7. “Laser Induced Plasma Spectroscopy (LIPS) as an efficient method for elemental analysis of environmental samples”,
M. Kompitsas, F. Roubani-Kalantzopoulou, I. Bassiotis, A. Diamantopoulou and A. Giannoudakos,
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8. “Single shot, laser plasma X-ray contact microscopy of chlamydomonas”,
A.C. Cefalas, P. Argitis, Z. Kollia, E. Sarantopoulou, T.W. Ford, A.D. Stead, A. Marranka, C.N. Danson, J. Knott and D. Neely,
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9. “Regarding the possibilities of upconversion UV and VUV lasers based on 5d-4f transitions of rare earth ions in wide band gap dielectric crystals”,
V.V. Semashko, M.F. Joubert, E. Descroix, S. Nicolas, R. Yu. Abdulsabirov, A.K. Naumov, S.L. Korableva and A.C. Cefalas,
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10. “Laser-based materials growth and microfabrication”,
N.A. Vainos,
Proc. of the Int. Semiconductor Conference, IEEE Inc. Publ., 2000, Vol. 2, pp. 421-426.

3	Dissertations
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a. **PhD theses**

1. “Structure and properties of alkali germanate glasses”,
Y.D. Yiannopoulos, supervisors E.I. Kamitsos and A.T. Tsatsas, University of Athens,
Chemistry Department (2000).
2. “Use of path integrals and stationary quantum states for the study of the interaction of
matter with coherent and squeezed radiation”,
E. Thrapsaniotis, supervisor C.A. Nicolaides, University of Ioannina (2000).

b. Honors theses

1. “Elemental determination in ceramic matrices by laser-induced plasma spectroscopy”,
A. Diamantopoulou, supervisors M. Kompitsas and F. Roubani-Kalantzopoulou, National
Technical University of Athens, Chem. Eng. Dept. (2000).