

1. Papers in Refereed Journals

1. "Ion-pair and Rydberg states of ArH",
I.D. Petsalakis and G. Theodorakopoulos,
J. Phys. B 27, 4483 (1994).
2. "Quasidiabatic states for intramolecular charge-transfer - application to the protonation of NH₃",
I.D. Petsalakis, G. Theodorakopoulos and C.A. Nicolaidis,
J. Chem. Phys. 100, 5870 (1994).
3. "Rydberg spectra of ArH - bound-bound interactions, predissociation, and radiative lifetimes of the Rydberg states",
G. Theodorakopoulos and I.D. Petsalakis,
J. Chem. Phys. 101, 194 (1994).
4. "Electronic states and radiative transitions in LiAr",
J.P. Gu, G. Hirsch, R.J. Buenker, I.D. Petsalakis, G. Theodorakopoulos and M.B. Huang,
Chem. Phys. Lett. 230, 473 (1994).
5. "The ScPH⁺ cation",
A. Metropoulos, A. Mavridis and A. Papakondylis,
J. Phys. Chem. 98, 12232 (1994).
6. "State-specific theory and computation of a polyelectronic atomic state in a magnetic field. Application to doubly excited state of H⁻",
M. Bylicki, S.I. Themelis and C.A. Nicolaidis,
J. Phys. B 27, 2741 (1994).
7. "Electron correlation, geometry, and energy-spectrum of quadruply excited-states",
Y. Komninos and C.A. Nicolaidis,
Phys. Rev. A 50, 3782 (1994).
8. "Computation of strong-field multiphoton processes in polyelectronic atoms - state-specific method and applications to H and Li",
T. Mercouris, Y. Komninos, S. Dionissopoulou and C.A. Nicolaidis,
Phys. Rev. A 50, 4109 (1994).
9. "Time-dependent multiphoton absorption by NO²⁺ - above and below threshold dissociation and the effect of the 1st excited surface",
T. Mercouris, I.D. Petsalakis, P. Valtazanos and C.A. Nicolaidis,
J. Phys. B 27, L519 (1994).

10. "Computation of time-dependent transition-probabilities in excimer molecules Induced by femtosecond laser-pulses",
I.D. Petsalakis, T. Mercouris and C.A. Nicolaides,
Chem. Phys. 189, 615 (1994).
11. "Prediction and characterization of magnesium fluoride dimers and their nonclassical hydrogen complexes",
E.D. Simandiras and C.A. Nicolaides,
Chem. Phys. Lett. 223, 233 (1994).
12. "Partial widths with interchannel coupling to all orders for the H^{-2} -electron ionization ladder of 1D symmetry",
S.I. Themelis and C.A. Nicolaides,
Phys. Rev. A 49, 596 (1994).
13. "dc-field tunneling of polyelectronic atoms and of negative-ions-computations based on models and on *ab-initio* theory",
S.I. Themelis and C.A. Nicolaides,
Phys. Rev. A 49, 3089 (1994).
14. "Many-electron, many-photon theory of nonstationary states",
C.A. Nicolaides, T. Mercouris, Y. Komninos and I.D. Petsalakis,
Int. J. Quantum Chem. 51, 529 (1994).
15. "Excitonic bands in the optical-absorption spectra of A_3MX_6 and $A_3M_2X_9$ ($A=MeNH_3$, Me_2NH_2 , Me_3NH , Me_4N ; $M=Bi$, Sb $X=Cl$, Br , I)",
G.C. Papavassiliou and I.B. Koutselas,
Z. Naturforsch B 49, 849 (1994).
16. "Optical and related properties of some natural 3-dimensional and lower-dimensional semiconductor systems",
G.C. Papavassiliou, I.B. Koutselas, D.J. Lagouvardos, J. Kapoutsis, A. Terzis and G.J. Papaioannou,
Mol. Cryst. Liq. Cryst. A 253, 103 (1994).
17. "Structural and electronic-properties of the natural Quantum-Well system $(C_6H_5CH_2CH_2NH_3)_2SnI_4$ ",
G.C. Papavassiliou, I.B. Koutselas, A. Terzis and M.H. Whangbo,
Solid State Commun. 91, 695 (1994).
18. "Lithium sodium metaborate glasses - structural aspects and vitrification chemistry",
G.D. Chryssikos, J.A. Kapoutsis, E.I. Kamitsos, A.P. Patsis and A.J. Pappin,
J. Non-Cryst. Solids 167, 92 (1994).
19. "X-Ray photoelectron-spectroscopy of Al-substituted and B-substituted sodium trisilicate glasses",

- C.H. Hsieh, H. Jain, A.C. Miller and E.I. Kamitsos,
J. Non-Cryst. Solids 168, 247 (1994).
20. "Vibrational study of the role of trivalent ions in sodium trisilicate glass",
E.I. Kamitsos, J.A. Kapoutsis, H. Jain and C.H. Hsieh,
J. Non-Cryst. Solids 171, 31 (1994).
21. "Lithium borate glasses: A quantitative study of strength and fragility,
G.D. Chryssikos, J.A. Duffy, J.M. Hutchinson, M.D. Ingram, E.I. Kamitsos, A.J. Pappin,
J. Non-Cryst. Solids 172, 378 (1994).
22. "Conducting Langmuir-Blodgett-films based on semiamphiphilic
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O. Fichet, B. Agricole, H. Kassi, B. Desbat, V. Gionis, R.M. Leblanc, C. Garrigou-Lagrange and
P. Delhaes,
Thin Solid Films 243, 592 (1994).
23. "Structure and optical conductivity of silver thiogermanate glasses",
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J. Solid St. Chem. 112, 255 (1994).
24. "VUV and UV fluorescence and absorption studies of Tb³⁺ and Tm³⁺ trivalent ions in
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E. Sarantopoulou, A.C. Cefalas, M.A. Dubinskii, Z. Kollia, C.A. Nicolaidis, R.Y. Abdulsabirov,
S.L. Korableva, A.K. Naumov and V.V. Semashko,
J. Modern Opt. 41, 767 (1994).
25. "VUV and UV fluorescence and absorption studies of Nd³⁺ and Ho³⁺ ions in LiYF₄ single
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Opt. Commun. 107, 104 (1994).
26. "VUV and UV fluorescence and absorption studies of Pr³⁺-doped LiLuF₄ single crystals",
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Opt. Lett. 19, 499 (1994).
27. "Vacuum ultraviolet and ultraviolet fluorescence and absorption studies of Er³⁺-doped
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E. Sarantopoulou, Z. Kollia, A.C. Cefalas, M.A. Dubinskii, C.A. Nicolaidis, R.Y. Abdulsabirov,
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28. "VUV and UV fluorescence and absorption studies of Pr³⁺-doped LiLuF₄ single crystals",
V.V. Semashko, A.K. Naumov, S.L. Korableva, R.Yu. Abdulsabirov, C.A. Nicolaidis, M.A.
Dubinskii, A.C. Cefalas, E. Sarantopoulou,

Philips J. Res. 48, 499 (1994).

29. "Threshold photoelectron-spectroscopy of CF₄ up to 60.5-eV",
A.J. Yencha, A. Hopkirk, A. Hiraya, G. Dujardin, A. Kvaran, L. Hellner, M.J. Besnardramage,
R.J. Donovan, J.G. Goode, R.R.J. Maier, G.C. King and S. Spyrou,
J. Elec. Spectr. 70, 29 (1994).

30. "Rydberg states of zinc and measurement of the dipole polarizability of the Zn⁺ ion",
M. Kompitsas, C. Baharis and Z. Pan,
J. Opt. Soc. Am. B 11, 697 (1994).

2. Papers in Proceedings of International and National Conferences

1. "Structural aspects of the mixed alkali effect",
E.I. Kamitsos, A.P. Patsis, G.D. Chryssikos, J.A. Kapoutsis,
Int'l Symposium on Glass Science and Technology, G.D. Chryssikos and E.I. Kamitsos
(Eds.), Chimica Chronica, New Series (1994) 23, pp. 245-250.

2. "Fragility and decoupling in glass: A chemical perspective",
G.D. Chryssikos, E.I. Kamitsos, J.A. Kapoutsis and A.P. Patsis,
Int'l Symposium on Glass Science and Technology, G.D. Chryssikos and E.I. Kamitsos
(Eds.), Chimica Chronica, New Series (1994), 23, pp. 271-276.

3. "Physical properties and spectroscopy of rubidium and caesium borate glasses with
exceptionally high alkali content",
S. Feller, S. Nijhawan, M. Royle, J. Mackenzie, J. Taylor, M. Sharma, E.I. Kamitsos, G.D.
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4. "Raman and far-infrared study of aluminum and boron substituted sodium trisilicate
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(Eds.), Chimica Chronica, New Series, (1994), 23, pp. 335-340.

5. "Alkali sites in silicate glasses",
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Int'l Symposium on Glass Science and Technology, G.D. Chryssikos and E.I. Kamitsos
(Eds.). Chimica Chronica, New Series (1994), 23, pp. 341-346.

6. "Optical and related properties of semiconductors: bulk and small particles",
G.C. Papavassiliou,
in NATO-ASI on "Nanophase Materials: Synthesis-Properties-Applications, Corfu, Greece
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7. "Influence of anisotropic scattering along the 2D-Fermi surface on transport properties in an asymmetrical-donor-based molecular crystal",
N. Fortune, K. Murata, G.C. Papavassiliou, D.J. Lagouvardos and J.S. Zambounis,
Mater. Res. Soc. Proc. 328, 307 (1994), (Boston, MRS).

3. Book Chapters

1. "The statistical properties of lattice solitons",
N. Theodorakopoulos,
in *Nonlinear coherent structures in Physics and Biology*, K. Spatschek and F.G. Mertens
(Eds.), pp. 73-83, Plenum, 1994.

4 Dissertations

a. PhD theses

1. "Organic conducting materials based on heterocyclic compounds with oxygen, sulfur, selenium and nitrogen",
D.J. Lagouvardos, supervisor G.C. Papavassiliou, University of Athens (1994).

b. Honors theses

1. "Raman and infrared spectroscopic study of alkaline earth borate glasses",
S. Sofou, supervisors E.I. Kamitsos and C.A. Nicolaidis, National Technical University of Athens, School of Applied Mathematical and Physical Sciences (1994).