

1. Papers in Refereed Journals

1. "Theoretical calculations on the Rydberg states of H₂S",
I.D. Petsalakis and G. Theodorakopoulos,
Chem. Phys. Lett. 200, 387 (1992).
2. "Theoretical lifetimes of Rydberg states of ArH and ArD",
I.D. Petsalakis and G. Theodorakopoulos,
J. Phys. B 25, 5353 (1992).
3. "Theoretical calculations on the electronic states of XeH",
I.D. Petsalakis, G. Theodorakopoulos and S. Consta,
Mol. Phys. 75, 805 (1992).
4. "Adiabatic and quasidiabatic $^2\Sigma^+$ states of BeH",
I.D. Petsalakis, G. Theodorakopoulos and C.A. Nicolaides,
J. Chem. Phys. 97, 7623 (1992).
5. "Electric-dipole transition moments between the $^2\Sigma_u^+$ and $^2\Sigma_g^+$ states of the He₂⁺ ion",
A. Metropoulos, Y. Li, G. Hirsch and R.J. Buenker,
Chem. Phys. Lett. 198, 266 (1992).
6. "State-specific theory and method for the computation of diatomic molecules:
Application to He₂<sup>2+ 1Σ_g⁺",
N.C. Bacalis, Y. Komninos and C.A. Nicolaides,
Phys. Rev. A 45, 2701 (1992).</sup>
7. "Theory for the direct construction of diabatic states and application to the He₂⁺ $^2\Sigma_g^+$
spectrum",
C.A. Nicolaides, N.C. Bacalis and Y. Komninos,
Chem. Phys. Lett. 192, 486 (1992).
8. "Partial widths of the He⁻ 2S two-electron ionization ladder resonances",
M. Chrysos, G. Aspromallis, Y. Komninos and C.A. Nicolaides,
Phys. Rev. A 46, 5789 (1992).
9. "Partial widths of the resonances of the H⁻ $^1P^0$ two-electron ionization ladder",
M. Chrysos, Y. Komninos and C.A. Nicolaides,
J. Phys. B 25, 1977 (1992).
10. "Theory of multiphoton ionization tested on negative ions",
T. Mercouris and C.A. Nicolaides,
Phys. Rev. A 45, 2116 (1992).

11. "On the preparation and observation of the triply excited discrete state $\text{He}^- 2\text{p}^3 {}^4\text{S}^0$ ",
 C.A. Nicolaides,
J. Phys. B 25, L91 (1992).
12. "Hole projection, saddle-points, and localization in the theory of autoionizing states",
 C.A. Nicolaides,
Phys. Rev. A 46, 690 (1992).
13. "On the calculation of the complex energies of resonances",
 C.A. Nicolaides and H.J. Gotsis,
J. Phys. B 25, L171 (1992).
14. "Prediction of nontransition-metal-hydrogen complexes",
 C.A. Nicolaides and E.D. Simandiras,
Chem. Phys. Lett. 196, 213 (1992).
15. "Theory of the resonances of the Losurdo-Stark effect",
 C.A. Nicolaides and S.I. Themelis,
Phys. Rev. A 45, 349 (1992).
16. "Theory and computation of scalar and tensor polarizabilities and hyperpolarizabilities
 and of Losurdo-Stark shifts in polyelectronic atoms",
 S.I. Themelis and C.A. Nicolaides,
Phys. Rev. A 46, R21 (1992).
17. "Theoretical lifetimes of the Al ${}^2\text{S}$, ${}^2\text{P}$, ${}^2\text{D}$, and ${}^2\text{F}$ states",
 C.E. Theodosiou,
Phys. Rev. A 45, 7756 (1992).
18. "Total energy and band structure of the $3d$, $4d$, and $5d$ metals",
 M. Sigalas, D.A. Papaconstantopoulos and N.C. Bacalis,
Phys. Rev. B 45, 5777 (1992).
19. "Thermal solitons in the Toda chain",
 N. Theodorakopoulos and N.C. Bacalis,
Phys. Rev. B 46, 10706 (1992).
20. "4,5-Ethylenedithio-1-selenole-3-thiole-2-one as starting material for the preparation of
 new tetrachalcogenafulvalenes",
 D.J. Lagouvardos and G.C. Papavassiliou,
Z. Naturforsch. B 47, 898 (1992).
21. "On the modification of the optical properties of the TCNQ ion-radical salts by
 mechanical grinding",
 G.C. Papavassiliou and V.M. Yartsev,
Chem. Phys. Lett. 200, 209 (1992).

22. "Resonance Raman and far-infrared studies of n -Bu₄NI₃ and n -Bu₄NBr₃", J.S. Zambounis, E.I. Kamitsos, A.P. Patsis and G.C. Papavassiliou, *J. Raman Spectroscopy* 23, 81 (1992).
23. "Resonance Raman investigation of the state of polyiodides in the organic conductors (PEDT-DTDSF)₂I₃ and (PDM-TTF)₃I₃", J.S. Zambounis, E.I. Kamitsos and G.C. Papavassiliou, *J. Raman Spectroscopy* 23, 721 (1992).
24. "Langmuir-Blodgett films based on substituted 1,2-Dithiolium-tetracyanoquinodimethane radical-anion salt", O. Fichet, V. Gionis, J. Amiell, B. Agricole, P. Delhaes, D. Ducharme, A. Perrier and R. M. Leblanc, *Thin Solid Films* 210, 330 (1992).
25. "Infrared reflectance studies of ionic conductive glasses - network structure and cation dynamics", E. I. Kamitsos, *J. Phys. (Paris) IV* 2, 87 (1992).
26. "Solid-state LaF₃-Nd³⁺ VUV laser pumped by a pulsed discharge F₂-molecular laser at 157 nm", M.A. Dubinskii, A.C. Cefalas and C.A. Nicolaides, *Opt. Commun.* 88, 122 (1992).
27. "On the interconfigurational 4f²5d-4f³ VUV and UV fluorescence features of Nd³⁺ in LiYF₄ (YLF) single crystals under F₂ laser pumping", M.A. Dubinskii, A.C. Cefalas, E. Sarantopoulou, R.Y. Abdulsabirov, S.L. Korableva, A. K. Naumov and V.V. Semashko, *Opt. Commun.* 94, 115 (1992).
28. "Efficient LaF₃-Nd³⁺ - based vacuum-ultraviolet laser at 172 nm", M.A. Dubinskii, A.C. Cefalas, E. Sarantopoulou, S.M. Spyrou, C.A. Nicolaides, R.Y. Abdulsabirov, S.L. Korableva and V.V. Semashko, *J. Opt. Soc. Am. B* 9, 1148 (1992).
29. "The perturbed even-parity $J = 1^e, 2^e$ autoionizing spectra of strontium below the 4d_{5/2} threshold: observation and theoretical analysis", S. Goutis, M. Aymar, M. Kompitsas and P. Camus, *J. Phys. B* 25, 3433 (1992).
30. "Field statistics in a generalization of the Jaynes-Cummings model", S.A. Hadjiagapiou and S. M. Spyrou, *Z. Phys. B* 87, 137 (1992).

2. Papers in Proceedings of International and National Conferences

1. "Structural studies of single and mixed alkali borate glasses",
E.I. Kamitsos, G.D. Chryssikos and A.P. Patsis,
Solid State Ionics, M. Balkanski, T. Takahashi, H.L. Tuller (Eds.), North-Holland, Amsterdam, 1992, pp. 331-336.
2. "Infrared reflectance spectra of mixed alkali borate glasses",
E.I. Kamitsos, A.P. Patsis and G.D. Chryssikos,
The Physics of Non-Crystalline Solids, L.D. Pye, W.C. La Course, H.J. Stevens (Eds.), Taylor and Francis, London, 1992, pp. 460-465.
3. "Chemical aspects of the glass transition in mixed-alkali and mixed-network glasses",
G.D. Chryssikos, J.A. Kapoutsis, M.S. Bitsis, E.I. Kamitsos, A.P. Patsis and A. Pappin, Bol. Soc. Esp. Vid. vol. 31C-2, pp. 27-32 (1992), A. Duran, J.M.F. Navaro (Eds.), Ceramica Vidrio, Madrid.
4. "Infrared reflectance investigation of the structure of mixed alkali glasses",
E.I. Kamitsos, A.P. Patsis, G.D. Chryssikos and J.A. Kapoutsis,
Bol. Soc. Esp. Vid. vol. 31C-3, pp. 287-292 (1992), A. Duran, J.M.F. Navaro (Eds.), Ceramica Vidrio, Madrid.
5. "Infrared structural studies of silver ion conducting glasses: $x\text{AgI} \cdot (1-x)(\text{Ag}_2\text{O} \cdot n\text{B}_2\text{O}_3)$ ",
E.I. Kamitsos, J.A. Kapoutsis, G.D. Chryssikos and A.P. Patsis,
Bol. Soc. Esp. Vid. vol. 31C-4, pp. 403-408 (1992), A. Duran, J.M.F. Navaro (Eds.), Ceramica Vidrio, Madrid.
6. "Superionic materials: structure, properties and applications",
E.I. Kamitsos,
Proc. Greek Conf. on Current Trends in Science and Technology of Condensed Matter, Athens, 1992, pp. 43-63 (in Greek).
7. "Sol-gel synthesis and investigation of amorphous materials in the system: $\text{Na}_2\text{O} \cdot \text{B}_2\text{O}_3 \cdot \text{SiO}_2$ ",
C. Trapalis, M.A. Karakassides, G. Fyrigos, G. Kordas, E.I. Kamitsos, G.D. Chryssikos, J.A. Kapoutsis and A.P. Patsis,
Proc. 8th Greek Conf. on Solid State Physics, Ioannina, 1992, pp. 410-414 (in Greek).
8. "Tetraheterafulvalenes and precursors of conducting materials"
G.C. Papavassiliou,
Mat. Res. Symp. Proc., 247, 523 (1992), (Boston MRS).
9. "Conducting and superconducting salts based on some symmetrical and unsymmetrical donors",

G.C. Papavassiliou, D.J. Lagouvardos, V.C. Kakoussis, A. Terzis, A. Houtas, B. Hilti, C. Mayer, J.S. Zambounis, J. Pfeiffer, M.-H. Whangbo, J. Ren and D.B. Kang,
Mat. Res. Symp. Proc., 247, 535 (1992), (Boston, MRS).

4. Dissertations

a. PhD theses

1. “Symmetrical and unsymmetrical tetraheterofoulvalenes and their conducting salts”,
V.C. Kakoussis, supervisor G.C. Papavassiliou, University of Athens (1992).

b. Honors theses

1. “Characterization and construction of an excimer laser system”,
K. Barlas, supervisors A.C. Cefalas and A. Karabelas, University of Patras (1992).