

## GEORGE A. MOUSDIS

### PUBLICATIONS –MAY 2011

#### A. Ph.D. THESIS

1. “[Synthesis and study of one dimensional and two dimensional conducting organic materials](#)”, Chemistry Department, University of Athens Greece (1990).

#### B. PAPERS IN REFEREED JOURNALS

1. “Disodium s-cyanoisothiazoleedithiolate as a starting material for preparation of new conductive solids”, G. C. Papavassiliou, G. A. Mousdis, V. Gionis, J. S. Zambounis and S. Y. Yiannopoulos, Z. Naturforsch. **42b**, 105O (1987).
2. “Some nitrogen-containing tetrahetero-fulvalenes and a few of their conductive salts”, G. C. Papavassiliou, V. Gionis, S. Y. Yiannopoulos, J. S. Zambounis, G. A. Mousdis, K. Kobayashi and K. Umemoto, Mol. Cryst. Liq. Cryst. inc. Nonlin. Opt. **156**, 277 (1988). [DOI: 10.1080/00268948808070577](https://doi.org/10.1080/00268948808070577)
3. “Bis (alkylthio) tetrathiafulvalenes and a few of their salts”, G. C. Papavassiliou, J. S. Zambounis, G. A. Mousdis, V. Gionis and S. Y. Yiannopoulos , Mol. Cryst. Liq. Cryst. inc. Nonlin. Opt., **156**, 269 (1988). [DOI: 10.1080/00268948808070576](https://doi.org/10.1080/00268948808070576)
4. “Preparation and characterization of some 4,5 methylene dithio –4',5', dis (alkylthio) tetrathiafulvalenes: Unsymmetrical  $\pi$ -Donors”,G. C. Papavassiliou, G. A. Mousdis, S. Y. Yiannopoulos and J. S. Zambounis, Chemica Scripta **28**, 365 (1988).
5. “Structural and electrical properties of some cation radical Salts Based on EDTTTF. PEDTTTF and similar  $\pi$ -Donors”, A. Terzis, A. Hountas, A. E. Underhil, A. Clark, B. Kaye, B. Hilti, C. Mayer J. Pfeiffer, S. V. Yiannopoulos, G. A. Mousdis and G. C. Papavassiliou, Synt. Metals **27**, B97 (1988). [DOI:10.1016/0379-6779\(88\)90130-0](https://doi.org/10.1016/0379-6779(88)90130-0)
6. “Low temperature measurements of the electrical conductivities of some charge transfer salts with the assymetric. (MDT-TTF)<sub>2</sub>AuI<sub>2</sub> a new superconductor”, G. C. Papavassiliou, G. A. Mousdis, J. S. Zambounis, A. Terzis, A. Hountas, B. Hilti, G. W. Mayer and J. Pfeiffer, Synth. Metals **27**, B379 (1988). [DOI:10.1016/0379-6779\(88\)90172-5](https://doi.org/10.1016/0379-6779(88)90172-5)
7. “Conductive solids based on some new unsymmetrical tetra- heterofulvalenes”, G. C. Papavassiliou, G. A. Mousdis, S. V. Yiannopoulos, V. C. Kakoussis and J. S. Zambounis, Synth. Metals **27**, B373 (1988). [DOI:10.1016/0379-6779\(88\)90171-3](https://doi.org/10.1016/0379-6779(88)90171-3)

8. "Methylenediselenotetrathiafulvalene and similar unsymmetrical  $\pi$ -donors" G. C. Papavassiliou, V. C. Kakoussis, J. S. Zambounis and G. A. Mousdis, *Chemica Scripta*, **29**, 123 (1989).
9. "4,5 Bis (methylthio)-4',5-bis (alkylthio) tetrathiafulvalenes", G. C. Papavassiliou, V. C. Kakoussis, G. A. Mousdis, J. S. Zambounis, and G. W. Mayer, *Chemica Scripta* **29**, 71 (1989).
10. "Behavior of bis (alkylthio) tetrathiafulvalene derivatives of Lagmuir-Blodgett films, upon iodine exposure", M. Vandevyver, M. Roulliay, J. P. Bourgoin, A. Barraud, V. Gionis, V. C. Kakoussis, G. A. Mousdis, J. P. Morand, and O. Noel, *J. Phys. Chem.* **95**, 246 (1991). [DOI: 10.1021/j100154a048](https://doi.org/10.1021/j100154a048)
11. "Ethylene dioxotetrathiafulvalenes: New unsymmetrical  $\pi$ -Donors", G. C. Papavassiliou, D. J. Lagouvardos, V. C. Kakoussis and G. A. Mousdis, *Z. Naturforsch* **45b**, 1216 (1990).
12. "Transition-metal 1,2 diheterolenes and polyetherotetrahetero -fulvalenes: precursors of conducting solids", G. C. Papavassiliou, V. C. Kakoussis, D. J. Lagouvardos and G. A. Mousdis, *Mol. Cryst. Liq. Cryst. inc. Nonlin. Opt.* **181**, 171 (1990). [DOI: 10.1080/00268949008036002](https://doi.org/10.1080/00268949008036002)
13. "Electronic structure and physical properties of unsymmetrical TTF based organic salts", L. Ducasse, J. Amiell, P. Delhaes, G. Mousdis, G. C. Papavassiliou, and A. Terzis, *Synthetic Metals*, **41-43**, 2483 (1991). [DOI:10.1016/0379-6779\(91\)91408-3](https://doi.org/10.1016/0379-6779(91)91408-3)
14. "Crystal structures and properties of some cation radical salts based on EDOEDTTF, EDOMDTTF, EDOVDTTF, EDOBTTF, EDOPDSDTTF, EDODMPTTF, BEDTTTF, BMDTTTF", A. Terzis, A. Hountas, B. Hilti, G. W. Mayer and J. S. Zambounis, D. Lagouvardos, V. C. Kakoussis, G. A. Mousdis and G. C. Papavassiliou, *Synthetic Metals* **41-43**, 1715 (1991). [DOI:10.1016/0379-6779\(91\)91938-7](https://doi.org/10.1016/0379-6779(91)91938-7)
15. "Some new radical cation salts based on unsymmetrical tetraheterofulvalenes,  $(MDTTTF)_4Pt(CN)_4$ , the first  $\kappa$ -phase salt with a square planar dianion", G. A. Mousdis, L. Ducasse, M. Fettouhi, L. Ouahab, E. Dupart, C. Garrigou-Lagrange, J. Amiell, R. Canet and P. Delhaes, *Synth Metals* **48**, 219 (1992). [DOI:10.1016/0379-6779\(92\)90063-O](https://doi.org/10.1016/0379-6779(92)90063-O)
16. "Structures of some quasi 2D molecular conductors: I. Structures of  $\kappa$ -Tetrakis-(Methylenedithiotetrathiafulvalene) tetracyanoplatinate Dihydrate salt  $\kappa$ - $(MDTTTF)_4Pt(CN)_4(H_2O)_2$ ", M. Fettouhi, L. Ouahab, D. Grandjean G. A. Mousdis and P. Delhaes, *Acta Crystal. C* **48**, 1920 (1992). [DOI: 10.1107/S0108270192002750](https://doi.org/10.1107/S0108270192002750)
17. "Structures of two tetrakis-(Ethylene dithiotetra-thiafulvalene) tetracyanometalate dihydrate salts  $\beta$ -(EDTTTF) $_4M(CN)_4(H_2O)_2$   $M=Pt^{II}$ ,  $Pd$  ", M. Fettouhi, L.

Ouahab, D. Grandjean G. A. Mousdis and P. Delhaes, Acta Crystal. C **48**, 2141 (1992). [DOI: 10.1107/S0108270192003676](https://doi.org/10.1107/S0108270192003676)

18. "Band structures and physical properties of new organic salts based on unsymmetrical donors and square-planar dianions", L. Ducasse, G. A. Mousdis, M. Fettouchi, L. Ouahab, J. Amiell and P. Delhaes, Synth Metals **56**, 1995 (1993). [DOI:10.1016/0379-6779\(93\)90361-Y](https://doi.org/10.1016/0379-6779(93)90361-Y)
19. "Studies in 123 texturing through pressure and MgO whiskers seeding", P. Kondilis, G. A. Mousdis and G. Kordas Physica C **235**, 467 (1994). [DOI:10.1016/0921-4534\(94\)91457-5](https://doi.org/10.1016/0921-4534(94)91457-5)
20. "Preparation and infrared study of magnesium borate gels with a wide composition range", M. A. Karakassides, D. Petridis, G. A. Mousdis, C. Trapalis and G. Kordas, Journal of Non Crystalline Solids **202**, 198 (1996). [DOI:10.1016/0022-3093\(96\)00519-4](https://doi.org/10.1016/0022-3093(96)00519-4)
21. "Some new synthetic low-dimensional semiconductors based on inorganic units", G. C. Papavassiliou, G. Á. Mousdis, I. Koutselas, C. P. Raptopoulou, A. Terzis, M. G. Kanatzidis and A. Axtell III, Adv. Mat. For Optics and Electronics, **8**, 263 (1998). [DOI:10.1002/\(SICI\)1099-0712\(1998090\)8:5<263::AID-AMO349>3.0.CO;2-X](https://doi.org/10.1002/(SICI)1099-0712(1998090)8:5<263::AID-AMO349>3.0.CO;2-X)
22. "Preparation, structure and optical properties of  $[CH_3SC(=NH_2)NH_2]_3PbI_5$ ,  $[CH_3SC(=NH_2)NH_2]_4Pb_2Br_8$  and  $[CH_3SC(=NH_2)NH_2]_3PbCl_5\cdot CH_3SC(=NH_2)NH_2Cl$ ", G. Á. Mousdis, V. Gionis, G. C. Papavassiliou, C. P. Raptopoulou, and A. Terzis, J. Mater. Chem. **8**, 2259 (1998). [DOI: 10.1039/a802926a](https://doi.org/10.1039/a802926a)
23. "Preparation, structure and optical properties of  $[H_3N(CH_2)_6NH_3]BiX_5$  (X=I, Cl) and  $[H_3N(CH_2)_6NH_3]SbX_5$  (X=I, Br)", G. A. Mousdis, G. C. Papavassiliou, A. Terzis, and C. P. Raptopoulou, Z. Naturforsch. **53b**, 927 (1998).
24. "Excitonic bands in the optical absorption spectra of  $(Bu_4N)CuBr_2$ ,  $(Et_4N)_2Cu_2Br_4$ ,  $(Pr_4N)_2Cu_4Br_6$ ,  $(Bu_4N)_2Cu_2I_4$ ,  $(Me_4N)Cu_2I_3$ ,  $(Pr_4N)_4Ag_4I_8$ ,  $(Me_4N)Ag_2I_3$ ,  $(Et_4N)Ag_2Br_3$ , and Similar Compounds", G. C. Papavassiliou, G. A. Mousdis, A. Terzis, and C. P. Raptopoulou, Z. Naturforsch. **54b**, 109 (1999).
25. "Organic conductors of  $\tau$ -phase", G. C. Papavassiliou, K. Murata, J.P. Ulmet, A. Terzis, G. Á. Mousdis, H. Yoshino, A. Oda, D. Vignolles and C. P. Raptopoulou, Synth. Metals, **103**, 1921 (1999). [DOI:10.1016/S0379-6779\(98\)00629-8](https://doi.org/10.1016/S0379-6779(98)00629-8)
26. "Optical and related properties of some synthetic low-dimensional semiconductors based on inorganic units", G. C. Papavassiliou, G. A. Mousdis, I. B. Pistolis, M. G. Kanatzidis, and A. Axtell III, , Synth. Metals, **103**, 2689 (1999). [DOI:10.1016/S0379-6779\(98\)00743-7](https://doi.org/10.1016/S0379-6779(98)00743-7)

27. "Preparation and characterization of  $[C_6H_5CH_2NH_3]_3PbI_4$ ,  $[C_6H_5CH_2SC(NH_2)_2]_3PbI_5$  and  $[C_{10}H_7CH_2NH_3]_1PbI_3$  organic-inorganic hybrid compounds", G. C. Papavassiliou, G. A. Mousdis, C. P. Raptopoulou and A. Terzis, Z. Naturforsch. **54b**, 1405 (1999).
28. "Preparation and characterization of  $[H_3N(CH_2)_6NH_3]PbI_4$  and similar compounds with a layered perovskite structure", G. A. Mousdis, G. C. Papavassiliou, C. P. Raptopoulou, and A. Terzis, J. Mater. Chem. **10**, 515 (2000). [DOI: 10.1039/a906161d](https://doi.org/10.1039/a906161d)
29. "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, Z. Naturforsch. **55b**, 231 (2000).
30. "Optical investigation of a  $\tau$ -(EDO-(S,S)-DMEDT-TTF) $_2$ (AuBr<sub>2</sub>)(AuBr<sub>y</sub>) with  $y \approx 0.75$ ", I. Olejniczak, J.L. Musfeldt, G. C. Papavassiliou, and G. A. Mousdis, Physical Review B **62**, 15634 (2000). [DOI:10.1103/PhysRevB.62.15634](https://doi.org/10.1103/PhysRevB.62.15634)
31. "Some New Organic - Inorganic Hybrid Semiconductors Based on Metal-Halide Units: Structural, Optical and Related Properties", G. C. Papavassiliou, G. A. Mousdis, and I. B. Koutselas, Adv. Mater. Opt. Electronics **9**, 265, (1999). [DOI:10.1002/1099-0712\(199911/12\)9:6<265::AID-AMO390>3.0.CO;2-6](https://doi.org/10.1002/1099-0712(199911/12)9:6<265::AID-AMO390>3.0.CO;2-6)
32. "Some new luminescent compounds based on 4-methylbenzylamine and lead halides", G. C. Papavassiliou, G. A. Mousdis, C. P. Raptopoulou, and A. Terzis, Z. Naturforsch. **55b**, 536, (2000).
33. "Excitons in a single two-dimensional semiconductor crystal of  $H_3N(CH_2)_6NH_3PbI_4$ ", T. Goto, N. Ohshima, G. A. Mousdis and G. C. Papavassiliou, Solid State Communications **117**, 13 (2001). [DOI:10.1016/S0038-1098\(00\)00416-6](https://doi.org/10.1016/S0038-1098(00)00416-6)
34. "Excitonic bands in the spectra of some organic-inorganic hybrid compounds based on metal halide units", G. C. Papavassiliou, G. A. Mousdis, and I. B. Koutselas, Monatshefte für Chemie - Chemical Monthly **132**, 113-119 (2001). [DOI: 10.1007/s007060170150](https://doi.org/10.1007/s007060170150)
35. "Preparation, structure and physical properties of some new organic conductors of  $\tau$ -phase", G. C. Papavassiliou, G. A. Mousdis, A. Terzis, C. Raptopoulou, Keizo Murata, T. Konoike, and Y. Yoshino, Synth. Metals **120**, 743 (2001). [DOI:10.1016/S0379-6779\(00\)00697-4](https://doi.org/10.1016/S0379-6779(00)00697-4)
36. "Excitonic bands in the spectra of some organic-inorganic hybrid compounds based on metal halide units", G. C. Papavassiliou, G. A. Mousdis, and I. B. Koutselas, Synth. Metals **121**, 1339-1340 (2001). [DOI:10.1016/S0379-6779\(00\)00705-0](https://doi.org/10.1016/S0379-6779(00)00705-0)

37. "Low temperature electric nature of  $\tau$  phase conductors", T. Konoike, A. Oda, K. Iwashita, T. Yamamoto, H. Tajima, H. Yoshino, K. Ueda, T. Sugimoto, K. Hiraki, T. Takahashi, T. Sasaki, Y. Nishio, K. Kajita, G. C. Papavassiliou, G. A. Mousdis and Keizo Murata, *Synth. Metals* **120**, 801 (2001). [DOI:10.1016/S0379-6779\(00\)01022-5](https://doi.org/10.1016/S0379-6779(00)01022-5)
38. "Excitonic bands in the photoconductivity spectra of some organic-inorganic hybrid compounds based on metal halide units", G. C. Papavassiliou, G. A. Mousdis, I. B. Koutselas and G. J. Papaioannou, *Int. J. Modern Physics B* **15**, 3727 (2001). [DOI:10.1142/S0217979201008524](https://doi.org/10.1142/S0217979201008524)
39. "Some organic - inorganic hybrid compounds based on iso - thiuronium cations and lead halide anions", G. C. Papavassiliou, G. A. Mousdis, and I. B. Koutselas, *Z. Naturforsch.* **56b**, 57 (2001).
40. "Preparation and characterization of 4-[4-(dimethylamino)styryl]-1-methylpyridinium lead triiodide and tribromide analog", G. C. Papavassiliou, G. A. Mousdis, and I. B. Koutselas, *Z. Naturforsch.* **56b**, 213 (2001).
41. "New  $\pi$ -donor molecules with a pyrazino-group and their conducting salts", G. C. Papavassiliou, Yohji Misaki, Kazuko Takahashi, Jun-ichi Yamada, G. A. Mousdis, Takashi Sharahata, and Toshihiro Ise, *Z. Naturforsch.* **56b**, 297 (2001).
42. "Preparation, structure and optical properties of  $[CH_3SC(NH_2)_2]_3SnI_5$ ,  $[CH_3SC(NH_2)_2][HSC(NH_2)_2]SnBr_4$ ,  $(CH_3C_5H_4NCH_3)PbBr_3$ , and  $[C_6H_5CH_2SC(NH_2)_2]_4Pb_3I_{10}$ ", C. P. Raptopoulou, A. Terzis, G. A. Mousdis and G. C. Papavassiliou, *Z. Naturforsch.* **57b**, 645 (2002).
43. "An improved synthesis of nickel-bis[ 5,6-dihydro-1, 4-dioxine-2,3-dithiolate],  $Ni(edo)_2$ ", G. C. Papavassiliou, G. A. Mousdis, and G. C. Anyfandis, *Z. Naturforsch.* **57b**, 707 (2002).
44. "Hybrid molecular materials based upon organic  $\pi$ -electron donors and inorganic metal complexes: Conducting Salts of Bis(ethylenediseleno)tetrathiafulvalene (BEST) with the Octahedral Anions Hexacyanoferrate (III) and Nitroprusside", M. C. Leon, E. Coronado, J. Mascaros, C. Gimenez-Saiz, C. Gomez-Garcias, J. M. Fabre, G. A. Mousdis and G. C. Papavassiliou, *J. Solid State Chem.* **168**, 616 (2002). [DOI:10.1006/jssc.2002.9759](https://doi.org/10.1006/jssc.2002.9759)
45. "Exciton dynamics in synthetic one-dimensional semiconductor  $C_{10}H_7CH_2NH_3PbI_3$ ", T. Goto, N. Ohshima, G. A. Mousdis and G. C. Papavassiliou, *Non Linear Optics*, **29** 379 (2002). [DOI: 10.1080/1058726021000044523](https://doi.org/10.1080/1058726021000044523)
46. "New donor molecules and their  $\tau$ -phase conducting salts", G. C. Papavassiliou, G. A. Mousdis, A. Terzis, C. P. Raptopoulou K. Murata. T. Konoike, H. Yoshino, A. Graja, and A. Łapiński, *Synth. Metals* **135** 651 (2003). [DOI:10.1016/S0379-6779\(02\)00762-2](https://doi.org/10.1016/S0379-6779(02)00762-2)

47. "Optical properties of the conducting salt  $\tau$ -(P-S,S-DMEDT-TTF)<sub>2</sub>(AuBr<sub>2</sub>) (AuBr<sub>2</sub>)<sub>y</sub> ( $y \approx 0.75$ .)", Lapinski, A. Graja, G. C. Papavassiliou and G. A. Mousdis, Synthetic Metals **139**, 405 (2003). [DOI:10.1016/S0379-6779\(03\)00189-9](https://doi.org/10.1016/S0379-6779(03)00189-9)
48. "Crystal structure and optical properties of 4-[4-(Dimethylamino)styryl]-1-methyl-pyridinium Lead tribromide", G. C. Papavassiliou, G. A. Mousdis, A. Terzis, and C. P. Raptopoulou, [Z. Naturforsch. 58b, 815 \(2003\)](https://doi.org/10.1007/s00114-003-0815-9).
49. "Preparation and characterization of 5,6-dimethyl-5,6-dihydro-[1,4] diselenino[2,3-d] [1,3]dithiole-2-thione and similar compounds", G. C. Papavassiliou, G. A. Mousdis, G. C. Anyfantis, N. Assimomytis, and B. R. Steele, [Z. Naturforsch. 58b, 813 \(2003\)](https://doi.org/10.1007/s00114-003-0813-7).
50. "New ambient pressure organic superconductor with  $T_c = 8.1$  K based on unsymmetrical donor ethylenedithiotetrathiafulvalene:  $\beta$ -(EDT-TTF)<sub>4</sub>Hg<sub>2.83</sub>I<sub>8</sub>", E. Zhilyaeva, O. Kazheva, S. Torunova, R. Lyubovskaya, O. Dyachenko, G. Mousdis, G. Papavassiliou, J. Perenboom, S. Pesotskii and R. Lyubovskii, Synth. Metals **140**, 151 (2004). [DOI:10.1016/S0379-6779\(03\)00354-0](https://doi.org/10.1016/S0379-6779(03)00354-0)
51. "New donor molecules, precursors of conducting salts", G. C. Papavassiliou, G. A. Mousdis, A. Terzis, C. Paptopoulou, K. Murata, L. Li, and H. Yoshino, Journal de Physique IV **114**, 569 (2004). [DOI: 10.1051/jp4:2004114135](https://doi.org/10.1051/jp4:2004114135)
52. "New ambient pressure organic superconductor based on asymmetrical donor (EDT-TTF)<sub>4</sub>Hg<sub>3- $\delta$</sub> I<sub>8</sub>, with  $T_c = 8.1$  K", R. Lyubovskaya, E. Zhilyaeva, S. Torunova, G. Mousdis, G. Papavassiliou, J. Perenboom, S. Pesotskii, R. Lyubovskii, Journal de Physique IV **114**, 463 (2004). [DOI: 10.1051/jp4:2004114108](https://doi.org/10.1051/jp4:2004114108)
53. "Synthesis of some new electron  $\pi$ -donors containing methoxy groups", G. A. Mousdis, G. C. Papavassiliou, N. Psaroudakis, and G. C. Anyfantis, [Z. Naturforsch. 59b, 839 \(2004\)](https://doi.org/10.1007/s00114-003-0839-9).
54. "Metal/metal-oxide/metal etalon structures grown by pulsed laser deposition", N. A. Vainos, A. Tsigara, J. Manesis, A. Giannoudakos, G. Mousdis, N. Vakakis, M. Kompitsas, A. Klini and F. Roumpani-kalatsopoulou, Appl. Phys. A **79** 1395 (2004). [DOI: 10.1007/s00339-004-2791-y](https://doi.org/10.1007/s00339-004-2791-y)
55. "Structural and Physical Properties of  $\tau$ -(EDO-S,S-DMEDTTF)<sub>2</sub>(AuBr<sub>2</sub>)<sub>1+y</sub> and  $\tau$ -(P-S,S-DMEDT-TTF)<sub>2</sub>(AuBr<sub>2</sub>)<sub>1+y</sub>.", G.C.Papavassiliou, G. A. Mousdis, G.C. Anyfantis, K.Murata, L.Li, H.Yoshino, H. Tajima, T. Konoike, J.S.Brooks, D. Graf and E.S. Choi, [Z. Naturforsch. 59a 952 \(2004\)](https://doi.org/10.1007/s00114-003-0952-9).
56. "Some new findings in  $\tau$ -phase: organic conductors", G.C.Papavassiliou, G. A. Mousdis, G.C. Anyfantis, K.Murata, T. Nakanishi, L.Li, H.Yoshino, H. Tajima, M. Inoue, T. Konoike, J.S.Brooks, E.S. Choi and D. Graf, [Materials Science-Poland. 22, 365 \(2004\)](https://doi.org/10.1007/s00114-003-0952-9).

57. "Magnetization, thermoelectric, and pressure studies of the magnetic field-induced metal to insulator transition in tau phase organic conductors", D. Graf, E. S. Choi, J. S. Brooks, N. Harrison, K. Murata, T. Konoike, G. C. Papavassiliou and G. A. Mousdis, *Physical Review B* **71** (4) 045117 (2005).  
[DOI:10.1103/PhysRevB.71.045117](https://doi.org/10.1103/PhysRevB.71.045117)
58. "Induced absorption and spontaneous emission due to biexciton in two-dimensional semiconductor  $(CH_3C_6H_4CH_2NH_3)_2PbBr_4$ ", H. Makino, T. Goto, T. Yao, G.A. Mousdis and G. C. Papavassiliou, *J. Luminescence* **112**, 54 (2005).  
[DOI:10.1016/j.jlumin.2004.09.081](https://doi.org/10.1016/j.jlumin.2004.09.081)
59. "Pressure-induced low resistive and insulating phases in  $\tau$ -(EDO-R,R-DMEDT-TTF) $_2$ (AuI $_2$ ) $_{1+y}$ ", L.Li, H.Yoshino T. Nakanishi, G. C.Papavassiliou, G. A. Mousdis, T. Sakaki and K.Murata, *Synth. Metals* **152**, 445 (2005).  
[DOI:10.1016/j.synthmet.2005.07.174](https://doi.org/10.1016/j.synthmet.2005.07.174)
60. "Nonlinear optical properties of fullerene-organic glassy polymer composites", K.D. Gatsouli, S. Pispas, G. Mousdis, N. Vainos, P. Alukos, E Xerogiannopoulou and S. Couris, [Glass Technology, 46, 62 \(2005\)](#).
61. "Cobalt chloride based nanocomposite humidity sensors", G. Manasis, A. Tsigara, A. Giannoudakos, G. Anyfantis, K. Gatsouli, G. Mousdis, S. Pispas, N. Madamopoulos and N. Vainos, [Glass Technology, 46, 17 \(2005\)](#).
62. "Classification of Edible and Lampante Virgin Olive Oils Based on Synchronous Scan Fluorescence and Total Luminescence Spectroscopy", K. I. Poulli, G. A. Mousdis, and C. A. Georgiou. *Analytica Chimica Acta B* **542**, 151 (2005).  
[DOI:10.1016/j.aca.2005.03.061](https://doi.org/10.1016/j.aca.2005.03.061)
63. "Hybrid materials based on CdS and CdSe nanoparticles in glassy block copolymers", K.D. Gatsouli, S. Pispas G. Mousdis, G.C. Papavassiliou, and E. I. Kamitsos, [Physics and Chemistry of Glasses, 46, 197 \(2005\)](#).
64. "Structure and conductivity of unsymmetrical  $\pi$ -donor ethylenedithio-dithiadiselenafulvalene iodomercurate, (EDT-DTDSF) $_4$ Hg $_3$ I $_8$ ", E.I. Zhilyaeva, A.Yu. Kovalevskyi, S.A. Torunova, G.A. Mousdis, R.B. Lyubovskii, G.C. Papavassiliou, P. Coppens and R.N. Lyubovskaya, *Synth. Metals* **150**, 245 (2005).  
[DOI:10.1016/j.synthmet.2005.02.014](https://doi.org/10.1016/j.synthmet.2005.02.014)
65. "Time-resolved spectroscopy of oligothiophenes using the femtosecond fluorescence upconversion technique", D Anestopoulos, M Fakis, I Polyzos, G Tsigaridas, G Mousdis, P Persephonis and V Giannetas, *Journal of Physics: Conference Series* **10**, 230, (2005).

66. "Localization of triplet excitons and biexcitons in the two-dimensional semiconductor  $(CH_3C_6H_4CH_2NH_3)_2PbBr_4$ ", T. Goto, H. Makino, T. Yao, C. H. Chia, T. Makino, Y. Segawa, G. A. Mousdis, and G. C. Papavassiliou, Phys. Rev. B **73**, 115206 (2006). [DOI: 10.1103/PhysRevB.73.115206](https://doi.org/10.1103/PhysRevB.73.115206)
67. "Synchronous fluorescence spectroscopy for quantitative determination of virgin olive oil adulteration with sunflower oil", K. I. Poulli, G. A. Mousdis and C. A. Georgiou, Anal. Bioanal. Chem. **386**, 1571 (2006). [DOI 10.1007/s00216-006-0729-2](https://doi.org/10.1007/s00216-006-0729-2)
68. Rapid Synchronous Fluorescence Method for Virgin Olive Oil Adulteration Assessment", K. I. Poulli, G. A. Mousdis and C. A. Georgiou, Food Chemistry **105**, 369 (2007). [DOI:10.1016/j.foodchem.2006.12.021](https://doi.org/10.1016/j.foodchem.2006.12.021)
69. "Fluorescence and anisotropy dynamics of a —CHO substituted terthiophene", D Anestopoulos, M Fakis, G Mousdis, V Giannetas, and P Persephonis, Synth. Metals **157**, 30 (2007). [DOI:10.1016/j.synthmet.2006.11.011](https://doi.org/10.1016/j.synthmet.2006.11.011)
70. "New  $\pi$ -electron donor (1,4-thioxane-2,3-diyldithio) ethylenedithio tetrathiafulvalene (ETOEDT-EDT-TTF) and its derivatives. Synthesis and characterization", A. Barszcz, A. Graja, G. Soras, N. Psaroudakis, G. A. Mousdis, J. Phys. Chem. Solids. **68**, 1364 (2007). [DOI:10.1016/j.jpcs.2007.02.031](https://doi.org/10.1016/j.jpcs.2007.02.031)
71. "Anion Chain Structure Controlled Behavior of Phase Transition in Quasi-Two-Dimensional Organic Metal  $(EDT-TTF)_4[Hg_3I_8]_{1-x}$ ", Elena I. Zhilyaeva, Andrey Y. Kovalevsky, Rustem B. Lyubovskii, Svetlana A. Torunova, George A. Mousdis, George C. Papavassiliou, and Rimma N. Lyubovskaya, Crystal Growth & Design, **7**, 2768 (2007). [DOI:10.1021/cg070339y](https://doi.org/10.1021/cg070339y)
72. "Spectral Studies Of New Organic Conductor(ETOEDT-PDT-TTF)<sub>2</sub>I<sub>3</sub>:Normal Mode Vibrations Of The Unsymmetrical  $\pi$ -Electron Donor", A. Barszcz, A. Graja, G. Soras, A. Keramidas, A. Tasiopoulos and G. A. Mousdis, Journal of Molecular Structure **887**, 67 (2008). [DOI:10.1016/j.molstruc.2007.12.046](https://doi.org/10.1016/j.molstruc.2007.12.046)
73. "Nanocomposite hybrid photonic media for remote point sensors", A. Meristoudi, L. Athanasekos, M. Vasileiadis, S. Pispas, G. Mousdis, E. Karoutsos, D. Alexandropoulos, H. Du, A. Tsigara, K. Kibasi, A. Perrone and N A Vainos, J. Opt. A: Pure Appl. Opt. **11** Art. No. 034005 (2009). [DOI:10.1088/1464-4258/11/3/034005](https://doi.org/10.1088/1464-4258/11/3/034005)
74. "Monitoring olive oil oxidation under thermal and UV stress through synchronous fluorescence spectroscopy and classical assays", K. I. Poulli, G. A. Mousdis and C. A. Georgiou, Food Chemistry **117**, 499 (2009) [DOI10.1016/j.foodchem.2009.04.024](https://doi.org/10.1016/j.foodchem.2009.04.024)
75. "The effect of Au and Pt nanoclusters on the structural and hydrogen sensing properties of SnO<sub>2</sub> thin films", I. Fasaki, M. Suchea, G. Mousdis, G. Kiriakidis, M. Kompitsas, Thin Solid Films, **518**, 1109 (2009). [DOI:10.1016/j.tsf.2009.07.192](https://doi.org/10.1016/j.tsf.2009.07.192)

76. "New type dithiolene complex based on 4,5-(1,4-dioxane-2,3-diyl)dithio)-1,3-dithiol ligand: Synthesis, experimental and theoretical investigation.", G. Soras, N. Psaroudakis, M.J. Manos, A.J. Tasiopoulos, D.G. Liakos, G.A. Mousdis, Polyhedron **28**, 3340 (2009). [DOI:10.1016/j.poly.2009.05.031](https://doi.org/10.1016/j.poly.2009.05.031)
77. " Synchronous fluorescence spectroscopy: tool for monitoring thermally stressed edible oils. ", K. I. Poulli, N. V. Chantzios, G. A. Mousdis and C. A. Georgiou. J Agric Food Chem. **57**, 8194. (2009) [DOI: 10.1021/jf902758d](https://doi.org/10.1021/jf902758d)
78. "Organic-inorganic hybrid compounds based on lead halide units: preparation from melts and through grinding effects.", G.C. Papavassiliou, G. A. Mousdis, and G. C. Anyfantis [Z. Naturforsch. \*\*65b\*\* 516 \(2010\)](https://doi.org/10.1515/natf-2010-0516).
79. "Diffractive optic sensor for remote point detection of ammonia.", M. Vasileiadis, L. Athanasekos, A. Meristoudi, D. Alexandropoulos, G. Mousdis, V. Karoutsos, A. Botsialas and N. A. Vainos. Optics Letters **35**, 1476 (2010) [DOI:10.1364/OL.35.001476](https://doi.org/10.1364/OL.35.001476)
80. "Strong photoluminescence from thin deposits of organic-inorganic hybrid compounds based on metal-halide units." G.C. Papavassiliou, G. A. Mousdis, and G. C. Anyfantis, Luminescence **25**, 218 (2010) [DOI: 10.1002/bio.1217](https://doi.org/10.1002/bio.1217)
81. Optical and electrophysical properties of sulfur containing metal free phthalocyanine", A.V. Kukhta, E.E. Kolesnik, I.N. Kukhta, A.E. Pochtenny, V.K. Dolgiy, G.A. Mousdis, N. Psaroudakis, Synth. Metals **160**, 2361-2365 (2010) [DOI:10.1016/j.synthmet.2010.09.012](https://doi.org/10.1016/j.synthmet.2010.09.012)
82. "Synthesis and non-linear optical properties of some novel nickel derivatives" G. Soras, N. Psaroudakis, G.A. Mousdis, M.J. Manos, A.J. Tasiopoulos, P. Aloukos, S. Couris, P. Labéguerief, J. Lipinski, A. Avramopoulos, M.G. Papadopoulos Chemical Physics **372**, 33 (2010) [DOI:10.1016/j.chemphys.2010.04.019](https://doi.org/10.1016/j.chemphys.2010.04.019)
83. "Molecular conductors with differently oriented conducting layers,  $(EDT\_TTF)_3Hg_2Br_6$  and  $(TMBEDT\_TTF)_5Hg(SCN)_{4-x}I_x$ " I. Zhilyaeva, V. N. Semkin, E. I. Yudanova, R. M. Vlasova, S. A. Torunova, A. M. Flakina, G. A. Mousdis, K. V. Van, A. Graja, A. Lapinski, R. B. Lyubovskii, and R. N. Lyubovskaya Russian Chemical Bulletin, International Edition, **59**, 1360 (2010) [DOI: 10.1007/s11172-010-0247-4](https://doi.org/10.1007/s11172-010-0247-4)
84. "Updating a synchronous fluorescence spectroscopic virgin olive oil adulteration calibration to a new geographical region" Matthew Ross Kunz, Joshua Ottaway, John H. Kalivas, Constantinos A. Georgiou, and George A. Mousdis J Agric Food Chem. **59** 1051. (2011) [DOI: 10.1021/jf902758d](https://doi.org/10.1021/jf902758d)

## C. PAPERS IN PROCEEDINGS OF INTERNATIONAL CONFERENCES

- 1 "Conductive solids based on some new molecules with isothiazolo-rings", G. C . Papavassiliou, G .A. Mousdis, V. Gionis, J. S. Zambounis and S. Y. Yiannopoulos, "Organic and Inorganic Low Dimensional Crystalline Materials" NATO ASI Series, Series B: Physics **168**, 301 (1987).
- 2 "Conducting and superconducting salts based on MDTTTF, EDTTTF, VDTTTF, EDTDSDF, MDSTTF, BMDTTF, Pd(dmit)<sub>2</sub> and Ni(dcit)<sub>2</sub>", G. C. Papavassiliou, G. A. Mousdis, V. C. Kakoussis, A. Terzis, A. Hountas, B. Hilti, G. W. Mayer and J. S. Zambounis, Springer Proc. in Phys.: "The Physics and Chemistry of Organic Superconductors" Ed. G. Saito, S. Kagoshima, Springer Verlag, 51, 247 (1990).
- 3 "New conducting solids based on some symmetrical and unsymmetrical  $\pi$ -donors", G. A. Mousdis, V. C. Kakoussis, G. C. Papavassiliou, *Lower-Dimensional Systems and Molecular Electronics*, Edited by R. M. Metzger et all, Plenum Press, New York 181 (1991).
- 4 "Conducting and superconducting crystals based on some unsymmetrical donor molecules", G. C. Papavassiliou, D. J. Lagouvardos, V. C. Kakoussis, G. A. Mousdis, A. Terzis, A. Hountas, B. Hilti, G. W. Mayer, J. S. Zambounis, J. Pfeiffer and P. Delhaes, *Organic Superconductors* eds V. Z. Kresch, W. A. Little, Plenum Press New York 367, (1990).
- 5 "Optical and related properties of some synthetic low-dimensional semiconductors based on metal sulfide units", G. C. Papavassiliou, G. A. Mousdis, I. B. Koutselas, M. G. Kanatzidis, E. A. Axtell III, and M.-H. Whangbo, *Proc. Third International Conference on Excitonic Processes in Condensed Matter EXCON'98* Edit R. T. Williams & W. M. Yen, 343 (1998).
- 6 "Optical and related properties of the synthetic quasi-two-dimensional semiconductors  $k_2cd_3s_4$ ,  $Rb_2Cd_3S_4$  and  $Cs_2Cd_3S_4$ ", G. C. Papavassiliou, I. B. Koutselas, G. A. Mousdis, J. A. Kapoutsis, M. G. Kanatzidis, and E. A. Axtell III, In "Optical Properties of Semiconductor Nanostructures" Edited by Marcin L. Sadowski, M. Potrnski and M. Grynberg Kluwer Acad. Publ. 97 Nederlands (2000).
- 7 "Self-trapped excitons of quasi-one dimensional semiconductor  $C_{10}H_7CH_2NH_3PbI_3$ .", T. Ohshima, T. Goto, G. A. Mousdis, G. C. Papavassiliou, In *Proc. of Association for Condensed Matter Photophysics*, 2000. (In Japanese).
- 8 "Excitonic bands in the photoconductivity spectra of some organic-inorganic hybrid compounds based on metal halide units", G. C. Papavassiliou, G. A. Mousdis, I. B. Koutselas and G. J. Papaioannou, *Proc. of 2000 International Conference on Excitonic Processes in Condensed Matter* Osaka Japan August 22-25 2000 Edited by: Cho, Kikuo; Matsui, Atsuo. World Scientific Publishing Co. Pte. Ltd.: Singapore, Singapore 159.

- 9 "Some organic-inorganic hybrid semiconductors obtained from melts.", G. C. Papavassiliou, I. B. Koutselas, G. A. Mousdis and G. J. Papaioannou, in Proc.of the NATO ARW on *Mol. Low-Dim. And Nanostructured Mat. For Adv. Applications* ed A. Graja et al, Kluwer Acad. Publ., The Netherlands 319 (2002).
- 10 "NiCl<sub>2</sub>/SiO<sub>2</sub> sol-gel material for ammonia sensing", Anna Tsigara; Nicholas Madamopoulos; Mike Hands; Loukas Athanasekos; Anastasia Meristoudi; George Mousdis; Giannis Manasis; Nikos Vainos and I. Koutselas, Advanced Environmental, Chemical, and Biological Sensing Technologies IV edited bv Tuan Vo-Dinh, RobertA. Lieberman, Gijnter GaugliD, Proc. of SPIE vol. 6377, art. No 63770B (2006). [DOI: 10.1117/12.685106](https://doi.org/10.1117/12.685106)
- 11 "Inorganic and hybrid polymer-inorganic nanostructured materials, for optical physicochemical sensing applications" A. Tsigara, L. Athanasekos, J. Manasis, M. Hands, G. Mousdis, S. Pispas and N. A. Vainos, Proceedings of SPIE -- Volume 6785 ROMOPTO 2006: Eighth Conference on Optics, Valentin I. Vlad, Editor, 67851G (Aug. 1, 2007). [DOI: 10.1117/12.757862](https://doi.org/10.1117/12.757862)
- 12 "The effect of Au nanoclusters in tin oxide film gas sensors", G. A. Mousdis, M. Kompitsas, I. Fasaki, M. Suche, G. Kiriakidis, " Nanostructured Materials for Advanced Technological Applications" NATO Science for Peace and Security Series B: Physics and Biophysics, Edited by J. P. Reithmaier et all, Springer p.219-222 (2009) [DOI: 10.1007/978-1-4020-9916-8\\_23](https://doi.org/10.1007/978-1-4020-9916-8_23)
- 13 "Electrochemical sensors for the detection of hydrogen prepared by pld and sol-gel chemistry" G. A. Mousdis, M. Kompitsas, I. Fasaki, " Nanotechnological Basis for Advanced Sensors" " NATO Science for Peace and Security Series B: Physics and Biophysics, Edited by Reithmaier, J.P.; Paunovic, P.; Kulisch, W.; Popov, C.; Petkov, P, Springer in press (2011)  
ISBN: 978-94-007-0902-7 [DOI: 10.1007/978-94-007-0903-4\\_41](https://doi.org/10.1007/978-94-007-0903-4_41)

## F. PAPERS IN PROCEEDINGS OF NATIONAL CONFERENCES

1. "Some new metal-2-dithiolene complexes", G. C. Papavassiliou, J. S. Zambounis, G. A. Mousdis. Chimika Chronika special issue, August 246 (1986).
2. "Exitonic spectra of organic-inorganic hybrids based on metal – halogen units", G. C. Papavassiliou., G. A. Mousdis and I. B. Koutselas, *Proc. XVI Greek Conf. on Solid State Physics*, Nafplion, 338 2000.
3. "*Organic metals based on tetrathiafulvalene and metal dithiolenes*" G. A. Mousdis, G. C. Papavassiliou, G. C. Anyfantis, N. Psaroudakis, A. Terzis, K. Raptopoulou, D.

Papaxatzis, and K. Murata, *Proc. XIX Greek Conf. on Solid State Physics*, Thessaloniki, 311 2003.

4. Hybrid photonic humidity sensors with cobalt chloride nanomaterials, Tsigara, A. Nichellati, G. Manasis, G. Anyfantis, K. Gatsouli, N. Madamopoulos, G. Mousdis, S. Pispas, N. Vainos, *Proc. XX Greek Conf. on Solid State Physics*, Ioannina, 2004
5. "Study of the exited states of terthiophenes through time depended fluorescence", D Anestopoulos, M Fakis, I. Polizos, G. Tsigaridas, G Mousdis, P Persephonis and V Giannetas, *Proc. XX Greek Conf. on Solid State Physics*, Ioannina, 2004
6. "Synthesis of some new electron  $\pi$ -donors containing a thioxy ring, precursors of organic metals", G. Soras, N. Psaroudakis, A. J. Tasiopoulos, A. D. Keramidas and G. A. Mousdis, *Proc. XXII Greek Conf. on Solid State Physics*, Patras, 2006, in press.