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Education

- B.Sc. in Physics, University of Thessaloniki, Greece, 1983
- Ph.D. in Physics, University of London, United Kingdom, 1990
Thesis topic: "Nuclear Magnetic Resonance in two and three dimensional systems"
Advisor: Prof. B.C. Cowan

Employment and Appointments

- Research scientist in the Nuclear Magnetic Resonance Laboratory, Institute of Materials Science, National Centre for Scientific Research Demokritos, December 2004 to present
- Research fellow in the Nuclear Magnetic Resonance Laboratory, Institute of Materials Science, National Centre for Scientific Research Demokritos, December 1991 to November 2004
- Research assistant in the MilliKelvin Laboratory, Royal Holloway and Bedford New College, University of London, Egham Hill, Egham, United Kingdom, January 1985 to October 1990

Research interests

- Nuclear Magnetic Resonance (NMR)
- NMR in molecule-based materials, molecular nanomagnets, and magnetic nanoparticles
- Magnetic induction heating and NMR in ferrofluids
- NMR in fluids confined in nanoporous materials

Impact of Research

- Co-authored 50 publications in international peer-reviewed journals
- Co-authored papers that are published in journals with high impact factors, such as Physical Review Letters, Europhysics Letters, ACS nano
- Citations exceed 500 (by September 2008)
- Presented over 40 seminars in international meetings and workshops

Recent selected publications

1. "Spin dynamics in the molecule-based ferromagnet decamethylferrocenium tetracyanoethanide [FeCp*₂][TCNE] as probed by ¹H NMR relaxation", M. Fardis, G. Diamantopoulos, E. Karakosta, I. Rabias, G. Papavassiliou, and J. S Miller, *Polyhedron* **28**, 3382 (2009).
2. "Gummic acid stabilized γ -Fe₂O₃ aqueous suspensions for biomedical applications", G. C. Papaefthymiou, I. Rabias, M. Fardis, E. Devlin, N. Boukos, D. Tsi trouli, and G. Papavassiliou", *Hyperfine Interactions* **190**, 59 (2009).

3. "Salicylaldoxime in manganese(III) carboxylate chemistry: Synthesis, structural characterization and physical studies of hexanuclear and polymeric complexes", C. P. Raptopoulou, A. K. Boudalis, K. N. Lazarou, V. Psycharis, N. Panopoulos, M. Fardis, G. Diamantopoulos, J-P. Tuchagues, A. Mari and G. Papavassiliou, *Polyhedron*, **27**, 3575 (2008).
4. "Synthesis and characterization of novel natural product-Gd(III) MRI contrast agent conjugates", E. K. Eftimiadou, M. E. Katsarou, M. Fardis, C. Zikos, E. N. Pitsinos, A. Kazantzis, L. Leondiadis, M. Sagnou, and D. Vourloumis, *Bioorganic & Medicinal Chemistry Letters* **18**, 6058 (2008).
5. "No aging phenomena in ferrofluids: the influence of coating on interparticle interactions of maghemite nanoparticles", I. Rabias, M. Fardis, E. Devlin, N. Boukos, D. Tsitrouli, and G. Papavassiliou, *ACS Nano* **2**, 977 (2008).
6. "Polaron activation energy as evidenced by EMR in colossal magnetoresistive nanowires", A. Popa, D. Toloman, M. N. Grecu, G. Mihailescu, A. Darabont, C. V. L. Pop, O. Raita, M. Fardis, S. Idziak, S. K. Hoffman, and L. M. Giurgiu, *Appl. Magn. Res.* **34**, 21 (2008).
7. "In vitro studies on ultrasmall superparamagnetic iron oxide nanoparticles coated with gummy acid for T₂ MRI contrast agent", I. Rabias, H. Pratsinis, G. Drossopoulou, M. Fardis, T. Maris, N. Boukos, N. Tsotatos, D. Kletsas, E. Tsilibary, and G. Papavassiliou, *Biomicrofluidics* **1**, 044104 (2007).
8. "Magnetic nanoparticles for biomedical applications", M. Fardis, I. Rabias, G. Diamantopoulos, N. Boukos, D. Tsitourli, G. Papavassiliou, and D. Niarchos, *J. Opt. Adv. Mater.* **9**, 527 (2007).
9. "Syntheses, structural, and physical studies of basic Cr-III and Fe-III benzilates and benzoates: Evidence of antisymmetric exchange and distributions of isotropic and antisymmetric exchange parameters", V. Psycharis, C.P. Raptopoulou, A.K. Boudalis, Y. Sanakis, M. Fardis, G. Diamantopoulos, and G. Papavassiliou, *European Journal of Inorganic Chemistry*, **18**, 3710 (2006).
10. "Low temperature charge and orbital textures in La_{0.875}Sr_{0.125}MnO₃", G. Papavassiliou, M. Pissas, G. Diamantopoulos, M. Belesi, M. Fardis, D. Stamopoulos, A. G. Kontos, M. Hennion, J. Dolinsek, J-Ph. Ansermet, and C. Dimitropoulos, *Phys. Rev. Lett.*, **96**, 097201 – 097204 (2006).
11. "Morphology, ionic diffusion and applicability of novel polymer gel electrolytes with LiI/I²", A. G. Kontos, M. Fardis, M.I. Prodromidis, T. Stergiopoulos, I.M. Arabatzis, G. Papavasilliou, and P. Falaras, *Phys. Chem. Chem. Phys.*, **8**, 767 (2006).
12. "¹¹B NMR study of pure and lightly carbon- doped superconductors", M. Karayanni, G. Papavassiliou, M. Pissas, M. Fardis, K. Papagelis, K. Prassides, T. Takenobu, and Y. Iwasa, *J. Supercond.* **18**, 521 (2005).
13. "Spin-polarized oxygen hole states in cation-deficient La_{1-x}Ca_xMnO_{3+delta}", G. Papavassiliou, M. Pissas, M. Belesi, M. Fardis, M. Karayanni, J.P. Ansermet, D. Carlier, C. Dimitropoulos, and J. Dolinsek, *Europhys. Letters* **68**, 453 (2004).
14. "Magnetic critical behavior in the [Cu(1-hydroxybenzotriazole)₂(MeOH)]_n molecule-based random-field magnet", M. Fardis, C. Christides, G. Diamantopoulos, V. Psycharis, C. Raptopoulou, V. Tangoulis, and G. Papavassiliou, *Phys. Rev. B* **68**, 184415 (2003).
15. "Orbital Domain State and Finite Size Scaling in Ferromagnetic Insulating Manganites", G. Papavassiliou, M. Pissas, M. Belesi, M. Fardis, J. Dolinsek, C. Dimitropoulos, and J. P. Ansermet, *Phys. Rev. Lett.* **91**, 147205 (2003).
16. "¹¹B and ²⁷Al NMR spin-lattice relaxation and Knight shift of Mg_{1-x}Al_xB₂: Evidence for an anisotropic Fermi surface", G. Papavassiliou, M. Pissas, M. Karayanni, M. Fardis, S. Koutandos, and K. Prassides, *Phys. Rev. B* **66**, 140514(R) (2002).
17. "¹H NMR investigation of the magnetic spin configuration in the molecule-based ferrimagnet [MnTFPP][TCNE]", M. Fardis, G. Diamantopoulos, G. Papavassiliou, K. Pokhodnya, Joel S. Miller, D. K. Rittenberg and C. Christides, *Phys. Rev. B* **66**, 064422 (2002).