Curriculum Vitae

Dr. George Mitrikas

Research Director

1. PERSONAL DATA

Date of birth:	2 November 1970
Place of birth:	Athens
Marital status:	Married, two children
Place of residence:	Athinas 7
	Aghia Paraskevi Attikis 15343
Tel. (home):	210 60 85 229
Place of work:	Institute of Nanoscience and Nanotechnology
	NCSR "Demokritos"
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2. STUDIES

1995-2000 : PhD in Physics from the Department of Physics, University of Ioannina. Title: "Continuous wave and Pulsed Electron Paramagnetic Resonance Study of Metallic Silver Nanoparticles embedded in SiO_2 and TiO_2 matrices"

1989-1993 : Diploma in Physics, Department of Physics, University of Ioannina.

3. SCHOLARSHIPS

1994 : Scholarship from the Institute of Materials Science of the National Centre for Scientific Research "Demokritos" for conducting postgraduate studies.

4. RESEARCH EXPERIENCE

2021- : Researcher Grade A at the Institute of Nanoscience and Nanotechnology of NCSR "Demokritos".

2011-2021 : Researcher Grade B at the former Institute of Materials Science and now Institute of Nanoscience and Nanotechnology of NCSR "Demokritos".

2008-2011 : Researcher Grade C at the Institute of Materials Science of NCSR "Demokritos".

2007-2008 : Collaborative researcher (post-doc in contract, ENTER 2004) at the Institute of Materials Science of NCSR "Demokritos".

2001-2006 : Post-doctoral researcher at the EPR group of Prof. Dr. Arthur Schweiger, Department of Physical Chemistry, ETH Zürich.

2000-2001 : Post-doctoral researcher at the Institute of Materials Science of NCSR "Demokritos".

1994-1998 : Post-graduate student at the Institute of Materials Science of NCSR "Demokritos".

5. RESEARCH DIRECTIONS

1) Development of New Hybrid Electronic-Nuclear Spin Systems with Applications in Quantum Technologies.

Innovative materials such as molecular magnets, study of their electronic properties with advanced EPR techniques and their possible use as information units (qubits or quantum bits) for applications in quantum computing.

Development of new pulse sequences for their application in quantum operations characterized by weak decoherence.

Search and design of natural molecular spin systems bearing long electron spin coherence times for the above applications. Typical achievements:

(a) Full EPR characterization of atomic hydrogen encapsulated in silicon oxide nanocages (H@POSS: polyhedral oligomeric sylsesquioxanes)

b) Application of dynamic decoupling methods in the H@POSS system and measurement of the intrinsic electron spin coherence time T_2 = 55 μs which is one of the largest that have been reported to date in molecular spin systems.

Collaborators:
Department of Chemical Research Support, Weizmann Institute of Science, Israel (Raanan Carmieli)
INN, NCSR D (Dr. Ioannis Sanakis, Dr. Catherine Raptopoulou)

2) Application of Advanced Pulse EPR Methods for the Investigation of the Electronic and Geometric Structure of Metal Complexes of Chemical and Biological Interest.

The catalytic properties of paramagnetic complexes (Cu (II), Fe (III), Co (II) etc.) are directly related to the distribution of the electronic wave function in the adjacent atoms of the substituents. Pulse EPR spectroscopy provides information on the electronic and geometric structure through a detailed mapping of hyperfine and nuclear quadrupole interactions.

Study of the super-hyperfine ^{31}P interactions by HYSCORE spectroscopy in new Cu (II) compounds where phosphorus atoms are in the second coordination sphere. Analysis of the hyperfine-strain effects by taking into account the structural flexibility of the complex. Application of new models for the distribution of magnetic interactions that allow for the correlation of magnetic parameters with the flexibility of the structure of the complexes in solution.

Study of new Cu (II), Cu (II) -TMPA complexes, with artificial metallo-nuclease (AMN) activity. Application of EPR spectroscopy to study their stability and structure in solution, as well as their entrapment in nanocarriers for targeted drug delivery.

Collaborators:
Department of Physics, University of Antwerp, Belgium (Sabine Van Doorslaer)
Department of Chemistry, University of Torino, Italy (Mario Chiesa)
School of Chemical Sciences and National Institute for Cellular Biotechnology, Dublin City University, Ireland (Andrew Kellett)
Max-Planck-Institut für Kohlenforschung, Mülheim an der Ruhr, Germany (Dimitrios Pantazis)
Department of Chemistry, National and Kapodistrian University of Athens (Prof. Panayotis Kyritsis, Assoc. Prof. Eleni Efthimiadou)
Department of Chemistry, University of Patras (Prof. Spyros Perlepes)
Department of Physics, University of Ioannina (Prof. Ioannis Deligiannakis)
INN, NCSR D (Dr. Ioannis Sanakis, Dr. Catherine Raptopoulou, Dr. Vasilis Psyharis)

3) Pulsed EPR Methodology.

The development of new EPR techniques based on ESEEM spectroscopy aiming at resolution and sensitivity enhancement is of great importance, especially in systems of biological interest (e.g. metal protein complexes) in which the EPR signal is very weak due to the low concentration of paramagnetic centers.

A recent achievement of this activity is the development of a new two-dimensional (2D) pulse EPR technique that significantly increases the sensitivity of the ESEEM effect while addressing typical problems of 2D experiments such as "blind spot" distortions.

6. TEACHING EXPERIENCE

2021- : Interdepartmental Program of Postgraduate Studies "Quantum Computing and Quantum Technologies" of the Department of Electrical and Computer Engineering, Democritus University of Thrace and INN, NCSR "Demokritos" (ΦΕΚ Β' 1388/08.04.2021, October 2021).

2007-2009 : Visiting assoc. Prof. at the School of Science and Technology, Hellenic Open University: studies in Physical Sciences, course FYE34.

2005-2006 : 1. "Spectroscopy Lab" (summer sem.). Supervisors: Prof. Dr. Arthur Schweiger, Dr. Erich Meister. 2. "Magnetic Resonance Lab"* (winter sem.). Supervisors: Prof. Dr. Arthur Schweiger, Dr. Erich Meister.

2004-2005 : 1. "Physical Chemistry Lab" (summer sem.). Supervisors: Prof. Dr. Arthur Schweiger, Dr. Erich Meister. 2. "Principles of Magnetic Resonance" (winter sem.). Supervisors: Prof. Dr. Arthur Schweiger, Prof. Dr. Beat Meier.

2003-2004 : 1. "Physical Chemistry Lab" (summer sem.). Supervisors: Prof. Dr. Arthur Schweiger, Dr. Erich Meister. 2. "Principles of Magnetic Resonance" (winter sem.). Supervisors: Prof. Dr. Arthur Schweiger, Prof. Dr. Beat Meier.

2002-2003 : 1. "Quantum Mechanics" (summer sem.). Supervisor: Prof. Dr. Vahid Sandoghdar. 2. "Principles of Magnetic Resonance" (winter sem.). Supervisors: Prof. Dr. Arthur Schweiger, Prof. Dr. Beat Meier.

2001-2002 : 1. "Physical Chemistry Lab" (summer sem.). Supervisors: Prof. Dr. Arthur Schweiger, Dr. Erich Meister. 2. "Principles of Magnetic Resonance" (winter sem.). Supervisors: Prof. Dr. Arthur Schweiger, Prof. Dr. Beat Meier.

7. SEMINARS

2021 "Pulse Electron Paramagnetic Resonance Spectroscopy (Pulse EPR)", Seminar educational series entitled "Spectroscopy Days" May 2021, Institute of Nanoscience and Nanotechnology, NCSR "Demokritos".

2019 : **1.** "g tensor", 16 July 2019
2. "CW-ENDOR", 17 July 2019
3. "Short introduction to pulsed EPR", 20 July 2019, τρεις ομιλίες στα πλαίσια του 1st PARACAT Summer School on "Basics of Electron Paramagnetic Resonance for Catalysis", 14-20 July 2019 - University of Antwerp, Belgium.
https://www.uantwerpen.be/en/summer-schools/paracat/
https://twitter.com/Paracat4
4. "Pulse Electron Paramagnetic Resonance Spectroscopy (Pulse EPR)", Seminar educational series entitled "Spectroscopy Days" May-June 2019, Institute of Nanoscience and Nanotechnology, NCSR "Demokritos".

2017 : **1**. "Introduction to EPR spectroscopy (basic principles)"

2. "EPR characterization of transition metal complexes (Examples)"
3. "Advanced pulse EPR methods and applications in Chemistry and Physics", Summer School on Computational and Experimental Methods for determining structure-properties of complex compounds and Inorganic Materials, postgraduate curriculum "Inorganic Chemistry and Industrial Applications", Department of Chemistry, National and Kapodistrian University of Athens, 19-22 June 2017.

2014 : **1**. "Principles of EPR spectroscopy and applications in nanotechnology" http://www.blod.gr/lectures/Pages/viewlecture.aspx?LectureID=1536 presented in the 49th Summer School, NCSR "Demokritos", 7-18 July 2014.
2. "Advanced pulsed EPR methods: applications to physical chemistry and meterials science", Invited talk, Department of Physical Chemistry, STU, 13 November 2014, Bratislava, Slovakia.

2012 : "Advanced pulsed EPR methods and applications to current problems of Physics and Chemistry", Invited talk, Department of Chemistry, National and Kapodistrian University of Athens, 15 February 2012, Athens.

2010 : "Quantum computers: basic principles and future applications", 45th Summer School, NCSR "Demokritos", 5-16 July 2010.

2009 : "Quantum computing and magnetic resonance: materials and methods", 44th Summer School, NCSR "Demokritos", 6-17 July 2009.

2007 : "Principles and applications of EPR spectroscopy", 43rd Summer School, NCSR "Demokritos", 9-20 July 2007.

8. THESIS SUPERVISION

2021- : Member of the advisory board of the Ph.D thesis of Mr. Kantartzis Nikolaos "Metal complexes with PNP/PNC chelate ligands and NHC carbenes», Department of Chemistry, National and Kapodistrian University of Athens.

2019 : Supervisor of the M.Sc thesis of Mrs. Stavroula Menenakou "Electron Spin Relaxation properties of Atomic Hydrogen Encapsulated in Octavinyl POSS nanocomposites" within the Interdepartmental Program of Postgraduate Studies "Microsystems and Nanodevices" of the School of Applied Mathematical and Physical Sciences, National Technical University of Athens 2018.

2016- : Member of the advisory board of the Ph.D thesis of Mrs. Maria Tsoukala "Structural, spectroscopic and biological properties of mixed copper complexes with imidodiphosphinic and diimine ligands", Department of Chemistry, National and Kapodistrian University of Athens 2016.

2015 : **1**. Supervision of post-doctoral research of Dr. Maria Chrysina between June 2015 and December 2015 "Development and application of advanced EPR methods for the characterization of free radicals occurring in bio-mimetic photochemical reactions" in the framework of KRIPIS project.

2. Supervisor of the M.Sc thesis of Mr. Nikolaos-Angelos Stamos "Study of $[VO\{Ph_2P(O)NP(O)Ph_2\}_2]$ and $[Cu\{Ph_2P(O)NP(O)Ph_2\}_2]$ complexes by EPR spectroscopy", Department of Chemistry, National and Kapodistrian University of Athens 2015

2014 : Co-supervisor of the diploma thesis of Mrs. Georgia Prokopiou "Study of metal complexes by EPR spectroscopy", Department of Chemistry, National and Kapodistrian University of Athens 2014

2006 : **1**. Supervisor of the Ph.D student Carlos Calle, "Continuous wave and pulse EPR

investigations of novel copper(II) and cobalt(II) containing complexes", Physical Chemistry Department, ETH 2006.
2. Supervisor of the Ph.D student Maria Grazia Santangelo, "Applications of pulse EPR to systems of chemical relevance and biological interest", Physical Chemistry Department, ETH.

2005 : Supervisor of the Diploma thesis of Olivier Duss, "Pulse EPR study of the Fe(III) complex of N-confused Tetraphenylporphyrin", Physical Chemistry Department, ETH 2005.

2003 : Supervisor of the Diploma thesis of Mirko Birbaumer, "Physical mechanisms of Electron Spin Echoes", Physics Department, ETH 2003.

2002 : Supervisor of the Semester work of Frank Loncke, "Investigation of the Rh-dimer in NaCl:Rh crystals with the PEANUT experiment", Physics Department, ETH 2002.

9. FUNDING

2019-2022 : **1**. "PARACAT: Paramagnetic Species in Catalysis Research. A Unified Approach Towards Heterogeneous, Homogeneous and Enzyme Catalysis" H2020-EU.1.3.1. Project ID: 813209 (coordination of the project: Prof. Mario Chiesa, University of Torino, Italy), budget for INN, 18 kEuros.
2. "Photosynthetic Water Splitting: The Critical Stages before Oxygen Release" MIS 5047814, ΕΔΒΜ103 (Coordinator: Dr. George Mitrikas, co-coordinator: Dr. Ioannis Sanakis), budget 50 kEuros.

2017-2020 : Kripis II, GSRT: "Development of Materials and Devices with Applications in Industry, Health, Environment and Culture" (E-12175).

2011-2015 : **1**. "Functionalized Mesoporous-Microporous Hybrid Materials" Research Funding Program (University of Ioannina): THALIS 80790. European Social Fund (ESF)-National Strategic Reference Framework (NSRF). 20 kEuros (coordination of the project: Prof. Y. Deligiannakis/UOI).
2. "Photoactivity of Anatase Nanostructures with {001} Exposed Facets" Bilateral Collaboration Program Greece-Slovakia 2013-2014, GSRT. 15 kEuros (coordination of the project: Dr. C. Trapalis/NCSRD).
3. "Development of High Energy Power Density Supercapacitors for Automotive Applications", AUTOSUPERCAP, 2011-2014, FP7, EU. 410 kEuros (coordination of the project: Dr. C. Trapalis/NCSRD).
4. KRIPIS, GSRT, "Advanced materials and devices for energy collection and management", (coordination of the project: Dr. D. Niarchos/NCSRD).

2007-2008 : Return grant ENTER 2004, integration of researchers from abroad to the Greek R&D system, 04EP100 "Transition metal complexes as contrast agents for MRI applications: study of structure and electronic properties by advanced pulsed EPR methods" (coordinator Dr. G. Papavasiliou, Institute of Materials Science, NCSR "Demokritos")

2000-2001 : European TMR (ERB 4061 PL 97-0645), "ENDEASD": European Network in Defect Engineering of Advanced Semiconductor Devices. (coordinator: Dr. G. Fanourakis, Institute of Nuclear Physics, NCSR "Demokritos).

10. ORGANIZATION OF INTERNATIONAL CONFERENCES

1. XIth Conference of European Federation of EPR Groups (EFEPR), 1-5 September 2019, Bratislava, Slovakia (Member of the International Advisory Board).
2. 8th Workshop on "Current trends in Molecular and Nanoscale Magnetism",

Rhodes, Greece 27-31 May 2019.

3. 8th North America-Greece-Cyprus Workshop on Paramagnetic Materials, 18-22 June 2018, Sparta, Greece.
4. 6th Workshop on "Current trends in Nanoscopic and Mesoscopic Magnetism", 9-13 October 2016, Pylos, Greece.
5. 6th North America-Greece-Cyprus Workshop on Paramagnetic Materials 3-6 June 2015, Athens, Greece.
6. EUROMAR 2013: 9th EUROpean MAgnetic Resonance meeting and specialized colloque AMPERE: "Advances in Solid State Broadband Magnetic Resonance", June 30th - July 5th 2013, Hersonissos, Crete, Greece.
7. 4th Workshop on "Current trends in Nanoscopic and Mesoscopic Magnetism", 11-14 June 2012, Ouranoupolis, Greece.

11. JOURNAL REVIEWER

1. Reviewer in scientific journals (including Chem. Comm., RSC Advances, Chem. Phys. Lett., Phys. Chem. Chem. Phys., Magnetic Resonance in Chemistry, New Journal of Chemistry).
2. Certifier of proposals APIΣTEIA II, GSRT, 2012-2016
3. Reviewer of internal funding ETH Zurich, 2012

12. CONFERENCES and WORKSHOPS

1. *2D-Hyperfine Sublevel Correlation Investigation of the Tyrosyl Radicals of Photosystem II,* Maria Chrysina, Georgia Zahariou, Nikolaos Ioannidis, Yiannis Sanakis, George Mitrikas, Athens Conference on Advances in Chemistry (ACAC 2020), 10-14 March 2021, Athens, Greece (oral presentation)
2. *Strain Effects of ^{31}P Hyperfine Coupling Constants in the Conformationally Flexible [Cu{$Ph_2P(O)NP(O)Ph_2$}$_2$] Complex, as Revealed by HYSCORE Spectroscopy*, G. Mitrikas, P. Kyritsis, D. A. Pantazis, XIth EFEPR Conference, 1-5 September 2019, Bratislava, Slovakia (oral presentation)
3. *Electron Spin Relaxation Mechanisms of Atomic Hydrogen Trapped in Silsesquioxane Cages: the Role of Isotope Substitution*, G. Mitrikas, R. Carmieli, 2019 EUROISMAR joint conference , 25 – 30 August 2019, Berlin, Germany (invited oral presentation)
4. *Electron Spin Relaxation properties of Atomic Hydrogen Encapsulated in Octavinyl POSS nanocomposites*, G. Mitrikas, 8th Workshop on "Current trends in Molecular and Nanoscale Magnetism", 27-31 May 2019, Rhodes, Greece (oral presentation)
5. *Structural, spectroscopic and DNA cleavage properties of Cu(II) complexes bearing [$Ph_2P(O)NP(O)Ph_2$]$^-$ and 2,2'-bipyridine as ligands,* Tsoukala M., Ioannou P. C., Raptopoulou C. P., Psycharis V., Mitrikas G., Simaan A. J., Kyritsis P., Athens Conference on Advances in Chemistry, 30 October-2 November 2018, Athens, Greece (poster)
6. *Structural, spectroscopic and cytotoxic properties of Cu(II) complexes bearing {$Ph_2P(O)NP(O)Ph_2$}$^-$ and 2,2΄-bipyridine as ligands*, Tsoukala M., Ioannou P.-C., Ferentinos E., Raptopoulou C.P., Psycharis V., Mitrikas G., Paravatou-Petsotas M., Methenitis C., Simaan A.J., Kyritsis P., Copper Bioinorganic Chemistry Symposium (CuBICS 2018), 21-24 May 2018, Aix-Marseille Université/CNRS, Marseille, France (poster)
7. *Hydrogen Atom in the box: what can we learn from Pulse EPR spectroscopy?,* G. Mitrikas, R. Carmieli, 8th North America-Greece-Cyprus Workshop on Paramagnetic Materials, 18-22 June 2018, Sparta, Greece (oral presentation)
8. *Probing the Electronic Structure of the Copper(II) Complex of a Derivative of Di-2-pyridyl Ketone by Continuous Wave- and Pulse-EPR Spectroscopy*, G. Mitrikas, Y. Sanakis, C. P.

Raptopoulou, V. Psycharis, Z. G. Lada, S. Perlepes, EUROMAR 2017, 2-6 July 2017, Warsaw, Poland (invited oral presentation)

9. *Probing the Electronic Structure of the Copper(II) Complex of a Derivative of Di-2-pyridyl Ketone by Continuous Wave- and Pulse-EPR Spectroscopy*, George Mitrikas, Yiannis Sanakis, Catherine P. Raptopoulou, Vassilis Psycharis, Zoi G. Lada, Spyros Perlepes, "Current trends in Nanoscopic and Mesoscopic Magnetism", 9-13 October 2016, Pylos, Greece (oral presentation).
10. *Modulation Depth Enhancement of ESEEM Experiments using Pulse Trains,* George Mitrikas, Xth EFEPR Conference, 4-8 September 2016, Torino, Italy (invited key-note lecture)
11. *ESEEM Spectroscopy: Basic Theory and Application Examples*, George Mitrikas, 6th North America-Greece-Cyprus Workshop on Paramagnetic Materials, 3-6 June 2015, Athens, Greece (oral presentation).
12. *Pulsed EPR characterization of a novel Fe^{1+}(S=1/2) state trapped in an iron-based catalyst for hydrogen production*, G. Mitrikas, P. Stathi, Y.Sanakis, M. Louloudi, Y.Deligiannakis, 5th North America-Greece-Cyprus Workshop on Paramagnetic Materials, 22-26 May 2013, Limassol, Cyprus (oral presentation).
13. *Extending the Electron Spin Coherence Time of Atomic Hydrogen by Dynamical Decoupling*, G. Mitrikas, EUROMAR 2013, 30th June – 5th July 2013, Hersonissos, Crete, Greece (poster presentation).
14. *Electron spin-lattice and spin-spin relaxation times of atomic hydrogen: can H@POSS rival endohedral fullerenes as qubit embodiments?* G. Mitrikas, EUROMAR 2012, 1-5 July 2012, Dublin, Ireland (poster presentation).
15. *Pulsed EPR Characterization of Encapsulated Atomic Hydrogen in Ooctasilsesquioxane Cages*, George Mitrikas, George Kordas, EUROMAR 2011, 21-25 August 2011, Frankfurt, Germany (oral presentation).
16. *Electron Magnetic Resonance Studies of Magnetic Nanoparticles encapsulated in Novel Multifunctional Microcontainers*, A. Chatzipavlidis, P. Bilalis, G. Mitrikas, N. Boukos, G. Kordas, EUROMAR 2011, 21-25 August 2011, Frankfurt, Germany (poster presentation).
17. *Solid-State Quantum Gates based on Hybrid Electron-Nuclear Spin Systems*, G. Mitrikas, Joint EUROMAR 2010 and 17th ISMAR Conference, 4-9 July 2010, Florence, Italy (oral presentation).
18. *Ultrafast Control of Nuclear Spins Using Only Microwave Pulses: Towards Switchable Solid State Gates for Quantum Information Processing*, G. Mitrikas, Y. Sanakis, and G. Papavassiliou, 25th PanHellenic Conference on Solid State Physics & Materials Science, 20-23 September 2009, Thessaloniki, Greece (oral presentation).
19. *Probing the Electronic Structure of Molecular Magnets by Pulse EPR Methods*, G. Mitrikas, Y. Sanakis, C. Raptopoulou, and G. Papavassiliou, 25th PanHellenic Conference on Solid State Physics & Materials Science, 20-23 September 2009, Thessaloniki, Greece (poster presentation).
20. *Ultrafast Control of Nuclear Spins Using Only Microwave Pulses: Towards Switchable Solid State Quantum Gates*, G. Mitrikas, Y. Sanakis, and G. Papavassiliou, 7th EFEPR Groups Meeting & Closing Meeting of COST P15, 6-11 September 2009, Antwerp, Belgium (poster presentation).
21. *Probing the Electronic Structure of Molecular Magnets and their Relevance in Quantum Computing by Pulse EPR Methods*, G. Mitrikas, Current Trends in Nanoscopic and Mesoscopic Magnetism, 1-5 September 2008, Delphi, Greece (oral presentation).
22. *Pulse EPR spectroscopy: Advanced Methods and Applications*, G. Mitrikas, 2nd North America-Greece-Cyprus Workshop on Paramagnetic Materials, 18-21 June 2007, Syros,

Greece (oral presentation).

23. *Probing the protonation state of the remote nitrogen in the copper(II) complex of N-confused tetraphenylporphyrin by hyperfine decoupling techniques*, G. Mitrikas and C. Calle, 40th Annual International Meeting of The Electron Spin Resonance Group of The Royal Society of Chemistry, 25-29th March 2007, New College, Oxford, UK (poster presentation).
24. *Structural Analysis of Cu(II) Ligation to the GMP Nucleotide by using Pulse EPR Spectroscopy*, M. G. Santangelo, B. Spingler, P. M. Antoni, A. Medina Molner, G. Mitrikas, A. Schweiger, 6th European Federation of EPR Groups Meeting, 5-8 September 2006, Madrid, Spain (poster presentation).
25. *Pulse EPR study on the Cobalt(II) Complex of N-confused Porphyrin*, George Mitrikas, Carlos Calle and Arthur Schweiger, EUROMAR 2006, 16-21 July 2006, York, UK (poster presentation).
26. *Pulse EPR study on the Copper(II) Complex of N-confused Porphyrin*, George Mitrikas, Carlos Calle and Arthur Schweiger, EUROMAR 2006, 16-21 July 2006, York, UK (oral presentation).
27. *Probing the Copper(II) Complex of N-Confused Porphyrin by EPR Spectroscopy*, Carlos Calle, George Mitrikas and Arthur Schweiger, 39th Annual International Meeting of The Electron Spin Resonance Group of The Royal Society of Chemistry, 2-5th April 2006, University of Edinburgh (poster presentation).
28. *A N-confused Porphyrin Complex of Cobalt(II) - a Combined Pulse EPR/ ENDOR and DFT Study*, Carlos Calle, George Mitrikas and Arthur Schweiger, 39th Annual International Meeting of The Electron Spin Resonance Group of The Royal Society of Chemistry, 2-5th April 2006, University of Edinburgh (poster presentation).
29. *Asymmetric Spin Density Distribution in the Copper(II) Complex of N-Confused Tetraphenylporphyrin Revealed by Multifrequency Continuous Wave and Pulse EPR*, Carlos Calle, George Mitrikas, Stefan Stoll and Arthur Schweiger, 38th Annual International Meeting of The Electron Spin Resonance Group of The Royal Society of Chemistry, 20th – 24th March 2005, University of Bath (poster presentation).
30. *A Suppression Effect in ESEEM Spectra of Multinuclear Spin Systems*, Stefan Stoll, Carlos Calle, George Mitrikas and Arthur Schweiger, 38th Annual International Meeting of The Electron Spin Resonance Group of The Royal Society of Chemistry, 20th – 24th March 2005, University of Bath (poster presentation).
31. *N-confused Porphyrin Complexes of Copper and Cobalt - a Combined Multi- Frequency One- and Two-Dimensional Pulse EPR/ ENDOR and DFT Study*, Carlos Calle, George Mitrikas and Arthur Schweiger, Asia-Pacific EPR/ESR Symposium 2004 (APES'04), 22-25 November 2004, the Indian Institute of Science, Bangalore, India (oral presentation).
32. *Recent developments of hyperfine-decoupling schemes in pulse EPR,* G. Mitrikas and A. Schweiger, 27th International EPR Symposium, August 1-5, 2004, Hyatt Regency Denver, Denver, Colorado (oral presentation).
33. *Recent developments of hyperfine-decoupling schemes in EPR spectroscopy*, G. Mitrikas and A. Schweiger, Specialized Colloque AMPERE 2003: "NMR and EPR of broad-line solids", 8-12 September 2003, Portorož, Slovenia (oral presentation).
34. *EPR studies of neutron-irradiated n-type FZ silicon doped with tin*, G. Mitrikas, G. Kordas, G. Fanourakis, E. Simoen, E-MRS 2001 Conference, Symposium B: "Defect Engineering of Advanced Semiconductor Devices", 5-8 June 2001, Strasbourg, France (poster presentation).
35. *Μελέτη των μηχανισμών χαλάρωσης ηλεκτρονικού σπιν σε νανοσωματίδια αργύρου με την φασματοσκοπία συνεχούς και παλμικού EPR*, Γ. Μήτρικας, Χ. Τράπαλης, Γ. Κόρδας, XIV Πανελλήνιο Συνέδριο Φυσικής Στερεάς Κατάστασης, Ιωάννινα, 1998 (παρουσίαση αφίσας).

36. *Cw and pulsed EPR of silver nanoparticles in a SiO_2 matrix*, G. Mitrikas, Y. Deligiannakis, C. C. Trapalis, N. Boukos, G. Kordas, Sol-Gel 97, 9th International Workshop on Glasses, Ceramics, Hybrids and Nanocomposites from Gels, 31 August-5 September 1997, Sheffield, UK (poster presentation).
37. *Χαρακτηρισμός μεταλλικών νανοσωματιδίων αργύρου σε περιβάλλον SiO_2 με φασματοσκοπία cw & pulsed-EPR*, Γ. Μήτρικας, Γ. Δεληγιαννάκης, Χ. Τράπαλης, Ν. Μπούκος, Γ. Κόρδας, XIII Πανελλήνιο Συνέδριο Φυσικής Στερεάς Κατάστασης, Θεσσαλονίκη, 1997 (παρουσίαση αφίσας).
38. *Παρασκευή και χαρακτηρισμός μεταλλικών νανοσωματιδίων αργύρου σε περιβάλλον SiO_2*, Γ. Μήτρικας, Χ. Τράπαλης, Ν. Μπούκος, Β. Ψυχάρης, Λ. Αστρακάς, Γ. Κόρδας, XII Πανελλήνιο Συνέδριο Φυσικής Στερεάς Κατάστασης, Ηράκλειο Κρήτης, 1996 (15λεπτη ομιλία).

13. PUBLICATIONS

Books (reviews)

1. *Advanced Pulse EPR methods for the characterization of metalloproteins*, Jeffrey Harmer, George Mitrikas, Arthur Schweiger, in Biological Magnetic Resonance, Vol. 28 "High Resolution EPR: Applications to Metalloenzymes and Metals in Medicine", p. 13-61, Ed. G. Hanson and L. Berliner, Springer Publishers, New York (2009)

Other

2. *Spin Quantum Computing with Molecular-Encaged Atomic Hydrogen*, George Mitrikas, ERCIM News, 128 pp. 43-44 (2022)
3. *ESEEM simulations: CPMG-2D sequence* (free simulation program written in Matlab), G. Mitrikas (2015), https://gmitrikas.wordpress.com/simulation-program/
4. *EUROMAR 2013: An EPR Point of View*, Yiannis Sanakis and George Mitrikas, EPR Newsletter, 23(2) pp. 10-11 (2013)
5. *Present Day EPR Spectroscopy in Greece*, Yiannis Sanakis, George Mitrikas, Vassilios Petrouleas and Yiannis Deligiannakis, EPR Newsletter, 21(1) pp. 11-12 (2011)

In peer-reviewed journals : h-index = 18, citations = 996

6. *Electronic Structure of Tyrosyl D Radical of Photosystem II, as Revealed by 2D-Hyperfine Sublevel Correlation Spectroscopy*, Maria Chrysina, Georgia Zahariou, Nikolaos Ioannidis, Yiannis Sanakis, and George Mitrikas, *Magnetochemistry* **7**, 131 (2021)
7. *Electron Spin Relaxation Mechanisms of Atomic Hydrogen Trapped in Silsesquioxane Cages: the Role of Isotope Substitution*, George Mitrikas* and Raanan Carmieli, *J. Phys. Chem. C* **125**, 9899–9907 (2021)
8. *Parallel-Mode EPR of Atomic Hydrogen Encapsulated in POSS Cages*, George Mitrikas*, Yiannis Sanakis, Nikolaos Ioannidis, *Applied Magnetic Resonance* **51**, 1451–1466 (2020)
9. *Electron spin relaxation properties of atomic hydrogen encapsulated in octavinyl POSS cages*, George Mitrikas* and Stavroula Menenakou, *Phys. Chem. Chem. Phys.* **22**, 15751-15758 (2020)
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