

Ioannis Panagiotopoulos

Curriculum Vitae

Address

Department of Materials Science and Engineering,
University of Ioannina,
Ioannina 45110.

Tel: +30 26510-07182
Fax: +30 26510-07074
e-mail: ipanagio@cc.uoi.gr

Table of Contents

1. Employment record from date of graduation	2
2. Research	
2.1 Research interests and experience	3
2.2 Publications in Journals	3
2.2.1 List of Publications	4
2.3 Publications in proceedings	11
2.4 Talks Presented	12
2.5 Organization of Conferences	14
2.6 Projects	14
2.7 Referee of journal articles	15
3. Teaching Experience	
3.1 Courses	16
3.2 PhD Students	16
3.3 MSc and Diploma Students	16

1. Employment record from date of graduation:

<u>9/2013-today</u>	<i>Professor</i> Department of Materials Science and Engineering University of Ioannina
<u>2/2013-8/2013</u>	<i>Sabbatical:</i> Lab. Léon Brillouin CEA/CNRS, Centre d'Etudes de Saclay, France
<u>8/2008- 9/2013</u>	<i>Associate Professor</i> Department of Materials Science and Engineering University of Ioannina
<u>9/2002-8/2008</u>	<i>Assistant Professor</i> Department of Materials Science and Engineering University of Ioannina
<u>1/1996- 9/2002</u>	<i>Research Associate</i> Institute of Materials Science NCSR "DEMOKRITOS"
<u>6/1994-12/1995:</u>	<i>Research Scholar</i> Department of Physics and Astronomy University of Delaware.
<u>7/4/1994:</u>	<i>PhD in Solid State Physics</i> National Technical University of Athens <i>Title of Dissertation:</i> "Deposition and Characterization of Hard Magnetic Thin Films with the ThMn ₁₂ Structure"
<u>1989-1994:</u>	<i>Graduate Scholar</i> Institute of Materials Science NCSR "DEMOKRITOS"
<u>1988-1989:</u>	Military Service
<u>1987</u>	<i>Graduation</i> Physics Department University of Patras (GPA 8)

2. Research

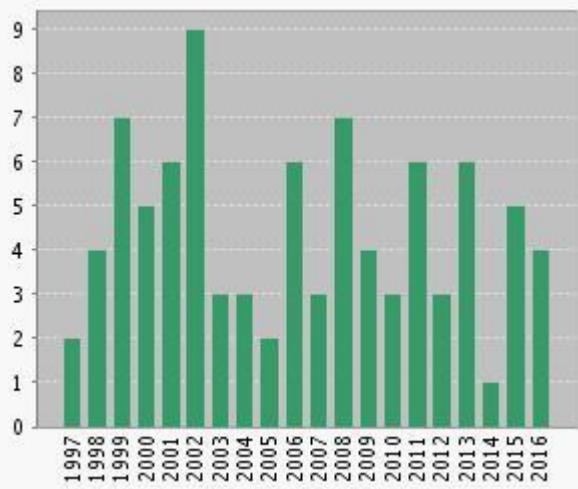
2.1 Research interests and experience

Synthesis and characterization of magnetic materials in the form of thin films, multilayers and nanoparticles. Magnetization Switching, Magnetic Interactions and Exchange Bias. Nanocomposite Magnetic Materials. Magnetic Recording Materials. Permanent Magnets. Transport properties in magnetic oxides. Extrinsic magnetoresistance. Spintronic and Multiferroic Materials.

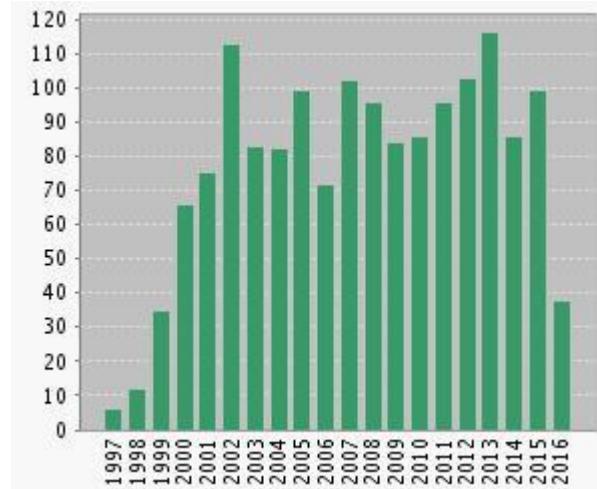
2.2 Publications in Journals

(Web Of Science 26-5-2016)

Published Items in Each Year



Citations in Each Year



Sum of the Times Cited : 1562

h-index : 21

2.2.1 List of Publications in Journals

1. "Synthesis of Nd(Fe,Ti)₁₂ Films by sputtering" I. Panagiotopoulos, D. Wang, D. Niarchos and D.J. Sellmyer; *Appl. Phys. Lett.* **62**(26), 3528 (1993)
2. "Magnetic Properties of SmFe₁₁Ti, Sm_{0.75}Tm_{0.25}Fe₁₁Ti Films and Fe/SmFe₁₁Ti Bilayers with (002) Texture" I. Panagiotopoulos, D. Niarchos, A. Kostikas, E. Devlin and G. Zouganelis*; *IEEE Trans. Magn.* **29**(6), 3141 (1993)
3. "Hall Effect Study of Bulk YBa₂Cu_{3-x}FexO_y (0≤x≤0.2, 6<y<7)" G. Kallias, I. Panagiotopoulos, D. Niarchos and A. Kostikas; *Phys. Rev. B* **48**, 5992 (1993)
4. "Magnetization reversal in SmFeTi (002) Textured films with the ThMn₁₂ structure" I. Panagiotopoulos, G. Zouganelis and D. Niarchos; *J. Appl. Phys.* **75**(3), 1689 (1994)
5. "Estimation of the exchange constants in the Fe sublattice of the Y₂Fe₁₇ and Y₂Fe₁₇N_{3-δ} compounds from the analysis of Moessbauer measurements" M.S. Anagnostou, I. Panagiotopoulos, A. Kostikas, D. Niarchos, G. Zouganelis; *J. Magn. Magn. Mat.* **130** (1994), 57-62
6. "The effect of shape anisotropy on the spin reorientation in Nd₂Fe₁₄B" films I. Panagiotopoulos, G.K. Nicolaides, V. Pscharis and D. Niarchos; *J. Alloys and Compounds* **205**, 45-47 (1994).
7. "The Anisotropic magnetoresistance in Fe/Pt compositionally modulated films" C. Christides, I. Panagiotopoulos, D. Niarchos, T. Tsakalakos and A.F. Jankowski *J. of Phys; Condensed Mater* **6**(40) 8187-8195 (1994)
8. "Magnetic Properties of Nd(Fe,Ti)₁₂ and Nd(Fe,Ti)₁₂N_x films of Perpendicular Texture" D.Wang*, D.J. Sellmyer, I. Panagiotopoulos and D. Nirachos; *J. Appl. Phys.* **75**(10), 6232 (1994)
9. "Nitrogen absorbtion in bulk and thin films of RFe_{12-x}T_x-type compounds" D. Niarchos, O. Kalogirou, V. Pscharis, I. Panagiotopoulos, L. Saettas; *Journal of Alloys and compounds* **222**, (1995) 44-48
10. "Magnetic Properties and Microstructure of melt-spun Nd-Fe-Ga-B Alloys" I. Panagiotopoulos*, A. Murthy and G. Hadjipanayis; *IEEE Trans. Magn.* **31**(6), 3617-3619 (1995)
11. "Melt-spun Pr₂Co₁₄B/Co Nanocomposite magnets" L. Withanawasam, I. Panagiotopoulos and G.C. Hadipanayis; *J. Appl. Phys.* **79**(8), 4837 (1996)
12. "Magnetic and Phase transformation studies in Nd₁₅DyFe₇₅(C,B)₉ cast alloys" A.S. Murthy, I. Panagiotopoulos and G.C. Hadipanayis; *J. Appl. Phys.* **79**(8), 4616 (1996)
13. "Magnetic hardening of melt-spun nanocomposite Nd₂Fe₁₄B/Fe magnets" I. Panagiotopoulos, A.S. Murthy, L. Withanawasam G.C. Hadipanayis, E. Singleton and D.J. Sellmyer; *J. Appl. Phys.* **79**(8), 4827 (1996)
14. "Crystallization behavior of melt-spun Nd_xFe_{93-x}NbB₆ alloys" L. Withanawasam*, I. Panagiotopoulos and G.C. Hadipanayis; *IEEE Trans. Mag.* **32**, 4422 (1996)

- 15.** "Exchange spring behavior of nanocomposite hard magnetic materials" I. Panagiotopoulos*, L. Withanawasam and G. Hadjipanayis; J. Magn. Magn. Mat. **152**, 353-358 (1996)
- 16.** "Granular Nd₂Fe₁₄B/W thin films" I. Panagiotopoulos, X. Mengburany and G.C. Hadipanayis*, J. Magn. Magn. Mat. **172**(3), 225-228 (1997)
- 17.** "High Magnetostriction in low applied magnetic fields in amorphous Tb-Fe (Hard)/ Fe-B (soft) multilayers" C. Prados*, I. Panagiotopoulos, G.C. Hadipanayis, J.J. Freijo and A. Hernando; IEEE Trans. Mag. **33**(5), 3712-3714 (1997)
- 18.** "Spin flunctuations in La_{2/3}Ca_{1/3}MnO₃ probed by ⁵⁷Fe and ¹¹⁹Sn Mossbauer spectroscopy" A. Simopoulos*, G. Kallias, E. Devlin, I. Pangiotopoulos and M. Pissas; J. Magn. Magn. Mat. **177-181**, 860-861 (1998)
- 19.** "Pulsed Laser deposition of La_{2/3}Ca_{1/3}MnO₃ films at low oxygen pressures." I. Panagiotopoulos*, G. Kallias, M. Pissas, V. Pscharis and, D. Niarchos; Materials Science and Engineering **B53**, 272-277 (1998)
- 20.** "Thin film nanocomposite Nd₂Fe₁₄B/α-Fe magnets" I. Panagiotopoulos and G.C. Hadipanayis Nanostructured Materials **10**, 1013 (1998).
- 21.** "CoPt/Ag Nanocomposites for High Density Recording Media" S. Stavroyiannis, I. Panagiotopoulos, D. Niarchos, J.A. Christodulides, Y. Zhang and G.C. Hadjipanayis; Appl. Phys. Lett. **73**(23) 3453 (1998)
- 22.** "Exchange biasing in La_{2/3}Ca_{1/3}MnO₃/La_{1/3}Ca_{2/3}MnO₃ multilayers." I. Panagiotopoulos, C. Christides, N. Moutis, M. Pissas, D. Niarchos; Journal of Applied Physics **85**(8) 4913, (1999)
- 23.** "New CoPt/Ag Films for High Density Recording Media" S. Stavroyiannis*, I. Panagiotopoulos, D. Niarchos, J.A. Christodulides, Y. Zhang and G.C. Hadjipanayis J. of Appl. Phys. **85**(8) 4304, (1999)
- 24.** "Investigation of CoPt/M (M=Ag,C) Films for High Density Recording Media" S. Stavroyiannis*, I. Panagiotopoulos, D. Niarchos, J.A. Christodoulides, Y. Zhang and G.C. Hadjipanayis. J. Magn. Magn. Mat. **193**, 181-184 (1999)
- 25.** "Structural and magnetic properties of La_{0.67}(Ba_{1-x}Ca_x)_{0.33}MnO₃ perovskites" N. Moutis, I. Panagiotopoulos, M. Pissas and D. Niarchos; Phys. Rev. **B59**, 1129 (1999)
- 26.** "Study of Fe doped La_{1-x}Ca_xMnO₃ (x≈1/3) using Mössbauer spectroscopy and neutron diffraction" A. Simopoulos, M. Pissas, G. Kallias, E. Devlin, N. Moutis, I. Panagiotopoulos, C. Christides, D. Niarchos and R. Sonntag; Phys. Rev. **B59**, 1263 (1999)
- 27.** "Polarons and Phase Separation in Lanthanum based Manganese Perovskites. A ¹³⁹La and ⁵⁵Mn NMR Study" G. Papavassiliou, M. Fardis, M. Pissas, I. Panagiotopoulos, G. Kallias, D. Niarchos, C. Dimitropoulos and J. Dolinsek; Phys. Rev. **B59**, 6390 (1999)
- 28.** "Exchange biasing mechanism in La_{2/3}Ca_{1/3}MnO₃/La_{1/3}Ca_{2/3}MnO₃ multilayers." I. Panagiotopoulos, C. Christides, M. Pissas, D. Niarchos; Phys. Rev. **B60**, 485 (1999)

- 29.** "Magnetotransport and exchange-biasing in La-Ca-Mn-O compositionally modulated ferromagnetic/antiferromagnetic multilayers" I. Panagiotopoulos, C. Christides*, M. Pissas, D. Niarchos; *J. Appl. Phys.* **87**(8), 3926 (2000).
- 30.** "Granular CoPt/C films for high-density recording media I. Panagiotopoulos, S. Stavroyiannis, D. Niarchos , J.A. Christodoulides, Y. Zhang and G.C. Hadjipanayis, *J. Appl. Phys.* **87**(9), 4358-4361 (2000)
- 31.** "Magnetic Properties and Granular Structure of CoPt/B films" V. Karanasos*, I. Panagiotopoulos, and D. Niarchos, H. Okumura and G. C. Hadjipanayis *J. Appl. Phys.* **88**(5), 2740-2744 (2000).
- 32.** "CoPt and FePt thin films for high density recording media" J.A. Christodoulides*, Y. Huang, Y. Zhang, G.C. Hadjipanayis, I. Panagiotopoulos, D. Niarchos *J. Appl. Phys.* **87**(9), 6938-6940 (2000)
- 33.** "Critical Behaviour of $\text{La}_{0.67}(\text{Ba}_{1-x}\text{Ca}_x)_{0.33}\text{MnO}_3$ perovskites $0 \leq x \leq 1$ " I. Panagiotopoulos*, N. Moutis, S. Stamopoulos, M. Pissas and D. Niarchos; *Physica* **B284**, 1416-1417 (2000)
- 34.** "Formation of a Co nanostructure revealed by ^{59}Co nuclear magnetic resonance measurements in Co/Au multilayers" M. Wojcik, C. Christides, E. Jedryka, S. Nadolski, and I. Panagiotopoulos, *Phys. Rev. B* **63**, 12102-12104 (2001).
- 35.** "Optimization of CoPt/B nanocomposite films for ultrahigh-density recording media" V. Karanasos*, I. Panagiotopoulos, D. Niarchos, H. Okumura and G. C. Hadjipanayis. *J. Appl. Phys.* **90**(6), 3112-3114 (2001)
- 36.** "CoPt/Ag nanocomposites with (001) texture" V. Karanasos*, I. Panagiotopoulos, D. Niarchos, H. Okumura and G. C. Hadjipanayis, *Appl. Phys. Lett.* **79**(9), 1255-1257 (2001).
- 37.** "Exchange-coupling properties of $\text{La}_{1-x}\text{Ca}_x\text{MnO}_3$ ferromagnetic antiferromagnetic multilayers" N. Moutis, C. Christides, I. Panagiotopoulos and D. Niarchos, *Phys. Rev. B* **64**, 94429-94439 (2001).
- 38.** "CoPt:B granular thin films for high density magnetic recording media" V. Karanasos*, I. Panagiotopoulos, D. Niarchos, H. Okumura and G.C. Hadjipanayis, *J. Magn. Magn. Mat.* **236**, 234-241 (2001).
- 39.** "Pulsed Laser Deposition of Manganite Artificial Superstructures" I. Panagiotopoulos*, C. Christides, M. Pissas, D. Niarchos, *Journal of Materials Processing Technology* **108** 193 (2001).
- 40.** «On the temperature dependence of coercivity and exchange biasing field in La-Ca-Mn-O ferromagnetic/antiferromagnetic multilayers" N. Moutis, C. Christides*, I. Panagiotopoulos and D. Niarchos,. *J. Magn. Magn. Mat.* **242-245**, 544 (2002).
- 41.** "Coercivity and fluctuation field in granular recording media" V. Karanasos*, I. Panagiotopoulos, D. Niarchos, *J. Magn. Magn. Mat.* **242-245**, 434 (2002).
- 42.** "Melt-spun $\text{Sm}(\text{Co},\text{Fe},\text{Cu},\text{Zr})_z$ magnets for high-temperature applications" I. Panagiotopoulos*, T. Matthias, D. Niarchos, J. Fidler, *J. Magn. Magn. Mat.* **242-245**(P2) 1304 (2002).
- 43.** "Effects of boron substitution on the structural and magnetic properties of melt-spun $\text{Sm}(\text{Co},\text{Fe},\text{Zr})_{7.5}$ and $\text{Sm}(\text{Co},\text{Fe},\text{Zr},\text{Cu})_{7.5}$ magnets" S.S. Makridis*, G.

Litsardakis*, I. Panagiotopoulos, D. Niarchos and G. C. Hadjipanayis. J. Appl. Phys. **91**(10) 7899 (2002).

44. "High coercivity in boron substituted Sm-Co melt-spun magnets" Makridis SS, Litsardakis G, Panagiotopoulos I, et al. IEEE T Magn **38**(5): 2922-2924 (2002)
45. "Asymmetry of the magnetization reversal mechanism probed by relaxation measurements in La-Ca-Mn-O ferromagnetic/antiferromagnetic multilayers" I. Panagiotopoulos, N. Moutis, C. Christides; Phys. Rev. B **65**(13), 132407 (2002)
46. "Magnetic properties and microstructure of melt-spun Sm₂(Co,Fe,Cu,Zr)₁₇ alloys" I. Panagiotopoulos*, T. Matthias, D. Niarchos, J. Fidler, J. Magn. Magn. Mat. **247** 355-362 (2002).
47. "Temperature dependence of the activation volume in high-temperature Sm₂(Co,Fe,Cu,Zr)₁₇ magnets" Panagiotopoulos I, Gjoka M, Niarchos D, J. Appl. Phys. **92** (12): 7693-7695 (2002)
48. "Texture and strain in CoPt/Ag nanocomposite films" Karanasos V*, Panagiotopoulos I, D. Niarchos, J. Magn. Magn. Mater. **249** (3): 471-474 (2002)
49. "Fast magnetic field mapping of permanent magnets with GMR bridge and Hall-probe sensors" C. Christides*, Panagiotopoulos I, Niarchos D, et al. Sensor Actuat A-Phys 106 (1-3): 243-245 (2003)
50. "Nanostructured melt-spun Sm₂(Co,Fe,Zr,B)7.5 alloys for high-temperature magnets" Makridis SS, Litsardakis G, Efthimiadis KG, et al. IEEE T Magn **39** (5): 2869-2871 (2003)
51. "Structural and magnetic properties of rhombohedral Sm₂(Co,Fe,Cr)17Bx and Sm₂(Co,Fe,Mn)17Bx compounds" Makridis SS, Litsardakis G, Efthimiadis KG, et al. IEEE T Magn **39**(5): 2872-2874 (2003)
52. "Angular dependence of coercivity in Sm₂(Co,Fe,Cu,Zr)₁₇ magnets" I. Panagiotopoulos*, M. Gjoka and D. Niarchos Journal of Magnetism and Magnetic Materials, **279**(2-3) 389-395 (2004)
53. "Influence of randomly distributed magnetic nanoparticles on surface superconductivity in Nb films" Stamopoulos D, Pissas M, Karanasos V, Panagiotopoulos I, Phys. Rev. B **70**(5) 54512 (2004)
54. «Hydrophilic Co-Pt alloy nanoparticles: Synthesis, characterization, and perspectives» Athanasios B. Bourlinos, Ioannis Panagiotopoulos, Dimitrios Niarchos, and Dimitrios Petridis*, Journal of Materials Research -Volume **19**(4), pp. 1227-1233 (2004)
55. «Temperature-compensated Sm_{1-x}Gdx(Co_{0.74}Fe_{0.10}Cu_{0.12}Zr_{0.04})_{7.50} permanent magnets (x=0, 0.2, 0.4, 0.6, 0.8)" Gjoka* M, Panagiotopoulos I, Niarchos D, et al. J ALLOY COMPD **367** (1-2): 262-265 (2004)
56. "(001) Textured CoPt/Ag films and nanocomposites: the effect of Ag underlayers" E. Manios, V. Karanasos, D. Niarchos and I. Panagiotopoulos*; Journal of Magnetism and Magnetic Materials, **272-276**, Part 3, Pages 2169-2170, (2004)

- 57.** "Structure and magnetic properties of $\text{Sm}(\text{Co}_{1-x}\text{M}_x)_5$ ($\text{M} = \text{Cu, Ag}$) alloys" M. Gjoka*, I. Panagiotopoulos, D. Niarchos, Journal of Materials Processing Technology **161** (2005) 173–175
- 58.** "Grain-boundary magnetoconductance and inelastic tunnelling" M. Ziese, A. Bollero, I. Panagiotopoulos, N. Moutis, Phys. Rev. B. **72**, 24453 (2005)
- 59.** "Magnetoconductance and hysteresis in milled $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$ " powder compacts I. Panagiotopoulos*, N. Moutis, M. Ziese, A. Bollero, Journal of Magnetism and Magnetic Materials **299**(1) 94-104 (2006).
- 60.** "Magnetoresistance switch effect in a multiferroic $\text{Fe}_3\text{O}_4/\text{BaTiO}_3$ bilayer" M Ziese*, Bollero A, Panagiotopoulos I, Moutis N., Appl. Phys. Lett. **88**(21): 212502 (2006)
- 61.** "Weak ferromagnetism and exchange biasing in cobalt oxide nanoparticle systems" Tomou A, Gournis D, I. Panagiotopoulos*, Y. Huang, G. C. Hadjipanayis, B. J. Kooi. J. Appl. Phys. **99**(12), 123915 (2006)
- 62.** "Structural and magnetic properties of $\text{La}_{0.67-y}(\text{Sr, Ba, Ca})(0.33+y)\text{Mn}_{1-x}\text{Sn}_x\text{O}_3$ ($x=0.01, 0.02, 0.07$) perovskites" Assaridis H, Panagiotopoulos I, Moukarika A, V. Papaefthymiou, T. Bakas* Solid State Commun. **139**(9): 473-478 (2006)
- 63.** "Critical behavior of $\text{La}_{0.67-y}(\text{Sr, Ba, Ca})(0.33+y)\text{Mn}_{1-x}\text{Sn}_x\text{O}_3$ ($x=0.01, 0.02, y=0, 0.07$) perovskites" Assaridis H, Panagiotopoulos I, Moukarika A, V. Papaefthymiou , T. Bakas*. Hyperfine Interactions **169** (1-3): 1331-1336 (2006)
- 64.** "Fe-57 Mossbauer spectroscopy studies of $\text{Sr}_2\text{Fe}_{1-x}\text{Cr}_x\text{Mo}_{1-x}\text{W}_x\text{O}_6$ double perovskite compounds" Douvalis AP*, Panagiotopoulos I, Moukarika A, T. Bakas & V. Papaefthymiou Hyperfine Interactions **168** (1-3): 1145-1149 (2006)
- 65.** "Magnetic and magnetotransport properties of $\text{Sr}_2\text{Fe}_{1-x}\text{Cr}_x\text{Mo}_{1-x}\text{W}_x\text{O}_6$ double perovskite compounds prepared by the encapsulation technique" AP Douvalis*, I. Panagiotopoulos, T. Bakas, et al. Journal of Magnetism and Magnetic Materials **316**(2): E940-E943 (2007)
- 66.** "Comparative Mössbauer and magnetization study of 1% ^{119}Sn -doped $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$ and $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$ " E. Assaridis, I. Panagiotopoulos, A. Moukarika, and T. Bakas*, Phys. Rev. B **75**, 224412 (2007)
- 67.** « L1_0 ordering and magnetic interactions in FePt nanoparticles embedded in MgO and SiO_2 shell matrices» A. Tomou, I. Panagiotopoulos*, D Gournis*, K. Bart; J. Appl. Phys. **102**, 23910 (2007)
- 68.** "Magnetotransport properties of cobalt-iron pyrite films" N. Moutis, T. Speliotis, I. Panagiotopoulos* and M. Ziese Thin Solid Films **516**, 2078-2081 (2008)
- 69.** "Magnetization reversal in CoPt-based hard-soft homocomposites"; V. Alexandrakis, D. Niarchos, I. Tsiaouassis and I. Panagiotopoulos*; "Journal of Magnetism and Magnetic Materials, **320** 1020–1025 (2008)
- 70.** "Synthesis and characterization of sol-gel derived bioactive $\text{CaO-SiO}_2-\text{P}_2\text{O}_5$ glasses containing magnetic nanoparticles"; M. Baikousi, S. Agathopoulos, I. Panagiotopoulos, A. D. Georgoulis , M. Louloudi, M. A. Karakassides, Journal of Sol-Gel Science and Technology **47** (1), pp. 95-101 (2008)

- 71.** "A comparative microstructural investigation of nanostructured and conventional Al₂O₃ coatings deposited by plasma spraying"; Zois, D., Lekatou, A., Vardavoulias, M. , Panagiotopoulos, I. , Vazdirvanidis, A. Journal of Thermal Spray Technology **17** (5-6), pp. 887-894 (2008)
- 72.** "Structural, microstructural and magnetic properties of nanocomposite isotropic Sm(CobalFe0.1MyZr0.04B0.04)7.5 ribbons with M=Ni, Cu and y=0.09 and 0.12" S.S. Makridis , I. Panagiotopoulos , I. Tsiaouassis , N. Frangis , E. Pavlidou , K. Chrisafis, G.F. Papathanasiou, K. Efthimiadis, G.C. Hadjipanayis, D. Niarchos Journal of Magnetism and Magnetic Materials **320** 2322– 2329 (2008)
- 73.** "Novel nanohybrids derived from the attachment of FePt nanoparticles on carbon nanotubes"; Tsoufis, T., Tomou, A. , Gournis, D., Douvalis, A.P., Panagiotopoulos, I.a , Kooi, B.b , Georgakilas, V. , Arfaoui, I. , Bakas, T Journal of Nanoscience and Nanotechnology **8**(11), pp. 5942-5951 (2008)
- 74.** A. Ktena*, V. Alexandrakis, I. Panagiotopoulos, D. Fotiadis and D. Niarchos "A study on the macroscopic properties of hard/soft bilayers" Physica B: Condensed Matter, Volume 403, Issues 2-3, Pages 320-323 (2008)
- 75.** E Manios, D Stamopoulos, I Panagiotopoulos and D Niarchos "Correlation between crystallographic texture and the degree of L1₀-ordering in post-annealed Ag/CoPt bilayers and comparison with Ag/CoPt nanocomposites" Journal of Physics: Conference Series 153, art. no. 012060 (2009)
- 76.** "Magnetization Reversal in CoPt(111) hard/soft Bilayers"; V. Alexandrakis, D. Niarchos, M. Wolff, I. Panagiotopoulos*. J. Appl. Phys. **105**, 063908 (2009)
- 77.** "Synthesis and magnetic properties of pure cubic CoO nanocrystals and nanoaggregates"; I. Panagiotopoulos*, V. Alexandrakis, G. Basina, S. Pal, H. Srikanth, D. Niarchos, G. Hadjipanayis and V. Tzitzios* Crystal Growth and Design **9**(8), pp. 3353-3358 (2009)
- 78.** "Synthesis and Exchange Bias in γ-Fe₂O₃/CoO and Reverse CoO/γ-Fe₂O₃ Binary Nanoparticles"; Ioannis Panagiotopoulos*, Georgia Basina, Vassilios Alexandrakis, Eammon Devlin, George Hadjipanayis, Levent Colak, Dimitrios Niarchos and Vassilios Tzitzios*, Journal of Physical Chemistry C **113** (33), pp. 14609-14614 (2009)
- 79.** «Magnetic properties of Co films and Co/Pt multilayers deposited on PDMS nanostructures»; A. Markou, K.G. Beltsios, I. Panagiotopoulos*, M.-E. Vlachopoulou, A. Tserepi, V. Alexandrakis, T. Bakas, Theodore Dimopoulos, Journal of Magnetism and Magnetic Materials **321** (17), pp. 2582-2586 (2009)
- 80.** "Magnetic properties of graded A1/L10 films obtained by heat treatment of FePt/CoPt multilayers", Alexandrakis V., Niarchos D., Mergia, K. , Lee J. , Fidler, J., I. Panagiotopoulos*, Selected For The Journal Research Highlights. Journal of Applied Physics Volume **107**(1), article no 013903, (2010)
- 81.** "Effects of layering and magnetic annealing on the texture of CoPt films" A. Markou, I. Panagiotopoulos*, T.Bakas; Journal of Magnetism and Magnetic Materials **322** L61-L63 (2010).

- 82.** "Structural and magnetic properties of Ru/Ni multilayers"; Mergia K , Tomou A , Panagiotopoulos*I. , Ott F. Journal of Physics D: Applied Physics **44**(7), 075001 (2011).
- 83.** "Magnetization reversal in [Ni/Pt]₆/Pt(x)/[Co/Pt]₆ multilayers", N. Siadou , M. Androutsopoulos , I. Panagiotopoulos* , L.Stoleriu , A.Stancu , T. Bakas, V. Alexandrakis, Journal of Magnetism and Magnetic Materials **323** (2011) 1671–1677
- 84.** I. Panagiotopoulos "A simple approach to the First Order Reversal Curves (FORC) of two-phase magnetic systems" Journal of Magnetism and Magnetic Materials **323** (2011) 2148–2153
- 85.** "Magnetic/SiO₂ nanocomposite thin films prepared by sol-gel dip coating modified method" Baikousi M., Kostoula, O., Panagiotopoulos I., Bakas T., Douvalis A.P., Koutselas I., Bourlinos A.B., Karakassides M.A. Thin Solid Films 520 (2011) 159
- 86.** "Formation of L10 with (001) texture in magnetically annealed Co/Pt multilayers" A. Markou, I. Panagiotopoulos, T. Bakas, D. Niarchos, G. Sáfrán J. Appl. Phys. 110, 083903 (2011)
- 87.** "Decoration of Carbon Nanotubes with CoO and Co Nanoparticles" M. Belesi, I. Panagiotopoulos, S. Pal, S. Hariharan, D. Tsitrouli, G. Papavassiliou, D. Niarchos, N. Boukos, M. Fardis, and V. Tzitzios. Journal of Nanomaterials Volume 2011, Article ID 320516
- 88.** "Effect of [Fe(CN)₆]⁴⁻ Substitutions on the Spin-Flop Transition of a Layered Nickel Phyllosilicate", Konstantinos Dimos*, Ioannis Panagiotopoulos,* Theodoros Tsoufis, Régis Y. N. Gengler, Aliki Moukarika, Petra Rudolf, Michael A. Karakassides, Thomas Bakas, and Dimitrios Gournis, Langmuir 28, 10289–10295 (2012)
- 89.** "Chemical synthesis and L1₂ ordering of CrPt₃ nanoparticles", A. Tomou, I. Panagiotopoulos*, V. Tzitzios , Wanfeng Li , G.C. Hadjipanayis Journal of Magnetism and Magnetic Materials 334 (2013) 107–110
- 90.** "Magnetization reversal in triangular L1₀-FePt nanoislands" Markou A, Beltsios KG, Gergidis LN, Panagiotopoulos I*, et al. Journal of Magnetism and Magnetic Materials 334 (2013) 107–110 344: 224-229
- 91.** "Packing fraction dependence of the coercivity and the energy product in nanowire based permanent magnets" Ioannis Panagiotopoulos, Weiqing Fang, Frédéric Ott, François Boué Kahina Aït-Atmane, Jean-Yves Piquemal, and Guillaume Viau J. Appl. Phys. 114, 143902 (2013);
- 92.** "Plasma-Assisted Nanoscale Protein Patterning on Si Substrates via Colloidal Lithography" By: Malainou, A.; Tsougeni, K.; Ellinas, K.; et al. JOURNAL OF PHYSICAL CHEMISTRY A Volume: 117 Issue: 50 Pages: 13743-13751 (2013)
- 93.** "Low dipolar interactions in dense aggregates of aligned magnetic nanowires" Panagiotopoulos, I.; Fang, W.; Ait-Atmane, K.; et al. JOURNAL OF APPLIED PHYSICS Volume: 114 Issue: 23 Article Number: 233909 (2013)
- 94.** "Optimization of the magnetic properties of aligned Co nanowires/polymer composites for the fabrication of permanent magnets" Fang, Weiqing;

Panagiotopoulos, Ioannis; Ott, Frederic; et al. JOURNAL OF NANOPARTICLE RESEARCH Volume: 16 Issue: 2 Article Number: 2265 (2014)

95. "Large magnetic anisotropy in strained Fe/Co multilayers on AuCu and the effect of carbon doping" Giannopoulos, G.; Salikhov, R.; Zingsem, B.; et al. APL MATERIALS Volume: 3 Issue: 4 Article Number: 041103 (2015)
96. "Optimization of L1(0) FePt/Fe45Co55 thin films for rare earth free permanent magnet applications" Giannopoulos, G.; Reichel, L.; Markou, A.; et al. JOURNAL OF APPLIED PHYSICS Volume: 117 Issue: 22 Article Number: 223909 (2015)
97. "Athermal exploration of Kagome artificial spin ice states by rotating field protocols" By: Panagiotopoulos, I. JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 384 Pages: 70-74 (2015)
98. "Localized magnetization reversal processes in cobalt nanorods with different aspect ratios" Pousthomis, Marc; Anagnostopoulou, Evangelia; Panagiotopoulos, Ioannis; et al. NANO RESEARCH Volume: 8 Issue: 7 Pages: 2231-2241 (2015)
99. "Structural and magnetic properties of strongly carbon doped Fe-Co thin films" Giannopoulos, G.; Reichel, L.; Markou, A.; et al. JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 393 Pages: 479-483 (2015)
100. "Dense arrays of cobalt nanorods as rare-earth free permanent magnets" Anagnostopoulou, E.; Grindi, B.; Lacroix, L.-M.; Panagiotopoulos, I; Viau, G; NANOSCALE Volume: 8 Issue: 7 Pages: 4020-4029 (2016)
101. "Micromagnetics of triangular thin film nanoelements" Stavrou, V. D.; Gergidis, L. N.; Markou, A.; et al. JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS Volume: 401 Pages: 716-723 (2016)
102. "Coercivity and random interfacial exchange coupling in CoPt/Co films" Alexandrakis, V.; Kechrakos, D.; Moutis, N.; et al. JOURNAL OF APPLIED PHYSICS Volume: 119 Issue: 12 Article Number: 123905 (2016)
103. "Magnetostatic bias in Kagome artificial spin ice systems" Panagiotopoulos, I; PHYSICA B-CONDENSED MATTER Volume: 486 Pages: 21-23 (2016)
104. "Confined spin wave spectra of Kagome artificial spin ice arrays" Panagiotopoulos, I; Journal of Magnetism and Magnetic Materials 422 (2017) 227-231

2.3 Publications in Conference and School proceedings

1. "Colossal Magnetoresistance in Manganese Perovskite Films and Multilayers" I. Panagiotopoulos, M. Pissas, C. Christides, G. Kallias, V. Pscharis, N. Moutis and D. Niarchos in "*Nano-Crystalline and Thin Film Magnetic Oxides*" Edited by Ivan Nedkov and Marcel Ausloos. NATO Science Series 3, High Technology, Vol72, 119-132.
2. "Unidirectional Anisotropy in Manganite Based Ferromagnetic-Antiferromagnetic Multilayers" I. Panagiotopoulos, C. Christides, M. Pissas and D. Niarchos in "*Nano-structured Films and Coatings*" Edited by Gan-

Moog Chow, Ilia A. Ovid'ko and Thomas Tsakalakos NATO Science Series 3, High Technology, Vol78, 171-176

3. "CoPt and FePt thin films for high density recording media" J.A. Christodoulides, Y. Zhang, G.C. Hadjipanayis, I. Panagiotopoulos, D. Niarchos in "*Nanostructured Films and Coatings*" Edited by Gan-Moog Chow, Ilia A. Ovid'ko and Thomas Tsakalakos NATO Science Series 3, High Technology, Vol78, 171-176
4. "CoPt and FePt thin films for high density recording media" J.A. Christodoulides, Y. Zhang, G.C. Hadjipanayis, I. Panagiotopoulos, D. Niarchos in Summer School on "*Advanced Materials for Industrial Applications*" Kavala Greece June 20-27, 1999.
5. Niarchos D., Manios E. , Panagiotopoulos I., "Towards terabit/in² magnetic storage media"; 2008 MRS Spring Meeting; San Francisco, CA; 24 March 2008 through 28 March 2008; Materials Research Society Symposium Proceedings 1106, pp. 68-80
6. Georgia Basina, Ioannis Panagiotopoulos, Eamonn Devlin, George Hadjipanayis, Levent Colak, Constantinos Hadjipanayis, Hui Mao, Georgios Diamantopoulos, Michael Fardisa, Georgios Papavasileiou, Dimitrios Niarchos and Vasilis Tzitzios "Synthesis of Biocompatible Magnetic Iron Oxide (γ -Fe₂O₃ and Fe₃O₄) Nanoparticles by a Modified Polyol Process for Biomedical Applications" Materials Research Society Symposium Proceedings 1256, pp. 174-180
7. "Preisach model for soft-hard bilayers", A. Stancu, L. Stoleriu, I. Panagiotopoulos, A. Markou, V. Alexandrakis, 7th International Symposium on Hysteresis Modeling and Macromagnetics (HMM-2009) held in Gaithersburg, MD, May 11-14, 2009.
8. "Relaxation effects evidenced on first-order reversal curves in hard/soft magnetic multilayers" A. Stancu, P. Postolache, L. Stoleriu, T. Bakas, N. Siadou, M. Androutsopoulos and I. Panagiotopoulos. The 56th Magnetism and Magnetic Materials Conference 2011 Scottsdale Arizona.
9. "Deposition and Characterization of Novel Fe_{2-x}Ni_xSn (x=0-1) Heusler Alloy Films" A. Markou, I. Panagiotopoulos, M. Gkioka , D. Niarchos, JEMS2013 25-30 August 2013, Rhodes, Greece

2.4 Talks Presented

1. "Exchange spring behavior of nanocomposite magnets" I. Panagiotopoulos, L. Withanawasam and G. Hadjipanayis. American Physical Society March Meeting, San Jose USA, Μάρτιος 1995
2. "Magnetic hardening of melt-spun nanocomposite Nd₂Fe₁₄B/Fe magnets" I. Panagiotopoulos, A.S. Murthy, L. Withanawasam G.C.

Hadipanayis, E. Singleton and D.J. Sellmyer. The 40th Annual Conference on Magnetism and Magnetic Materials, Philadelphia USA, Nov.1995.

3. **"Manganese Perovskite Thin Films With Colossal Magnetoresistance"**
I. Panagiotopoulos, G. Kallias, M. Pissas, V. Psycharis and, D. Niarchos. 4th Patras University Euroconference on low dimensional and mesoscopic magnetic materials, Patras Greece, Sept 1997.
4. **"Structural and magnetic properties of $\text{La}_{0.67}(\text{Ba}_{1-x}\text{Ca}_x)_{0.33}\text{MnO}_3$ perovskites"** N. Moutis, I. Panagiotopoulos, M. Pissas and D. Niarchos. 5th Patras University Euroconference on bulk magnetic and superconducting materials Patras Greece, Sept 1998.
5. **"CMR films and Multilayers"** I. Panagiotopoulos, D. Niarchos. NATO Advanced Research Workshop on Ferrimagnetic Nano-crystalline and thin film magneto-optical and MW materials. Sozopol Bulgaria, Sept 1998. (Invited).
6. **"Pulsed Laser Deposition of Manganites Artificial Superstructures"**
I. Panagiotopoulos, C. Christides, M. Pissas, D. Niarchos. Japanesse-Greek Workshop on Superconducting and Magnetic Materials, Athens May 1999.
7. **"Exchange biasing in manganite based AF/FM multilayers."**
I. Panagiotopoulos C. Christides, N. Moutis, D. Niarchos. «TMR EUROCONFERENCE-SCHOOL, FROM NANOSCOPIC TO MESOSCOPIC SYSTEMS-I» Spetses 27/8-1/9/2000.
8. **«Magnetic reversal and relaxation in La-Ca-Mn-O based exchange-biased multilayers»** Ioannis Panagiotopoulos, Nikolaos Moutis, Christos Christides. European Materials Research Society, 2003 Fall Meeting, Warsaw September 15-19th, 2003 (Invited).
9. **«Weak ferromagnetism in CoO and exchange biasing of CoPt in core-shell nanoparticles»** A. Tomou, D. Gournis, I. Panagiotopoulos, B. Kooi, Yunhe Huang, George Hadjipanayis, European Congress on Advanced Materials and Processes, Prague, Czech Republic, 5-8 September 2005
10. **"CoPt/C nanocomposite films for high density recording media"** ESF Exploratory Workshop on Carbon-Based Nanostructured Composite Films, Gdansk, Poland August 30 – September 1, 2006 (Invited).
11. **«Magnetization Reversal in CoPt(111) hard/soft Bilayers.»** 2nd workshop "Current Trends in Nanoscopic and Mesoscopic Magnetism" Delphi 1-5 Sept 2008.
12. **"PNR study of the magnetization reversal in CoPt hard/soft bilayers."** Workshop "Research Trends in Novel Magnetic Materials" Santorini, Sept. 2008
13. **“Feasibility of Permanent Magnets Based Solely on Shape Anisotropy”** Workshop on "Energy and Materials Criticality" Santorini, August 22 - 25, 2013

2.5 Member of Organizing committees of Conferences

- XXXII Panhellenic Conference on Solid State Physics & Materials Science, Ioannina, 18-21 September 2016
- Publication Committee, Local Scientific committee, JEMS2013 25-30 August 2013, Rhodes, Greece
- XXVI Panhellenic Conference of Solid state Physics and Materials Science 26-29 Sept 2010, Ioannina
- Advisory committee «20th Workshop on High Performance Magnets and their Applications» 9-13 Sept 2008, Rethymnon
- Magnetic Nanoparticles: Challenges & future prospects, June 18-22, 2007 Lorentz-Center, Leiden, The Netherlands
- XX Panhellenic Conference of Solid state Physics and Materials Science 26-29 Sept 2004, Ioannina,
- Member of the organizing committee «TMR EUROCONFERENCE-SCHOOL, FROM NANOSCOPIC TO MESOSCOPIC SYSTEMS-I» 27 Aug-1 Sept 2000, Spetses Greece.

2.6 Projects

- Coordinator
- Heraclitus II, (Greek Ministry of Education €45,000), «Deposition and Characterization of Magnetoelectric Thin Films».
- Pythagoras (Greek Ministry of Education €70,000) «New Systems of Halfmetal oxides for Spintronic Applications» 1/3/2004-31/8/2006)
- NATO Linkage Grant (\$27000) HTECH.LG 970571 “Study of Microstructural changes in the GMR effect of (Co,Fe)/NM (NM=Cu,Ag,Au) Multilayers” (1/5/1997-1/5/2000)
- Principal Investigator for the Ioannina Group
- Bilateral Greek-Germany (IKY-DAAD, €10000) “Innovative routes for high magnetic anisotropy in Co(Fe)-W alloys and multilayers” w Institut für Physik, EP IV Universität Augsburg (2014-2016)
- Pythagoras (Greek Ministry of Education, Coordinator D. Kechrakos €70,000) “New Systems of Halfmetal oxides for Spintronic Applications» (1/3/2004 - 31/8/2006)
- National funded PENED03 “Self assembly of magnetic nanoparticle arrays for permanent magnet, sensor and magnetic recording media

applications”, Coordinator O. Kalogiou U of Thessaloniki, 2005-2008 (200.000 €).

- Bilateral Greek-Germany (IKY-DAAD, €9000) “Oxide Heterostructures for Spin-Electronics Universität Leipzig, Fakultät für Physik und Geowissenschaften (2003-2005)
- Participation in R&D projects as Postdoctoral or PhD-Student
 - B/E-153 “MULTILAYERED MAGNETIC MATERIALS: FUNDAMENTAL AND TECHNOLOGICAL ASPECTS” (EU 2nd Framework Programme). Coordinator D. Niarchos (1989-1992)
 - B/E-405 “DEVELOPMENT OF NEW SM-FE-N PERMANENT MAGNETS” (EU 2nd Framework Programme). Coordinator D. Niarchos
 - ARO “Magnetic Hardening Studies and Novel Techniques for Preparation of High Performance Magnets” (US Army Research Office). Coordinator G. Hadjipanayis (1990-1994)
 - NSF-DMR-9307676 “Magnetic Hysteresis in Granular and Exchange-Coupled Thin Films” (US NSF Award). Coordinator G. Hadjipanayis (1993-1995)
 - DOE-FG02-89ER45262 “Fundamental and magnetic-hardening studies of nanocrystalline and nanocomposite magnets” and DOE-FG02-90ER454513 “Fundamental Magnetic Studies of New High Energy Permanent Magnet Materials” (US Department of Energy). Coordinator G. Hadjipanayis (1989-1995)
 - BRE20536 (MAGNIFIT) “MAGNETOSTRICTION IN FILMS FOR INTEGRATED TECHNOLOGIES” (EU Third Framework Programme). Coordinator D. Niarchos (1/1/1994-30/6/1997)
 - G5RD-2000-00213 (HITEMAG) “Novel permanent magnets for high Temperature applications” (EU Fifth Framework Programme). Coordinator D. Niarchos (1/3/2000-28/2/2003)
 - GRD1-2001-40316 (HIDEMAR) “Self Assembled Nanoparticles and Nanopatterned arrays for high density magnetorecording” Coordinator D. Niarchos (1/3/2002-28/6/2005)
 - REFREEPERMAG “Rare-Earth Free Permanent Magnets” EU-NMP funded project (1/5/2012-30/4/ 2015).

2.7 Referee of journal articles

Applied Physics Letters, Applied Surface Science, Journal of Applied Physics, Journal of Magnetism and magnetic Materials, Journal of Nanomaterials, Journal of Physics B, Journal of Physics: Condensed Matter, Journal of Physics D: Applied Physics, Materials Research Bulletin, Physica B, Thin Solid Films

3. Teaching Experience

3.1 Courses

- Classical and Statistical Thermodynamics (3rd Semester, MSE-UOI, Department of Materials Science and Engineering, University of Ioannina)
- Magnetic Materials and Superconductors (8th Semester, MSE-UOI)
- Materials Lab III (Magnetic, Electrical and Optical Measurements) (7th Semester, MSE-UOI)
- Surface Science and Thin Film Technology (9th Semester, MSE-UOI,)
- Magnetic Materials Design (8th Semester, MSE-UOI,)
- Lectures on Magnetism, Surfaces and Thin Films in the framework of the MSc programme “Chemistry and Materials Engineering” of the University of Ioannina.
- Physics Labs, Technological Educational Institute of Athens, Department of Physics, Chemistry and Materials Science (1998-2001)

3.2 Supervision of PhD Students

- Vasileios Alexandrakis (Completed in 2009) «Magnetization Reversal and Relaxation in Modern Magnetic Recording Media». Members of the Advisory Committee: D. Niarchos, C. Massalas.
- Afrodite Tomou (Completed in 2013) “Poloyol Synthesized of Magnetic Nanoparticles and Nanocomposites” Members of the Advisory Committee: D. Gournis, A. Lappas.
- Georgia Basina (Completed in 2012) “Study of Synthesis and Surface Modification of Magnetic Nanoparticles of Biomedical Applications” done in the Institute of Materials Science of NCSR “Demokritos” under the supervision of V. Tzitzios and D. Niarchos and G. Hadjipanayis (University of Delaware).
- Anastasios Markou (Completed 2014) “Nanostructured High Magnetic Anisotropy Pt-TM TM=Co,Fe,Cr films” Members of the Advisory Committee: T. Bakas, E. Devlin
- Nikoleta Siadou (Completed 2014) “Deposition and Characterization of Magnetoelectric Thin Films” Members of the Advisory Committee: T. Bakas, K. Mergia.

3.3 Supervision of MSc and Diploma Thesis Students

13 MSc completed in the framework of the post-graduate study programme “Chemistry and Technology of Materials”, University of Ioannina : Ioannou Sokrates, Kalentzi Panagiota, Deligiannis Demitrios, Karagounis Ioannis Michael Androutsopoulos, C. Vacharides, Gogola Vasiliki, Tomou Afrodite,

Siadou Nilolleta, Anastatios Markou, Theofanis Vergos, George Lykoskoufis, A. Koliogiorgos.

28 Diploma Thesis completed in the Department of Materials Science and Engineering, University of Ioannina: A. Tomou, S. Ioannou, D. Deligiannis, P. Kalentzi, H. Kyritsi, I. Karagounis, S. Pantelitsa, M. Androutsopoulos, A. Gregoriou, I. Papageorgiou, N. Papachristou, C. Hadjicharalampous, N. Siadou, F. Boulaki, A. Markou, F. Karvelas, N. Tzitzios, S. Marinopoulou, V. Bouzarelos, P. Thanos, A. Mourkas, A. Koliogiorgos, L. Fragou, N. Kyroy, E. Kontos, G. Asimakopoulos, S. Theodorou, A. Koume.