

EUROPEAN
CURRICULUM VITAE
FORMAT



Name	Margarit Gjoka
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Position	Researcher
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Work experience

1. 2007-2021	Laboratory of Magnetism and Superconductivity, Institute of Nanoscience and Nanotechnology, NCSR "Demokrito", Greece Position: Researcher (current position) https://inn.demokritos.gr/functional-scientific-personnel/
2. 1995-2007	Laboratory of Magnetism NCSR Demokritos Position: Scientific collaborator
3. 1985- 1990	University of Elbasan "A. Xhuvani", Albania, Position: professor

EDUCATION AND TRAINING

1973-1978	University of Tirana, Department of Physics, Physicist (B.Sc)
1984-1985	University of Tirana, Department of Physics, Post graduate studies
1986	Laboratoire de Crystallography & and Mineralogy, Paris 6 (Was followed the DEA-courses of Crystallography)
1986-1990	University of Tirana, Department of Physics Postgraduate special entry exams to First Stage of Qualification: 1. Crystallography 2. Growth of Crystals, (Albanian system for Academic Qualification)
1994-1995	Postgraduate school of NCSR Demokritos, supported by Bodosaki fellowship
1995-1999	PhD graduation, University of Ioannina/ NCSR Demokritos

Organizing Committee of International Conferences	
1. JEMS-2013, Rhodes 2. REPM-2008, August 2008, , Crete, Greece 3. Materials and Renewable Energy Conference 2013	Member of organizing committee of Joint European Magnetic Symposia (JEMS 2013) Member of organizing committee of 20th International Workshop on RARE EARTH PERMANENT MAGNETS AND THEIR APPLICATIONS Chairmen of a session on International Congress on Materials and Renewable Energy, MRE 2013

Editor:	Section Topics Board Editors for 'Materials Physics' https://www.mdpi.com/journal/materials/topic_editors/Physics
Reviewer	Journal of Alloys and compound, IEEE Magnetic Transaction, Material Science and Engineering, Journal of Magnetism and Magnetic Materials, Physica B, Scientific reports, Materials, ect.
Membership	1. European Magnetism Association (EMA). 2. PANHELLENIC Association ON SOLID STATE PHYSICS AND MATERIALS SCIENCE 3. IEEE Magnetics Society

My work as scientific coordinator and leader team (overall participations on European and Greek projects >15)

Scientific coordinator	
2006- 2008	Scientific Responsible of a Greek-Rumanian (E+T) project titled: "New magnetic nanomaterials, syntheses, characterization and applications.
2008-2017	Scientific coordinator: Sub-contract of Materials for Fusion Technology project (Nr 687, financial support by EU)- Magnetic characterization.
2012-2014	Scientific Responsible of a Greek-Rumanian project titled: <i>Development of Integrated Advanced Materials and Processes for Efficient Hydrogen Storage</i>
2016-2018	Administrative responsible for Greek team of European project INAPEM, "International Network on Advanced high energy Permanent Magnets" H2020-MSCA-RISE-2015 (10 partners from EU)

My Projects applied with Albanian partners

1996-1998	“Development and investigation of the hard magnetic materials of the type R-Fe-M”, NATO funded project (NCSR “Demokritos”, U of Elbasan, U of Tirana, U of Sofia) Supported by NATO (successful)
2005 S&T Cooperation Program between the Republic of Greece and the Republic of Albania (2005–2007)	1.The study of archeological iron finds to determine the optimal methods for protection from corrosion (Demokritos, UE, UT). (rejected) 2. The study of Nero’s statue discovered in Durrës, the causes of deterioration and the restorations , preservations methods reevaluating as a national as well as a world treasure(max evaluation from greek part, not relevant for albanian evaluation-rejected)
14. 11.2019 (only applied)	“RUGAMAG”-Twinning in Magnetic Materials science in the Frame of EU programs of Horizon 2014-2020 (partners NCSR “Demokritos”, U of Elbasan, U of Tirana, National Institute of R&D for Technical Physics, Iasi, Romania, Ivan Franko National University of Lviv, Ukraina, University of Delaware USA). (We didn’ t win this project)

Select PUBLICATIONS in Refereed Journals- Proceedings	105 publications in peer Refereed <i>Journals and Conference Proceedings</i> , 19 other papers in Greek Proceedings, > 70 abstract and presentation at International conferences, ~1120 Citations, h-index (scopus): 17, RG score 34.93 https://www.researchgate.net/profile/Margarit-Gjoka ORCID iD https://orcid.org/0000-0001-6305-3685
	1. D.Niarchos, M. Gjoka, Ana María Schönhöbel, Alex Aubert, Rajasekhar Madugundo, Jose Javier Saiz Garitaonandía, Jose Manuel Barandiaran, George Hadjipanayis, Intrinsic magnetic properties of $(\text{Nd}_{1-x}\text{Sm}_x)\text{Fe}_{11}\text{Ti}$, <i>Journal of Alloys and Compounds</i>, Volume 864, 2021, 158097. 2. G. Sempros, K. Kanari, M. Gjoka, O. Kalogirou, C. Sarafidis, Synthesis, processing and characterization of Mn-based nanoparticles for permanent magnet applications, <i>Materials Today: Proceedings</i>, 19(1),(2019)126-132. 3. M. Gjoka, C. Sarafidis, G. Giannopoulos et al., Effect of cobalt substitution on structure and magnetic properties of $\text{Nd}_{0.4}\text{Zr}_{0.6}\text{Fe}_{10-x}\text{Co}_x\text{Si}_2$ ($x = 0-3$) alloys and their ribbons, <i>Journal of Rare Earths</i>, 37(10) 2019, pp 1096-1101. 4. J.M. Barandiaran, .., M. Gjoka, D. Niarchos et al, Nitrogenation and sintering of $(\text{Nd-Zr})\text{Fe}_{10}\text{Si}_2$ tetragonal compounds for permanent magnets applications, <i>Journal of Alloys and Compounds</i>, 784 (2019)pp. 996-10023. 5. M. Gjoka <i>et al</i>, Structure and magnetic properties of $\text{Sm}_{1-x}\text{Zr}_x\text{Fe}_{10}\text{Si}_2$ ($x=0.2-0.6$) alloys, 2017, <i>J. Phys.: Conf. Ser.</i> 903 012033 6. K. Kanari, C. Sarafidis, M. Gjoka, D. Niarchos, O. Kalogirou, <i>Journal of Magnetism and Magnetic Material Processing of magnetically anisotropic MnBi particles by surfactant assisted ball milling</i>, , 426, (2017)pp.691-697. 7. D. Niarchos, M. Gjoka, V. Psycharis and E. Devlin, "Towards realization of bulk L10-FeNi," <i>2017 IEEE International Magnetism Conference (INTERMAG)</i>, 2017, pp. 1-1, doi: 10.1109/INTMAG.2017.8007560.

PUBLICATIONS in Refereed Journals- Proceedings	https://www.researchgate.net/profile/Margarit-Gjoka ORCID iD https://orcid.org/0000-0001-6305-3685
	8. S. Karamanou, M. Gjoka, E. Devlin, V. Psycharis, A. Ioannidou, G. Giannopoulos, D. Niarchos, A novel approach for Plastic Bonded Magnets of the type MQU-F melt spun NdFeGaB-type alloys, <i>IEEE Transactions on Magnetism</i>, 53(11), (2017). 9. M. Gjoka, V. Psycharis, E. Devlin, D. Niarchos, G. Hadjipanayis, Effect of Zr substitution on the structural and magnetic properties of the series $\text{Nd}_{1-x}\text{Zr}_x\text{Fe}_{10}\text{Si}_2$ with the ThMn_{12} type structure, <i>Journal of Alloys and Compounds</i>, 687 (2016) pp. 240-245 10. M. Gjoka, C. Sarafidis, G. Giannopoulos and D. Niarchos, "Effects of milling conditions on the magnetic properties of MnBi alloys," <i>2015 IEEE International Magnetism Conference (INTERMAG)</i>, 2015, pp. 1-1, doi: 10.1109/INTMAG.2015.7157188. 11. M. Gjoka, Dan Neil, G. Hadjipanayis, and Dimitris G. Niarchos, Experimental Proof of Microwave Sintering of Nd-Fe-B Powders Toward Fabrication of Permanent Magnets, <i>IEEE Transactions on Magnetism</i>, vol. 50, No. 11, 2014, 2104804. 12. Ch. Sarafidis, M. Gjoka, O. Kalogirou, N. Lupu, G. Ababei and D. Niarchos Structure and Magnetic Properties of Boron Doped $\text{Fe}_{50+x}\text{Cu}_{25-x}\text{M}_{25}$ (M=Al, Ga) and $\text{Fe}_{50+x}\text{Co}_{25-x}\text{Ga}_{25}$ Heusler Alloys, <i>IEEE Transactions on Magnetism</i>, VOL. 50, NO. 11, 2014, 2103704 13. M.Yu. Lavrentiev, K. Mergia, M. Gjoka, D. Nguyen-Manh, G. Apostolopoulos, and S.L. Dudarev, Magnetic Cluster Expansion and Experimental Study of the High Temperature Magnetic Properties of Fe-Cr Alloys, <i>J. Phys.: Condens. Matter</i> 24 (2012) 326001 (5pp) 14. A. Kotoulas, M. Gjoka, K. Simeonidis, I. Tsiaoussis, M. Angelakeris, O. Kalogirou, C. Dendrinou-Samara, The role of synthetic parameters in the magnetic behavior of relative large hcp Ni nanoparticles <i>Journal of Nanoparticle Research</i> 2011, pp. 1-12, DOI 10.1007/s11051-010-9941-2 15. V.G. Harris, .., M. Gjoka..and al, High coercivity cobalt carbide nanoparticles processed via polyol reaction: A new permanent magnet material, <i>J. Phys. D: Appl. Phys.</i> 43 (2010) 165003 (7pp). 16. M. Gjoka, C. Sarafidis, O. Kalogirou and D. Niarchos, "Structural and magnetic properties of $\text{Sm}_3(\text{Fe}_{1-x}\text{Co}_x)_{27}\text{Ti}_{1.3}$," <i>2006 IEEE International Magnetism Conference (INTERMAG)</i>, 2006, pp. 235-235, doi: 10.1109/INTMAG.2006.375817. 17. E. Pollatos, .., M. Gjoka, et al., Morphological, thermal and electrical characterization of syndiotactic polypropylene/multi-walled carbon nanotube composite, <i>Journal of Macromolecular Science, Part B Physics</i>, Volume 49 Issue 5, 2010, pages 1044-1056 18. E. Logakis, E. Pollatos..M. Gjoka et al, Structure-property relationships in isotactic Polypropylene/multi-walled carbon nanotubes nanocomposites, <i>Composites Science and Technology</i> 70 (2010) 328–335 19. Vassilios Tzitzios, Dimitrios Niarchos, Margariti Gjoka et al, Synthesis and Characterization of 3D CoPt Nanostructures, <i>J. Am. Chem. Soc.</i>, 127 (40), 13756 -13757, 2005. 20. V. Tzitzios, D. Niarchos, M. Gjoka et al, Synthesis of CoPt nanoparticles by a modified polyol method: characterization and magnetic properties, <i>Nanotechnology</i> 16 (2005) 287–291 21. M. Gjoka, I. Panagiotopoulos, D. Niarchos Structure and magnetic properties of $\text{Sm}(\text{Co}_{1-x}\text{M}_x)_5$ (M= Cu, Ag, Cr) alloys, <i>Journal of Materials Processing Technology</i> 161 (2005)173–175 22. M. Gjoka, O. Kalogirou, V. Psycharis, D. Niarchos, F. Leccabue and B.E. Watts, G. Bocelli, Synthesis of melt-spun rare-earth transition-metal intermetallics with $\text{R}_3(\text{Fe,Ti})_{29}$ structure, <i>J. Alloys. Comp.</i> Vol. 290 (1999) 1-5

Oral Talks and invitation talks

Selected Oral Talks and invitation talks (international and national conferences)	
	1. Phase Stability, Structure And Magnetic Properties Of $R_3(Fe,TM)_{29}$, (R=Gd, Dy, Er, Y and TM=V,Ti) Compounds With Disordered Structures M. Gjoka, V. Psycharis, C. Christides and D. Niarchos. 13th International Conference on Solide Compound on Transition Metal, Stresa, Italy, 2000, (Oral talk) 2. Temperature- compensated $Sm_{1-x}Gd_x(Co_{0.74}Fe_{0.10}Cu_{0.12}Zr_{0.04})_{7.50}$ permanent magnets (x=0, 0.2, 0.4, 0.6, 0.8), Presented in IMC-Lviv, September 2002(Oral talk) M. Gjoka, I. Panagiotopoulos, D. Niarchos, T. Matthias, J. Fidler 3. (Oral talk) Effect of Co replacement with Ni on the magnetic properties of Co_{1-x}Ni_xPt alloys Panhellenic Conference of Metallic Materials, Athens 2004, M. Gjoka, D. Niarchos 4. Structure and magnetic properties of $Hf_2(Co_{1-x}Fex)_{11}B$ melt-spun M. Gjoka, S. Sarafidis, G. Ababei, N. Lupu, S. Makridis, O. Kalogirou, D. Niarchos JEMS-13, Rodos, 25-30 August(Oral talk) 5. Mg Based Nanocomposites for Efficient Hydrogen Storage, REM-2013, Athens, (Oral Talk) M. Gjoka, E. Gkanas, Ioannidou, S.S. Makridis,, N. Lupu, G. Ababei 6. Prospect of MnBi permanent magnets for traction motors and generators , M.Gjoka, C. Sarafidis, D. Niarchos XXX-PCSSP, September 2013, Heraklio 7. Experimental Proof of Microwave Sintering of Nd-Fe-B Powders Toward Fabrication of Permanent Magnets, M. Gjoka, D. Neil, G. Hadjipanayis, and D. Niarchos Intermag 2014, Dresden(Oral talk) 8. Permanent magnet market-strategy to find new magnet Summer school, NCSR Demokritos 2017 9. A journey of my efforts toward the synthesis of NEW MAGNETIC MATERIALS AND APPLICATIONS, Department of Physics, Tirana, 2017 10. New developments in hard magnetic materials University of Cali Colombia, May 2018 (Invited talk) 11. Recent developments on rare-earth-free (or lean) hard-magnetic materials-Demokritos experience, University of Elbasan, october 2019 (invited talk) 11. Effect of Zr substitution on the structural and magnetic properties of the series $Nd_{1-x}Zr_xFe_{10}Si_2$ with the ThMn₁₂ type structure , Gjoka, M., Psycharis, V., Devlin, E., Niarchos, D., Hadjipanayis, G., REPM-2016 Darmstadt (Oral talk) 12. Effect of Zr substitution on the structural and magnetic properties of the series $R_{1-x}Zr_xFe_{10}Si_2$ (R=Sm, Nd) with the ThMn₁₂ type structure (presented at XXXII- PCSSP, September 2016 Ioannina, (Oral talk)

Selected publication related to Albanian teams	1. M. Gjoka, O. Kalogirou, V. Psycharis, E. Gamari D. Niarchos, J. Dode, T. Dilo, Sh. Vyshka "Thermomagnetic and X-ray diffraction analysis of $Nd_{3-x}Dy_x(Fe,Ti)_{29}$" presented at 3th BP. Conference, September 1997 Cluj – Napoc 2. M. Gjoka, O. Kalogirou, V. Psycharis, E. Gamari D. Niarchos, J. Dode, T. Dilo, Sh. Vyshka "Structural analysis with SEM and thermo magnetic analysis of $Nd_{3-x}Dy_x(Fe,Ti)_{29}$". The Bulletin of the Nature's Sciences, 1997, Tirana. 3. M. Gjoka, O. Kalogirou, V. Psycharis, E. Gamari D. Niarchos, J. Dode, T. Dilo, Sh. Vyshka, R. Mejdani, F.Klosi, "Synthesis and structure study of $Nd_{3-x}Dy_x(Fe,Ti)_{29}$", Bulletin Nr 1 of UE (University of Elbasan), Nr.1.1997, p 15-25 4. M. Gjoka, V. Psycharis, O. Kalogirou, D. Niarchos, J. Dode, T. Dilo, N. Sheloudko and M. Mikhov, "Phase diagram and magnetic properties of $Nd_{3-x}Dy_x(Fe,Ti)_{29}$ (0.1<x<3) compounds", Proceedings of XV PanHellenic Conference of Solid State Physics: 1999, p 261-264. 5. M. Gjoka, O. Kalogirou, D.Niarchos, T.Dilo, J. Dode, Sh. Vyshka, "The Microstructure Study of the R-Fe-T (R=Y, Dy, Er, T=Ti, V) System by Electronic Microscopy" Third National Conference of the Albanian Physical Union, 9-10 December, 1999, Tirana, Albania. 6. M. Gjoka, T. Dilo and D. Niarchos, "Structure And Magnetic Properties of $Er_3(Fe, V)_{29}$ Intermetallic Compounds" Second International Conference on "Materials and their applications", 21-22 November, 2002 Tirana, Albania. 7. M. Gjoka, ..T. Dilo, J. Dode et al. Phase diagram and magnetic properties of $Nd_{3-x}Dy_x(Fe,Ti)_{29}$ (0.1<x<3) intermetallic compounds. Journal of Alloys and Compounds 305 (2000) 311–317 8. M. Gjoka, T. Dilo, D. Niarchos and F. Leccabue, "Structure and magnetic properties of $Er_3(Fe, V)_{29}$ alloys", Journal of Alloys and Compounds, vol 369/1- 2 pp 178-181(2004)
Visitor Scientist	1. University of Delaware (USA) Supported by a) INAPEM project (4 months during 2017-2018) b) IRSES project (June 2010- December 2013-1month) 2. University of Cali, Colombia 2018 Supported by INAPEM project 3. Technische Universität Darmstadt (1 week 2014-REFREPERMAG) 4. Institute of Materials Technology, Polytechnic University of Valencia, 1 week, 2013 4. Max-Plank institute (supported by BENSC) for neutron diffraction 2005 5. Instituto per Materiali Speciali MASPEC-Parma (Italy) Human Capital Mobility Network, 3 months (1996) 6. University of Sofia and Elbasan 1 week in the frame of NATO collaboration project (1997 and 1998) 7. Laboratory of Crystallography and Mineralogy, Paris 6, three months 1986.

Collaborators

Foreign Collaborators		Austria(Vienna University of Technology), Albania (U. of Tirana), Bulgaria (U. of Sofia), England (EURATOM/CCFE, Oxfordshire), France (Universite de Toulouse; European Synchrotron Radiation Facility (ESRF), Grenoble, U. Paris 6, Germany (IFW Dresden: T.U of Darmstadt), Cyprus, Iran (Sharif University), Italy (MASPEC Parma), Spain (CSIC, Madrid; Valencia; Basque center for materials), Sweden (Uppsala University), Romania (IASI), USA (Northeastern University, Boston; U. of Delaware), China (Fuzhou University; Central South University, Changsha).
Intern collaborators (Greece)		U. of Thessaloniki, U. of Ioannina, U. Kozani, TUA, U of Athens etc.