

SOFOKLIS MAKRIDIS

Tel. 26410 74224, email: smakridis@upatras.gr

Assistant Professor

Metallic Materials Technology for Energy Applications

Ιστότοπος: www.energy-matters.weebly.com



Πτυχίο:	Department of Physics, School of Sciences, University of Ioannina, 1999
Μεταπτυχιακό:	Faculty of Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece: Processes and Advanced Materials Technology, Thesis: “Preparation and characterization of Sm-Co-C ribbons with high coercivity for permanent magnets”, 2002
Διδακτορικό:	Department of Electrical and Computers Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece: “Synthesis and characterization of structural and magnetic properties of new intermetallic rare earth – transition metal compounds for high temperature permanent magnet applications”, 2004 – AWARDED by IKY
Ερευνητικά Ενδιαφέροντα:	Hydrogen Storage and compression technology, magnetic and smart materials, materials and processes of hydrogen energy systems, carbon capture (CO2), Innovation and entrepreneurship on energy and environment, stand-alone green systems.
Διδασκόμενα μαθήματα:	Materials Science and Technology, ChemicalPhysics-thermodynamics, Materials and Bioclimatic Architecture, Transport Phenomena, Environmental Physics II, Hydrogen Technology and CO2 Capture
Βιβλία:	<ul style="list-style-type: none">• S.S. Makridis, Chapter 1: Hydrogen absorption for storage in Book: Methane and Hydrogen for Energy Storage, Invited chapter by Senior Editor for Power & Energy with the Institution of Engineering & Technology (IET), edited by R. Carriaveau & D.S-K. Ting, Turbulence & Energy Laboratory, University of Windsor, Canada. http://digital-library.theiet.org/content/books/po/pbpo101e, 2016.• G.E. Marnellos, C. Athanasiou, S.S. Makridis and E.S. Kikkinides, Invited chapter “Integration of Hydrogen Energy Technologies in Autonomous Power Systems”, Book: Hydrogen-based Autonomous Power Systems, Techno-economic Analysis of the Integration of Hydrogen in Autonomous Power Systems, Series: Power Systems, Zoulias, Emmanuel I. (Ed.), 2008, Approx. 190 p. 50 illus., Hardcover, ISBN: 978-1-84800-246-3, Springer-Verlag (London) Ltd (http://www.springer.com/engineering/power+engineering/book/978-1-84800-246-3)• Sofoklis Makridis, “Introduction of Energy Management, pp. 157, Department of Mechanical Engineering, University of Western Macedonia, 2005 – 2010.• Efstrathios Kikkinides and Sofoklis Makridis, “Hydrogen Technologies”, pp.

	<p>196, Department of Mechanical Engineering, University of Western Macedonia, 2004 – 2010.</p> <ul style="list-style-type: none"> Sofoklis Makridis, "Materials Applications on Energy and Environmental Technologies", to be published, Verizona Publishing Ltd, UK, 2019.
Επιλεγμένες Δημοσιεύσεις:	<ul style="list-style-type: none"> EVANGELOS GKNAS, ALINA DAMIAN, ALEXANDRA IOANNIDOU, GEORGE STOIAN, NICOLETA LUPU, MARGARIT GJOKA, SOFOKLIS MAKRIDIS, "SYNTHESIS, CHARACTERISATION AND HYDROGEN SORPTION PROPERTIES OF MECHANICALLY ALLOYED Mg(Ni1-XMNX)2, MATERIALS TODAY ENERGY, VOLUME 13, SEPTEMBER 2019, PAGES 186-194 E.I. GKNAS, S.S. MAKRIDIS, "Thermal Management of a MgH₂ cylindrical tank including the thermal coupling with an operating SOFC during the dehydrogenation process", <i>International Journal of Hydrogen Energy</i>, 41(13):5693-5708, 2016. JM BARANDIARAN, A MARTIN-CID, AM SCH?NH?BEL, JS GARITAONANDIA, M GJOKA, D NIARCHOS, SS MAKRIDIS, A PASKO, A AUBERT, F MAZALEYRAT, G HADJIPANAYIS, "NITROGENATION AND SINTERING OF (Nd-Zr) Fe10Si2 TETRAGONAL COMPOUNDS FOR PERMANENT MAGNETS APPLICATIONS", <i>JOURNAL OF ALLOYS AND COMPOUNDS</i>, VOLUME 784, PAGES 996-1002, HTTPS://DOI.ORG/10.1016/J.JALCOM.2019.01.044, 2019. STAVROS LAZAROU, VASILIKI VITA, MARIA DIAMANTAKI, DIOTIMA KARANIKOLOU?KARRA, GEORGE FRAGOYIANNIS, SOFOKLIS MAKRIDIS, LAMBROS EKONOMOU, "A SIMULATED ROADMAP OF HYDROGEN TECHNOLOGY CONTRIBUTION TO CLIMATE CHANGE MITIGATION BASED ON REPRESENTATIVE CONCENTRATION PATHWAYS CONSIDERATIONS", <i>ENERGY SCIENCE & ENGINEERING</i>, WILEY, HTTPS://DOI.ORG/10.1002/ESE3.194, 2018. EVANGELOS I GKNAS, MARTIN KHZOUZ, GRIGORIOS PANAGAKOS, THOMAS STATHEROS, PANAGIOTA MIHALAKAKOU, GERASIMOS SIASIOS, GEORGIOS SKODRAS, SOFOKLIS S MAKRIDIS, "HYDROGENATION BEHAVIOR IN RECTANGULAR METAL HYDRIDE TANKS UNDER EFFECTIVE HEAT MANAGEMENT PROCESSES FOR GREEN BUILDING APPLICATIONS", <i>ENERGY</i>, VOLUME 142, PAGES 518-530, HTTPS://DOI.ORG/10.1016/J.ENERGY.2017.10.040, 2018 S.S. MAKRIDIS, E. GKNAS, G. PANAGAKOS, E.S. KIKKINIDES, A.K. STUBOS, P. WAGENER, S. BARCIKOWSKI, "Polymer-Stable Magnesium Nanocomposites Prepared by Laser Ablation for Efficient Hydrogen Storage", <i>International Journal of Hydrogen Energy</i>, 38(26): 11530-11535, 2013. E.D. KOULTOUKIS, S.S. MAKRIDIS, E. PAVLIDOU, P. DE RANGO, A.K. STUBOS, "Investigation of ZrFe2-type materials for metal hydride hydrogen compressor systems by substituting Fe with Cr or V", <i>International Journal of Hydrogen Energy</i>, 39(36): 21380-21385, 2014.