

PERSONAL INFORMATION	
SURNAME	GIASAFAKI
NAME	DIMITRA
DATE OF BIRTH	21.02.1981
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TEL.	(+30)210-6503957

EDUCATION

02.2009 - 10.2014	PhD , "Development of Carbon based Nanostructured Materials for H ₂ Storage Applications", Dep. Materials Science & Engineering, Univ. Ioannina, Greece
09.2005 - 11.2008	M.Sc. in Materials Chemistry & Technology, "Development of biomimetic modified silica materials through sol-gel method: evaluation of their catalytic activity with respect to their morphology", Dep. Chemistry & Dep. Materials Science & Engineering, Univ. Ioannina, Greece
09.1999 - 04.2005	B.Sc. in Materials Science & Engineering, Department of Materials Science and Engineering, University of Ioannina, Greece

CURRENT POSITION

02.2019 - today	Post-Doctoral Researcher/GRAPHEIN project Membranes and Materials for Environmental Separations Laboratory (MESL), Institute of Nanoscience and Nanotechnology (INN), NCSR "Demokritos", Greece
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PREVIOUS POSITION(S)

08.2015 - 01.2019	Post-Doctoral Researcher/BOR4STORE, GLOW, MOZART projects Environmental Research Laboratory, Inst. Nuclear & Radiological Sciences & Technology, Energy & Safety (INRASTES), NCSR "Demokritos", Greece
08.2014 - 07.2015	Post-Doctoral Researcher/KRIPIS project Membranes and Materials for Environmental Separations Laboratory (MESL), Institute of Nanoscience and Nanotechnology (INN), NCSR "Demokritos", Greece
01.2009 - 11.2013	Research Associate – PhD student under state scholarship/Synthesis and characterization of metal doped porous carbons for H₂ storage Membranes and Materials for Environmental Separations Laboratory (MESL), Institute of Physical Chemistry NCSR "Demokritos", Greece

VISITING SCIENTIST

03.2020 - 07.2020	Academic Fellow Researcher/Composites: Carbon Nanoparticles in Polymeric Matrices Laboratory of Dyeing, Refining, Paints and Advanced Polymers, Department of Industrial Design and Production Engineering, University of West Attica, Greece
09.2016 - 10.2016	Visiting Researcher/MOZART project Grupo de Investigación Biomateriales Inteligentes, Dep. of Inorg. & Bioinorg. Chemistry, Universidad Complutense de Madrid, Spain
04.2016 - 05.2016	Visiting Researcher/GLOW project
06.2014 - 07.2014	R&D Department, MEGARA Resins S.A, Greece

TEACHING ACTIVITIES

2019 - today	Academic Fellow – Teaching of six (6) Academic Courses and Laboratory Exercises: "Material Science Engineering", "Materials I" (Metals, Ceramics), "Advanced Materials", "Materials II" (Polymers), "Composite Materials", "Advanced Materials Technology" at "Department of Industrial Design and Production Engineering" and "Department of Mechanical Engineering", School of Engineering, University of West Attica, Greece
2010 - today	Laboratory training of 5 PhD students & 1 MSc student and Co-Supervision of 2 undergraduate students at NCSR "Demokritos", Athens, Greece
2008	Teaching of the topics: "Mechanical Resistance of Materials" and "Materials Technology" at 1st Public Vocational Training Institute of Ioannina, Greece
2007	Laboratory training in "Materials Technology", Postgraduate Programme: "Chemistry and Technology of Materials", University of Ioannina, Ioannina, Greece.

FELLOWSHIPS and AWARDS

- 07.2014** **Poster award**, 14th Int. Symposium on Metal-H₂ Systems, “H₂ storage properties of Pd-doped thermally oxidized single wall carbon nanohorns”, Manchester-UK.
- 09.2013** **1st Oral presentation prize**, 6th Panhellenic Symposium on Porous Materials, “A hydrogen sorption study on a Pd-doped CMK-3 type ordered mesoporous carbon”, Kavala-Greece.
- 2009 - 2013** **PhD scholarship**, NCSR "Demokritos", Institute of Physical Chemistry/Greece.

PUBLICATIONS

- “Biodistribution of mesoporous carbon nanoparticles via technetium-99m radiolabelling after oral administration to mice”, Mamai M., Giasafaki D., Salvanou E.-A., Charalambopoulou G., Steriotis Th., Bouziotis P., *Nanomaterials*, 11(12), 3260, 2021. <https://doi.org/10.3390/nano11123260>
- “A shelf-life study of silica- and carbon-based mesoporous materials”, Björk E. M., Atakan A., Wu P.-H., Bari A., Pontremoli C., Zheng K., Giasafaki D., Iviglia G., Torre E., Cassinelli C., Morra M., Steriotis Th., *J. Ind. Eng. Chem.*, 101, 205–213, 2021. <https://doi.org/10.1016/j.jiec.2021.06.011>
- “Oral Drug Delivery Systems Based on Ordered Mesoporous Silica Nanoparticles for Modulating the Release of Aprepitant”, Christoforidou Th., Giasafaki D., Andriotis E. G., Bouropoulos N., Theodoroula N. F., Vizirianakis I. S., Steriotis Th., Charalambopoulou G., Fatouros D. G., *Int. J. Mol. Sci.*, 22, 1896, 2021. <https://doi.org/10.3390/ijms22041896>
- “Embedding ordered mesoporous carbons into thermosensitive hydrogels: A cutting-edge strategy to vehiculate a cargo and control its release profile”, Boffito M., Laurano R., Giasafaki D., Steriotis Th., Papadopoulos A., Tonda-Turo Ch., Cassino C., Charalambopoulou G., Ciardelli G., *Nanomaterials*, 10(11), 2165, 2020. <https://doi.org/10.3390/nano10112165>
- “Engineered pH-Responsive Mesoporous Carbon Nanoparticles for Drug Delivery”, Gisbert-Garzarán M., Berkmann J.C., Giasafaki D., Lozano D., Spyrou K., Manzano M., Steriotis Th., Duda G. N., Schmidt-Bleek K., Charalambopoulou G., Vallet-Regí M., *ACS Applied Materials and Interfaces*, 12(13), 14946–14957, 2020. <https://dx.doi.org/10.1021/acsami.0c01786>
- “Redox thermochemistry of Ca-Mn-based perovskites for oxygen atmosphere control in solar-thermochemical processes”, Pein M., Agrafiotis C., Vieten J., Giasafaki D., Brendelbergera S., Roeb M., Sattler C., *Solar Energy*, 198, 612–622, 2020. <https://doi.org/10.1016/j.solener.2020.01.088>
- “Redox Oxides-Based Solar Thermochemistry and Its Materialization to Reactor/Heat Exchanger Concepts for Efficient Solar Energy Harvesting, Transformation and Storage”, Agrafiotis C., Pein M., Giasafaki D., Tescari S., Roeb, M., Sattler, C., *Journal of Solar Energy Engineering, Transactions of the ASME*, 141(2), 021010, 2019. <https://doi.org/10.1115/1.4042226>
- “Silver decorated mesoporous carbons for the treatment of acute and chronic wounds, in a tissue regeneration context”, Torre E., Giasafaki D., Steriotis Th., Cassinelli C., Morra M., Fiorilli S., Vitale-Brovarone C., Charalambopoulou G., Iviglia G., *International Journal of Nanomedicine*, 14, 10147–10164, 2019. <http://doi.org/10.2147/IJN.S234393>
- “Electrosprayed mesoporous particles for improved aqueous solubility of a poorly water soluble anticancer agent: in vitro and ex vivo evaluation”, Sayed E., Karavasili Ch., Ruparella K., Haj-Ahmad R., Charalambopoulou G., Steriotis Th., Giasafaki D., Cox P., Singh N., Giassafaki L.-P. N., Mpenekou A., Markopoulou C. K., Vizirianakis I. S., Chang M.-W., Fatouros D. G., Ahmad Z., *J. Control. Release*, 278, 142–155, 2018. <https://doi.org/10.1016/j.jconrel.2018.03.031>
- “Carbon adsorbents with dual porosity for efficient removal of uremic toxins and cytokines from Human Plasma”, Pavlenko D., Giasafaki D., Charalambopoulou G., van Geffen E., Gerritsen K. G. F., Steriotis Th., Stamatialis D., *Sci. Rep.*, 7(1), 14914, 2017. <https://doi.org/10.1038/s41598-017-15116-y>
- “Comparing hydrogen sorption in different Pd-doped pristine and surface-modified nanoporous carbons”, Giasafaki D., Charalambopoulou G., Tampaxis Ch., Dimos K., Gournis D., Steriotis Th., Stubos A., *Carbon*, 98, 1-14, 2016. <https://doi.org/10.1016/j.carbon.2015.10.067>
- “Hydrogen storage properties of Pd-doped thermally oxidized single wall carbon nanohorns”, Giasafaki D., Charalambopoulou G., Tampaxis C., Mirabile Gattia D., Montone A., Barucca G., Steriotis Th. *J. Alloys and Compounds*, 645, S485–S489, 2015. <https://doi.org/10.1016/j.jallcom.2014.12.076>
- “Hydrogen sorption properties of Pd-doped carbon molecular sieves”, Giasafaki D., Charalambopoulou G., Tampaxis C., Stubos A., Steriotis Th., *International Journal of Hydrogen Energy*, 39(18), 9830–9836, 2014. <http://dx.doi.org/10.1016/j.ijhydene.2014.02.149>
- “Development of new drug delivery systems based on ordered mesoporous carbons: characterisation and cytocompatibility studies”, Karavasili C., Amanatiadou E., Sygellou L., Giasafaki D., Steriotis Th., Charalambopoulou G., Vizirianakis I. Fatouros D., *J. Mater. Chem. B*, 1, 3167-3174, 2013. <https://doi.org/10.1039/c3tb20304b>
- “A hydrogen sorption study on a Pd-doped CMK-3 type ordered mesoporous carbon”, Giasafaki D., Charalambopoulou G., Bourlinos A., Stubos A., Gournis D., Steriotis Th., *Adsorption*, 19, 803–811, 2013. <https://doi.org/10.1007/s10450-013-9522-7>
- “Synthesis and characterisation of nanoporous carbon-metal composites for hydrogen storage”, Giasafaki

- D., Bourlinos A., Charalambopoulou G., Stubos A., Steriotis Th., Microporous and Mesoporous Materials, 154, 74–81, 2012. <https://doi.org/10.1016/j.micromeso.2011.11.011>
- “Nanoporous carbon - Metal composites for hydrogen storage”, Giasafaki D., Bourlinos A., Charalambopoulou G., Stubos A., Steriotis Th., Central European Journal of Chemistry, 9(5), 948–952. 2011. <https://doi.org/10.2478/s11532-011-0081-z>
 - “Nanostructured composites of mesoporous carbons and boranates as hydrogen storage materials”, Ampoumogli A., Steriotis Th., Trikalitis P., Giasafaki D., Bardaji E.G., Fichtner, M., Charalambopoulou, G., Journal of Alloys and Compounds, 509 (SUPPL. 2), S705–S708, 2011. <https://doi.org/10.1016/j.jallcom.2010.10.098>
 - “The catalytic function of SiO₂-immobilized Mn(II)-complexes for alkene epoxidation with H₂O₂”, Stamatis Ag., Giasafaki D., Christoforidis K.C., Deligiannakis Y., Louloudi M., Journal of Molecular Catalysis A: Chemical, 319(1-2), 58–65, 2010. <https://doi.org/10.1016/j.molcata.2009.11.021>

CONFERENCES/WORKSHOPS/etc.

- Approx. thirty **(30) oral and posters presentations** to national and international conferences and workshops.
- Selected presentations:
 - “Development of conductive and hydrophilic rGO/AgNWs composites for electronic applications”, D. Giasafaki, C. Mitzithra, V. Belessi, G. Charalambopoulou, Th. Steriotis, NANOCON 2021, Brno-Czech Republic, 20-22 October **2021**.
 - “Electrical and dispersibility properties of new rGO/AgNPs hybrid systems”, C. Mitzithra, D. Giasafaki, V. Belessi, Th. Steriotis, G. Charalambopoulou, NANOCON 2021, Brno-Czech Republic, 20-22 October **2021**.
 - “Carbon Black and reduced Graphene Oxide water-based conductive inks”, A. Koutsoukis, Th. Philippakopoulou, M. Anastasopoulou, D. Giasafaki, Ch. Mitzithra, Th. Steriotis, G. Charalambopoulou, V. Georgakilas, V. Belessi, IARIGAI 2021: 47th Annual scientific conference of the iarigai and 52nd International Circle Conference, Athens-Greece, 19-24 September **2021**.
 - “Nanomatrices as Delivery Platforms for Therapeutic Ions to Treat Biofilm Infections”, Th. Paterson, K. Zheng, P. Balasubramanian, A. Bari, S. Fiorilli, A. J. Bullock, D. Giasafaki, G. Charalambopoulou, Th. Steriotis, A. R. Boccaccini, C. Vitale-Brovarone, S. MacNeil, J. Shepherd, EWMA 2019: 29th Conference of the European Wound Management Association, Gothenburg-Sweden, 05-07 June **2019**.
 - “Therapeutic ion loaded mesoporous nanoparticles for treating biofilms in chronic bone and skin wounds”, T. E. Paterson, K. Zheng, P. Balasubramanian, A. J. Bullock, A. Bari, S. Fiorilli, D. Giasafaki, T. Steriotis, G. Charalambopoulou, A. R. Boccaccini, C. Vitale-Brovarone, S. MacNeil, J. Shepherd, TERMIS 2018: 5th TERMIS world congress, Kyoto-Japan, 03-07 September **2018**.
 - “Synthesis and modification of carbon nanoparticles for therapeutic applications”, D. Giasafaki, M. Gisbert-Garzarán, G. Charalambopoulou, L. Boutsika, K. Spyrou, M. Manzano, M. Vallet-Regí, Th. Steriotis, EUROMAT 2017, Thessaloniki-Greece, 17-22 September **2017**.
 - “Nanoporous and nanostructured carbons: Attractive candidates for hydrogen storage”, D. Giasafaki, M. Baikousi, Th. Tsoufis, G. Charalambopoulou, F. Katsaros, Th. Steriotis, E-MRS 2015 Fall Meeting, Symposium C: Nanostructured Materials for solid state hydrogen storage, Warsaw-Poland, 15-18 September **2015**.
 - “Combining experiments and simulations for studying hydrogen sorption in nanoporous carbons”, A. Gotzias, A. Ampoumogli, D. Giasafaki, G. Charalambopoulou, Th. Steriotis, E-MRS 2015 Fall Meeting, Symposium C: Nanostructured Materials for solid state hydrogen storage, Warsaw-Poland, 15-18 September **2015**.
 - “Hydrogen storage in solids with the use of nanoporous carbon supports and scaffolds”, A. Ampoumogli, D. Giasafaki, Ch. Tampaxis, G. Charalambopoulou, A. Stubos, Th. Steriotis, EmHyTeC2014: Euro-Mediterranean Hydrogen Technologies Conference, Taormina-Italy, 9-12 December **2014**.
 - “Hydrogen storage properties of Pd-doped thermally oxidized single wall carbon nanohorns”, D. Giasafaki, G. Charalambopoulou, Ch. Tampaxis, D. Mirabile Gattia, A. Montone, G. Barucca, Th. Steriotis, MH-2014: 14th International Symposium on Metal-Hydrogen Systems: Fundamentals and Applications, Manchester-UK, 20-25 July **2014**. (Poster award: highly commented poster)
 - “Studying the effect of surface chemistry and metal-doping on the hydrogen storage capacity of carbon nanostructures”, D. Giasafaki, Ch. Tampaxis, A. Ampoumogli, G. Charalambopoulou, A., Bourlinos, A. Stubos, Th. Steriotis, E-MRS 2013 Fall Meeting, Symposium C: Nanostructured Materials for solid state hydrogen storage, Warsaw-Poland, 16-20 September **2013**.
 - “Hydrogen storage properties of different metal-doped carbon-based composites”, A. Ampoumogli, D. Giasafaki, A. Bourlinos, G. Charalambopoulou, A. Stubos, D. Gournis, Th. Steriotis, 1st European Early Stage Researcher’s Conference on Hydrogen Storage, Belgrade-Serbia, 3-5 December **2012**.
 - “Hydrogen storage studies in metal doped nanostructured carbon adsorbents”, D. Giasafaki, G. Charalambopoulou, A. Bourlinos, A. Stubos, Th. Steriotis, 8th International Symposium Surface Heterogeneity Effects in Adsorption and Catalysis (ISSHAC 8), Krakow-Poland, 27-31 August **2012**.

- “Hydrogen storage with the use of nanoporous carbon supports and scaffolds”, Th. Steriotis, G. Charalambopoulou, A. Bourlinos, D. Giasafaki, A. Ampoumogli, P. Trikalitis, A. Stubos, International Conference on Hydrogen Production (ICH2P-11), Thessaloniki-Greece, 19-22 June **2011**.
- “Hydrogen Storage with the use of Nanoporous Carbon Supports and Scaffolds”, G. Charalambopoulou, A. Bourlinos, D. Giasafaki, A. Ampoumogli, P. Trikalitis, A. Stubos, Th. Steriotis, 2nd International Workshop on NAnoPorous Materials for ENvironmental and ENergy Applications (NAPEN 2011), Rhodes-Greece, 9-13 June **2011**.
- “Synthesis and characterisation of nanoporous carbon-metal composites for hydrogen storage applications”, D. Giasafaki, A. Bourlinos, G. Charalambopoulou, A. Stubos, Th. Steriotis, 9th International Symposium on the Characterisation of Porous Solids-COPS IX, Dresden-Germany, 5-8 June **2011**.
- “Hydrogen storage with the use of nanoporous carbon supports and scaffolds”, G. Charalambopoulou, A. Bourlinos, D. Giasafaki, A. Ampoumogli, P. Trikalitis, A. Stubos, Th. Steriotis, 1st International Workshop of the European Nanoporous Materials Institute of Excellence ‘Nanostructured Materials for Sorption, Separation and Catalysis’, Antwerp-Belgium, 4-5 October **2010**.
- “Organized nanoporous carbon-metal composites for hydrogen storage”, D. Giasafaki, A. Bourlinos, G. Charalambopoulou, A. Stubos, Th. Steriotis, MH-2010: International Symposium “Metal-Hydrogen Systems: Fundamentals and Applications”, Moscow-Russia, 19-23 July **2010**.
- “Nanostructured Composites of Mesoporous Carbons and Boranates, as Hydrogen Storage Materials”, A. Ampoumogli, Th. Steriotis, P. Trikalitis, D. Giasafaki, E. Gil Bardaji, M. Fichtner, G. Charalambopoulou, MH-2010: International Symposium “Metal-Hydrogen Systems. Fundamentals and Applications”, Moscow-Russia, 19-23 July **2010**.
- “Hydrocarbon oxidation by homogeneous and heterogeneous manganese (II) and iron (III) catalysts with H₂O₂”, G. Bilis, Ag. Stamatis, D. Giasafaki, Ch. Vartzouma, M. Louloudi, Workshop on Innovative Catalysis: New processes and Selectivities, Tarragona-Spain, 20-22 May **2008**.
- “Hydrocarbon oxidation by heterogeneous and homogeneous iron (III) and manganese (II) catalysts with H₂O₂”, G. Bilis, Ag. Stamatis, D. Giasafaki, Ch. Vartzouma, M. Louloudi, 14th ICC, Seoul-Korea, July 13-18, **2008**.

RESEARCH GRANTS

Project Title	Funding source	Period	Role
Development of water based conductive inks based on graphene for gravure and flexography printing (GRAPHEIN)	GSRT, RESEARCH – CREATE – INNOVATE (T1EDK-02093)	02.2019 today	Post-Doctoral Researcher
Mesoporous matrices for localized pH-triggered release of therapeutic ions and drugs (MOZART)	H2020-NMP-PILOTS-2015 (Grant 685872)	08.2015 01.2019	Post-Doctoral Researcher
New weather-stable low gloss powder coatings based on bifunctional acrylic solid resins and nanoadditives (GLOW)	MC FP7-PEOPLE-2012-IAPP (Grant 324410)	06.2014 05.2016	Post-Doctoral Researcher
Fast, reliable and cost effective boron hydride based high capacity solid state hydrogen storage materials (BOR4STORE)	FP7/FCH-JU-2011-1 (Grant 303428)	12.2013 09.2015	Post-Doctoral Researcher
Advanced Materials and Devices for Collection and Energy Management (project within KRIPIS action)	NSRF 2007-2013 and Attica Region	08.2014 07.2015	Post-Doctoral Researcher
Novel nanocomposites for hydrogen storage applications (NANOHY)	FP7-ENERGY-2007-1.2-04 (210092)	01.2011 09.2011	PhD Student
Novel Efficient Solid Storage for Hydrogen (NESSHY)	FP6-ENERGY, SES6 (Contract 518271)	01.2010 12.2010	PhD Student
Hydrogen Storage in Carbon Cones (HYCONES)	FP6, NMP3-CT-2006-032970	01.2009 10.2009	PhD Student
Development of bioactive, inorganic biomimetic materials through the sol-gel method and the activation of the surfaces of inert glasses and ceramics (PYTHAGORAS II)	HMNE-Greece-Education and Initial Vocational Training	01.2005 12.2007	M.Sc. Student