

INTERNATIONAL CONFERENCES

V. Tsakaloudi, G. Kogias, V.T. Zaspalis. **A new power MnZn-Ferrite for broad temperature range applications.** Joint MMM-Intermag Conference 2019, Washington USA, 10-14 Ιανουαρίου, 2019.

Z. Vryzas, O. Mahmoud, H. Nasr-El-Din, V. Zaspalis, L. Nalbandian, M. Antoniou, D. Gournis, M. Bowman, V. Kelessidis. **Smart Magnetic Drilling Fluids with In-situ Rheological Controllability Using Fe₃O₄ Nanoparticles.** 20th Middle East Oil & Gas Show and Conference (MEOS), Manama-Bahrain, 6-9 Μαρτίου, 2017.

V. Zaspalis. **The usage of Cobalt in Manganese Zinc Ferrites.** International Cobalt Conference, Marrakesh-Morocco, 17-17 Μαΐου, 2017.

V.C. Kelessidis, Z. Vryzas, V. Zaspalis, L. Nalbandian, A. Terzidou. **Advances in the Development of Nano-based Drilling Fluids for Hydrocarbon Exploration.** 17th International Conference Nanosciences & Nanotechnology, Thessaloniki-Greece, 4-7 Ιουλίου, 2017.

Z. Vryzas, A. Terzidou, V. Zaspalis, L. Nalbandian, V. C. Kelessidis. **Relationship between Microstructure and Rheology in Newly Developed Nano-Based Drilling Fluids.** EuroMat 2017, Thessaloniki-Greece, 17-22 Σεπτεμβρίου, 2017.

C. Beatrice, S. Dobák, V. Tsakaloudi, C. Ragusa, F. Fiorillo , L. Martino, and V. Zaspalis. **The magnetic losses of CoO-doped Mn-Zn ferrites.** Soft Magnetic Materials SMM 2017, Sevilla-Spain, 10-13 Σεπτεμβρίου, 2017.

C. Beatrice, F. Fiorillio, S. Dobak, V. Tsakaloudi, V. Zaspalis. **High frequency losses in soft ferrites and rapidly quenched alloys.** 5th International Conference on Superconductivity and Magnetism, Fethiye-Turkey, 24-30 Απριλίου, 2016.

V. Zaspalis, L. Nalbandian. **Environmental Friendly Technologies based on Fossil Fuels for Energy Production.** International Symposium & Workshop RE-Greece 2016, Nisyros-Greece, 20-22 Ιουλίου, 2016.

Z. Vryzas, L. Nalbandian, V. Zaspalis, Y. Wubulikasimu, O. Mahmoud, H. Nasr-El-Din, H. Bowman, V. Kelessidis. **Use of Fe₃O₄ and SiO₂ nanoparticles to develop smart drilling fluids: A comparative Study.** Nanotech Dubai 2016 Conference and Exhibition, Dubai-UAE, 5-7 Δεκεμβρίου, 2016.

V. Zaspalis, L. Nalbandian. **Manufacturing and Characterization of Nanomaterials.** Workshop on Smart Drilling Fluids: Current and future Challenges, Doha-Qatar, 30 Νοεμβρίου, 2016.

Z. Vryzas, O. Mahmoud, H. A. Nasr-El-Din, V. Zaspalis, L. Nalbandian, D. Gournis, M. Bowman, V. C. Kelessidis. **Colloidal phenomena in newly developed nano-based drilling fluids.** 6th International Colloids Conference, Berlin-Germany, 19-22 Ιουνίου, 2016.

Z. Vryzas, O. Mahmoud, H. A. Nasr-El-Din, V. Zaspalis, L. Nalbantian, D. Gournis, M. Bowman, V. C. Kelessidis. **A Comparative Study of Novel Drilling Fluids Using Fe₃O₄ Nanoparticles and Hyperbranched Polymers for HP/HT Applications World Oil's.** 11th annual High-Pressure, High-Temperature Drilling, Completions and Production Conference (HPHT), Houston-Texas, 21-22 Σεπτεμβρίου, 2016.

Z. Vryzas, O. Mahmoud, H. Nasr-El-Din, V. Zaspalis, V. Kelessidis. **Incorporation of Fe₃O₄ nanoparticles as drilling fluid additives for improved drilling operation.** 35th Intern. Conf. on Ocean, Offshore and Arctic Engineering, Busan-Korea, 19-24 Ιουνίου, 2016.

Z. Vryzas, V. Zaspalis, L. Nalbandian, O. Mahmoud, H. Nasr-El-Din, V. Kelessidis. **A Comprehensive approach for the development of new magnetite nanoparticles giving smart drilling fluids with superior rheological and fluid loss properties for HP/HT applications.** International Petroleum Technology Conference (IPTC 2016), Bangkok-Thailand, 14-16 Νοεμβρίου, 2016.

Z. Vryzas, O. Mahmoud, H. A. Nasr-El-Din, V. Zaspalis, L. Nalbandian, M. K. Antoniou, D. Gournis, M. Bowman, V. C. Kelessidis. In-situ Rheological Controllability of Drilling Fluids Using Magnetic Fe₃O₄ Nanoparticles. Abu Dhabi International Petroleum Exhibition and Conference, Abu Dhabi, UAE, 7-10 Νοεμβρίου, 2016.

Z. Vryzas, O. Mahmoud, V. Zaspalis, H. Nasr-El-Din, V. C. Kelessidis. **Development of Nano-based Drilling Fluids for Improved Oil & Gas Applications.** 12th International Conference Nanosciences & Nanotechnology, Thessaloniki-Greece, 7-10 Ιουλίου, 2015.

K.G. Mallolari, V. Zaspalis, L. Nalbandian. **Iron Oxide nanoparticles for targeted biomedical applications; Synthesis, Characterization, Functionalization and Antibodies Binding.** 12th International Conference Nanosciences & Nanotechnology, Thessaloniki-Greece, 7-10 Ιουλίου, 2015.

V. Tsakaloudi, V. Zaspalis. **Development of a very low loss MnZn ferrite for power applications.** 20th International Conference on Magnetism, Barcelona-Spain, 5-10 Ιουλίου, 2015.

G. Kogias, V. Zaspalis. **New medium frequency MnZn-ferrites with low losses over a broad temperature range.** 20th International Conference on Magnetism, Barcelona-Spain, 5-10 Ιουλίου, 2015.

B. Stergiou, V. Zaspalis. **High frequency properties of ferrite-Fe-Si-Al alloy composites.** 20th International Conference on Magnetism, Barcelona-Spain, 5-10 Ιουλίου, 2015.

B. Stergiou, V. Zaspalis. **Ferrites in the low power Wireless Power Transfer Systems.** 20th International Conference on Magnetism, Barcelona-Spain, 5-10 Ιουλίου, 2015.

C. Beatrice, V. Tsakaloudi, F. Fiorillo, V. Zaspalis. **Magnetic Loss and Permeability versus Sintering Process in Mn-Zn-Ferrites.** 22th International Conference on Soft Magnetic Materials (SMM22), São Paulo-Brazil, 13-16 Σεπτεμβρίου, 2015.

S.P. Kaldis, G.C. Kaptaidakis, E.P. Favvas, D.E. Koutsonikolas and V.T. Zaspalis. **Assessment of Membrane Technologies in IGCC Process for H₂ Production and CO₂ Capture.** 4th Conference on CO₂ (CO₂ as feedstock for fuels chemistry and polymers), Essen-Germany, 29-30 Σεπτεμβρίου, 2015.

Z. Vryzas, O. Mahmoud, V. Zaspalis, H. Nasr-El-Din, V. Kelessidis. **Effect of various nanoparticles on the characteristics of water-based drilling fluids.** 5th Annual World Congress on nanoscience and technology, Xi'an-China, Σεπτέμβριος, 2015.

L. Nalbandian, A. Evdou, V. Zaspalis. **Low Cost Minerals and Industrial Waste Materials as Oxygen Carriers for Chemical Looping.** Combustion Global Conference on Global Warming (GCGW-2015), Athens-Greece, 24-27 Μαΐου, 2015.

A. Evdou, V. Zaspalis, L. Nalbandian. **Low Cost Minerals as Oxygen Carriers for Chemical Looping Combustion.** Int. Conf. on Chemistry and Chemical Engineering (CCE 2015), Zakynthos-Greece, 16-20 Ιουλίου, 2015.

K. Plakas, A. Karabelas, S. Sklari, V. Zaspalis, D. Giannakis, G. Sideropoulos. **Pilot Studies of a Novel Electro-Fenton Filter for the Removal of Organic Micropollutants from potable water.** 4th European Conference on Environmental Applications of Advanced Oxidation Processes— EAAOP4, Athens-Greece, 21-24 Οκτωβρίου 2015.

L. Nalbandian, A. Evdou, V. Zaspalis. **Ferrites as RedOX Catalysts for Chemical Looping Processes.** 3rd International Conference on Chemical Looping, Gothenburg-Sweden, 9-11 Σεπτεμβρίου, 2014.

S. Stilianou, S. Sklari, A. Pagana, P. Samaras, D. Zamboulis, V. Zaspalis, A. Zouboulis. **Hybrid ozonation-membrane filtration system for the treatment of water resources.** 1st International Conference on Desalination Using Membrane Technology, Ciutadella de Menorca-Citges-Spain, 7-10/04/2013

L. Nalbandian, A. Evdou, V. Zaspalis. **Perovskite dense membrane reactor for chemical-looping reforming and hydrogen production.** 11th International Conference on Catalysis in Membrane Reactors, Porto-Portugal, 7-11 Ιουλίου, 2013.

K.V. Plakas, A.J. Karabelas, S.D. Sklari and V.T. Zaspalis. **Efficient degradation of recalcitrant pharmaceuticals by a novel electro-fenton system: the case of diclofenac.** 13th International Conference on Environmental Science and Technology (CEST 2013), Athens 5-7 Σεπτεμβρίου, 2013.

S.D. Sklari, K. Szymanska, P. Samaras, V. Zaspalis, A.I. Zouboulis. **NanoMemWater: Development of Innovative Hybrid Processes for Contaminated Water Treatment using Nanoporous Membranes**. MDIW-8 Conference (Membranes in Drinking and Industrial Water), Leeuwarden-the Netherlands, 10-12 Σεπτεμβρίου, 2012.

B. Stergiou, V. Zaspalis. **Optimization of the compaction and magnetic behavior of Mn-Zn spinel ferrites by calcinations temperature**. 14th International Conference on Electroceramics, Bucharest-Romania, 16-20 Ιουνίου, 2014.

E. Skoutzos, V. Zaspalis, L. Nalbandian. **Preparation, physicochemical characteristics and photocatalytic properties of spinel ferrite nanoparticles**. Nanosciences and Nanotechnology 2014, Thessaloniki-Greece, 8-11 Ιουλίου, 2014.

P. Kouvaris, A. Delimitis, V. Zaspalis, P. Papadopoulos, S.A. Tsipas, N. Michailidis. **Bio-synthesis of Noble Metal Functionalized Nanoparticles Using Plant Extracts**. Nanosciences and Nanotechnology 2014, Thessaloniki-Greece, 8-11 Ιουλίου, 2014.

S. Sklari, A. Pagana, V. Zaspalis. **Ceramic membrane materials and hybrid process for the removal of As ions from water**. 4th International Workshop on Nanoporous Materials for Advanced Applications, Bled-Slovenia, 17-19 Σεπτεμβρίου, 2014.

V. Zaspalis. **Inorganic Membranes for Advanced Engineering Applications**. 3rd ENMIX Workshop: Zeolites, MOFs, and Porous Carbons-Advanced Preparation and Innovative Applications, Hannover-Germany, 25-27 Μαρτίου, 2013.

D. Holz, A. Pagana, V. Tsakaloudi, G. Kogias, V. Zaspalis. **Fundamentals of the Densification Mechanism of NiCuZn-ferrites**. 11th International Conference on Ferrites (ICF11), Okinawa Japan, 15-19 Απριλίου, 2013.

G. Kogias, D. Holz, V. Zaspalis. **New MnZn Ferrites with High Saturation Flux Density**. 11th International Conference on Ferrites (ICF11), Okinawa Japan, 15-19 Απριλίου, 2013.

V. Tsakaloudi, D. Holz, V. Zaspalis. **The Effect of Externally Applied Uniaxial Compressive Stress on the Magnetic Properties of Power MnZn-Ferrites**. 11th International Conference on Ferrites (ICF11), Okinawa Japan, 15-19 Απριλίου, 2013.

E. Eleftheriou, V. Tsakaloudi, D. Holz, M. Zagorowska, V. Zaspalis. **Hexagonal Ferrite Materials for the Manufacturing of Very High Frequency (~95 GHz) Non Reciprocal Components**. 11th International Conference on Ferrites (ICF11), Okinawa Japan, 15-19 Απριλίου, 2013.

L. Nalbandian, A. Evdou, D. Holz, V. Zaspalis. **Ferrites as RedOx Catalysts for Hydrogen Production from the Dissociation of Water**. 11th International Conference on Ferrites (ICF11), Okinawa Japan, 15-19 Απριλίου 2013.

V. Zaspalis, V. Tsakaloudi, G. Kogias, Ch. Stergiou, E. Eleftheriou, D. Holz, O. Perez. **Ceramic Magnetic Materials: Targeted Design for New Emerging Applications**. Joint European Magnetic Symposia (JEMS), Rhodes-Greece, 25-30 Αυγούστου, 2013.

D.E. Koutsonikolas, S. Kaldis, G. Pantoleontos, V. Zaspalis, G. Sakellaropoulos. **Techno-Economic Assessment of polymeric ceramic and metallic membranes integration in an advanced IGCC process for H₂ production and CO₂ capture**. 16th Conference Process Integration, Modelling and Optimization for Energy Saving and Pollution Reduction (PRES 13), Rhodes-Greece, 29 Σεπτεμβρίου – 2 Οκτωβρίου, 2013.

V. Zaspalis. **Nanoengineering in structural and functional ceramic materials**. 7th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries (EMCC 7), Corfu-Greece, 27 Απριλίου -1 Μαΐου, 2012.

A. Delimitis, P. Kouvaris, N. Michailidis, D. Tsipas, V. Zaspalis. **The effects of Ag salt / Arbutus Unedo plant extract ratio on the structural properties and stability of green-synthesized Ag nanoparticles**. 9th International Conference on Nanosciences & Nanotechnologies, Thessaloniki-Greece, 3-6 Ιουλίου, 2012.

A. Malakopoulos, E. Halevas, A. Delimitis, V. Zaspalis, G. Litsardakis, A. Salifoglou. **Mesoporous silica coated by manganese oxychloride – surface modification targeting removal of nitrates from water**. 9th International Conference on Nanosciences & Nanotechnologies, Thessaloniki-Greece, 3-6 Ιουλίου, 2012.

E. Patrikiadou, L. Nalbandian, V.Zaspalis, A. Patrikidou, E. Chatzidaki, C. N. Papandreou. **Synthesis of Magnetic Nanoparticles as contrast agents for the MRI Detection of early Prostate Cancer.** 9th International Conference on Nanosciences & Nanotechnologies, Thessaloniki-Greece, 3-6 Ιουλίου, 2012.

D.E. Koutsonikolas, S.P. Kaldis, V.T. Zaspalis, G.P. Sakellaropoulos. **A novel atomic layer deposition (ALD) technique for preparation of microporous inorganic membranes with customized properties.** 12th International Conference on Inorganic Membranes (ICIM12), Enschede-the Netherlands, 9-13 Ιουλίου, 2012.

A. Pagana, S. Sklari, V. Zaspalis. **Combined ozonation-ultrafiltration technology using γ-Al₂O₃-Fe porous membranes for As (III) ions removal from contaminated water.** 12th International Conference on Inorganic Membranes (ICIM12), Enschede-the Netherlands 9-13 Ιουλίου, 2012.

D.E. Koutsonikolas, G. Pantoleontos, S.P. Kaldis, V.T. Zaspalis, G.P. Sakellaropoulos. **Preparation and characterization of novel titania-modified ceramic membranes.** Euromembrane International Conference, London – UK, 23-27 Νοεμβρίου, 2012.

A. Evdou, L. Nalbandian, V. Zaspalis. **RedOx materials for hydrogen production. An overview of research activities at the laboratory of inorganic materials.** Scientific Workshop: Hydrogen Research at the Greek-Bulgarian Border Region, Thessaloniki-Greece, 17 Οκτωβρίου, 2012.

A. Evdou, L. Nalbandian, V. Zaspalis. **Mixed Oxides for hydrogen production. An overview of research activities at the laboratory of inorganic materials.** Scientific Workshop: Hydrogen Economy-A Roadmap to the Future, Blagoevgrad-Bulgaria, 30 Νοεμβρίου, 2012.

L. Nalbandian, A. Evdou, V. Zaspalis. **Novel materials as oxygen carriers in chemical-looping processes for energy and fuel applications.** Scientific Workshop: Hydrogen Economy-A Roadmap to the Future, Blagoevgrad-Bulgaria, 30 Νοεμβρίου, 2012.

A. Evdou, V. Zaspalis, L. Nalbandian. **Perovskites as RedOx materials for the production of high purity hydrogen.** Scientific Workshop: Hydrogen Economy-A Roadmap to the Future, Blagoevgrad-Bulgaria, 30 Νοεμβρίου, 2012.

E. Patrikiadou, V. Zaspalis, L. Nalbandian. **Synthesis and Characterization of Si-coated superparamagnetic nanoparticles for electrochemical applications.** Scientific Workshop: Hydrogen Economy-A Roadmap to the Future, Blagoevgrad-Bulgaria, 30 Νοεμβρίου, 2012.

A. Evdou, L. Nalbandian, V. Zaspalis. **La_{1-x}Sr_xMn_yFe_{1-y}O_{3-δ} perovskites as oxygen carrier materials for chemical looping reforming.** 1st ENMIX Workshop on Nanostructured Materials, Antwerp-Belgium 4-5 Οκτωβρίου, 2010.

A. Pagana, S. Sklari, V. Zaspalis. **Porous materials and ceramic membrane technology for water treatment: 1 hybrid membrane reactor.** Workshop on novel materials for future energy supply and a clean environment, Vatnahalsen-Norway, 15-16 Σεπτεμβρίου, 2011.

S. Sklari, A. Pagana, V. Zaspalis. **Porous materials and ceramic membrane technology for water treatment: 2 the Fenton membrane reactor.** Workshop on novel materials for future energy supply and a clean environment, Vatnahalsen-Norway 15-16 Σεπτεμβρίου, 2011.

D. Koutsonikolas, S. Kaldis, V.T. Zaspalis, G.P. Sakellaropoulos. **Silica microporous membranes in catalytic membrane reactors for dehydrogenation processes.** International Conference on Hydrogen Production, Thessaloniki-Greece, 19-22 Ιουνίου, 2011.

L.T. Nalbandian, A.P. Evdou, V.T. Zaspalis. **A novel membrane reactor concept for hydrogen production from the decomposition of water and simultaneous production of synthesis gas over ceramic materials.**

International Conference on Hydrogen Production, Thessaloniki-Greece, 19-22 Ιουνίου, 2011.

S.D. Sklari, A.E. Pagana, E.S. Kikkinides, V.T. Zaspalis. **Effect of hardness on the removal of Chromium (III) ions from contaminated water using combined absorption-permeation membrane process.** 3rd International Conference on Environmental Management Engineering and Economics (CEMEPE 2011), Skiathos-Greece, 19-24 Ιουνίου, 2011.

S.D. Sklari, D.E. Koutsonikolas, S.P. Kaldis, G. Pantoleontos, V.T. Zaspalis, G.P. Sakellaropoulos. **Development of silica membranes on defect free γ -Al₂O₃ membranes using a low temperature CVI technique.** International Congress on Membranes and Membrane Processes (ICOM2011), Amsterdam-the Netherlands, 23-29 Ιουλίου, 2011.

B. Stergiou, E. Eleftheriou, V. Zaspalis. **Planar hexaferrites for the enhancement of the near-field UHF RFID tags.** 20th Soft Magnetic Materials Conference (SMM 20), Kos-Greece, 18-22 Σεπτεμβρίου, 2011.

G. Kogias, G. Triantafyllides, P. Van der Valk, V. Zaspalis. **Low loss MnZn-ferrite materials through “green” microstructure improvement.** ICCPS-11, International Conference on Ceramic Processing Science Zurich-Switzerland 29 Αυγούστου -1 Σεπτεμβρίου, 2010.

E. Patrikiadou, L. Nalbandian, V. Zaspalis, A. Patrikidou, E. Chatzidaki, Ch. Papandreou. **Magnetic Materials in Medical Diagnostic Applications-Synthesis, Characterization, Functionalization and Proteins Conjugation.** 1st ENMIX Workshop on Nanostructured Materials, Antwerp-Belgium, 4-5 Οκτωβρίου, 2010.

A. Pagana, S. Sklari, E. Kikkinides, V. Zaspalis. **Combined adsorption-permeation membrane process for the removal of Chromium (III) ions from contaminated water.** 1st ENMIX Workshop on Nanostructured Materials, Antwerp-Belgium, 4-5 Οκτωβρίου, 2010.

L. Nalbandian, A. Evdou, V. Zaspalis. **La_{1-x}Sr_xMn_yFe_{1-y}O_{3-δ} perovskites as oxygen carrier materials for chemical looping reforming.** 1st International Conference on Chemical Looping, Lyon-France, 17-19 Μαρτίου, 2010.

G. Kogias, P. Van der Valk, D. Holz, V. Zaspalis. **New ferrite materials and cores with very low losses.** 8th European Magnetic Sensor and Actuator Conference, Bodrum-Turkey, 4-7 Ιουλίου, 2010.