

ΔΗΜΟΣΙΕΥΣΕΙΣ ΣΕ ΕΠΙΣΤΗΜΟΝΙΚΑ ΠΕΡΙΟΔΙΚΑ

Beatrice, C., Dobák, S., Tsakaloudi, V., Fiorillo, F., Manioudaki, A., Zaspalis, V. "Magnetic aging in TiO₂-doped Mn-Zn ferrites" (2020) *Journal of Magnetism and Magnetic Materials*, 502, art. no. 166576.

Plakas, K.V., Mantza, A., Sklari, S.D., Zaspalis, V.T., Karabelas, A.J. "Heterogeneous Fenton-like oxidation of pharmaceutical diclofenac by a catalytic iron-oxide ceramic microfiltration membrane" (2019) *Chemical Engineering Journal*, 373, pp. 700-708.

Tsakaloudi, V., Kogias, G., Zaspalis, V.T. "A new power MnZn ferrite for broad temperature range applications" (2019) *AIP Advances*, 9 (3), art. no. 035212.

Vryzas, Z., Nalbandian, L., Zaspalis, V.T., Kelessidis, V.C. "How different nanoparticles affect the rheological properties of aqueous Wyoming sodium bentonite suspensions" (2019) *Journal of Petroleum Science and Engineering*, 173, pp. 941-954.

Tokatlidis, S., Kogias, G., Zaspalis, V.T. "Low loss MnZn ferrites for applications in the frequency region of 1–3 MHz" (2018) *Journal of Magnetism and Magnetic Materials*, 465, pp. 727-735.

Stergiou, C.A., Zaspalis, V. "Cobalt-Induced Performance Instabilities of Mn-Zn Ferrite Cores" (2018) *IEEE Transactions on Magnetics*, 54 (8), art. no. 2001208.

Beatrice, C., Dobák, S., Tsakaloudi, V., Ragusa, C., Fiorillo, F., Martino, L., Zaspalis, V. "Magnetic loss, permeability, and anisotropy compensation in CoO-doped Mn-Zn ferrites" (2018) *AIP Advances*, 8 (4), art. no. 047803.

Matsouka, C., Zaspalis, V., Nalbandian, L. "Perovskites as oxygen carriers in chemical looping reforming process - Preparation of dense perovskite membranes and ionic conductivity measurement" (2018) *Materials Today: Proceedings*, 5 (4), pp. 27543-27552.

Vryzas, Z., Kelessidis, V.C., Nalbandian, L., Zaspalis, V. "Can titanium and copper oxide commercial nanoparticles be used for HP/HT applications? A comparison with the very well performing Fe₃O₄ NP" (2018) *Proceedings of the International Conference on Offshore Mechanics and Arctic Engineering - OMAE*, 8.

Zaspalis, V., Paras, S.V., Assimopoulou, A.N., Chatzidoukas, C., Tsivintzelis, I. "Special Issue of the 11th Panhellenic Scientific Conference on Chemical Engineering" (2018) *Materials Today: Proceedings*, 5 (4), pp. 27327-27328.

Vryzas, Z., Zaspalis, V., Nalbandian, L., Terzidou, A., Kelessidis, V.C. "Rheological and HP/HT fluid loss behavior of nano-based drilling fluids utilizing Fe₃O₄ nanoparticles" (2018) *Materials Today: Proceedings*, 5 (4), pp. 27387-27396.

Teknetzi, I., Nessi, P., Zaspalis, V., Nalbandian, L. "Ni-ferrite with structural stability for solar thermochemical H₂O/CO₂ splitting" (2017) *International Journal of Hydrogen Energy*, 42 (42), pp. 26231-26242.

Beatrice, C., Tsakaloudi, V., Dobák, S., Zaspalis, V., Fiorillo, F. "Magnetic losses versus sintering treatment in Mn-Zn ferrites" (2017) *Journal of Magnetism and Magnetic Materials*, 429, pp. 129-137.

Vryzas, Z., Kelessidis, V.C., Nalbandian, L., Zaspalis, V., Gerogiorgis, D.I., Wubulikasimu, Y. "Effect of temperature on the rheological properties of neat aqueous Wyoming sodium bentonite dispersions" (2017) *Applied Clay Science*, 136, pp. 26-36.

Nalbandian, L., Evdou, A., Zaspalis, V. "Industrial waste materials and naturally occurring minerals as inexpensive oxygen carriers for chemical looping combustion" (2017) *International Journal of Global Warming*, 13 (3-4), pp. 353-370.

Vryzas, Z., Kelessidis, V.C., Bowman, M.B.J., Nalbandian, L., Zaspalis, V., Mahmoud, O., Nasr-El-Din, H.A. "Smart magnetic drilling fluid with in-situ rheological controllability using Fe₃O₄ nanoparticles" (2017) *SPE Middle East Oil and Gas Show and Conference, MEOS, Proceedings*, 2017-March, pp. 2558-2569.

- Stergiou, C.A., Zaspalis, V. "Impact of Ferrite Shield Properties on the Low-Power Inductive Power Transfer" (2016) IEEE Transactions on Magnetics, 52 (8), art. no. 7422785.
- Nalbandian, L., Patrikiadou, E., Zaspalis, V., Patrikidou, A., Hatzidaki, E., Papandreou, C.N. "Magnetic nanoparticles in medical diagnostic applications: Synthesis, characterization and proteins conjugation" (2016) Current Nanoscience, 12 (4), pp. 455-468.
- Kogias, G., Zaspalis, V.T. "Temperature stable MnZn ferrites for applications in the frequency region of 500 kHz" (2016) Ceramics International, 42 (6), pp. 7639-7646.
- Plakas, K.V., Sklari, S.D., Yiankakis, D.A., Sideropoulos, G.T., Zaspalis, V.T., Karabelas, A.J. "Removal of organic micropollutants from drinking water by a novel electro-Fenton filter: Pilot-scale studies" (2016) Water Research, 91, pp. 183-194.
- Tsakaloudi, V., Zaspalis, V. "Synthesis of a low loss Mn-Zn ferrite for power applications" (2016) Journal of Magnetism and Magnetic Materials, 400, pp. 307-310.
- Evdou, A., Zaspalis, V., Nalbandian, L. "Ferrites as redox catalysts for chemical looping processes" (2016) Fuel, 165, pp. 367-378.
- Vryzas, Z., Mahmoud, O., Nasr-El-Din, H., Zaspalis, V., Kelessidis, V.C. "Incorporation of Fe₃O₄ nanoparticles as drilling fluid additives for improved drilling operations" (2016) Proceedings of the International Conference on Offshore Mechanics and Arctic Engineering - OMAE, 8, art. no. V008T11A040.
- Nalbandian, L., Zaspalis, V. "Perovskites as Oxygen Carrier-Transport Materials for Hydrogen and Carbon Monoxide Production by Chemical Looping Processes" (2015) Perovskites and Related Mixed Oxides: Concepts and Applications, pp. 839-862.
- Stylianou, S.K., Sklari, S.D., Zamboulis, D., Zaspalis, V.T., Zouboulis, A.I. "Development of bubble-less ozonation and membrane filtration process for the treatment of contaminated water" (2015) Journal of Membrane Science, 492, pp. 40-47.
- Koutsonikolas, D.E., Kaldis, S.P., Matsouka, Ch., Zaspalis, V.T. "Characterization of commercial ceramic and hybrid membranes using gas permeation and permoporometry tests" (2015) Journal of Membrane Science and Research, 1 (3), pp. 130-134.
- Stergiou, C.A., Zaspalis, V. "The role of pre-firing in the development of Mn-Zn spinel ferrites for inductive power transfer" (2015) Ceramics International, 41 (3), pp. 4798-4804.
- Sklari, S., Pagana, A., Nalbandian, L., Zaspalis, V. "Ceramic membrane materials and process for the removal of As(III)/As(V) ions from water" (2015) Journal of Water Process Engineering, 5, pp. 42-47.
- Stergiou, C.A., Zaspalis, V. "High Frequency Properties of Ferrite/Fe-Si-Al Alloy Soft Magnetic Composites" (2015) Physics Procedia, 75, pp. 1389-1395.
- Kogias, G., Zaspalis, V. "New MnZn Ferrite with Low Losses at 500 kHz over a Broad Temperature Range" (2015) Physics Procedia, 75, pp. 1286-1293.
- Sklari, S.D., Plakas, K.V., Petsi, P.N., Zaspalis, V.T., Karabelas, A.J. "Toward the development of a novel electro-Fenton system for eliminating toxic organic substances from water. Part 2. Preparation, characterization, and evaluation of iron-impregnated carbon felts as cathodic electrodes" (2015) Industrial and Engineering Chemistry Research, 54 (7), pp. 2059-2073.
- Tsakaloudi, V., Kogias, G., Zaspalis, V.T. "Process and material parameters towards the design of fast firing cycles for high permeability MnZn ferrites" (2014) Journal of Alloys and Compounds, 588, pp. 222-227.
- Stergiou, C.A., Zaspalis, V. "Analysis of the complex permeability of NiCuZn ferrites up to 1 GHz with regard to Cu content and sintering temperature" (2014) Ceramics International, 40 (1 PART A), pp. 357-366.
- Kogias, G., Holz, D., Zaspalis, V. "New MnZn ferrites with high saturation flux density" (2014) Funtai Oyobi Fummatu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 61 (SUPPL.1), pp. S201-S203.

- Tsakaloudi, V., Holz, D., Zaspalis, V. "The effect of externally applied uniaxial compressive stress on the magnetic properties of MnZn-Ferrites" (2014) *Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy*, 61 (SUPLL.1), pp. S204-S207.
- Zaspalis, V.T., Tsakaloudi, V., Kogias, G. "MnZn-ferrites: Targeted material design for new emerging application products" (2014) *EPJ Web of Conferences*, 75, art. no. 04004.
- Eleftheriou, E., Tsakaloudi, V., Kogias, G., Zagorowska, M., Zaspalis, V. "Hexagonal ferrite materials for the manufacturing of very high frequency (~95 GHz) non reciprocal components" (2014) *Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy*, 61, pp. S296-S298.
- Nalbandian, L., Evdou, A., Holz, D., Nikolaidou, Z., Zaspalis, V. "Ferrites as RedOx catalysts for chemical looping and thermochemical water splitting processes" (2014) *Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy*, 61 (SUPLL.1), pp. S173-S175.
- Holz, D., Pagana, A., Tsakaloudi, V., Kogias, G., Zaspalis, V. "Fundamentals of the densification mechanism of nicalon-ferrites" (2014) *Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy*, 61 (SUPLL.1), pp. S75-S77.
- Plakas, K.V., Karabelas, A.J., Sklari, S.D., Zaspalis, V.T. "Toward the development of a novel electro-fenton system for eliminating toxic organic substances from water. Part 1. in situ generation of hydrogen peroxide" (2013) *Industrial and Engineering Chemistry Research*, 52 (39), pp. 13948-13956.
- Halevas, E., Malakopoulos, A., Delimitis, A., Zaspalis, V., Litsardakis, G., Salifoglou, A. "Manganese oxychloride-modified hydrophobic silica targets removal of nitrates from water" (2013) *Water, Air, and Soil Pollution*, 224 (6), art. no. 1598.
- Tsakaloudi, V., Holz, D., Zaspalis, V. "The effect of externally applied uniaxial compressive stress on the magnetic properties of power MnZn-ferrites" (2013) *Journal of Materials Science*, 48 (10), pp. 3825-3833.
- Tsakaloudi, V., Sakellari, D., Zaspalis, V., Polychroniadis, E.K. "Stress relaxation phenomena in NiCuZn ferrites induced by annealing" (2013) *Journal of Materials Science*, 48 (10), pp. 3692-3699.
- Koutsonikolas, D.E., Kaldis, S.P., Pantoleonos, G.T., Zaspalis, V.T., Sakellaropoulos, G.P. "Techno-economic assessment of polymeric, ceramic and metallic membranes integration in an advanced IGCC process for H₂ production and CO₂ capture" (2013) *Chemical Engineering Transactions*, 35, pp. 715-720.
- Sklari, S.D., Szymanska, K., Pagana, A.E., Samaras, P., Zaspalis, V.T., Zouboulis, A.I. "NanoMembraneWater: development of innovative hybrid processes for contaminated water treatment using nanoporous membranes" (2013) *Desalination and Water Treatment*, 51 (25-27), pp. 4938-4946.
- Koutsonikolas, D., Kaldis, S., Zaspalis, V.T., Sakellaropoulos, G.P. "Potential application of a microporous silica membrane reactor for cyclohexane dehydrogenation" (2012) *International Journal of Hydrogen Energy*, 37 (21), pp. 16302-16307.
- Kalarus, J., Kogias, G., Holz, D., Zaspalis, V.T. "High permeability-high frequency stable MnZn ferrites" (2012) *Journal of Magnetism and Magnetic Materials*, 324 (18), pp. 2788-2794.
- Kouvaris, P., Delimitis, A., Zaspalis, V., Papadopoulos, D., Tsipas, S.A., Michailidis, N. "Green synthesis and characterization of silver nanoparticles produced using *Arbutus Unedo* leaf extract" (2012) *Materials Letters*, 76, pp. 18-20.
- Stergiou, C., Eleftheriou, E., Zaspalis, V. "Enhancement of the near-field UHF RFID with ferrite substrates" (2012) *IEEE Transactions on Magnetics*, 48 (4), art. no. 6172388, pp. 1497-1500.
- Kogias, G., Tsakaloudi, V., Van Der Valk, P., Zaspalis, V. "Improvement of the properties of MnZn ferrite power cores through improvements on the microstructure of the compacts" (2012) *Journal of Magnetism and Magnetic Materials*, 324 (2), pp. 235-241.
- Koutsonikolas, D.E., Pantoleonos, G., Kaldis, S.P., Zaspalis, V.T., Sakellaropoulos, G.P. "Preparation and characterization of novel titania-modified ceramic membranes" (2012) *Procedia Engineering*, 44, pp. 908-909.

Nalbandian, L., Evdou, A., Zaspalis, V. "La_{1-x}Sr_xMyFe_{1-y}O_{3-δ} perovskites as oxygen-carrier materials for chemical-looping reforming" (2011) International Journal of Hydrogen Energy, 36 (11), pp. 6657-6670.

Pagana, A.E., Sklari, S.D., Kikkinides, E.S., Zaspalis, V.T. "Combined adsorption-permeation membrane process for the removal of chromium (III) ions from contaminated water" (2011) Journal of Membrane Science, 367 (1-2), pp. 319-324.

Koutsonikolas, D.E., Kaldis, S.P., Sklari, S.D., Pantoleontos, G., Zaspalis, V.T., Sakellaropoulos, G.P. "Preparation of highly selective silica membranes on defect-free γ -Al₂O₃ membranes using a low temperature CVD technique" (2010) Microporous and Mesoporous Materials, 132 (1-2), pp. 276-281.

Evdou, A., Zaspalis, V., Nalbandian, L. "La_{1-x}Sr_xFeO_{3-δ} perovskites as redox materials for application in a membrane reactor for simultaneous production of pure hydrogen and synthesis gas" (2010) Fuel, 89 (6), pp. 1265-1273.

Tsakaloudi, V., Zaspalis, V.T. "Tailoring the temperature characteristics of the magnetic permeability of NiZn ferrites" (2010) Journal of Magnetism and Magnetic Materials, 322 (5), pp. 517-522.