

## Publication List:

Publications: 37, Citations: 982, h-index: 15 (Scopus)

**Kouzoudis D**, Nikolakis V, "The use of a non-linear model for a more realistic calculation of the “ $\Delta E$  effect” in magnetoelastic ribbons”, Journal of Magnetism and Magnetic Materials, Volume 395, 1 December 2015, Pages 59–66

Zoppellaro, G., Kolokithas-Ntoukas, A., Polakova, K., Tucek, J., Zboril, R., Loudos, G., Fragogeorgi, E., Diwoky, C., Tomankova, K., Avgoustakis, K., **Kouzoudis, D.**, Bakandritsos, A., “Theranostics of epitaxially condensed colloidal nanocrystal clusters, through a soft biomineralization route”, Chemistry of Materials, Volume 26, Issue 6, 25 March 2014, Pages 2062-2074

Tsukala, V., **Kouzoudis, D.**, “Zeolite micromembrane fabrication on magnetoelastic material using electron beam lithography”, Microporous and Mesoporous Materials, Volume 197, October 2014, Pages 213-220

T. Baimpos, L. Gora, V. Nikolakis, and **D.Kouzoudis**, “Selective detection of hazardous VOCs using zeolite/Metglas composite sensors”, Sensors and Actuators, A: Physical, Volume 186, October 2012, Pages 21-31.

T. Baimpos, V. Tsukala, V. Nikolakis, and **D. Kouzoudis**, “A Modified Method for the Calculation of the Humidity Adsorption Stresses Inside Zeolite Films Using Magnetoelastic Sensors”, Sensor Lett. 10, 878-884 (2012)

T. Baimpos, V. Nikolakis, and **D. Kouzoudis**, “A new method for measuring the adsorption induced stresses of zeolite films using magnetoelastic sensors”, Journal of Membrane Science, Volume 390-391, Pages 130-140(2012)

D. G. Dimogianopoulos, D. E. Mouzakis, **D .Kouzoudis**, "Statistical damage diagnosis in smart systems via contact-free MetGlas sensors and stochastic non-linear modelling of system output data", Int. J. Materials and Product Technology 41 (2011) 39-60

Bakandritsos A, Mattheolabakis G, Chatzikyriakos G, Szabo T, Tzitzios V, **KouzoudisD**, Couris S, Avgoustakis K., “Doxorubicin Nanocarriers Based on Magnetic Colloids with a Bio-polyelectrolyte Corona and High Non-linear Optical Response: Synthesis, Characterization, and Properties”, Advanced Functional Materials 21 (2011: 1465-1475

T. Baimpos, **D. Kouzoudis**, V. Nikolakis, L. Gora, "Are Zeolite Films Flexible?", Chem. Mater., 2011, 23 (6), pp 1347–1349

Dimitris Kouzoudis

T. Baimpos, **D. Kouzoudis**, V. Nikolakis, "Use of a Zeolite LTA Film for the Selective Detection of Light Hydrocarbons", *Sci. Adv. Mater.* 2 (2010) 215-218

T. Baimpos, P. Boutikos, V. Nikolakis, **D. Kouzoudis**, "A polymer-Metglas sensor used to detect volatile organic compounds", *Sensors And Actuators A-Physical* 158 (2010) 249-253

**D. Kouzoudis**, "Proof of the phase coherence in the Bardeen–Cooper–Schrieffer theory of superconductivity from first principles", *European Journal of Physics* 31 (2010) 239–248

C. Matzaroglou, P. Bougas, E. Panagiotopoulos, A. Saridis, M. Karanikolas, **D. Kouzoudis**, "Ninety-degree chevron osteotomy for correction of hallux valgus deformity: clinical data and finite element analysis". *The Open Orthopaedics Journal* 01 (2010) 4:152-6.

T. Baimpos, V. Nikolakis, and **D. Kouzoudis**, "Measurement of the elastic properties of zeolite films using Metglas-zeolite composite sensors", *Studies in Surface Science and Catalysis* 174 (suppl. part A, 4th International FEZA Conference, 2-6 September 2008, Paris), pp. 665-668 (2008).

**D. Kouzoudis** and D. E. Mouzakis, "A 2826 MB Metglas ribbon as a strain sensor for remote and dynamic mechanical measurements", *Sensors and Actuators A: Physical* Volume 127, Issue 2, 13 March 2006, Pages 355-359

S. C. Roy, J. R. Werner, **D. Kouzoudis**, and C. A. Grimes, "Use of Magnetoelastic Sensors for Quantifying Platelet Aggregation I: Whole Blood and Platelet Rich Plasma", *Sensor Letters* 6 (2008), 280–284

T. Baimpos, I. G. Giannakopoulos, V. Nikolakis and, **D. Kouzoudis**, "Effect of Gas Adsorption on the Elastic Properties of Faujasite Films Measured Using Magnetoelastic Sensors", *Chem. Mater.*, 20 (2008), 1470–1475

S. Chen, M. Paulose, C. Ruan, G. K. Mor, O. K. Varghese, **D. Kouzoudis**, C. A. Grimes, "Electrochemically synthesized CdS nanoparticle-modified TiO<sub>2</sub> nanotube-array photoelectrodes: Preparation, characterization, and application to photoelectrochemical cells", *J. Photochem. Photobiol. B: Chem* 177 (2006) 177–184

S. C. Roy, J. R. Werner, **D. Kouzoudis**, and C. A. Grimes, "Use of Magnetoelastic Sensors for Quantifying Platelet Aggregation I: Whole Blood and Platelet Rich Plasma", *Sensor Letters* 6 (2008), 280–284

V. Nikolakis, **D. Kouzoudis**, I. G. Giannakopoulos, and T. Baimpos, "The effect of gas adsorption on the elastic properties of faujasite films measured using magnetoelastic sensors", *Chem. Mater.*, 20 (4), 1470–1475, 2008

Dimitris Kouzoudis

S. Chen, M. Paulose, C. Ruan, G. K. Mor, O. K. Varghese, **D. Kouzoudis**, C. A. Grimes, "Electrochemically synthesized CdS nanoparticle-modified TiO<sub>2</sub> nanotube-array photoelectrodes: Preparation, characterization, and application to photoelectrochemical cells", J. Photochem. Photobiol. B: Chem 177 (2006) 177–184

I. G. Giannakopoulos, **D. Kouzoudis**, C. A. Grimes, and V. Nikolakis, "Synthesis and characterization of a composite zeolite-Metglas carbon dioxide sensor," Adv. Func. Mater. 15 (2005) 1165-1170

N. Bouropoulos, **D. Kouzoudis**, and C. A. Grimes, "The real-time, in situ monitoring of calcium oxalate and brushite precipitation using magnetoelastic sensors," Sensors and Actuators B 109 (2005) 227-232

L. G. Puckett, G. Barrett, **D. Kouzoudis**, C. A. Grimes, L. G. Bachas, "Monitoring blood coagulation with magnetoelastic sensors," Biosensors and Bioelectronics 18 (2003) 675-681

**D. Kouzoudis** and C. A. Grimes, Invited Paper, "Remote query fluid-flow measurement using magnetoelastic thick-film sensors," J. Appl. Phys 87 (2000)

**D. Kouzoudis** and C. A. Grimes, "The frequency response of magnetoelastic sensors to stress and atmospheric pressure," Smart Mater. Struct. 9 (2000) 1 – 5.

**D. Kouzoudis**, "Exact analytical partition function and spin gap for a 2x3 quantum spin ladder," J. Magn. Magn. Mater. 214, 112-118 (2000).

C. A. Grimes and **D. Kouzoudis**, "Remote query measurement of pressure, fluid-flow velocity, and humidity using magnetoelastic thick-film sensors," Sensors and Actuators 84 (2000) 205 - 212.

C. A. Grimes, **D. Kouzoudis**, C. Mungle, "Simultaneous measurement of liquid density and viscosity using remote query magnetoelastic sensors", Rev. Sci. Instr. 71, 3822 (2000).

C. A. Grimes and **D. Kouzoudis**, "Magnetoelastic sensors in combination with nanometer-scale honeycombed thin film ceramic TiO<sub>2</sub> for remote query measurement of humidity," J. Appl. Phys 87 (2000).

C. A. Grimes, P. G. Stoyanov, **D. Kouzoudis**, and K. G. Ong, "Remote query pressure measurement using magnetoelastic sensors," Rev. Sci. Instr. 70, 4711 (1999).

C.A. Grimes, C. Mungle, **D. Kouzoudis**, S. Fang, P.C. Eklund, "The 500 MHz to 5.50 GHz Complex Permittivity Spectra of Single-Wall Carbon Nanotube-Loaded Polymer Composites", Chemical Physics Letters, vol. 319, Issue 5-6, pp. 460-464 (2000).

Dimitris Kouzoudis

C. A. Grimes, K. G. Ong, K. Loiselle, P. G. Stoyanov, **D. Kouzoudis**, Y. Liu, C. Tong, and F. Tefiku, "Magnetoelastic sensors for remote query environmental monitoring," *J. Smart Mater. Struct.* 8, 639 (1999).

C. A. Grimes, **D. Kouzoudis**, K. G. Ong, and R. Crump, "Thin-film magnetoelastic microsensors for remote query biomedical monitoring", *Biomedical Microdevices* 2:1, 51-60 (1999).

**D. Kouzoudis**, M. J. Breitwisch, and D. K. Finnemore, "Edge barrier pinning for a single superconducting vortex," *Phys. Rev. B* 60, 10508 (1999).

**D. Kouzoudis**, "Exact analytical partition function and energy levels for a Heisenberg ring of N=6 spin 1/2 sites," *J. Magn. Magn. Mater.* 189, 366-376 (1998).

J. E. Ostenson, M. J. Breitwisch, **D. Kouzoudis**, and D. K. Finnemore, "Growth of a Transient Phase during Bi(2212) to Bi(2223) Transformation", *Advances in Cryogenic Engineering (Materials)*, Vol. 44, Edited by Balachandran et al., Plenum Press, New York (1998).

**D. Kouzoudis**, "Heisenberg s=1/2 ring consisting of a prime number of atoms," *J. Magn. Magn. Mater.* 173, 259-265 (1997).

M. J. Breitwisch, **D. Kouzoudis**, J. E. Ostenson, D. K. Finnemore, and U. Balachandran, "Characterization of Interfacial Growth Between Bi(2212) and Ag Coating," *IEEE Trans. Appl. Super.* 7, 1691 (1997).

D. K. Finnemore, Ming Xu, **D. Kouzoudis**, T. Bloomer, M. J. Kramer, S. McKernan, U. Balachandran, and P. Haldar, "Growth of nucleation sites on Pb-doped Bi(2212)," *Appl. Phys. Lett.* 68, 556 (1996).