

CURRICULUM VITAE

Personal Data

Surname: Trapalis
Name: Christos
Nationality: Greek
Languages: Greek, English
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Career/Employment

2005 - now Senior Researcher, Head of “Laboratory of Nanofunctional and Nanocomposite Materials”, Institute of Materials Science, NCSR Demokritos
2000-2005 Research associate, Sol-Gel Laboratory, IMS, NCSR Demokritos
1996-2000 Postdoctoral Researcher, Sol-Gel Laboratory, IMS, NCSR “Demokritos”

Education

1987-1991 **Ph.D. in Chemistry.** "University of Chemical Technology and Metallurgy", Sofia.
1978-84 **B. Sc. Chemical Engineer.** "Higher Institute of Chemical Technology and Metallurgy", Sofia.

Teaching Experience

2009- now **Hellenic Open University.** School of Science & Technology, teaching of “Physical Chemistry”.
2004- 2008 **Aegean University.** Department of Products Design Engineering, Ermoupolis, Syros. Professor in “Materials Technology” and “New Materials”.
1994-2004 **Higher Technological Educational Institute – Athens.** Prof. in: “Physical Chemistry”, “Technology of Glass and Ceramics”, “Conservation of Archaeological Findings”.

Scientific Interests

Visible Light Active Photocatalysts, Nanostructured Powders and Coatings, CNT and Graphenes/Oxide Nanocomposites, Metal – Oxide Nanocomposites, Hybrid organic – Inorganic Materials, Magnetic Nanoparticles,

Reviewer in International Refereed Journals including: Acta Biomaterialia, Applied Catalysis B: Environmental, Catalysis Communications, Chemical Engineering Journal, Journal of Catalysis, Journal of the American Chemical Society, J. Molecular Catalysis A: Chemical, J. Sol-Gel Science and Technology, J. Non-Crystalline Solids, J. Solid State Chemistry, Langmuir, Materials Science and Engineering B, Materials Chemistry, Materials Chemistry and Physics, Microporous & Mesoporous Materials, Thin Solid Films.

Publications

(a)	Number of papers in refereed journals:	73
(b)	Number of communications to scientific meetings:	65
(c)	Patents:	5, (2 Greek)
(d)	Citations:	> 800
(e)	H-factor:	17

Selected Publications in Refereed Journals

1. “The threonine effect on calcium phosphate preparation from a solution containing Ca/P = 1.33 molar ratio”, Mahmud, K., Mitsionis, A., Vaimakis, T., Kourkoumelis, N., **Trapalis, C., Ceramics International, 2010, 36, 6, 1893-1899.**

2. "Photocatalytic Degradation of Mecoprop and Clopyralid in Aqueous Suspensions of Nanostructured N-doped TiO₂", D. Šojić, V. Despotović, B. Abramović, Nadia Todorova, T. Giannakopoulou and C. Trapalis, **Molecules**, **2010**, **15**, **5**, **2994-3009**.
3. "Organic functionalisation of graphenes", Georgakilas, V., Bourlinos, A.B., Zboril, R., Steriotis, T.A., Dallas, P., Stubos, A.K., Trapalis, C., **Chemical Communications**, **2010**, **46**, **10**, **1766-1768**.
4. "The effect of citric acid on the sintering of calcium phosphate bioceramics", Mitsionis, A.I., Vaimakis, T.C., Trapalis, C.C., **Ceramics International**, **2010**, **36**, **2**, **623-634**.
5. "Aqueous-phase exfoliation of graphite in the presence of polyvinylpyrrolidone for the production of water-soluble graphenes", A.B. Bourlinos, V. Georgakilas, R. Zboril, T.A. Steriotis, A.K. Stubos, C. Trapalis, **Solid State Communications**, **2009**, **149**, **47-48**, **2172-2176**.
6. "Description of TiO₂ thin films treated in NH₃ atmosphere by optical dispersion models", Giannakopoulou T, Todorova N, Osiceanu P, Lagoyannis A., Vaimakis, T., Trapalis, C., **Thin Solid Films**, **2009**, **517**, **24**, **6694-6699**.
7. "Removal of Reactive Red 195 from aqueous solutions by adsorption on the surface of TiO₂ nanoparticles", Belessi V, Romanos G, Boukos N, Lambropoulou, D., Trapalis, C., **J. Hazardous Materials**, **2009**, **170**, **2-3**, **836-844**.
8. "Atomic force microscopy study of TiO₂ sol-gel films thermally treated under NH₃ atmosphere", C. Trapalis, N. Todorova, M. Anastasescu, C. Anastasescu, M. Stoica, M. Gartner, M. Zaharescu, T. Stoica, **Thin Solid Films**, **2009**, **517**, **23**, **6243-6247**.
9. "Experimental investigation of electric and magnetic responses in composites with dielectric resonator inclusions at microwave frequencies", Giannakopoulou, T., Niarchos, D., Trapalis, C., **Applied Physics Letters**, **94**, **24**, **art. no. 242506**.
10. "Polypyrrole/MWNT nanocomposites synthesized through interfacial polymerization", Vasilios Georgakilas, Panagiotis Dallas, Dimitrios Niarchos, N. Boukos, Christos Trapalis, **Synthetic Metals**, **2009**, **159**, **7-8**, **632-636**.
11. "The effect of thermal treatment on antibacterial properties of nanostructured TiO₂(N) films illuminated with visible light", C. Vacaroiu, M. Enache, M. Gartner, G. Popescu G, A. Brezeanu, T. Giannakopoulou, N. Todorova, C. Trapalis, **World Journal of Microbiology & Biotechnology**, **2009**, **25**, **1**, **27-31**.
12. "Study of fluorine-doped TiO₂ sol-gel thin coatings", T. Giannakopoulou, N. Todorova, T. Vaimakis, C. Trapalis, **J. Solar Energy Engineering-Transactions of the ASME**, **2008**, **130**, **4**, **ID: 041007**.
13. "Structure tailoring of fluorine-doped TiO₂ nanostructured powders" N. Todorova, T. Giannakopoulou, T. Vaimakis, C. Trapalis, **Materials Science and Engineering: B, Advanced Functional Solid-State Materials**, **2008**, **152**, **1-3**, **50-54**.
14. "Electrical conductivity and photoconductivity studies of TiO₂ sol-gel thin films and the effect of N-doping", K. Pomoni, A. Vomvas, C. Trapalis, **J. Non-Cryst. Solids**, **2008**, **354**, **35-39**, **4448-4457**.
15. "Multipurpose Organically Modified Carbon Nanotubes: From Functionalization to Nanotube Composites", V. Georgakilas, A. Bourlinos, D. Gournis, T. Tsoufis, C.

- Trapalis, A. Mateo-Alonso, and M. Prato, J. Am. Chem. Soc., 2008, 130, 27, 8733-8740.**
16. "Synthesis, Characterization and Aspects of Superhydrophobic Functionalized Carbon Nanotubes" Vasilios Georgakilas, Athanasios B. Bourlinos, Radek Zboril, and **Christos Trapalis, Chem. Mater. 2008, 20 (9), p.2884-2886.**
 17. "One-step solid state synthesis of capped γ -Fe₂O₃ nanocrystallites", R. Zboril, A. Bakandritsos, M. Mashlam, V. Tzotzios, P. Dallas, **C. Trapalis, D. Petridis, Nanotechnology, 2008, 19, 9, art. no. 095602.**
 18. "Doped Sol-Gel TiO₂ Films for Biological Applications", M. Gartner, **C. Trapalis, N. Todorova, T. Giannakopoulou, G. Dobrescu, M. Anastasescu, P. Osiceanu, A. Ghita, M. Enache, L. Dumitru, T. Stoica, M. Zaharescu, J.Y. Bae, S.H. Suh, Bull. Korean Chem. Soc. 2008, 29, 5, 1038.**
 19. "Investigation on the nitrogen doping of multilayered, porous TiO₂ thin films", M. Gartner, P. Osiceanu, M. Anastasescu, T. Stoica, T.F. Stoica, **C. Trapalis, T. Giannakopoulou, N. Todorova, A. Lagoyannis, Thin Solid Films, 2008, 516, 22, 8184-8189.**
 20. "Dark conductivity and transient photoconductivity of nanocrystalline undoped and N-doped TiO₂ sol-gel thin films", K.Pomoni, A.Vomvas and **C. Trapalis, Thin Solids Films, 2008, 516, 6, 1271-1278.**
 21. "Preparation of Fluorine-Doped TiO₂ Photocatalysts with Controlled Crystalline Structure", N. Todorova, T. Giannakopoulou, G. Romanos, T. Vaimakis, Jiaguo Yu, **C. Trapalis, Int. J. of Photoenergy, 2008, ID 534038, 1-9.**
 22. "Calorimetric Study of the Dissolution Kinetics of Calcareous Phosphate Ores using Dilute Acetic Acid Solutions", T.C. Vaimakis, E.D. Economou and **C.C. Trapalis, J. Thermal Anal. & Calorim., 2008, 92, 3, 783-789.**
 23. "Photoconductivity in sol-gel TiO₂ thin films with and without ammonia treatment", Vomvas A, Pomoni K, **Trapalis C, et al., Materials Science-Poland, 2007, 25, 3, 809-816.**
 24. "Sintering of Hydroxyapatite Lath-like Powders", G.C. Koumoulidis, **C.C. Trapalis, and T.C. Vaimakis, J. Thermal Anal. & Calorim., 2006, 84, 1, 165-174.**
 25. "Thermal behavior of Fe₂O₃/TiO₂ Mesoporous Gels", V. Balek, N. Todorova, **C. Trapalis et al. J. Ther. Analysis and Calorimetry, 2005, 80, 503-509.**
 26. "Effect of fluorine doping and SiO₂ under-layer on the optical properties of TiO₂ thin films", T. Giannakopoulou, N. Todorova, **C. Trapalis and T. Vaimakis, Materials Letters, 2007, 61, 23-24, 4474-4477.**
 27. "Effects of Calcination Temperature on the Microstructures and Photocatalytic Activity of Titanate Nanotubes", J. Yu, H. Yu, B. Cheng, **C. Trapalis, Journal of Molecular Catalysis A: Chemical, 2006, 249, 1-2, 135-142.**
 28. "TiO₂(Fe³⁺) Nanostructured Thin Films with Antibacterial Properties", **C.C. Trapalis, P. Keivanidis, G. Kordas, M. Zaharescu, M. Crisan, A. Szatvanyi, M. Gartner, Thin Solid Films, 433, 1, 186-190, 2003.**