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Curriculum Vitae

Athanasios Ladavos

Rank: Professor

Knowledge Area: General Chemistry

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Academic Titles

- B.Sc. in Chemistry, 1987, Chemistry Department, University of Ioannina
- PhD, 1992, Chemistry Department, University of Ioannina (title:Catalytic activity characterization of perovskite-type oxides $La_{2-x}Sr_xNiO_4$ and relative forms supported on various supports)

Research Interests

- Hybrid organic-inorganic nanocomposites. Synthesis / structure characterization. Investigation of mechanical and barrier properties.
- Preparation and characterization of mixed oxides catalysts. Catalytic activity studies of reactions with environmental interest.
- Development of porosity's characterization methods
- Geographic origin of agricultural products via isotopic ratio of stable isotopes estimation.

Reviewer in International Journals

- ✓ Applied Catalysis A: General
- ✓ Applied Catalysis B: Environmental
- ✓ Langmuir
- ✓ Journal Applied Polymer Science
- ✓ Composite Science and Technology
- ✓ Journal Composite Materials
- ✓ New Journal of Chemistry
- ✓ Microporous & Mesoporous Materials
- ✓ Journal of Polymer Research
- ✓ Materials Chemistry & Physics
- ✓ Catalysis Communications
- ✓ Reaction Kinetics Mechanisms & Catalysis
- ✓ Energy & Fuels
- ✓ Chemical Communications
- ✓ RCS-Advances
- ✓ Ceramics International
- ✓ Industrial & Engineering Chemistry Research
- ✓ Journal of Materials Chemistry A

- ✓ Carbohydrate Polymers
- ✓ PCCP
- ✓ ACS Sustainable Chemistry & Engineering
- ✓ International Journal of Biological Macromolecules
- ✓ Polymers
- ✓ Progress in Organic Coatings
- ✓ Food Hydrocolloids
- ✓ Journal of Physics and Chemistry of Solids

Publications in peer reviewed International Journals

1. "Comparative study of the solid state and catalytic properties of $\text{La}_{2-x}\text{Sr}_x\text{NiO}_{4-\lambda}$ perovskites ($x=0.00$ to 1.50) prepared by the nitrate and citrate method." A.K.Ladavos and P.J.Pomonis, J. Chem. Soc Faraday Trans., 87(19), 3291-3297, 1991.
2. "Intercalation of La_2O_3 and $\text{La}_2\text{O}_3\text{-NiO}$ Oxidic Species into Montmorillonite layered structure." A.K.Ladavos and P.J.Pomonis. G.Poncelet, P.A.Jacobs, P.Grance and B.Delmon (Editors), Studies in Surface Science and Catalysis "Preparation of Catalysts V", Elsevier, Amsterdam, p.p. 319-328, 1991.
3. "Catalytic Activity of Perovskite Species LaNiO_x Intercalated into Montmorillonite as Compared to Non-intercalated Ones." A.K.Ladavos, P.J.Pomonis, S.P.Skaribas., Materials Science Forum Vols. 91-93, pp.799-804, (1992).
4. "Catalytic Combustion of Methane on $\text{La}_{2-x}\text{Sr}_x\text{NiO}_{4-\lambda}$ ($x=0.00-1.50$) Perovskites Prepared via the Nitrate and Citrate Routes" A.K.Ladavos and P.J.Pomonis, J. Chem. Soc Faraday Trans., 88(17), 2557-2562, 1992.
5. "Effects of substitution in perovskites $\text{La}_{2-x}\text{Sr}_x\text{NiO}_{4-\lambda}$ on their catalytic action for the $\text{NO}+\text{CO}$ reaction." A.K.Ladavos and P.J.Pomonis, Applied Catalysis B, Environmental, 1 (1992) 101-116.
6. "De- NO_x process in the presence of CO on perovskites La-Ni-O supported on Al_2O_3 and ZrO_2 ", A.K.Ladavos and P.J.Pomonis, Catalysis Today, 17 (1993) 181-188.
7. "Structure and Catalytic Activity of Perovskites La-Ni-O Supported on Alumina and Zirconia", Athanasios K.Ladavos and Philip J.Pomonis, Applied Catalysis B, Environmental, 2 (1993) 27-47.
8. "Red-ox Treatment of an Fe/Al Pillared Montmorillonite. A Moessbauer Study", T.Bakas, A.Moukarika, V.Papaefthymiou, A.Ladavos and N.-H.J.Gangas, Clays and Clay Minerals, Vol.42, No.5, 634-642, 1994.
9. "Surface Characteristics and Catalytic Activity of Al-Pillared (AZA) and Fe-Al-Pillared (FAZA) Clays for isopropanol Decomposition", A.K.Ladavos, P.N.Trikalitis and P.J.Pomonis, Journal of Molecular Catalysis, A:Chemical, 106 (1996) 241-254.
10. "Mechanistic aspects of $\text{NO}+\text{CO}$ reaction on $\text{La}_{2-x}\text{Sr}_x\text{NiO}_{4-\delta}$ ($x=0.00-1.50$) perovskite-type oxides". A.K.Ladavos and P.J.Pomonis, Applied Catalysis, A:General, 165 (1997), 73-85.
11. "Synthesis, Characterization and Catalytic Activity of La_yMO_x ($M=\text{Ni}, \text{Co}$) Perovskite-type Particles Intercalated in Clay via Heterobinuclear Complexes", A.K. Ladavos, F. Kooli, S. Moreno, S.P. Skaribas, P.J. Pomonis, W. Jones, and G. Poncelet, Applied Clay Science, 13 (1998), 49-63.

12. "Structure and Catalytic Activity of $\text{La}_{1-x}\text{FeO}_3$ system ($x=0.00, 0.05, 0.10, 0.15, 0.20, 0.25, 0.35$) for the $\text{NO}+\text{CO}$ Reaction", V.C.Belessi, P.N.Trikalitis, A.K.Ladavos, T.V.Bakas and P.J.Pomonis, *Applied Catalysis, A:General*, 177 (1999), 53-68.
13. "Preparation, characterization and surface acid catalytic activity of microporous clays pillared with $\text{Al}_{1-x}\text{Fe}_x\text{O}_y$ ($x=0.00$ to 1.00) oxidic species", V.N.Stathopoulos, A.K.Ladavos, K.M.Kolonia, S.P.Skaribas, D.E.Petrakis and P.J.Pomonis, *Microporous and Mesoporous Materials*, 31 (1999), 111-121.
14. 'Al-pillared acid-activated montmorillonite modified electrodes', P.Falaras, F.Lezou, P.Pomonis and A.Ladavos, *Electroanalytical Chemistry*, 486 (2000) 156-165.
15. Kinetics of Methane Oxidation Over La-Sr-Ce-Fe-O Mixed Oxide Solids', V.C.Belessi, A.K.Ladavos, G.Armatas and P.J.Pomonis, *Phys. Chem. Chem. Phys.*, 3 (2001) 3856-3862.
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22. 'A new method for microporosity detection based on the use of the corrugated pore structure model (CPSM)', C.E.Salmas, V.N.Stathopoulos, A.K.Ladavos, P.J.Pomonis and G.Androutsopoulos, *Studies in Surface Science and Catalysis*, 114 (2002) 27-34.
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 33. “A Novel method for estimating the C-values of the BET Equation in the whole range $0 < P/P_0 < 1$ using a Scatchard – type Treatment of it”, P. J. Pomonis, D. E. Petrakis, **A. K. Ladavos**, K. M. Kolonia, G. S. Armatas, S. D. Sklari, P. C. Dragani, A. Zarlaha, V. N. Stathopoulos and A. T. Sdoukos, *Microporous and Mesoporous Materials*, Volume 69, Issues 1-2, 8 April 2004, Pages 97-107.
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