

Ermete Antolini Calcagno

Born: Cogoleto (Genova), 26/09/1951

Address: via 25 aprile 22, 16016 Cogoleto (Genova) Italy

Email: ermantol@libero.it

Tel: ++39 370 310 1994

Ermete Antolini received his PhD in Chemistry from the University of Genova, Italy. He worked at Ansaldo Ricerche, Genova, Italy, ENEA, Roma, Italy and Scuola Scienza Materiali, Genova, Italy. He was a visiting professor at Ecole National de Chimie, Paris, France, 1999, and at Institute of Chemistry of USP, Sao Carlos, Brazil, 2001-2010. He has over 160 scientific publications with more than 19000 total citations and an H-index of 66 (GoogleScholar). He was recognized a Highly Cited Researcher 2014 by Thomson Reuters (ISI Web of Knowledge), and was in the World's Top 2% Scientists list, 2020, the first of Italians in the Enabling & Strategic Technologies field and in the Energy subfield. He is a member of the Editorial Boards of Applied Catalysis B: Environmental and Catalysts. His research interests focus on the development of materials for heterogeneous catalysis with emphasis on fuel cell catalysts.

Last 20 publications

- 1) Antolini, E., Low molecular weight alkane-fed solid oxide fuel cells for power and chemicals cogeneration, *J. Energy Chem.* **2023**, 80, 711-735.
- 2) Maia, V.A., Santos, C.M.G., Azeredo, N.F.B., Antolini, E., Neto, A.O., de Souza, R.F.B., Conversion of nitrogen to ammonia using a Cu/C electrocatalyst in a polymeric electrolyte reactor, *Electrochem. Comm.* **2023**, 146, 107421.
- 3) Antolini, E., Direct propane fuel cells, *Fuel* **2022**, 315, 123152.
- 4) de Souza, R.F.B., Florio, D.Z., Antolini, E., Neto, A.O., Partial Methane Oxidation in Fuel

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- 5) Pereira, C.V., Maia, V.A., Zambiasi, P.J., (...), Antolini, E., Neto, A.O., PtSb/C electrocatalysts for glycerol oxidation in alkaline electrolyte, *Results Chem.* **2022**, 4,100375
- 6) Antolini, E., External abiotic glucose fuel cell, *Sust. Energy Fuels* **2021**, 5, 5038-5060.
- 7) Venturini, S.I., Antolini, E., Perez, J., Effect of CeO₂ presence on the electronic structure and the activity for ethanol oxidation of carbon supported Pt, *Catalysts* **2021**, 11, 579.
- 8) Fontes, E.H., Ramos, C.E.D., Ottoni, C.A., de Souza, R.F.B., Antolini, E., Neto, A.O., Glycerol dehydrogenation steps on Au/C surface in alkaline medium: An in-situ ATR-FTIR approach, *Renew. Energy* **2021**, 167, 954-959.
- 9) Antolini, E., Lignocellulose, Cellulose and Lignin as Renewable Alternative Fuels for Direct Biomass Fuel Cells, *ChemSusChem* **2021**, 14, 189-207.
- 10) Marinho, V.L., Antolini, E., Giz, M.J., Camara, G.A., Pocrifka, L.A., Passos, R.R., Ethylene glycol oxidation on carbon supported binary PtM (M = Rh, Pd an Ni) electrocatalysts in alkaline media, *J. Electroanal. Chem.* **2021**, 880, 114859.
- 11) Santos, M.C.L., Godoi, C.M., Kang, H.S., de Souza, R.F.B., Ramos, A.S., Antolini, E., Neto, A.O., Effect of Ni content in PdNi/C anode catalysts on power and methanol co-

- generation in alkaline direct methane fuel cell type, *J. Colloid Interface Sci.* **2020**, 578, 390-401.
- 12) Gonzalez, M.E., Antolini, E., Perez, J., CO tolerance and stability of graphene and N-doped graphene supported Pt anode electrocatalysts for polymer electrolyte membrane fuel cells, *Catalysts* **2020**, 10, 597.
 - 13) Gonzalez, M.E., Antolini, E., Perez, J., CO tolerance and stability of PtRu and PtRuMo electrocatalysts supported on N-doped graphene nanoplatelets for polymer electrolyte membrane fuel cells, *Int. J. Hydrogen Energy* **2020**, 45, Pages 5276-5284.
 - 14) Antolini, E., Glycerol electro-oxidation in alkaline media and Alkaline direct glycerol fuel cells, *Catalysts* **2019**, 9, 980.
 - 15) Antolini, E., Photoelectrocatalytic fuel cells and photoelectrode microbial fuel cells for wastewater treatment and power generation, *J. Environ. Chem. Eng.* **2019**, 7, 103241.
 - 16) Santos, N.A., Corradini, P.G., Antolini, E., Perez, J., Effect of MgO coverage on the synthesis and thermal treatment of Pt-Sn/C catalysts, *Mater. Lett.* **2019**, 244, 6-9.
 - 17) Antolini, E., Effect of Atomic Ordering on the Activity for Methanol and Formic Acid Oxidation of Pt-Based Electrocatalysts, *Energy Technology* **2019**, 7, 1800553.
 - 18) Kalantary, R.R., Moradi, M., Pirsahab, M., (...), Antolini, E., Dragoi, E.-N., Enhanced photocatalytic inactivation of E. coli by natural pyrite in presence of citrate and EDTA as effective chelating agents: Experimental evaluation and kinetic and ANN models, *J. Environ. Chem. Eng.* **2019**, 7, 102906.
 - 19) González-Hernández, M., Antolini, E., Perez, J., Synthesis, characterization and CO tolerance evaluation in PEMFCs of Pt₂RuMo electrocatalysts, *Catalysts* **2019**, 9, 61.
 - 20) Antolini, E., Photo-assisted methanol oxidation on Pt-TiO₂ catalysts for direct methanol fuel cells: A short review, *Appl. Catal. B.: Environ.* **2018**, 237, 491-503.