

Curriculum Vitae

Dr. YAN-XIN CHEN

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Education:

Postdoctoral Fellow, Jan.2013 –

University of Ulm, Germany

PhD Candidate, in Photochemistry & Electrochemistry, Jan.2010 – Dec.2012

Department of Chemical and Pharmaceutical Sciences, Trieste University, Trieste 34127, Italy & Institute of Chemistry of Organometallic Compounds - National Research Council of Italy (ICCOM-CNR), Sesto Fiorentino 50019, Florence, Italy

Thesis: *“Nanostructured TiO₂ Based Materials for electrocatalysis and Phototelectrocatalysis”*

Supervisor: Prof. Dr. Paolo Fornasiero

Tutors: Prof. Dr. Francesco Vizza, Prof. Dr. Claudio Bianchini, Dr. Alessandro Lavacchi

Master of Science, in Physical Chemistry, Sep. 2005 – Sep. 2009

Department of Chemistry, College of Chemistry and Chemical Engineering, Xiamen University, Xiamen 361005, China

Thesis: *“Electrochemically shape-controlled synthesis of Fe nanoparticles, their structural characterization and properties”* (Excellent Grade)

Supervisor: Prof. Dr. Shi-Gang Sun

List of selected publications:

- (1) **Yan-Xin Chen**, Alessandro Lavacchi, Sheng-Pei Chen, Francesco di Benedetto, Manuela Bevilacqua, Claudio Bianchini, Paolo Fornasiero, Massimo Innocenti, Marcello Marelli, Werner Oberhauser, Shi-Gang Sun, Francesco Vizza “Electrochemical Milling and Faceting: Size

- Reduction and Catalytic Activation of Palladium Nanoparticles”, *Angew. Chem. Int. Ed.*, Vol. 51, Issue 34, (2012) 8500-8504.
- (2) **Yan-Xin Chen**, Sheng-Pei Chen, Zhi-You Zhou, Na Tian, Yan-Xia Jiang, Shi-Gang Sun, Yong Ding, Zhong Lin Wang “Tuning the Shape and Catalytic Activity of Fe Nanocrystals from Rhombic Dodecahedra and Tetragonal Bipyramids to Cubes by Electrochemistry”, *J. AM. CHEM. SOC.*, Vol. 131, Issue 31, (2009) 10860-10862.
 - (3) **Yan-Xin Chen**, Sheng-Pei Chen, Qing-Song Chen, Zhi-You Zhou, Shi-Gang Sun, “Electrochemical preparation of iron cuboid nanoparticles and their catalytic properties for nitrite reduction”, *Electrochimica Acta*, Vol. 53, Issue 23, (2008) 6938-6943.
 - (4) Valentina Bambagioni, Claudio Bianchini, **YanXin Chen**, Jonathan Filippi, Paolo Fornasiero, Massimo Innocenti, Alessandro Lavacchi, Andrea Marchionni, Werner Oberhauser, Francesco Vizza “Energy Efficiency Enhancement of Ethanol Electrooxidation on Pd-CeO₂/C in Passive and Active Polymer Electrolyte-Membrane Fuel Cells”, *ChemSusChem*, Vol. 5, Issue 7, (2012) 1266-1273.
 - (5) A Marchionni, M Bevilacqua, C Bianchini, **YanXin Chen** J Filippi, P Fornasiero, A Lavacchi, H Miller, LQ Wang, F Vizza, “Electrooxidation in Alkaline Media of Ethylene Glycol and Glycerol on Pd-(Ni-Zn)/C Anodes in Direct Alcohol Fuel Cells”, *ChemSusChem*, Vol. 6, Issue 3, (2013) 390-390.
 - (6) A Marchionni, M Bevilacqua, C Bianchini, **YanXin Chen** J Filippi, P Fornasiero, A Lavacchi, H Miller, LQ Wang, F Vizza, “Electrooxidation of Ethylene Glycol and Glycerol on Pd-(Ni-Zn)/C Anodes in Direct Alcohol Fuel Cells”, *ChemSusChem*, Vol. 6, Issue 3, (2013) 518-528
 - (7) Lianqin Wang, Manuela Bevilacqua, Yan-Xin Chen, Jonathan Filippi, Massimo Innocenti, Alessandro Lavacchi, Andrea Marchionni, Hamish Miller, Francesco Vizza, “Enhanced electro-oxidation of alcohols at electrochemically treated polycrystalline palladium surface”, *Journal of Power Sources*, Vol. 242, 15 November, (2013) 872-876
 - (8) Qing-Song Chen, Shi-Gang Sun, Zhi-You Zhou, **Yan-Xin Chen**, Shi-Bin Deng, “CoPt nanoparticles and their catalytic properties in electrooxidation of CO and CH₃OH studied by in situ FTIRS”, *Phys Chem Chem Phys*, Vol.10, Issue.25, (2008), 3645-3654.
 - (9) CHEN Sheng-pei, **CHEN Yan-xin**, HUANG Tao, HOU Xiao-wen, SUN Shi-gang, “Influence of Electrolyte on the Preparation and Electrocatalytic Properties of Pt/GC Electrodes”, *Electrochemistry*, Vol.13, Issue.1, (2007) 77-81.
 - (10) WANG Jie-Ying, **CHEN Yan-Xin**, CHEN Sheng-Pei, WANG Peng, SUN Shi-Gang, “Electrochemical preparation of PtFe/GC nanoparticle and their electrocatalytic properties for nitrite reduction”, *Chinese Journal of Applied Chemistry*, Vol.27, Issue. 11, (2010), 1296-1300.
 - (11) OU Jie-lian, **CHEN Yan-xin**, LI Ming-xuan, XU Bin-bin, WANG Peng, CHEN Sheng-pei, SUN Shi-gang “Preparation and Characterization of Carbon Supported CoNi Alloy Nanoparticles Electrode and Studies of Their Electrocatalytic Properties”, *Journal of Chemical Industry and Engineering*, Vol.64, Issue. 5, (2013),1730-135.
 - (12) LI Ming-xuan, OU Jie-lian, **CHEN Yan-xin**, CHEN Sheng-pei, WANG Peng, XU Bin-bin, SUN Shi-gang “FeCo Alloy Cubic Nanoparticles and Their Electrocatalytic Properties”, *Journal of Electrochemistry*, Vol.19, Issue. 2,(2013),125-129.

- (13) Shengpei Chen, Qiao-qi Lou, Yan-Xin Chen, Shigang Sun, "Electrochemical and In- situ FTIR Studies of Maleic Acid Reduction in [BMIM]BF₄. ***Fine Chemicals***, Vol.25, Issue.11, (2008), 87-90
- (14) Shengpei Chen, Qiao-qi Lou, Yan-Xin Chen, Shigang Sun. "Electrochemical and In- situ FTIR Studies of Maleic Acid Reduction in [BMIM]BF₄ on Pt electrode", ***Journal of Chemical Industry and Engineering***, Vol.59, Issue.S1,(2008), 25-29.