

- [7] X. Hu, B.S. Brunschwig, J.C. Peters, Electrocatalytic hydrogen evolution at low overpotentials by cobalt macrocyclic glyoxime and tetraimine complexes. *J Am Chem Soc* 2007, Vol. 129, pp. 8988-8998.
- [8] H. Du, S. Gu, R. Liu, C.M. Li, Highly active and inexpensive iron phosphide nanorods electrocatalyst towards hydrogen evolution reaction. *Int J Hydrogen Energy* 2015, Vol. 40, pp. 14272-14278.
- [9] J. Kibsgaard, Z. Chen, B.N. Reinecke, T.F. Jaramillo, Engineering the surface structure of MoS₂ to preferentially expose active edge sites for electrocatalysis. *Nat Mater* 2012, Vol. 11, pp. 963-969.
- [10] F. Wang, X. Yang, B. Dong, X. Yu, H. Xue, L. Feng, A FeP powder electrocatalyst for the hydrogen evolution reaction, *Electrochem Commun* 2018, Vol. 92, pp. 33-38.
- [11] E. Leal da Silva, M.R. Ortega Vega, P.S. Correa, A. Cuña, N. Tancredi, C.F. Malfatti, Influence of activated carbon porous texture on catalyst activity for ethanol electro-oxidation, *Int J Hydrogen Energy* 2014, Vol. 39, pp. 14760-14767.
- [12] E. Leal da Silva, A. Cuña, M.R. Ortega Vega, C. Radtke, G. Machado, N. Tancredi, C.F. Malfatti, Influence of the support on PtSn electrocatalysts behavior: Ethanol electro-oxidation performance and in-situ ATR-FTIRS studies, *Appl. Catal. B* 2016, Vol. 193, pp. 170-179.
- [13] E. Leal da Silva, A. Cuña, S. Khan, J. Saldanha Marcuzzo, S. Pianaro, M. Cadorin, C. de Fraga Malfatti, Biomass Derived Carbon as Electrocatalyst Support for Ethanol Oxidation Reaction in Alkaline Medium: Electrochemical and Spectroelectrochemical Characterization, *Waste and Biomass Valorization* 2018. <https://doi.org/10.1007/s12649-018-0510-8>
- [14] R.K. Das, Y. Wang, S.V. Vasilyeva, E. Donoghue, I. Pucher, G. Kamenov, H-P. Cheng, A.G. Rinzler, Extraordinary Hydrogen Evolution and Oxidation Reaction Activity from Carbon Nanotubes and Graphitic Carbons. *ACS Nano* 2014, Vol. 8, pp. 8447-8456.
- [15] Y. Ito, W. Cong, T. Fujita, Z. Tang, M. Chen, High catalytic activity of nitrogen and sulfur co-doped nanoporous graphene in the hydrogen evolution reaction, *Angew. Chem. Int. Ed.* 2015, Vol. 54, pp. 2131-2136.
- [16] T.R. Lopes, D.F. Cipriano, G.R. Gonçalves, H.A. Honorato, M.A. Schettino Jr., A.G. Cunha, F.G. Emmerich, J.C.C. Freitas, Multinuclear magnetic resonance study on the occurrence of phosphorus in activated carbons prepared by chemical activation of lignocellulosic residues from the babassu production. *J Chem Environ Eng* 2017, Vol. 5, pp. 6016-6029.
- [17] J. Schwarz, C. Contescu, A. Contescu, Methods for preparation of catalytic materials, *Chem Rev* 1995, Vol. 95, pp. 477-510.
- [18] G.L. Viali, G. R. Gonçalves, E. C. Passamani, J. C. C. Freitas, M. A. Schettino Jr., A. Y. Takeuchi, C. Larica, Magnetic and hyperfine properties of Fe₂P nanoparticles dispersed in a porous carbon matrix, *J Magn Magn Mater* 2016, Vol. 401, pp. 173-179.
- [19] S. Brunauer, P. H. Emmett, E. Teller, Adsorption of gases in multimolecular layers. *J Am Chem Soc* 1938, Vol. 60, pp. 309-319.
- [20] ICDD (2010). Powder Diffraction File Inorganic and Organic Data Book, edited by Dr. Soorya Kabekkodu (International Centre for Diffraction Data, Newtown Square, PA USA), Set 60.
- [21] W.F. Chen, K. Sasaki, C. Ma, A.I. Frenkel, N. Marinkovic, J.T. Muckerman, et al. Hydrogen-evolution catalysts based on non-noble metal nickelmolybdenum nitride nanosheets. *Angew Chem Int Ed* 2012, Vol. 51, pp. 6131-6135.
- [22] Y. Xu, R. Wu, J. Zhang, Y. Shi, B. Zhang, Anion-exchange synthesis of nanoporous FeP nanosheets as electrocatalysts for hydrogen evolution reaction. *Chem Commun* 2013, Vol. 49, pp. 6656-6658.
- [23] M. Liu, L. Yang, T. Liu, Y. Tang, S. Luo, C. Liu, Y. Zeng, Fe₂P/reduced graphene oxide/Fe₂P sandwich structured nanowall arrays: a high-performance non-noble-metal electrocatalyst for hydrogen evolution. *J Mater Chem A*, 2017, Vol. 5, pp. 8608-8615.
- [24] Y. Lin, M. Liu, Y. Pan, J. Zhang, Porous Co-Mo phosphide nanotubes: an efficient electrocatalyst for hydrogen evolution. *J Mater Sci* 2017, Vol. 52, pp. 10406-10417.