Chemoselective Oxidation of Bio-Glycerol with Nano-Sized Metal Catalysts - DTU Orbit (08/11/2017)

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Glycerol, a major co-product in the process of biodiesel production, is a promising precursor to a variety of high value fine chemicals such as glyceric acid, dihydroxyacetone, lactic acid and tartronic acid via the corresponding chemoselective oxidation reactions. One of the prospective routes to selectively oxidize glycerol and yield products with good selectivity is the use of nano-sized metal particles as heterogeneous catalysts. In this short review, recent developments in chemoselective oxidation of glycerol to specific products over nano-sized metal catalysts are described. Attention is drawn to various reaction parameters such as the type of the support, the size of the metal particles, and the acid/base properties of the reaction medium which were illustrated to largely influence the activity of the nanocatalyst and selectivity to the target product. - See more at: http://www.eurekaselect.com/125706/article#sthash.gb2nV9Cq.dpuf

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