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(54) Title: A METHOD OF PREPARING A CATALYST AND A CATALYST PREPARED FROM THE METHOD

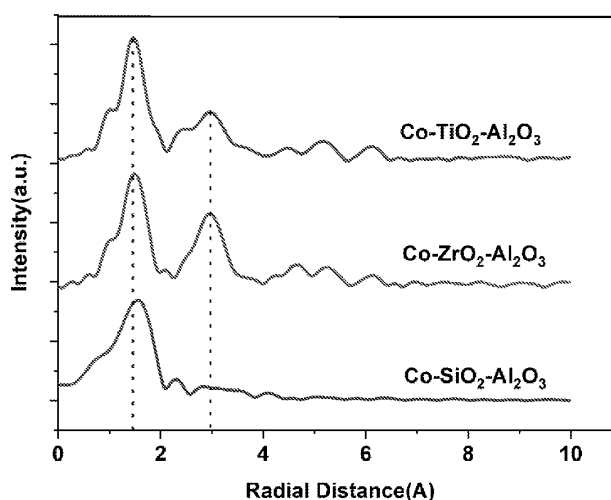


Fig. 2

(57) Abstract: There is provided herein a method of preparing a catalyst comprising the steps of: (a) adding a precursor of alumina, a precursor of heteroatom oxide and one or more precursors of metal into a solution of a surfactant to obtain a mixture; (b) filtering and/or drying the mixture of step a) to obtain a solid powder; and (c) calcining the solid powder of step b) to obtain the catalyst. There is also provided a catalyst comprising an alumina support with highly dispersed heteroatom oxide doping; and one or more metals highly dispersed within or thereon said alumina support. In a particular embodiment, the heteroatom oxide is silicon dioxide (SiO₂) and the metal is platinum (Pt), cobalt (Co), nickel (Ni), copper (Cu), gallium (Ga), tin (Sn), or their combinations thereof. In addition, there is also a process of converting propane to propylene using the catalyst as described herein.

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