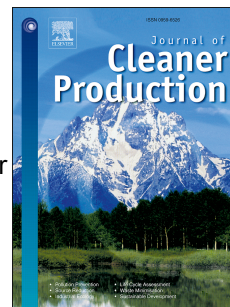


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Efficient dehydration of fructose into 5-hydroxymethylfurfural in aqueous medium over silica-included heteropolyacids

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Efficient dehydration of fructose into 5-hydroxymethylfurfural in aqueous
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ABSTRACT: The dehydration of fructose in aqueous and biphasic system was studied using heteropolyacids, immobilized in silica, as catalyst. The catalysts were characterized by ICP-AES, nitrogen sorption, NH₃-TPD, TEM, FT-IR, XRD, and TGA. The effect of different parameters, such as reaction temperature, reaction time, catalyst loading and volume ratio of water with methyl isobutyl ketone (MIBK) was studied. Silica included tungstosilicic acid

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