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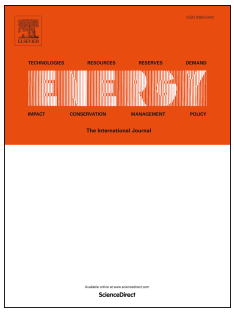

Process intensification of transesterification for biodiesel production from palm oil: Microwave irradiation on transesterification reaction catalyzed by acidic imidazolium ionic liquids

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Process Intensification of Transesterification for Biodiesel Production from Palm Oil: Microwave Irradiation on Transesterification Reaction Catalyzed by Acidic Imidazolium Ionic liquids

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Abstract

In the study, to improve the efficiency of acid-catalyzed biodiesel production process, three acidic imidazolium ionic liquids were synthesized and employed to the production of biodiesel from palm oil under microwave irradiation. The prepared ionic liquids were characterized by NMR, FT-IR and TG-DTG. Among the three ionic liquids, ([HSO_3-BMIM]HSO_4) was proved to be the most suitable catalyst because of

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