

البحث السابع

Title: Some Hardy's inequalities on conformable fractional calculus

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Abstract. In this article, we will demonstrate some Hardy's inequalities by utilizing Hölder inequality, integration by parts, and chain rule of the conformable fractional calculus. When $\alpha = 1$, we can obtain some of classical Copson's and Hardy's inequalities. In the end, we will obtain an application of Hardy's inequality utilizing the conformable fractional calculus.