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HCIO4-SiO2 Nanoparticles as an Efficient Catalyst for Three-Component Synthesis of Triazolo[1,2-A]Indazole-Triones

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Abstract : An environmentally benign protocol for the one-pot, three-component synthesis of Triazolo[1,2-a]indazole-1,3,8-trione derivatives by condensation of dimedone, urazole and aromatic aldehydes catalyzed by HClO4/SiO2 NPS as an ecofriendly catalyst with high catalytic activity and reusability at $100~^{\circ}$ C under solvent-free conditions is reported. The reaction proceeds to completion within 20-30 min in 77-86 % yield.

Keywords: one-pot reaction, dimedone, triazoloindazole, urazole

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