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ABBREVIATIONS USED

SFRC Solvent free reaction condition

MCR Multicomponent reaction

HIV Human immune virus

UV Ultra violet

TBAB Tetrabutylammonium bromide

CPTS Copper *p*-toluenesulfonate

ZBS Zinc benzenesulfonate

NPs Nanoparticles

NMR Nuclear magnetic resonance

FTIR Fourier transform infra-red spectroscopy

MS Mass spectroscopy

TGA Thermo gravimetric analysis