عنوان مقاله:

Nano silica-bonded aminoethylpiperazine as a highly efficient and reusable catalyst for the synthesis of hydrazono-۴-thiazolidinones

محل انتشار:

نهمین کنفرانس بین المللی علوم و توسعه فناوری نانو (سال: 1401)

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خلاصه مقاله:

An efficient synthesis of hydrazono-۴-thiazolidinones is reported using three-component reactions of various ketone derivatives (carbonyl compound), thiosemicarbazide and dialkyl acetylenedicarboxylate (or maleimide) in presence of nano silica-bonded aminoethylpiperazine (SB-APP) as heterogeneous catalyst. The reaction catalyst was recycled and reused without significant loss of catalytic efficiency. This eco-safe protocol offers several advantages such as a short reaction times, mild reaction conditions, excellent yield and green procedure.

کلمات کلیدی:

nano silica-bonded aminoethylpiperazine (SB-APP), heterogeneous catalyst, hydrazono-۴-thiazolidinones .