
Synthesis of novel azo-linked 5-amino-pyrazole-4-carbonitriles

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Synthesis of novel azo-linked 5-amino-pyrazole-4-carbonitriles Farhad Sedighi Pashaki Synthesis of novel azo-linked 5-amino-pyrazole-4-carbonitriles. In this research, one-pot synthesis of novel azo-linked 5-amino-pyrazole-4-carbonitriles derivatives by three-component reaction of various aromatic aldehydes, malononitrile, and phenyl hydrazine or p-tolyl hydrazine at simple grinding conditions. The products formed in excellent yields over short reaction times under an environmentally friendly conditions. Ar1: 4-cl-C₆H₄, 2-Cl-C₆H₄, 4-NO₂- C₆H₄, 4-Br-C₆H₄, 4-CH₃O- C₆H₄, 4-NO₂, 2-CH₃-C₆H₄ Ar2: C₆H₅-, P-CH₃- C₆H₄

Keywords : Multicomponent reactions, Pyrazole, 5-amino-pyrazole-4-carbonitrile azo-linker, green chemistry, grinding.

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