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Title:	Direct azidation of allylic/benzylic alcohols and ethers followed by the click reaction: One-pot synthesis of 1,2,3-triazoles and 1,2,3-triazole moiety embedded macrocycles
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Keywords:	1,2,3-Triazoles Allylic/benzylic alcohols Click reaction Magnetite
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Abstract:	Investigations on the one-pot direct azidation of allylic/benzylic alcohols or their methyl ethers followed by the click reaction are reported. Two methods involving sequential reactions were developed for synthesizing substituted 1,2,3-triazoles starting from allylic/benzylic alcohols. The first method involves magnetically separable nano Fe <sub>3</sub> O <sub>4</sub> -catalyzed direct azidation of various allylic/benzylic alcohols with TMSN <sub>3</sub> as the first step followed by the Cu-catalyzed click reaction of azides with alkynes as the second step. The second method involves Cu(OTf) <sub>2</sub> -catalyzed direct azidation of allylic/benzylic alcohols and their methyl ethers with TMSN <sub>3</sub> as the first step followed by the click reaction of azides with alkynes as the second step. In this method, Cu(OTf) <sub>2</sub> served as a single catalyst for both the azidation of alcohol and click reaction steps. Utility of this protocol has been revealed by synthesizing new classes of polyether systems and macrocycles embedded with the 1,2,3-triazole and 1,3-diyne units.
URI:	<a href="https://www.sciencedirect.com/science/article/pii/S0040402015009965">https://www.sciencedirect.com/science/article/pii/S0040402015009965</a> ( <a href="https://www.sciencedirect.com/science/article/pii/S0040402015009965">https://www.sciencedirect.com/science/article/pii/S0040402015009965</a> ) <a href="http://hdl.handle.net/123456789/2823">http://hdl.handle.net/123456789/2823</a> ( <a href="http://hdl.handle.net/123456789/2823">http://hdl.handle.net/123456789/2823</a> )
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