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GOLD-CATALYZED ONE-POT SYNTHESIS OF SUBSTITUTED OXAZOLES FROM 3-TRIMETHYLSILYL PROPARGYLIC ALCOHOLS AND AMIDES

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Oxazole is a structural motif in huge number of natural products and biologically active compounds. Among the numerous procedures reported for the synthesis of substituted oxazoles, cycloisomerization of propargylic amides to substituted oxazoles has attracted much attention. On the other hand, the one-pot synthesis of substituted oxazoles directly from propargylic alcohols and amides *via* propargylic amides as intermediates remains a challenging task, although both propargylic substitution and subsequent cycloisomerozation might proceed effectively under the same reaction conditions. Herein, we present the one-pot synthesis of substituted oxazoles by gold-catalyzed propargylic substitution followed by cycloisomerization promoted by β-cation-stabilizing effect of the silicon atom of 3-trimethylsilyl propargylic alcohols.

Biography

Nobuyoshi Morita was born in Iruma, Saitama, Japan in 1973. He received his B.S. degree from Meiji Pharmaceutical University (Prof. Dr. Masanori Sakamoto) in 1997 and his Ph. D. degree from Osaka University (Prof. Dr. Yasuyuki Kita) in 2003. After three years (2003-2006) postdoctoral work at Dortmund University of Technology in Germany (Prof. Dr. Norbert Krause), he was then recruited as Assistant Professor of organic chemistry in Showa Pharmaceutical University (Prof. Dr. Osamu Tamura) in 2006 and became an Associate Professor of organic chemistry in Showa Pharmaceutical University in 2016.

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