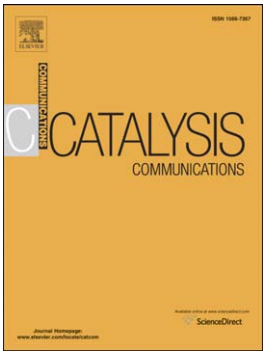

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Efficient copper catalysts for C–H bond arylation under microwave heating: direct access to multi-substituted pivanilides

Hyun Ji Yang [a, 1], Bijoy P. Mathew [a, b, 1], Dong Gun Oh [a], Kyungjae Myung [b], Ja Hun Kwak [a, *], Sung You Hong [a, b, *]

[a] *School of Energy and Chemical Engineering, Ulsan National Institute of Science and Technology (UNIST), UNIST-gil 50, Ulsan 689-798, Republic of Korea*

[b] *Center for Genomic Integrity (CGI), Institute for Basic Science (IBS), UNIST-gil 50, Ulsan 689-798, Republic of Korea*

[c] *School of Life Science, UNIST, UNIST-gil 50, Ulsan 689-798, Republic of Korea*

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* Corresponding authors. Tel.: +82 52 217 2528; fax: +82 52 217 2649

Email addresses: jhkwak@unist.ac.kr (J.H. Kwak), syhong@unist.ac.kr (S.Y. Hong)

[1] These authors equally contributed to this work.

ABSTRACT

We herein describe a parallel comparison between homogeneous and heterogeneous copper catalysts for microwave-assisted direct C–H bond arylation. These catalytic systems feature enhanced catalytic activities, unique bulky ligand/base effects, mild conditions, and operational simplicity with reduced catalyst loadings and shortened reaction times. A wide range of synthetically challenging multi-substituted pivanilides was directly assembled. Remarkably,