

Accepted Manuscript

Facile C–H Arylation using Catalytically Active Terminal Sulfurs of 2 Dimensional Molybdenum Disulfide

Eunhee Hwang, Sae Mi Lee, Sora Bak, Hee Min Hwang, Hyunjung Kim, Hyoyoung Lee

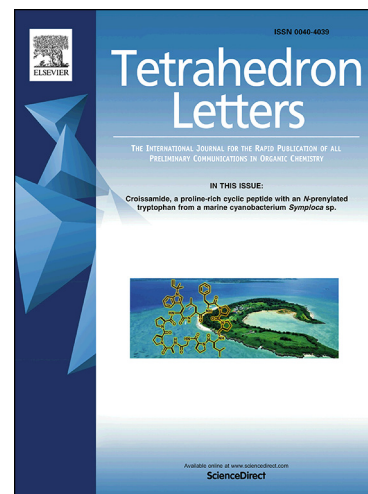
PII: S0040-4039(18)31156-0
DOI: <https://doi.org/10.1016/j.tetlet.2018.09.054>
Reference: TETL 50293

To appear in: *Tetrahedron Letters*

Received Date: 13 August 2018
Revised Date: 19 September 2018
Accepted Date: 20 September 2018

Please cite this article as: Hwang, E., Mi Lee, S., Bak, S., Min Hwang, H., Kim, H., Lee, H., Facile C–H Arylation using Catalytically Active Terminal Sulfurs of 2 Dimensional Molybdenum Disulfide, *Tetrahedron Letters* (2018), doi: <https://doi.org/10.1016/j.tetlet.2018.09.054>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Facile C–H Arylation using Catalytically Active Terminal Sulfurs of 2 Dimensional Molybdenum Disulfide

Eunhee Hwang^{a, b, †}, Sae Mi Lee^{a, b, †}, Sora Bak^{a, b}, Hee Min Hwang^{a, c}, Hyunjung Kim^{a, d}, and Hyoyoung Lee^{a, b, c, d*}

^a*Centre for Integrated Nanostructure Physics (CINAP), Institute of Basic Science (IBS), 2066 Seoburo, Jangan-gu, Suwon 16419, Republic of Korea*

^b*Department of Chemistry, Sungkyunkwan University, 2066 Seoburo, Jangan-gu, Suwon 16419, Republic of Korea*

^c*Department of Energy Science, Sungkyunkwan University, 2066 Seoburo, Jangan-gu, Suwon 16419, Republic of Korea*

^d*Skku Advanced Institute of Nanotechnology(SAINT), Sungkyunkwan University, 2066 Seoburo, Jangan-gu, Suwon 16419, Republic of Korea.*

[†]*These authors contributed equally to this work.*

** Corresponding Author, E-mail: hyoyoung@skku.edu; Fax: +82-031-290-5934; Tel: +82-031-299-4566.*

Abstract

The first methodology of C-H arylation of heteroarene via 2D transition metal dichalcogenides that have catalytically active edge functional groups was described. The terminal sulfur groups could effectively catalyze a formation of an azo-linked intermediate with aryl diazonium salts, leading to produce heteroarenes with good yields. This novel methodology using bulk 2D transition metal dichalcogenides that have

Download English Version:

<https://daneshyari.com/en/article/11011521>

Download Persian Version:

<https://daneshyari.com/article/11011521>

[Daneshyari.com](https://daneshyari.com)