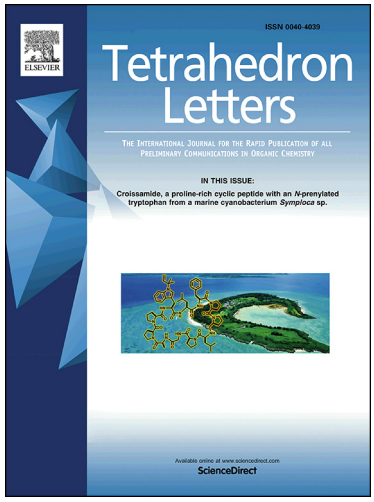

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Facile C–H Arylation using Catalytically Active Terminal Sulfurs of 2 Dimensional Molybdenum Disulfide

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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