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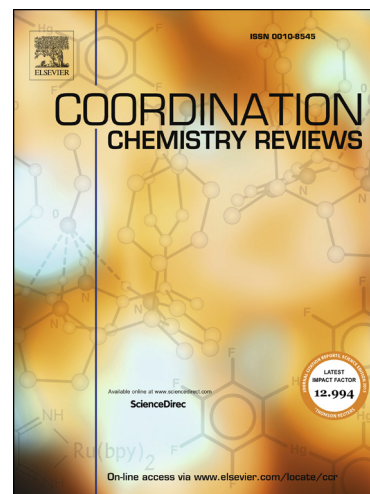
Transition Metal Catalyzed Element-Element' Additions to Alkynes

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Transition Metal Catalyzed Element-Element' Additions to Alkynes

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ABSTRACT

The efficient and stereoselective synthesis of, or precursors to multi-substituted alkenes has attracted substantial interest due to their existence in various industrially and biologically important compounds. One of the most atom economical routes to such alkenes is the transition metal catalyzed hetero element-element' π -insertion into alkynes. This article provides a thorough up-to-date review on this area of chemistry, including discussions on the mechanism, range of E-E' bonds accessible and the stoichiometric/catalytic transition metal mediators employed.

KEYWORDS: Alkynes, Alkenes, Element-Element bonds, Catalysis, Transition Metal

CONTENTS

1	Introduction.....	3
2	Transition Metal Mediated E-E' Additions to Alkynes	6
2.1	Mechanism.....	6
2.2	Silicon-Silicon (Si-Si)	7
2.2.1	Palladium.....	7
2.2.2	Platinum	13
2.2.3	Gold	15
2.2.4	Iron.....	16
2.2.5	Nickel.....	17
2.2.6	Rhodium.....	18
2.3	Boron-Boron (B-B)	20
2.3.1	Platinum	20

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