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4. All figures should be of good quality and the lettering should be readable. For chemical structures, ACS Document 1996 Setting in ChemDraw is recommended.
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**Reductive *anti*-Dimagnesiation and Dialumination of Alkynes**

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Given the significance of polar reactive organometallic species in synthesis for more than one century, generation and use of stereodefined 1,2-dimetallated alkenes have been fascinating yet very challenging. Here we report the facile reductive *anti*-1,2-dimetalation of alkynes to stereoselectively generate *trans*-1,2-dimagnesio- and 1,2-dialuminoalkenes that are typically difficult to prepare, reasonably stable, and thus useful for organic synthesis.1 The key for the success of these reactions is the use of a sodium dispersion as a powerful reducing agent,2 and the counterintuitive use of organomagnesium and organoaluminum halides as reduction-resistant electrophiles.3,4.....

**For Professionals**

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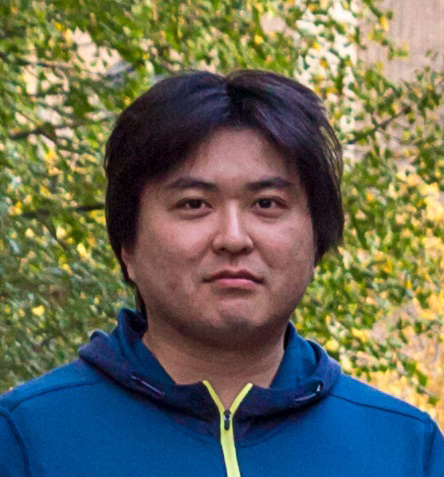


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**Reductive Dimerization of Styrenes to 1,4-Organodilithiums Enabled by Flow Microreactors**

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Organolithium reagents play an important role in organic synthesis and their versatile reactivity has led to various applications. Here we report…..

Treatment of alkyne **1** and B2pin2 with sodium dispersion afforded vic-diborylalkane **4** in good yield.1 This chemistry….



**For Students**

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