Supporting Information

Rhodium-Grafted Hydrotalcite Catalyst for Heterogeneous 1,4-Addition Reaction of Organoboron Reagents with Electron Deficient Olefins

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1. EXAFS oscillations and curve-fitting analysis results.
2. Kinetic studies

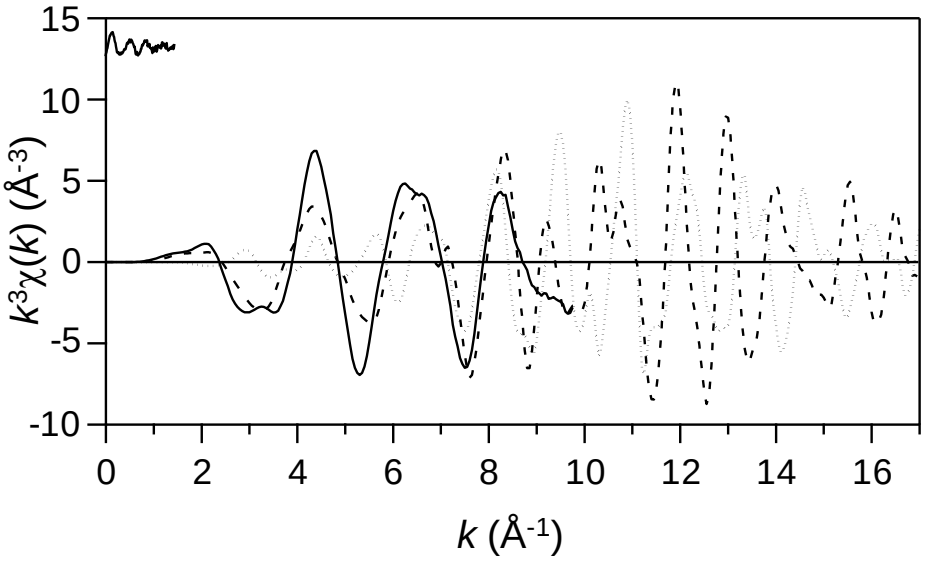

Fig. 1S The k^3-weighted Rh K-edge EXAFS oscillations for Rh foil (dotted line, ×0.25), Rh_2O_3 (dashed line, ×0.66), and fresh Rh/HT catalyst (solid line).

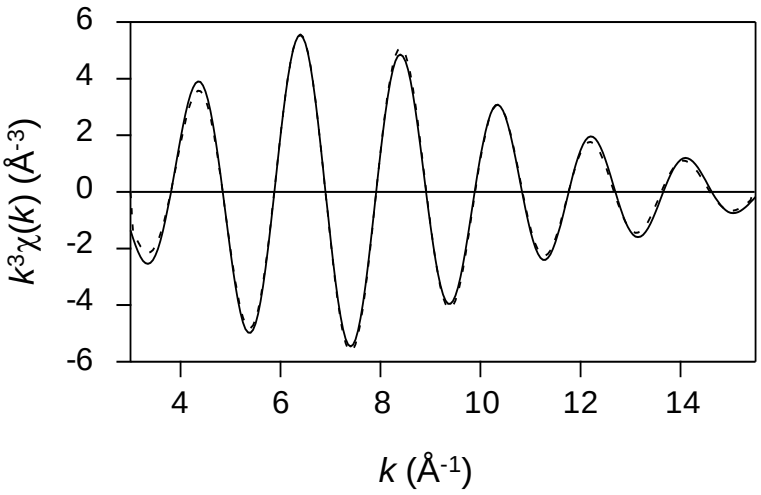

Fig. 2S Curve-fitting analysis was performed with the inverse FT of the 1.16 Å < r < 1.90 Å range using hexagonal Rh_2O_3 as a standard material. The solid curve was obtained experimentally, and the dashed curve is the calculated fit.

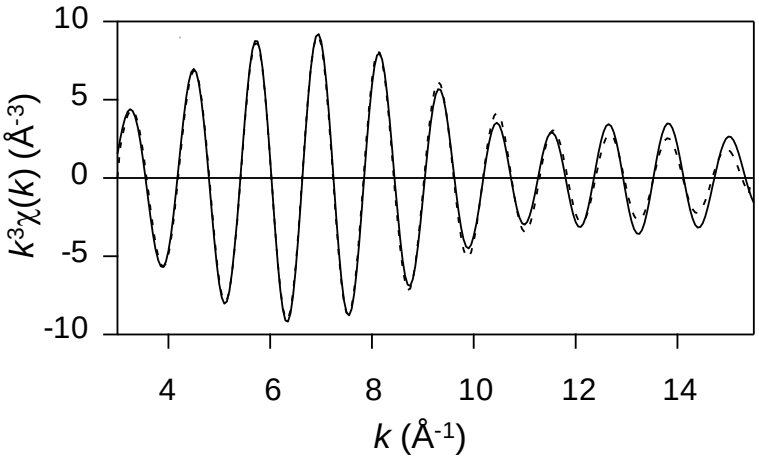

Fig. 3S Curve-fitting analysis was performed with the inverse FT of the 2.21 Å < r < 2.98 Å range using Rh-(O)-Mg shell parameter. The solid curve was obtained experimentally, and the dashed curve is the calculated fit.

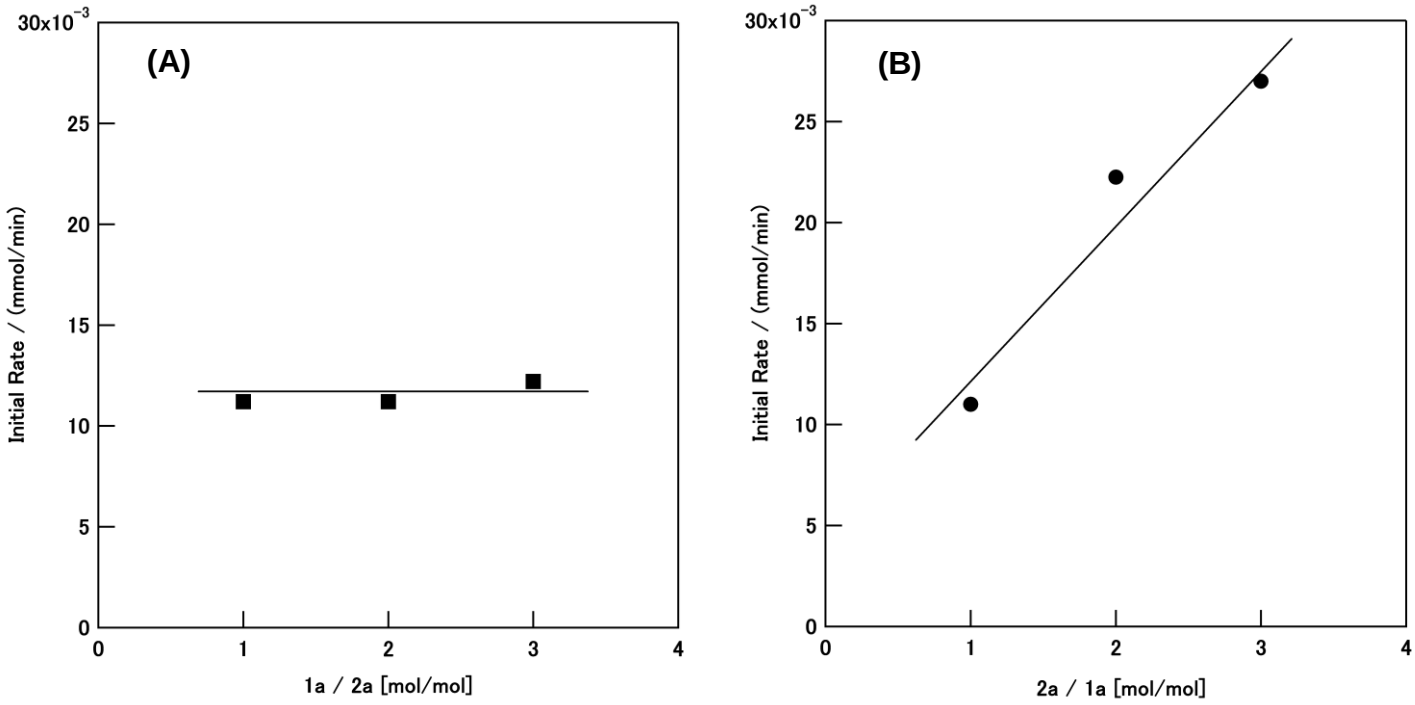

Fig. 4S Dependences of the initial formation rate of **3a** on the amount of **1a** (A) and **2a** (B).

Reaction conditions for (A): **1a** 1-3 mmol, **2a** 1 mmol, Rh/HT (2.0×10^{-2} g, Rh: 4×10^{-3} mmol), 1,4dioxane (2 mL), 1,5-COD (4×10^{-3} mmol), H_2O 0.1 mL, 100 °C, Ar, 30 min, for (B): **1a** 1 mmol, **2a** 1-3 mmol, Rh/HT (2.0×10^{-2} g, Rh: 4×10^{-3} mmol), 1,4-dioxane (2 mL), 1,5-COD (4×10^{-3} mmol), H_2O 0.1 mL, 100 °C, Ar, 30 min,