## **Supporting Information**

Predicting the Initial Thermal Decomposition Path of Nitrobenzene

Caused by Mode Vibration at Moderate-Low Temperatures:

Temperature-Dependent Anti-Stokes Raman Spectra Experiments

and First-Principals Calculations

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S1

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## IRC determination for the transition state of isomerization

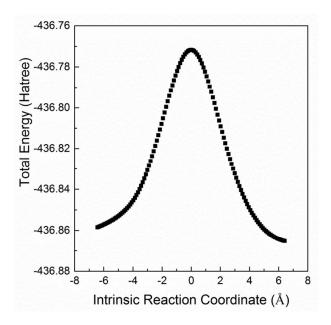


Figure S1. The IRC path of the transition state leading the nitrobenzene to the isomer phenyl nitrite.