## **Supporting Information**

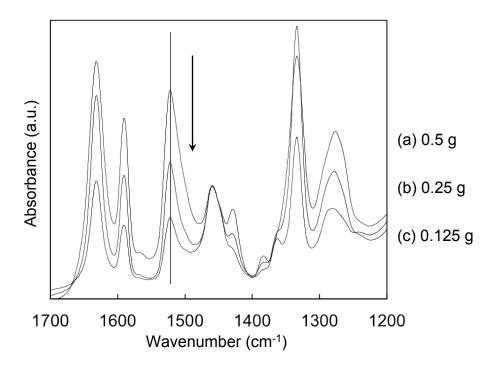
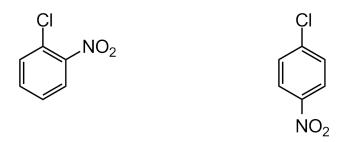


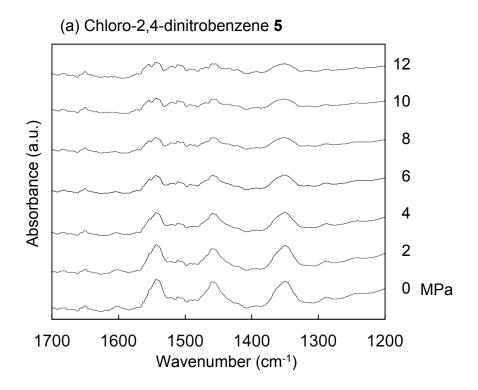
Figure S1. FTIR spectra in the range of  $v(NO_2)$  for 2,4-dinitroaniline 1 dissolved in THF in different concentrations at room temperature. A certain weight of 1 given was mixed with 10 cm<sup>3</sup> THF for FTIR measurements.

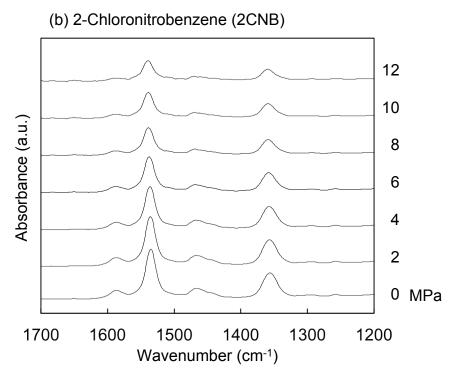
## 5: Chloro-2,4-dinitrobenzene



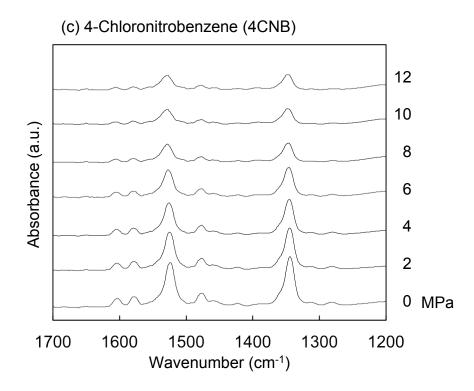
2CNB: 2-Chloronitrobenzene 4CNB: 4-Chloronitrobenzene

**Scheme S1.** Chlorodinitro and mononitro substrates used for FTIR measurements.





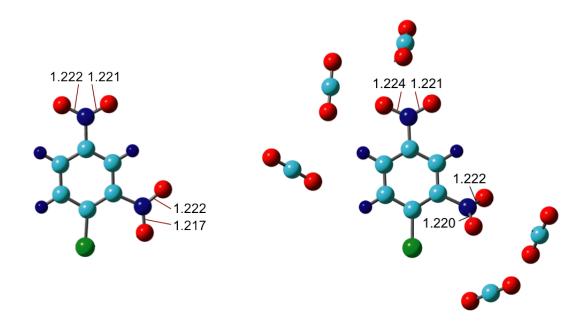
(Figure S2 on pp. 2 & 3)



**Figure S2.** High-pressure FTIR spectra in the range of  $v(NO_2)$  for (a) 5, (b) 2-chloronitrobenzene (2CNB) and (c) 4-chloronitrobenzene (4CNB) dissolved in THF measured in ATR mode at 323 K at 4 MPa of  $H_2$  and different  $CO_2$  pressures given.

## (a) Chloro-2,4-dinitrobenzene 5

## (b) Cluster of $\bf 5$ with five $CO_2$



**Figure S3.** The optimized structures of  $\mathbf{5}$  (a) and  $CO_2$ -coordinated clusters of  $\mathbf{5}$  with five  $CO_2$  molecules. The bonding distances of NO of nitro groups are given in Å.