

Alkaline-earth (Be, Mg, Ca) bonds at the origin of huge acidity enhancements.

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SUPPORTING INFORMATION

(2 pages)

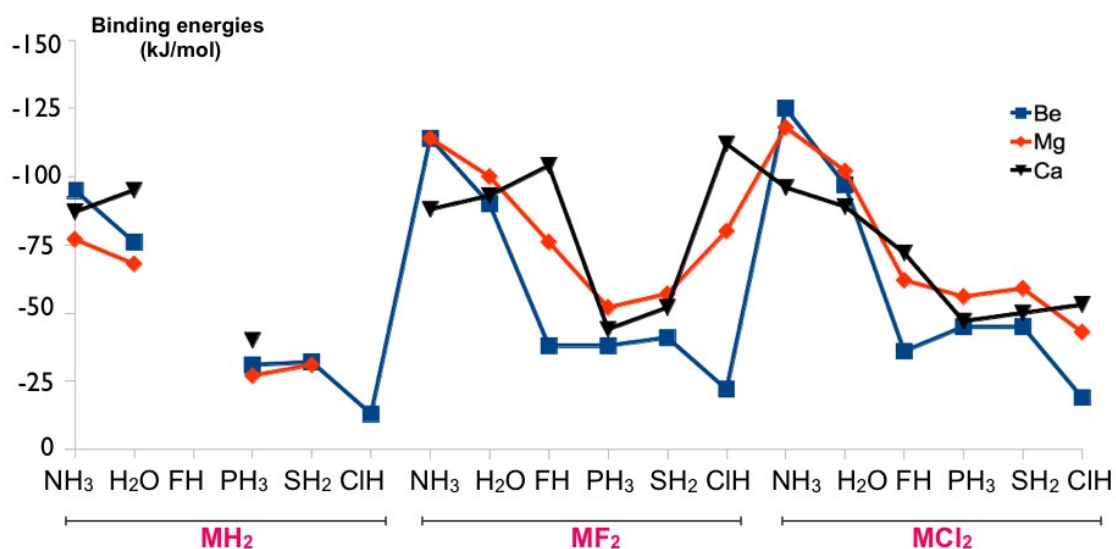


Figure S1. G4 Dissociation energies (D_0 , kJ/mol) of the complexes formed by association of MH_2 , MF_2 and MCl_2 ($M = Be, Mg, Ca$) with different Lewis bases.

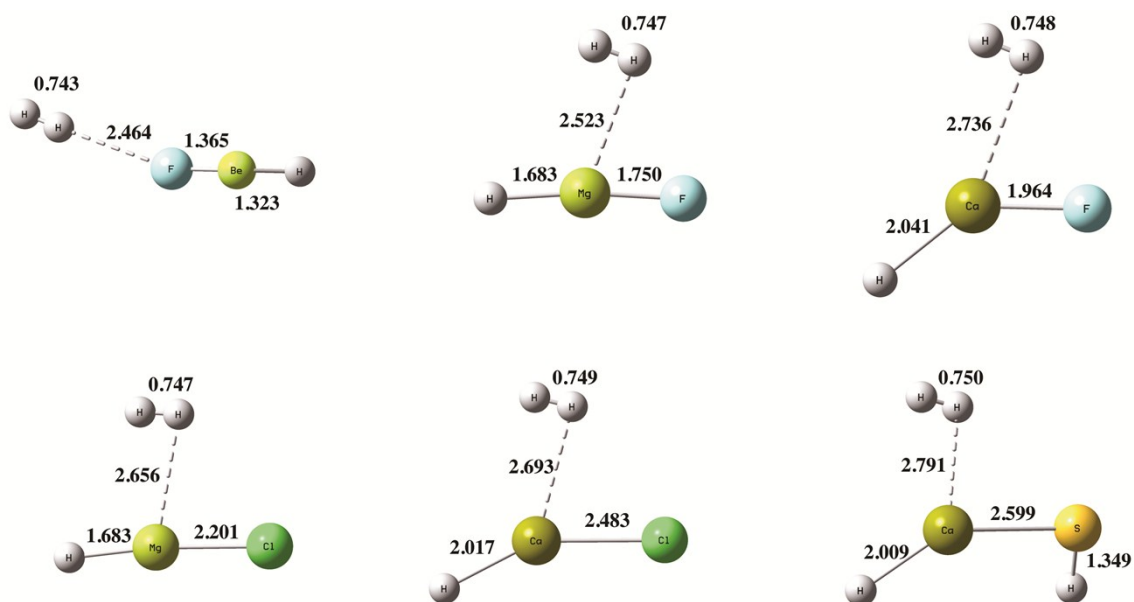


Figure S2. Equilibrium structures of the complexes formed upon the interaction of MH_2 ($M = Be, Mg, Ca$) with FH (first row); MH_2 ($M = Mg, Ca$) with HCl and CaH_2 with SH_2 (second row). In all cases, the spontaneous formation of a H_2 molecule is observed. Bond distances are in Å