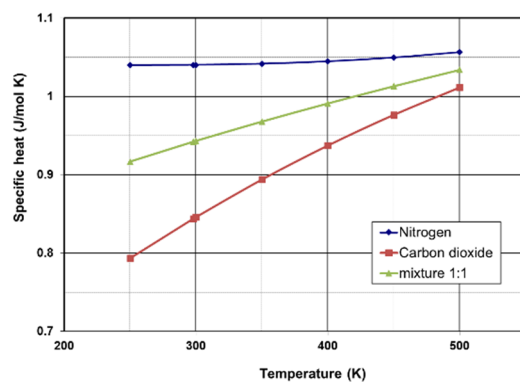


# Experimental study on the reaction of Magnesium in Carbon Dioxide and Nitrogen atmosphere

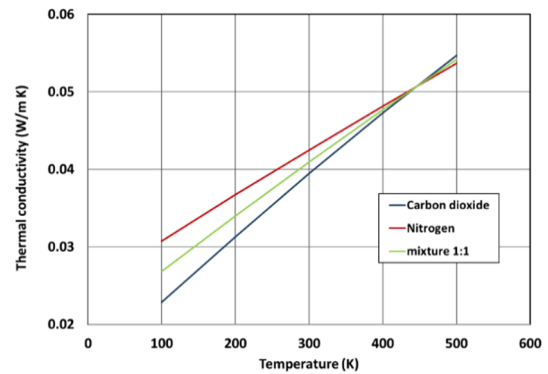
Supplementary material

**Table S1.** Reaction enthalpy for magnesium combustion in carbon dioxide (reaction 1)

Component	$\Delta H_f^\circ$ , kJ/mol
Mg	0
CO <sub>2</sub> (g)	-393.5
MgO (s)	-601.8
C (s)	0



(a)



(b)

**Figure S1.** Specific heat (a) and thermal conductivity (b) of N<sub>2</sub>, CO<sub>2</sub> (1:1) mixture.



**Figure S2.** Combustion chamber after test.