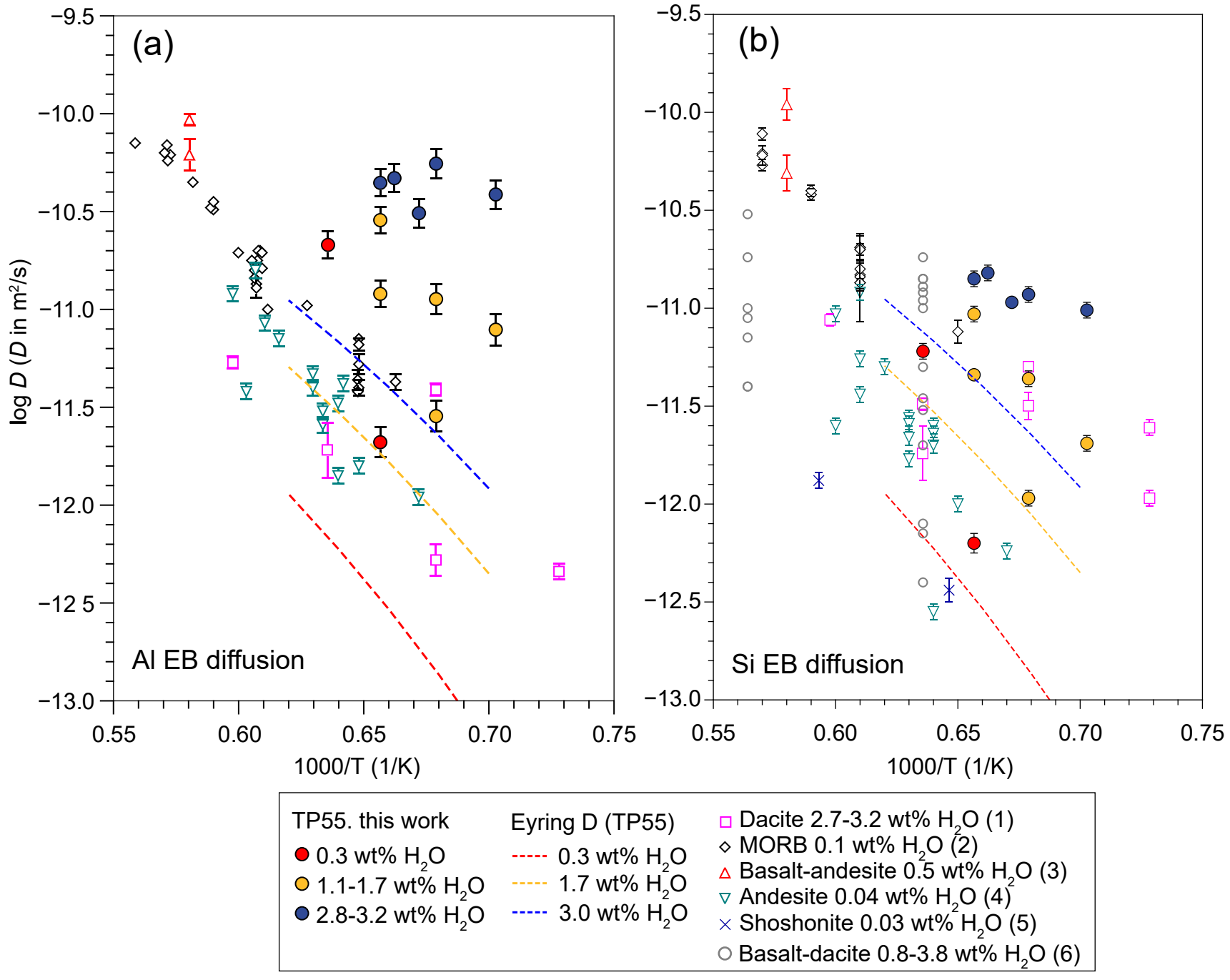
(a)
(b)
Al EB diffusion
Si EB diffusion
log D (D in m²/s)
1000/T (1/K)
−9.5
−10.0
−10.5
−11.0
−11.5
−12.0
−12.5
−13.0
0.55
0.60
0.65
0.70
0.75
TP55. this work
0.3 wt% H2O
1.1-1.7 wt% H2O
2.8-3.2 wt% H2O
Eyring D (TP55)
0.3 wt% H2O
1.7 wt% H2O
3.0 wt% H2O
Dacite 2.7-3.2 wt% H2O (1)
MORB 0.1 wt% H2O (2)
Basalt-andesite 0.5 wt% H2O (3)
Andesite 0.04 wt% H2O (4)
Shoshonite 0.03 wt% H2O (5)
Basalt-dacite 0.8-3.8 wt% H2O (6)