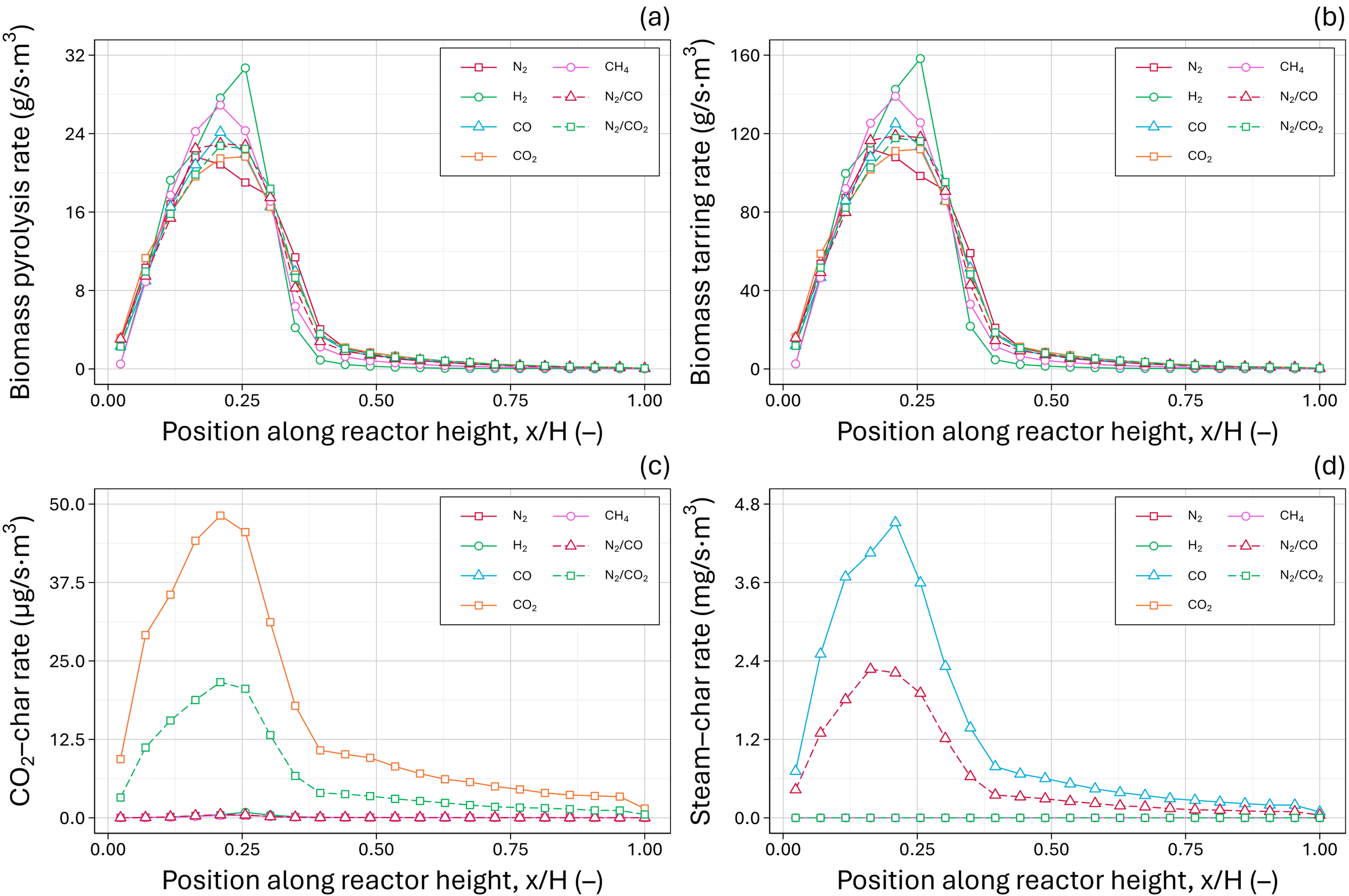
(a)
Biomass pyrolysis rate (g/s·m3)
32
24
16
8
0
0.00
0.25
0.50
0.75
1.00
Position along reactor height, x/H (–)
N2
CH4
H2
N2/CO
CO
N2/CO2
CO2
(b)
Biomass tarring rate (g/s·m3)
160
120
80
40
0
0.00
0.25
0.50
0.75
1.00
Position along reactor height, x/H (–)
N2
CH4
H2
N2/CO
CO
N2/CO2
CO2
(c)
CO2–char rate (μg/s·m3)
50.0
37.5
25.0
12.5
0.0
0.00
0.25
0.50
0.75
1.00
Position along reactor height, x/H (–)
N2
CH4
H2
N2/CO
CO
N2/CO2
CO2
(d)
Steam–char rate (mg/s·m3)
4.8
3.6
2.4
1.2
0.0
0.00
0.25
0.50
0.75
1.00
Position along reactor height, x/H (–)
N2
CH4
H2
N2/CO
CO
N2/CO2
CO2