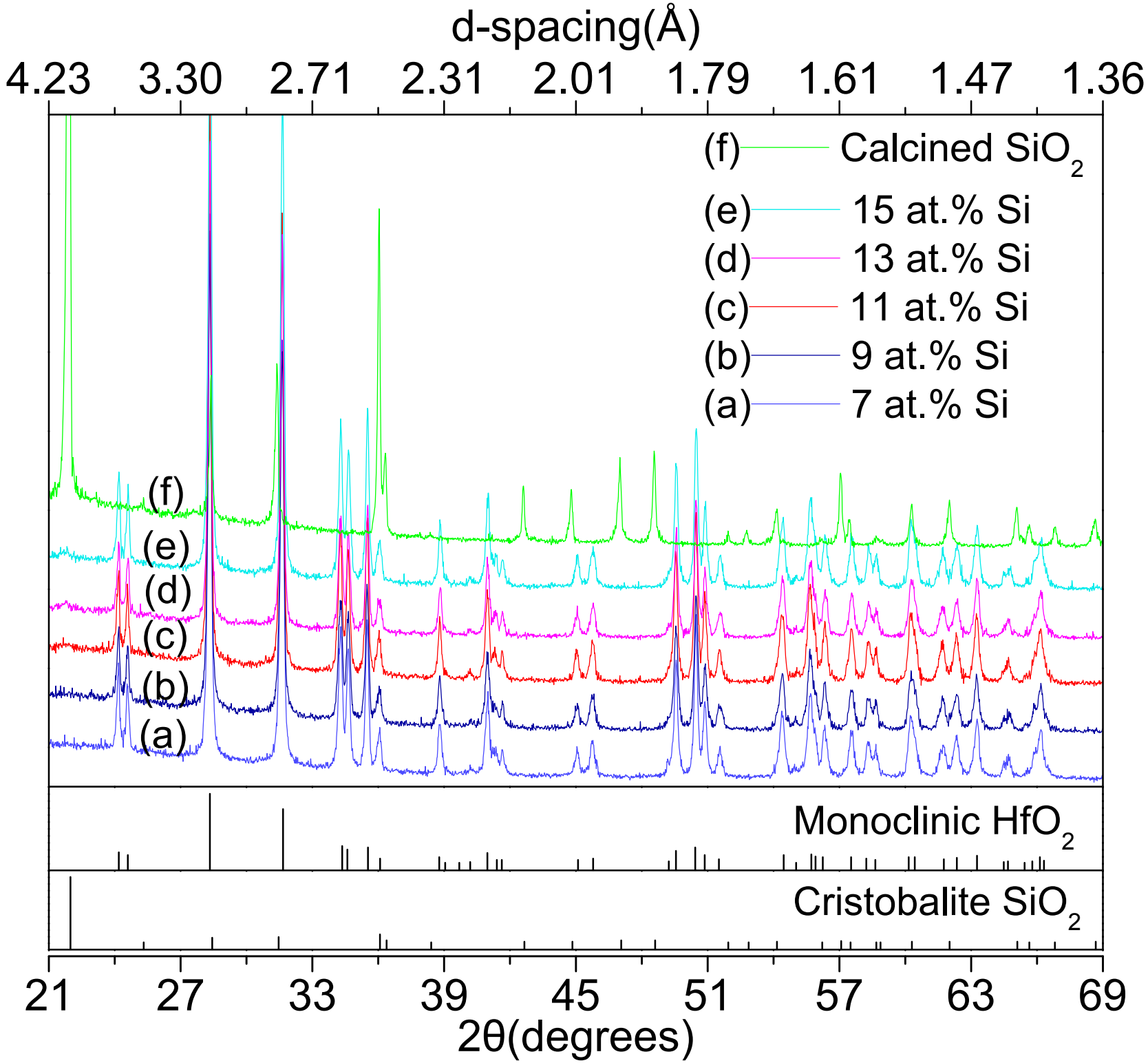
d-spacing(Å)
4.23
3.30
2.71
2.31
2.01
1.79
1.61
1.47
1.36
(f) Calcined SiO2
(e) 15 at.% Si
(d) 13 at.% Si
(c) 11 at.% Si
(b) 9 at.% Si
(a) 7 at.% Si
(f)
(e)
(d)
(c)
(b)
(a)
Monoclinic HfO2
Cristobalite SiO2
21
27
33
39
45
51
57
63
69
2θ(degrees)