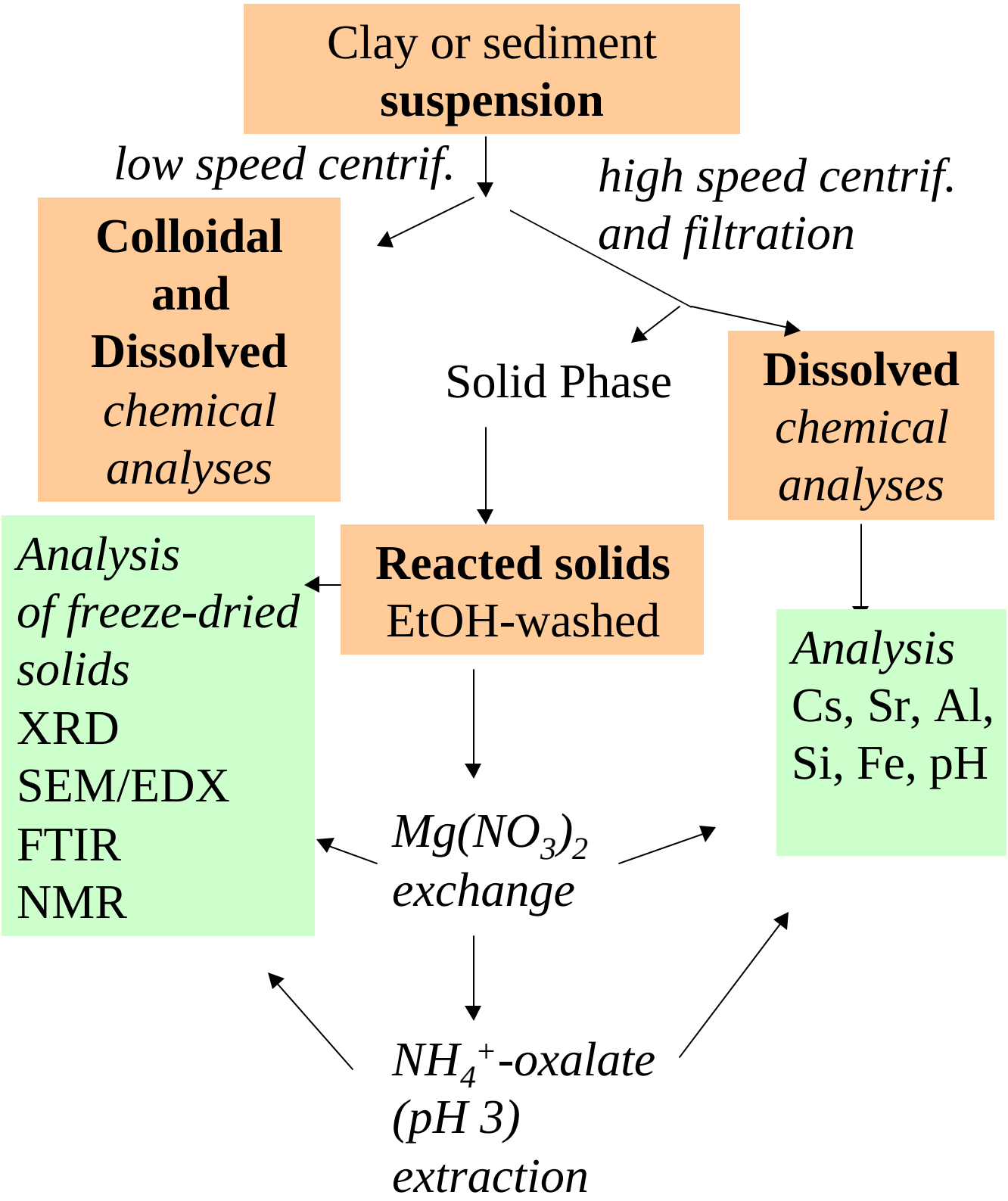
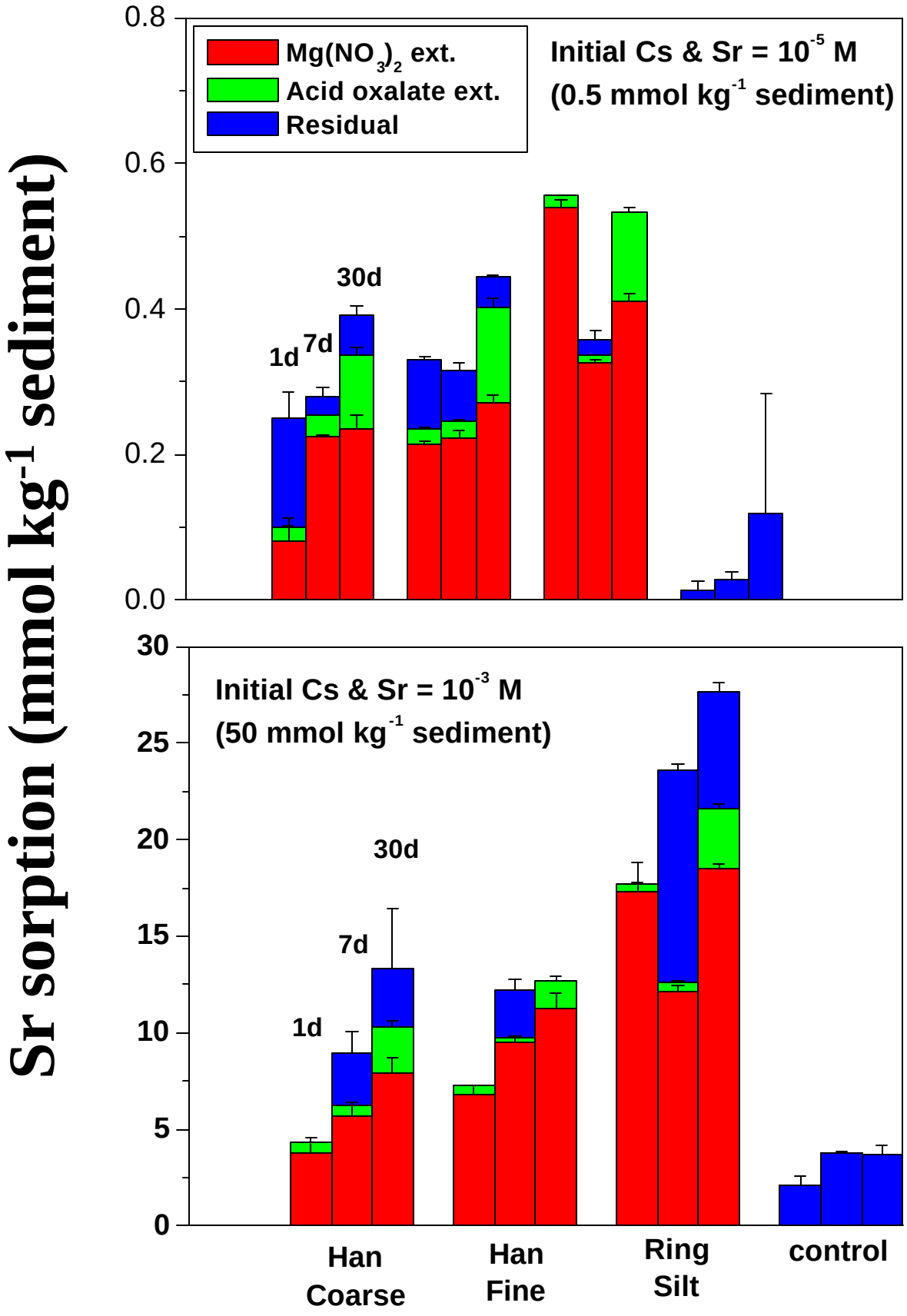
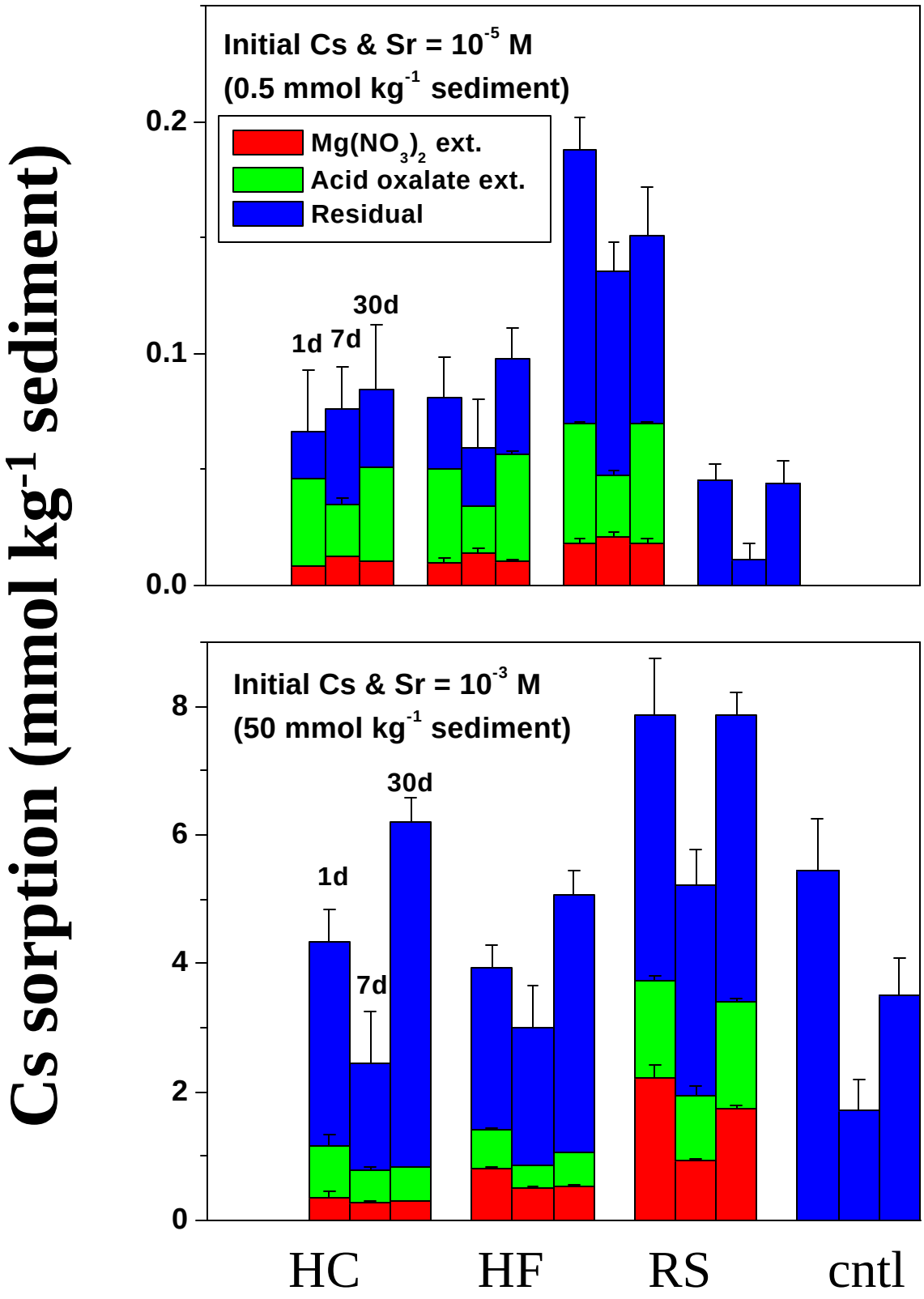
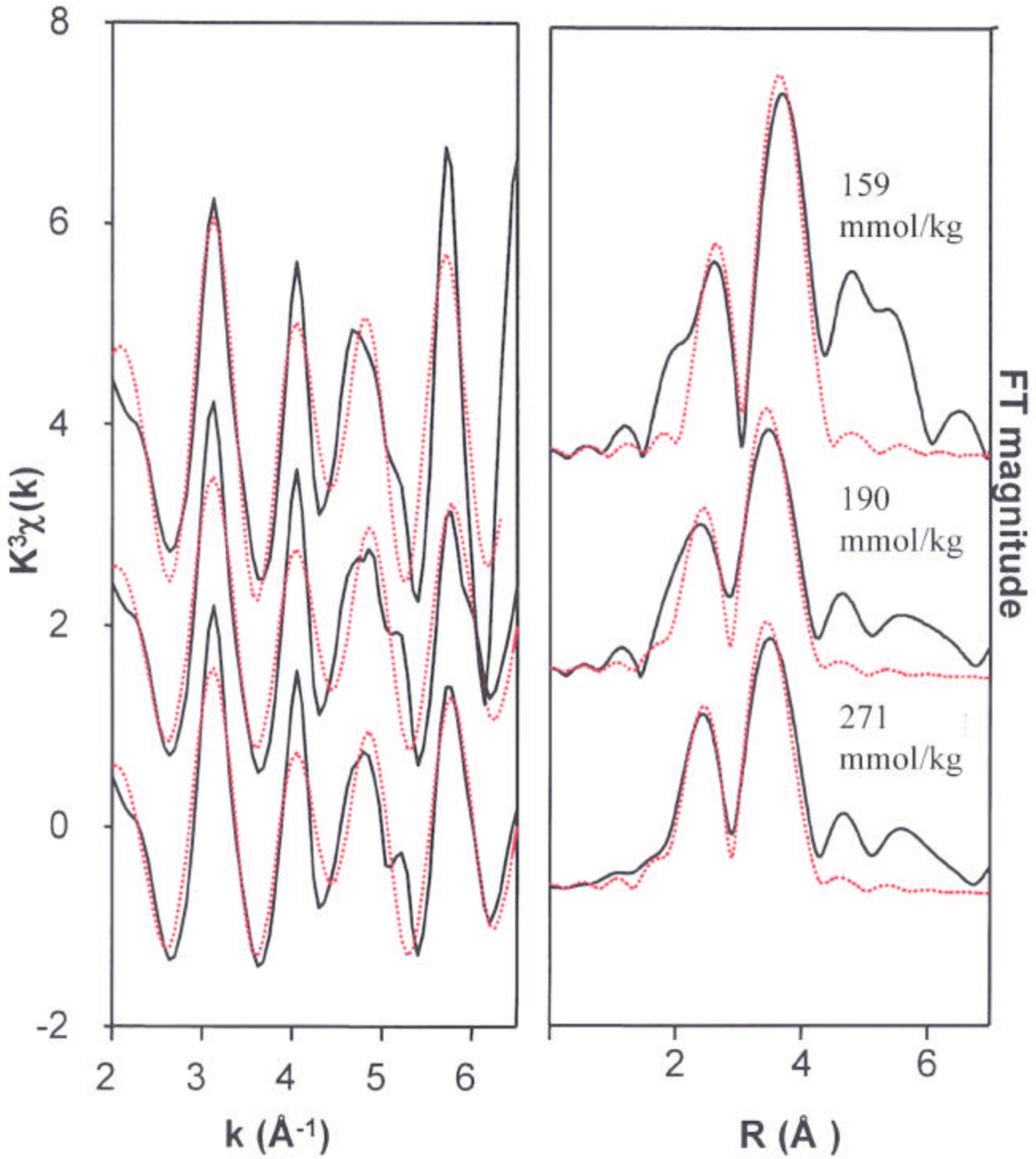
Post-Reaction Analyses



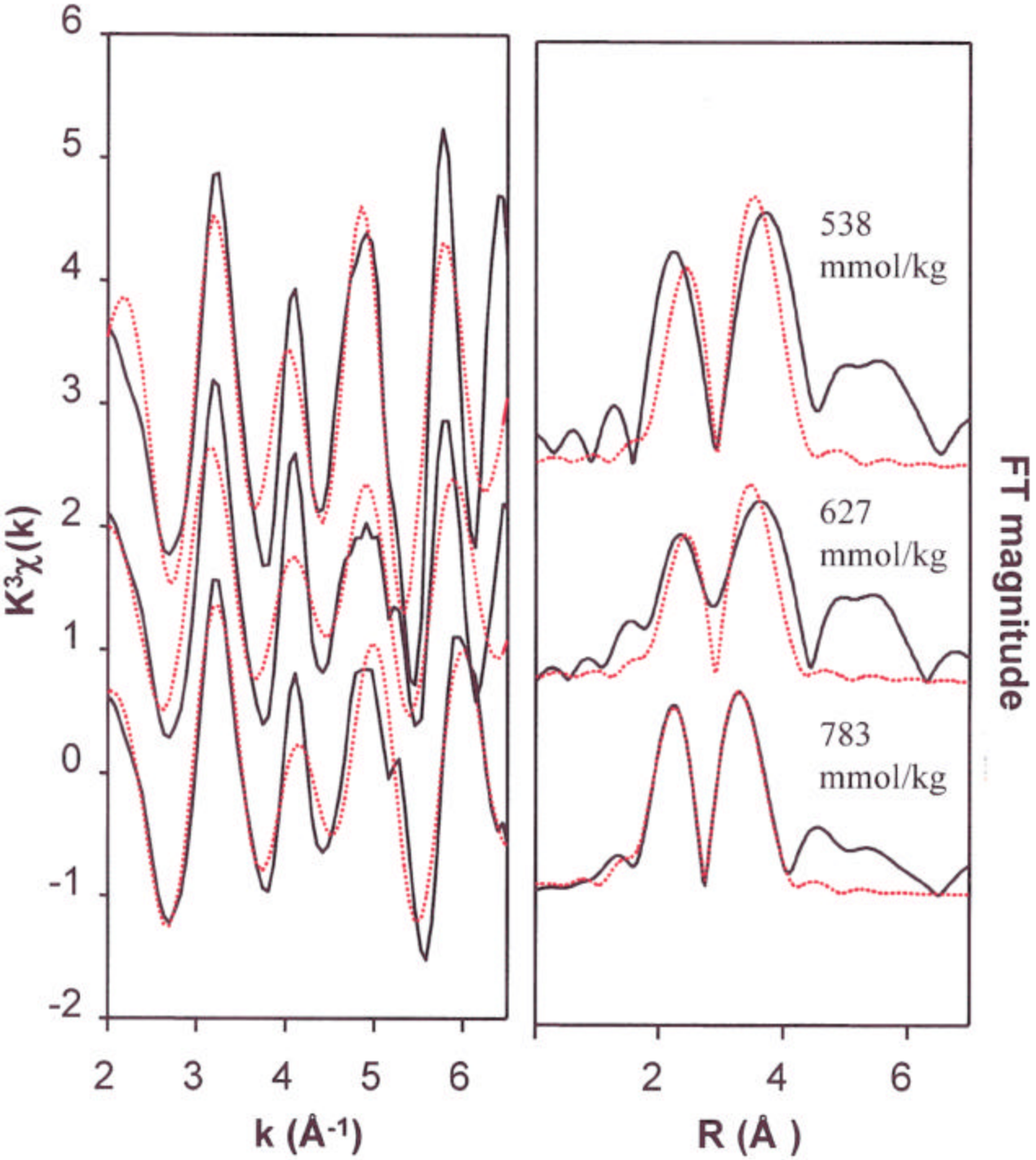

Sr sorption (mmol kg-1 sediment)
Mg(NO3)2 ext.
Acid oxalate ext.
Residual
Initial Cs & Sr = 10-5 M
(0.5 mmol kg-1 sediment)
1d
7d
30d
0.0
0.2
0.4
0.6
0.8
Initial Cs & Sr = 10-3 M
(50 mmol kg-1 sediment)
1d
7d
30d
0
5
10
15
20
25
30
Han Coarse
Han Fine
Ring Silt
control

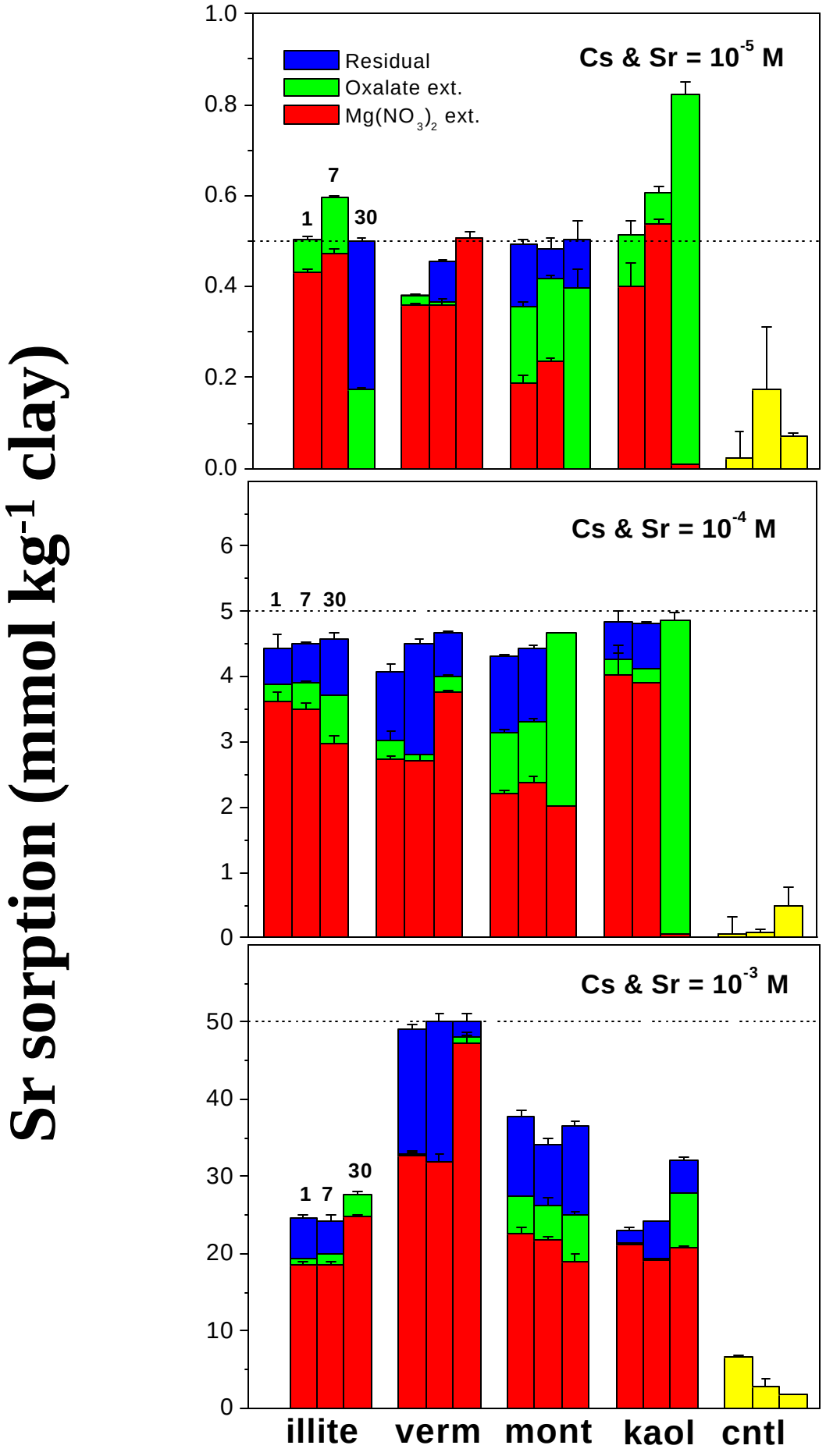

Cs sorption (mmol kg-1 sediment)
Initial Cs & Sr = 10-5 M
(0.5 mmol kg-1 sediment)
Mg(NO3)2 ext.
Acid oxalate ext.
Residual
1d
7d
30d
0.0
0.1
0.2
Initial Cs & Sr = 10-3 M
(50 mmol kg-1 sediment)
1d
7d
30d
0
2
4
6
8
HC
HF
RS
cntl

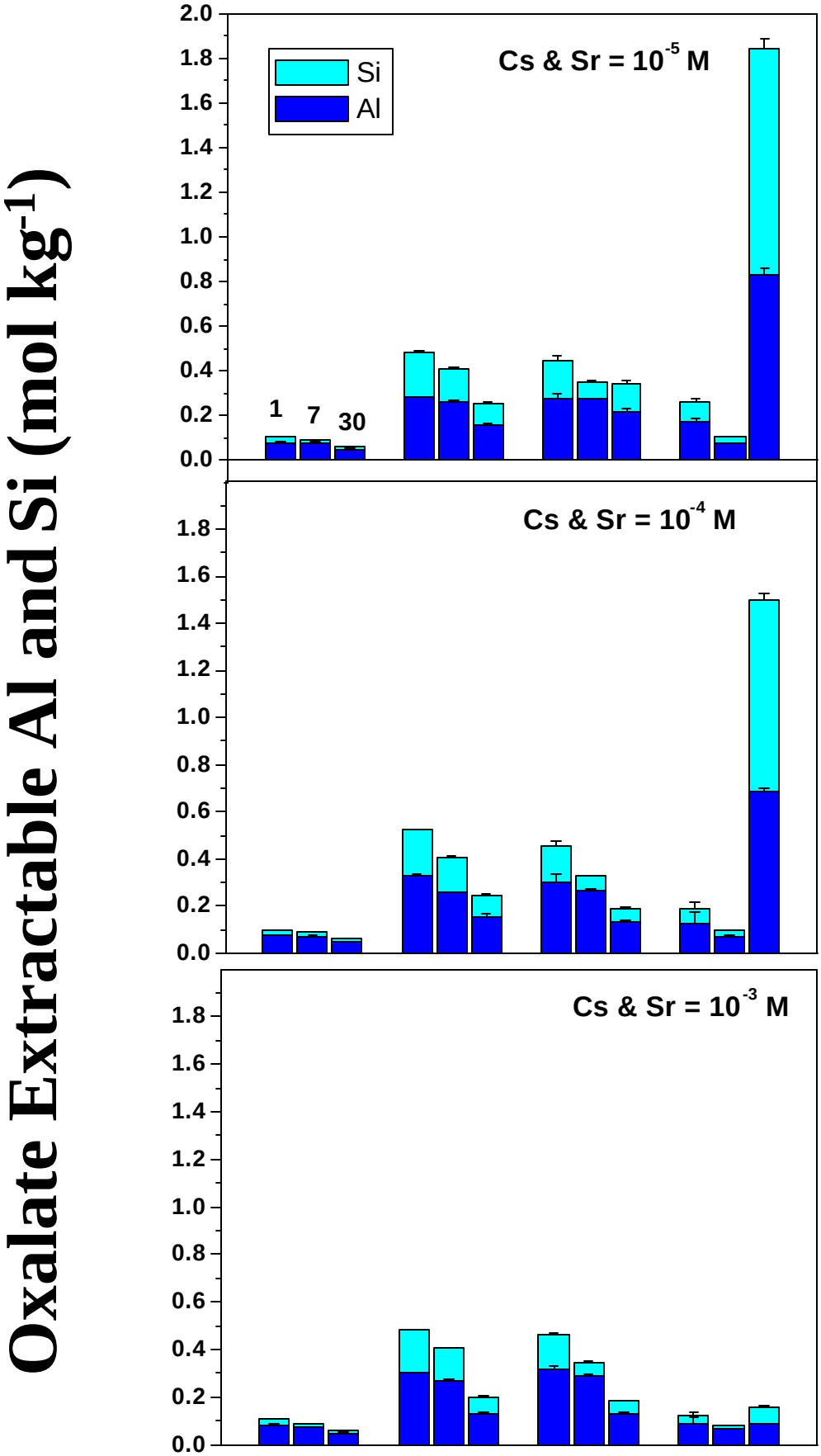
Cs-L_{III} EXAFS spectra for Cs-sorbed vermiculite

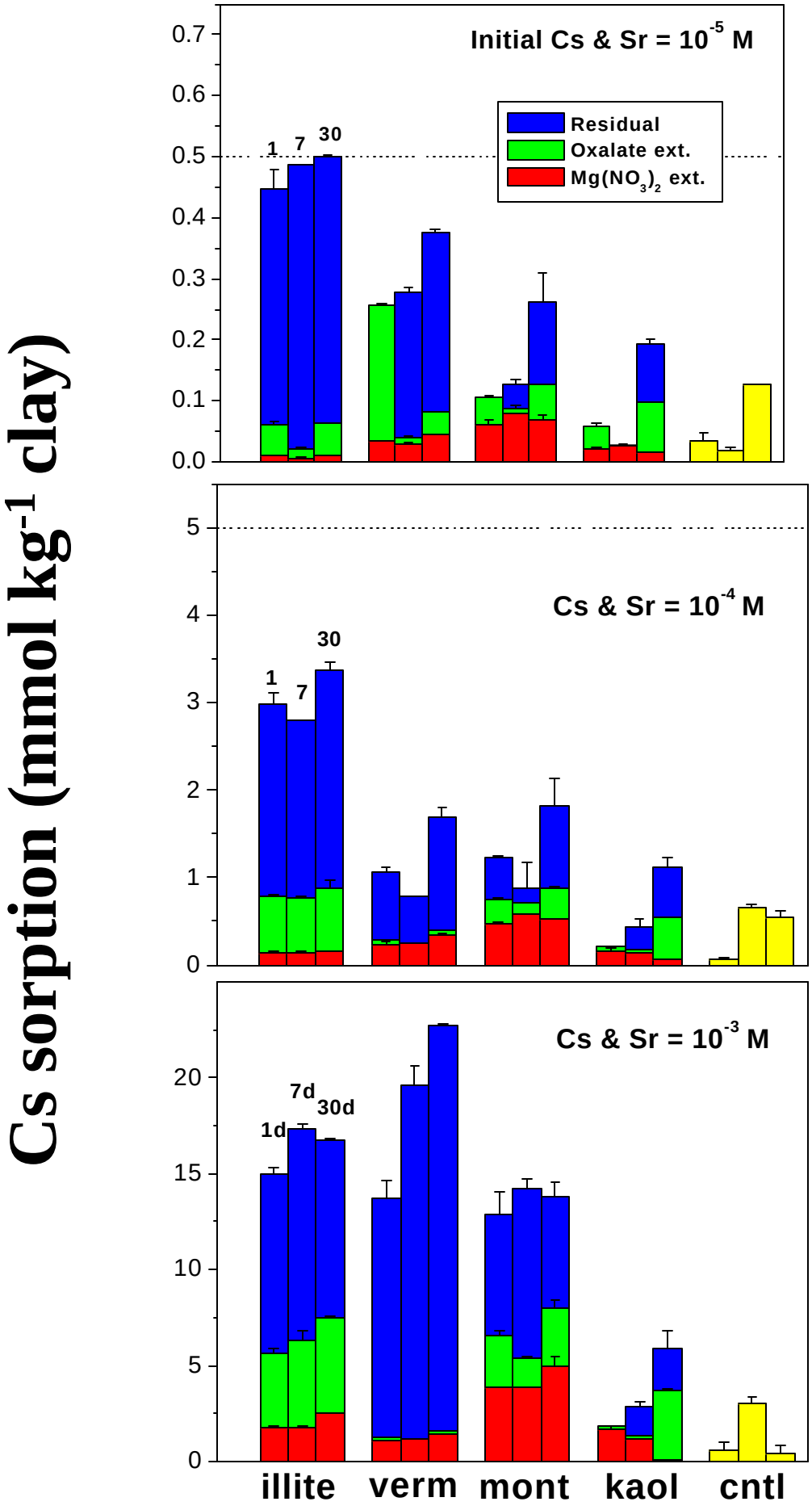


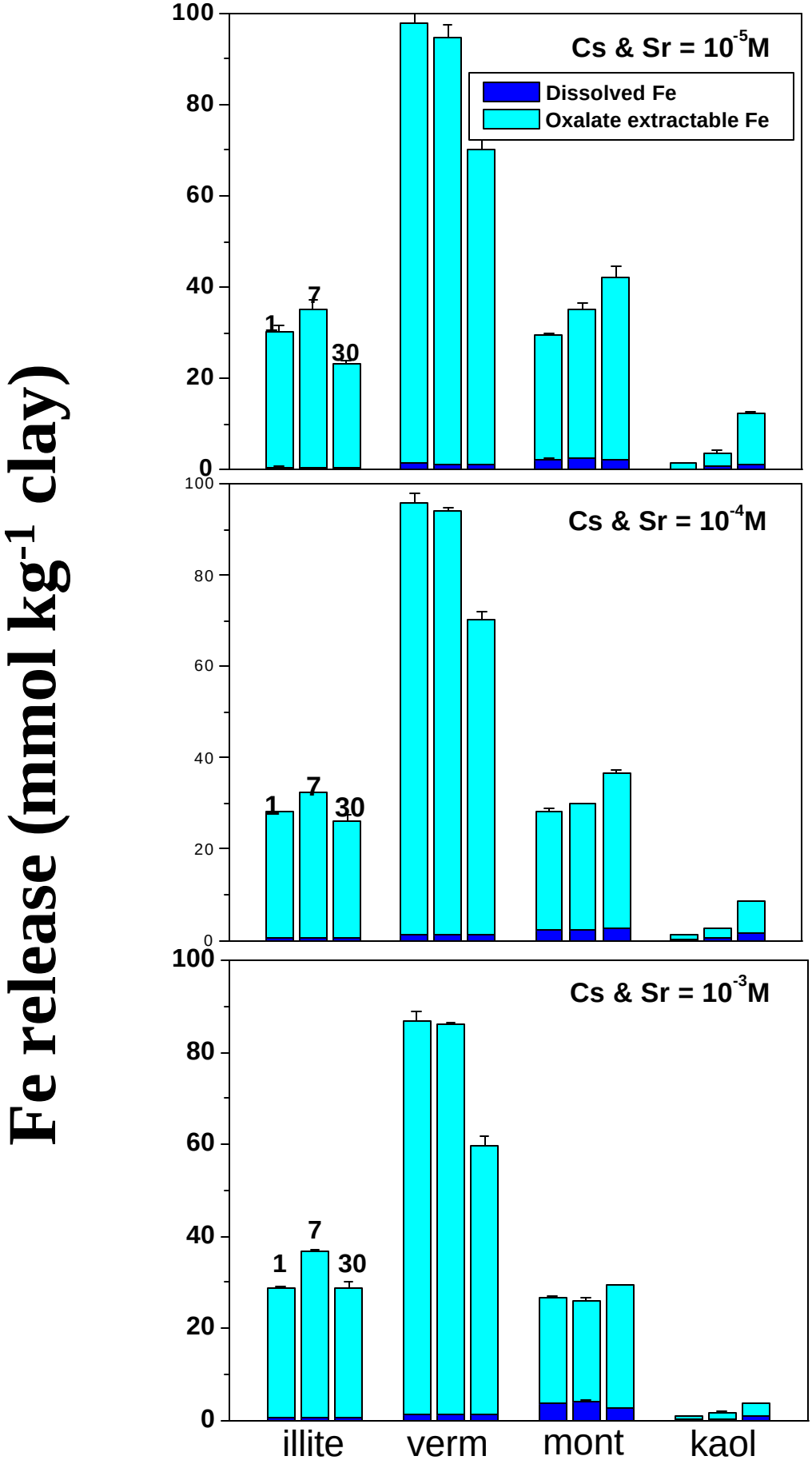
Cs-L_{III} EXAFS spectra for Cs-sorbed montmorillonite




Sr sorption (mmol kg-1 clay)
Residual
Oxalate ext.
Mg(NO3)2 ext.
Cs & Sr = 10-5 M
Cs & Sr = 10-4 M
Cs & Sr = 10-3 M
1
7
30
illite
verm
mont
kaol
cntl


Oxalate Extractable Al and Si (mol kg-1)
Si
Al
Cs & Sr = 10-5 M
Cs & Sr = 10-4 M
Cs & Sr = 10-3 M
1
7
30
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0


Cs sorption (mmol kg-1 clay)
Initial Cs & Sr = 10-5 M
Residual
Oxalate ext.
Mg(NO3)2 ext.
1
7
30
Cs & Sr = 10-4 M
Cs & Sr = 10-3 M
1d
7d
30d
illite
verm
mont
kaol
cntl


Fe release (mmol kg-1 clay)
Cs & Sr = 10-5M
Dissolved Fe
Oxalate extractable Fe
Cs & Sr = 10-4M
Cs & Sr = 10-3M
1
7
30
0
20
40
60
80
100
illite
verm
mont
kaol