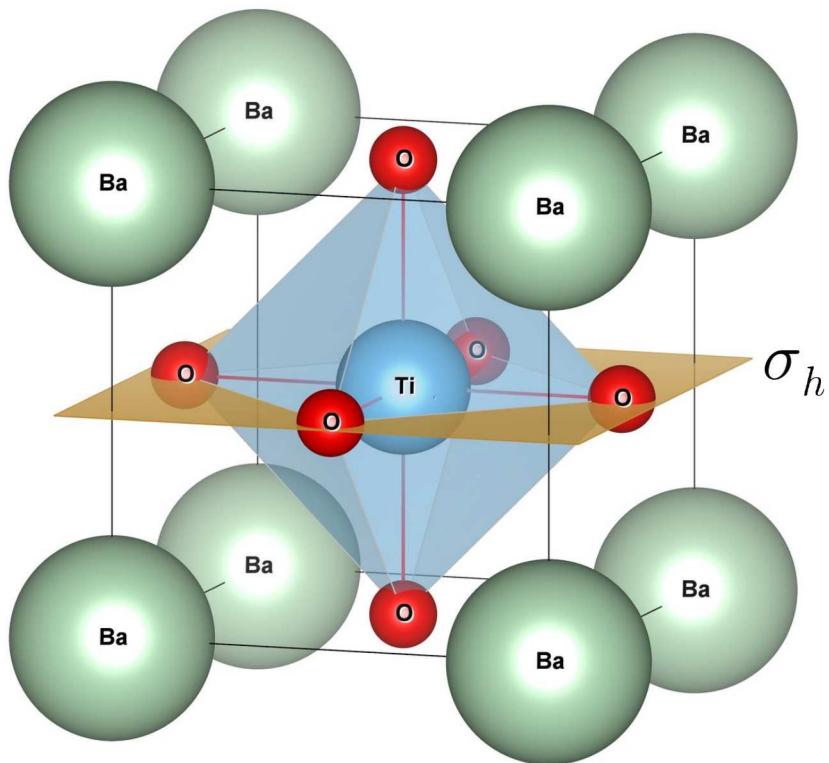


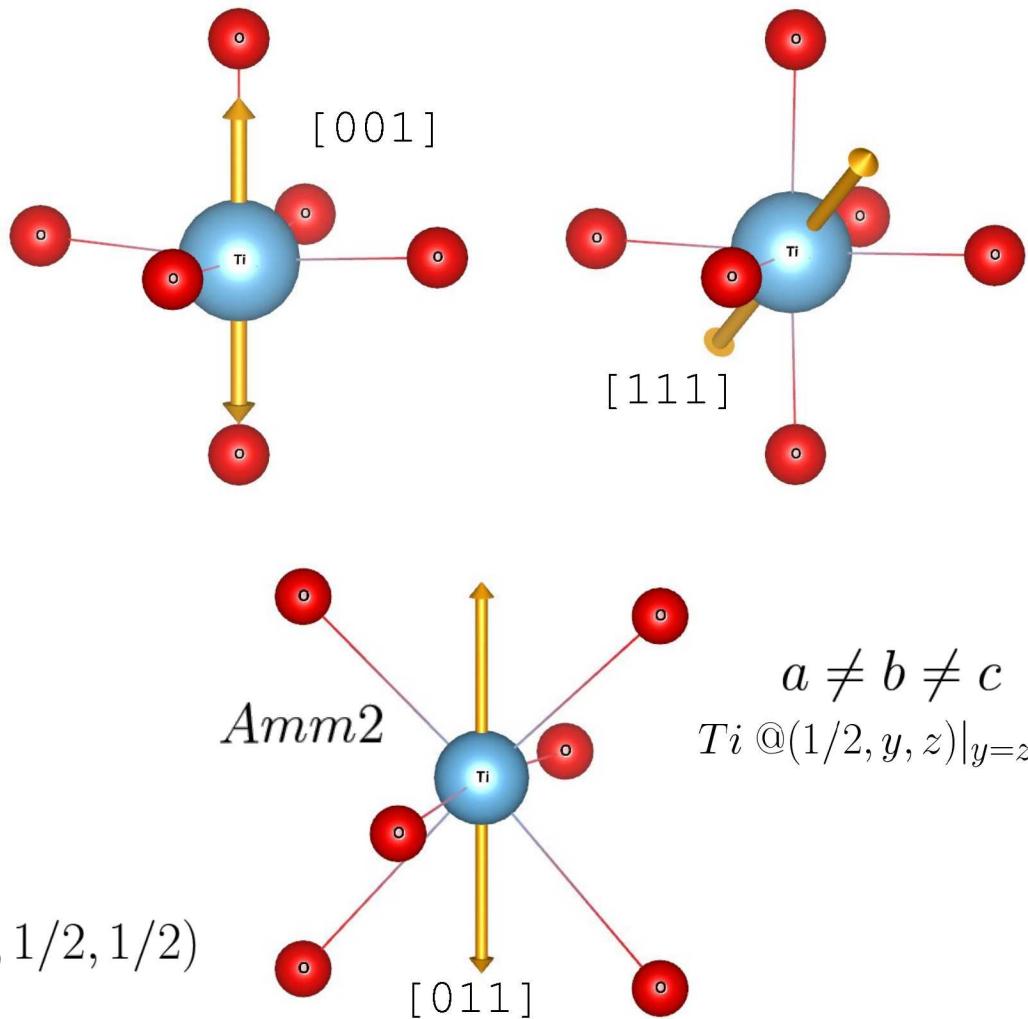
Candidate structures

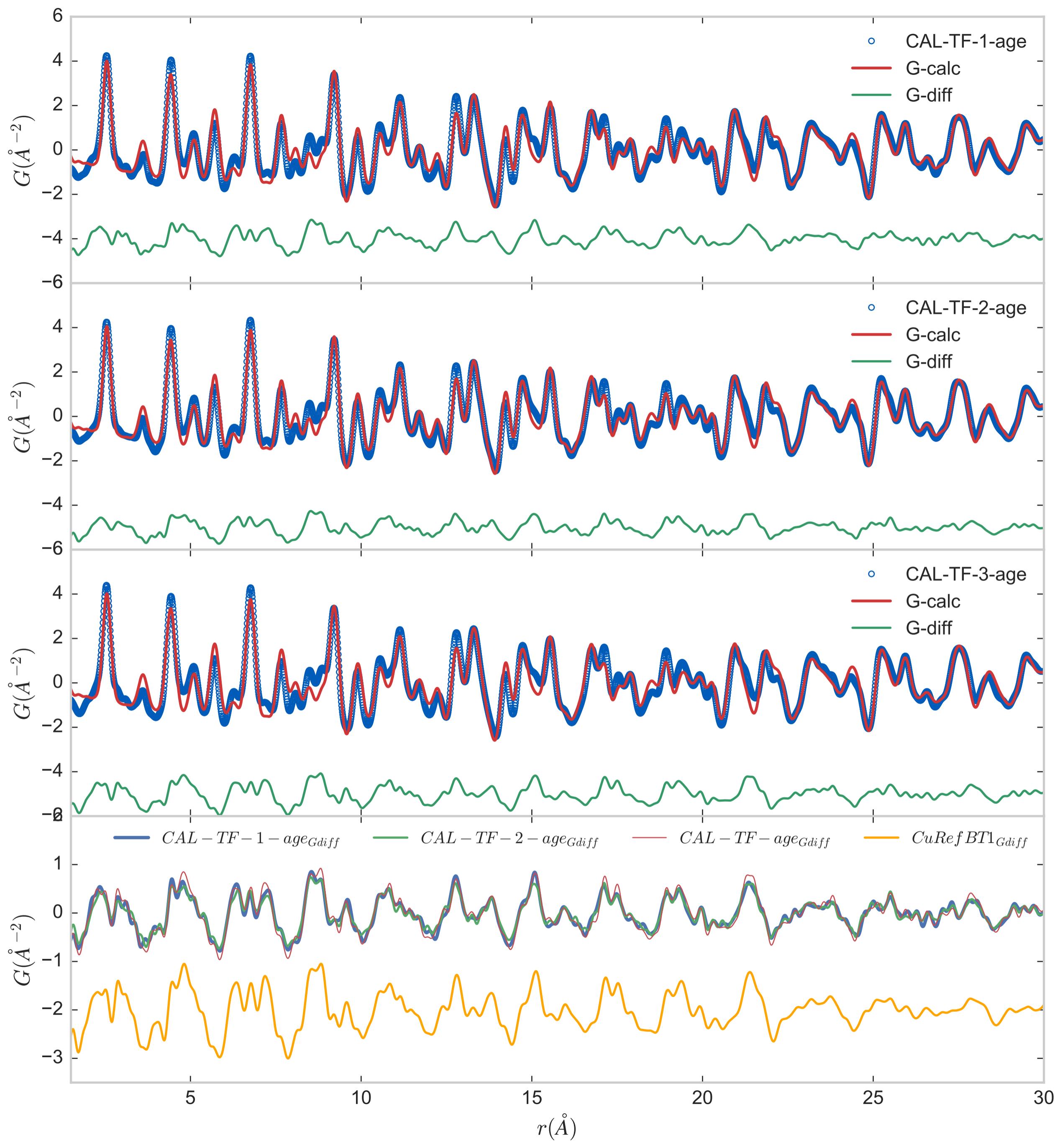


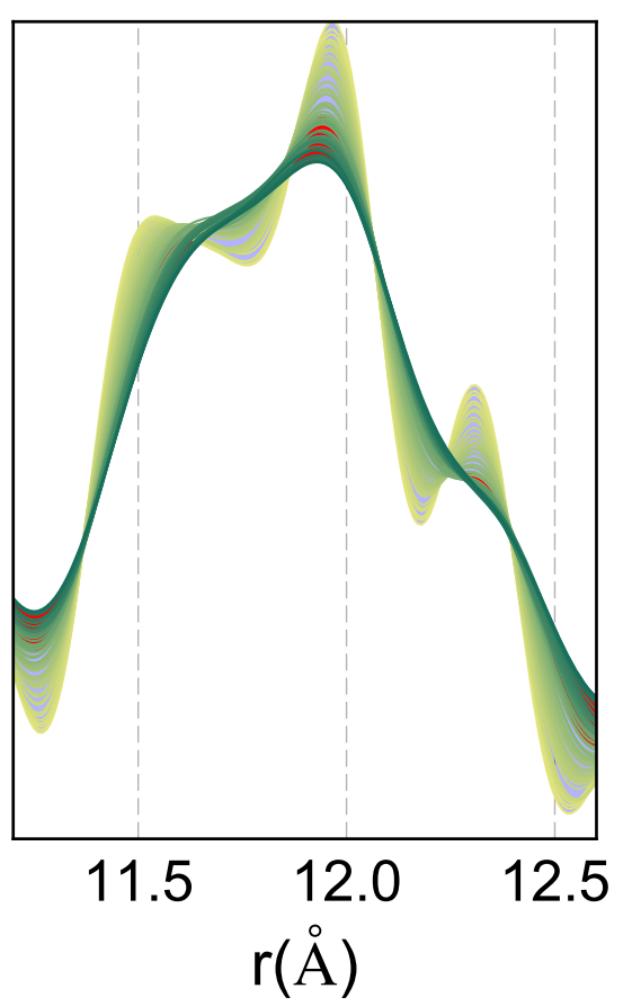
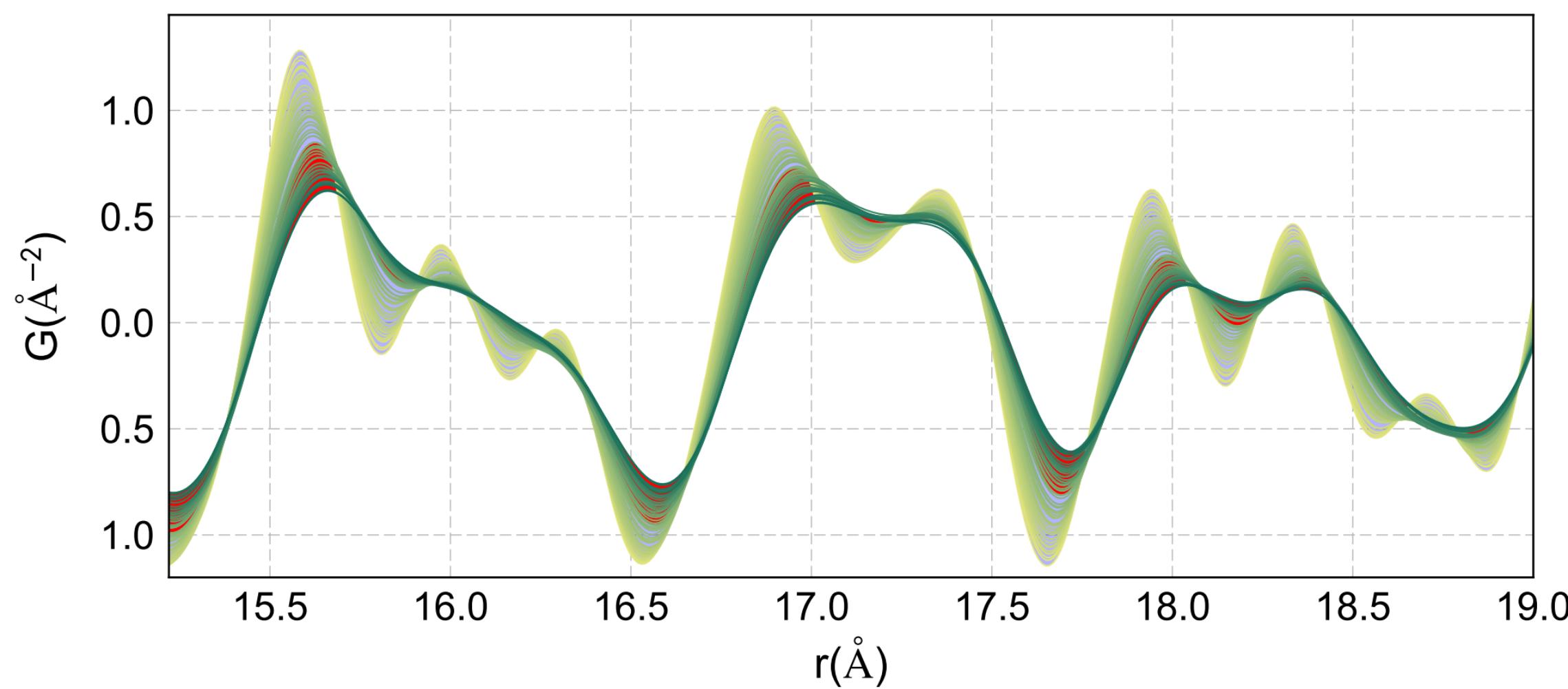
$Pm\bar{3}m^*$ $a = b = c$
 $P4/mmm$ $a = b \neq c$

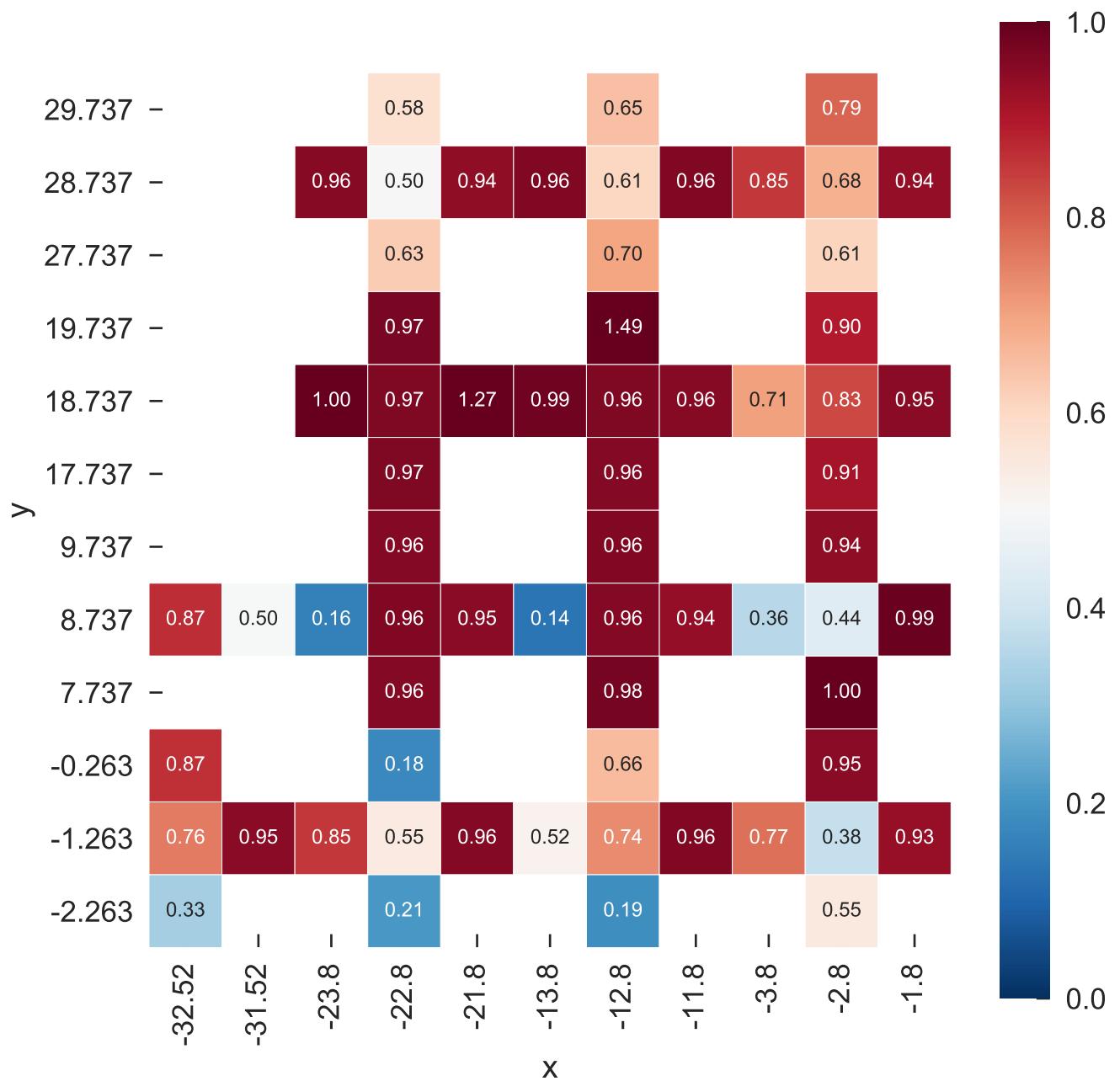
$Ti @ (1/2, 1/2, 1/2)$
 $*Ti @ (1/2, 1/2, z)$
 "Pseudo - cubic model"

$a = b \neq c$
 $P4mm$ $Ti @ (1/2, 1/2, z)$
 $R3m$
 $a = b = c$
 $\alpha = \beta = \gamma \neq 90^\circ$
 $Ti @ (x, y, z)|_{x=y=z}$

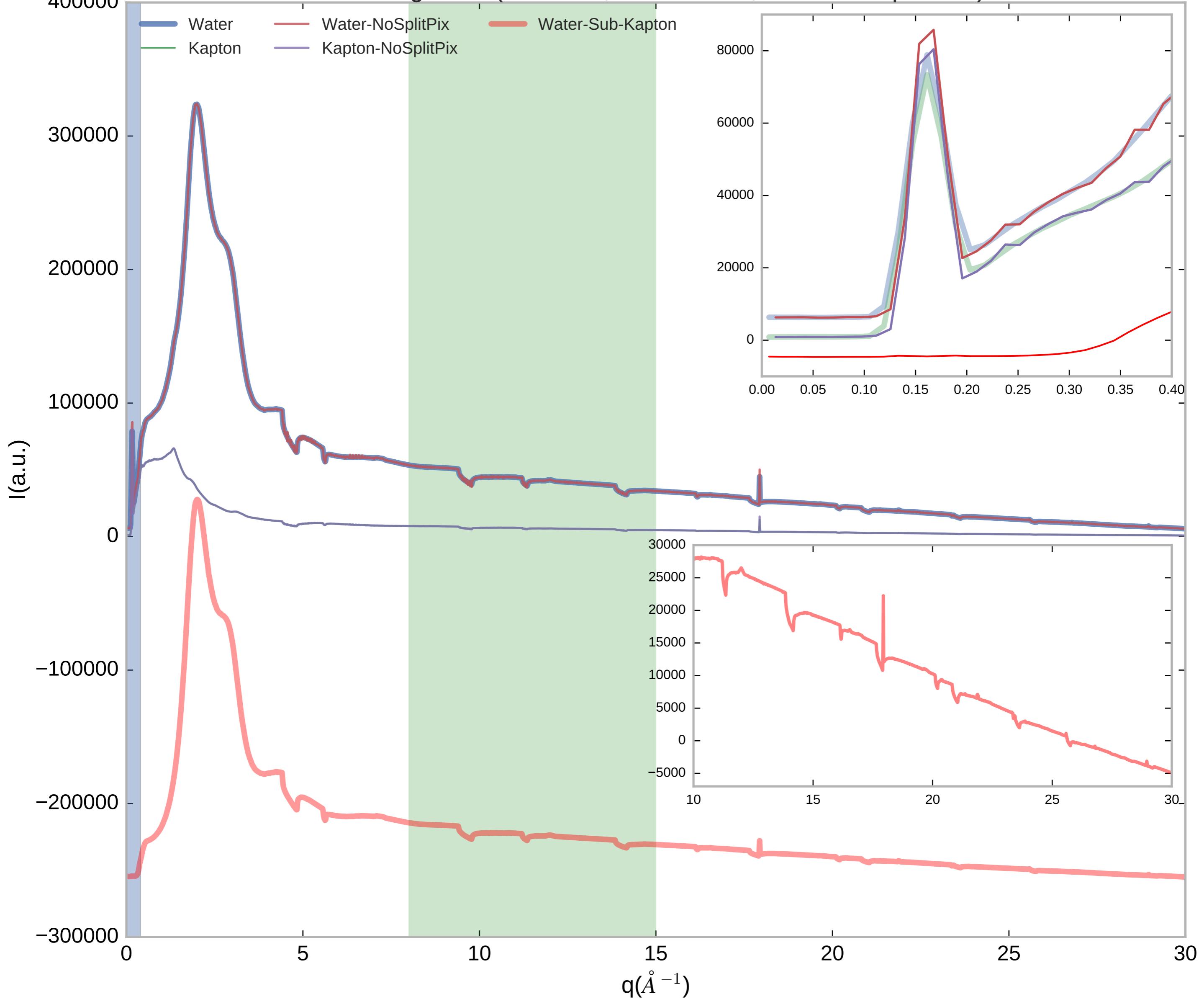




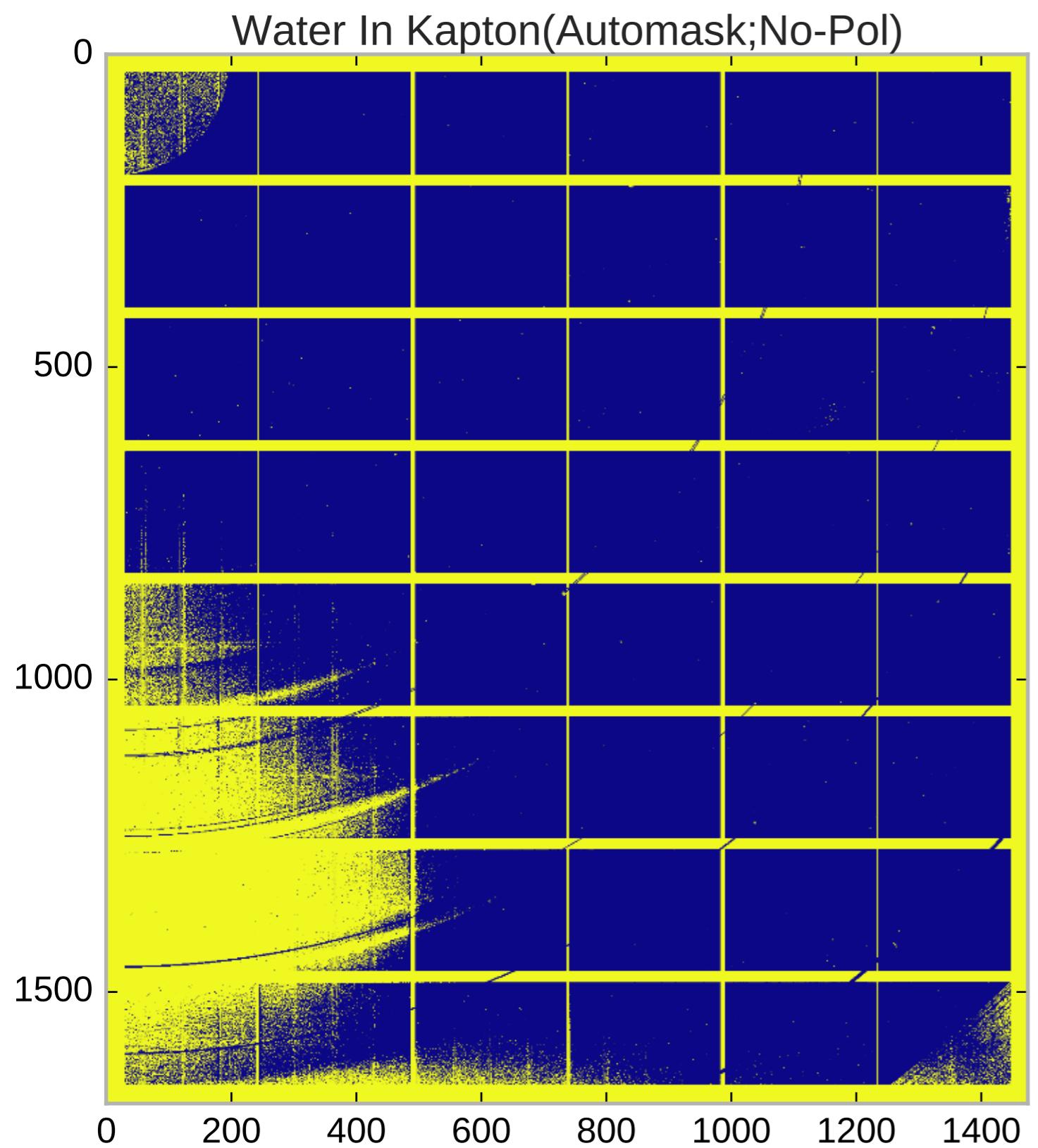




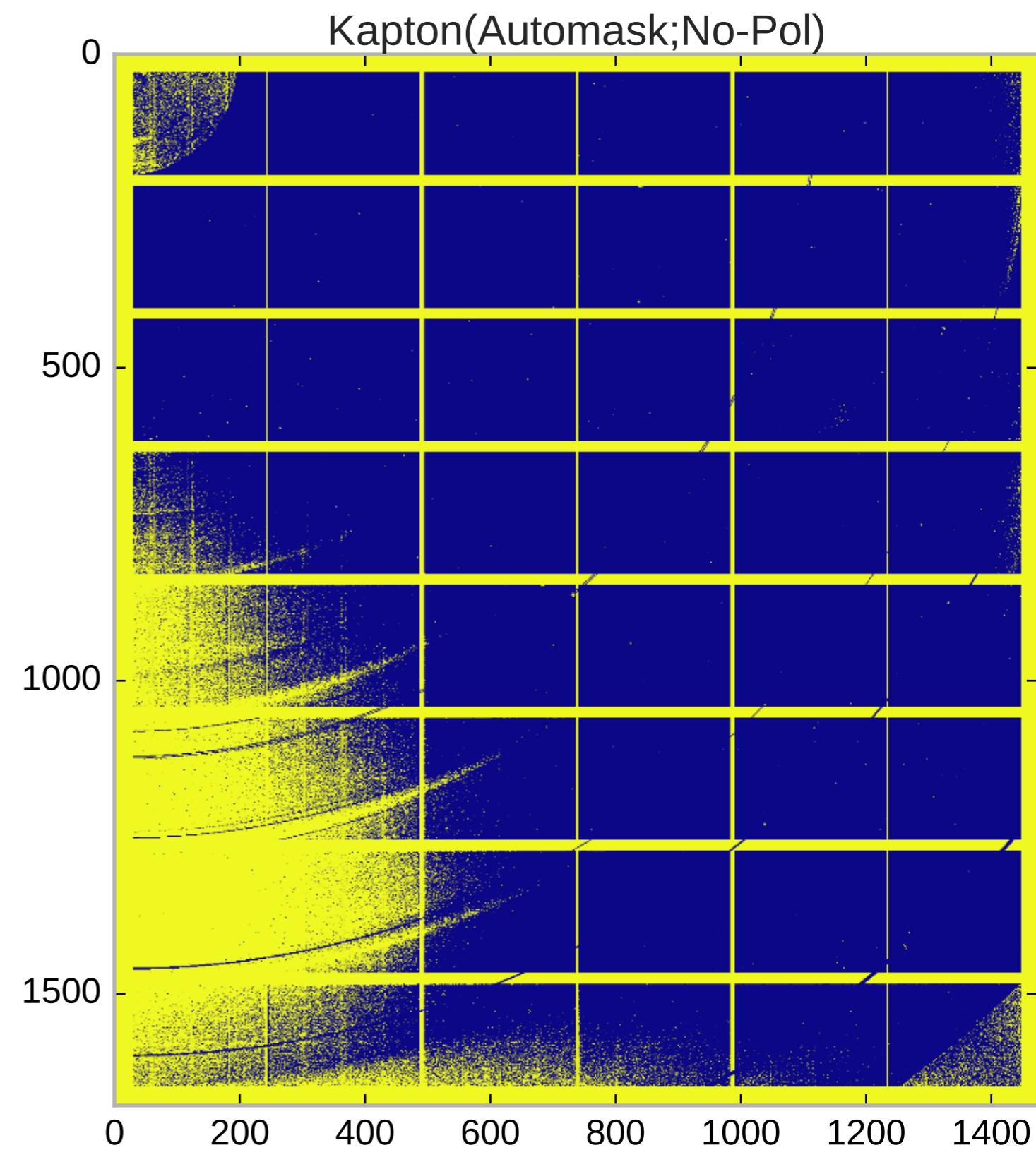
1D Integration (No Mask; ESRF Calib; Default 1D params)

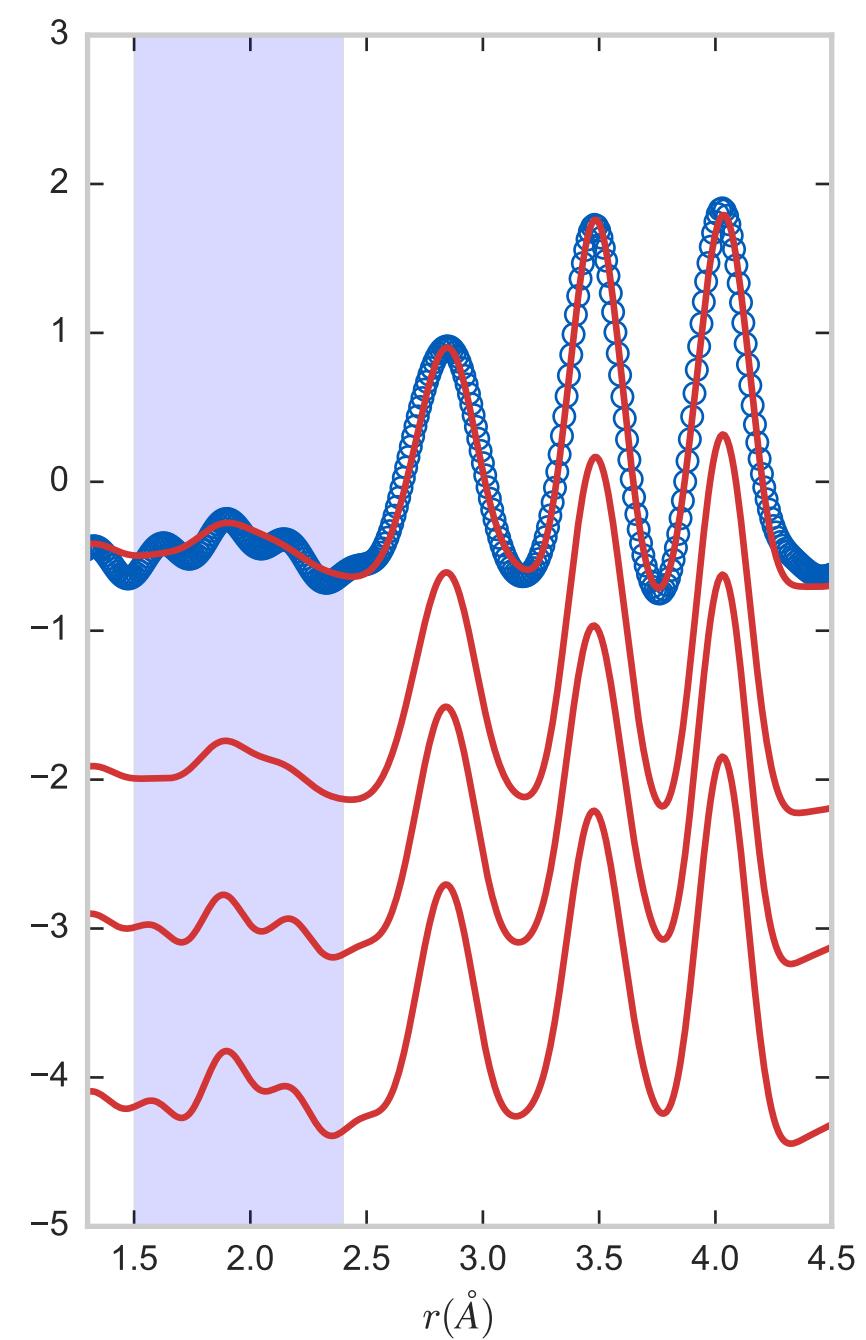
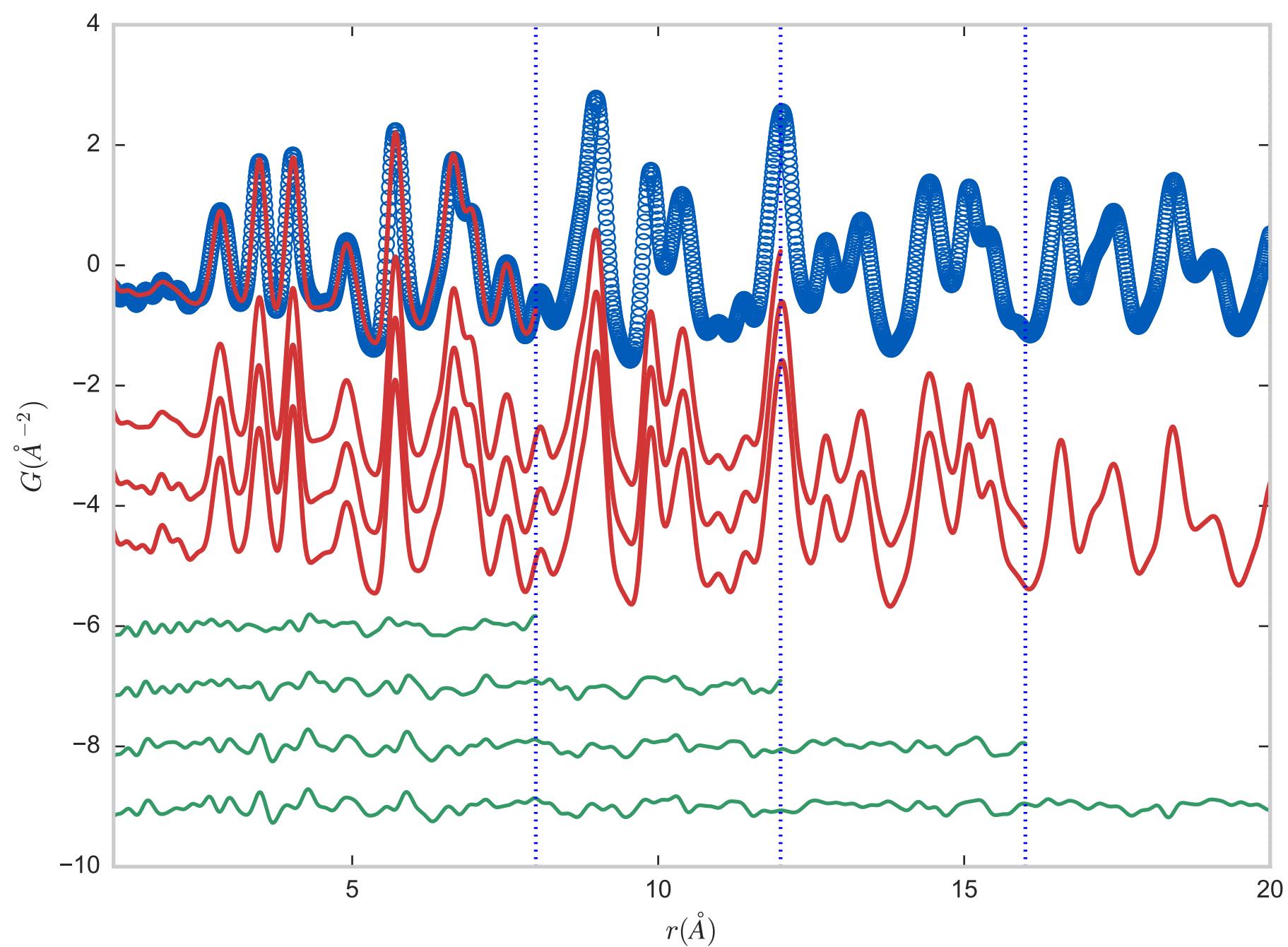


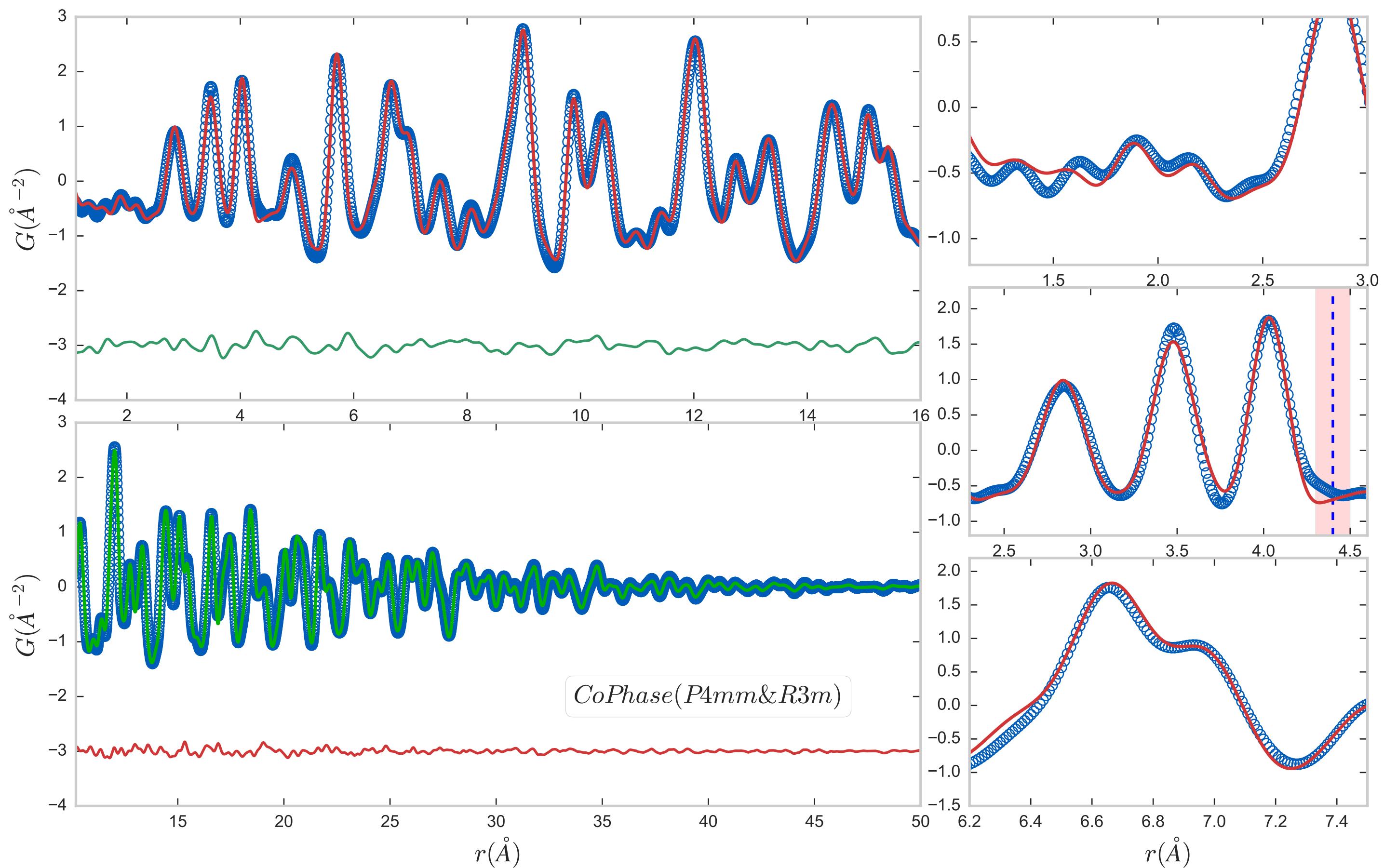
Water In Kapton(Automask;No-Pol)

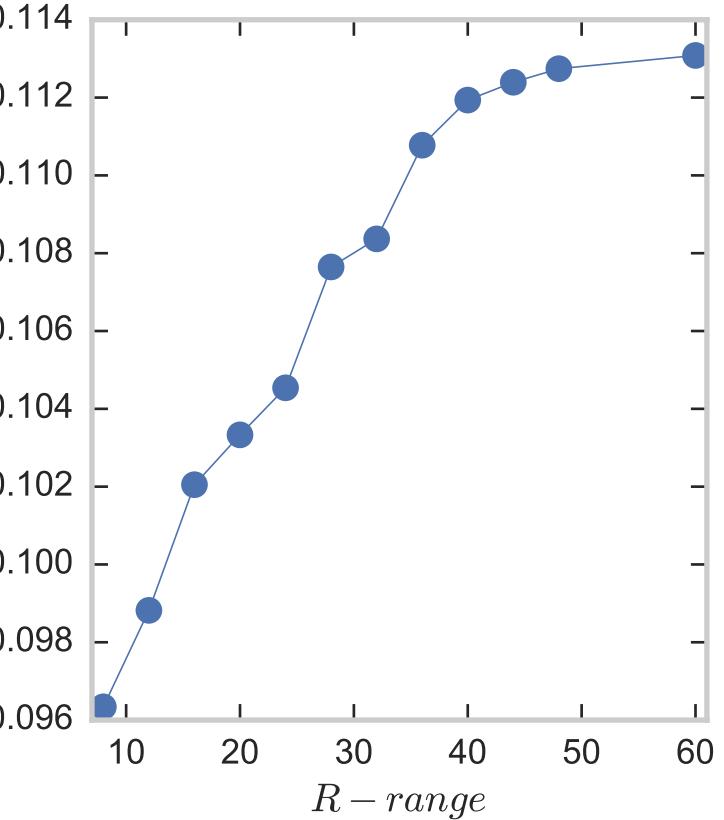
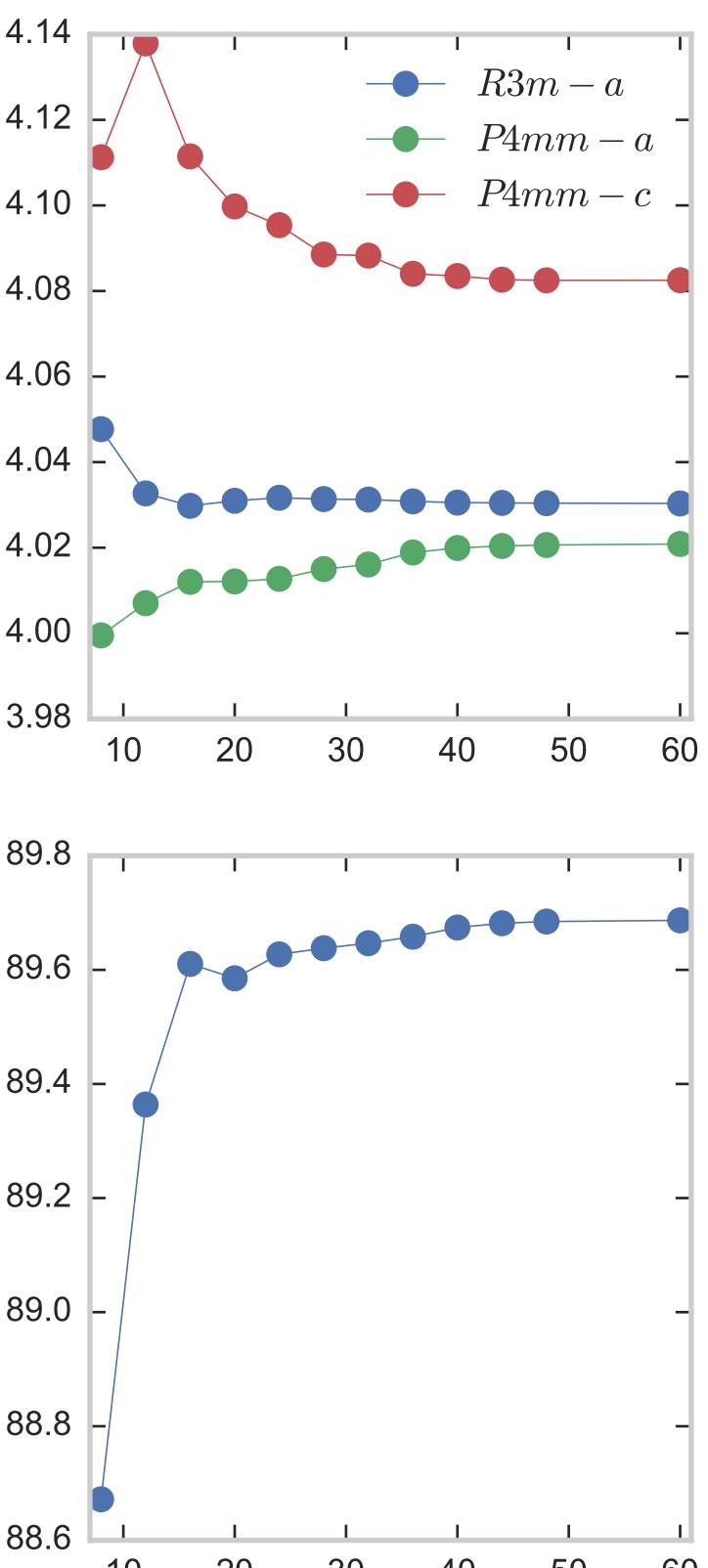
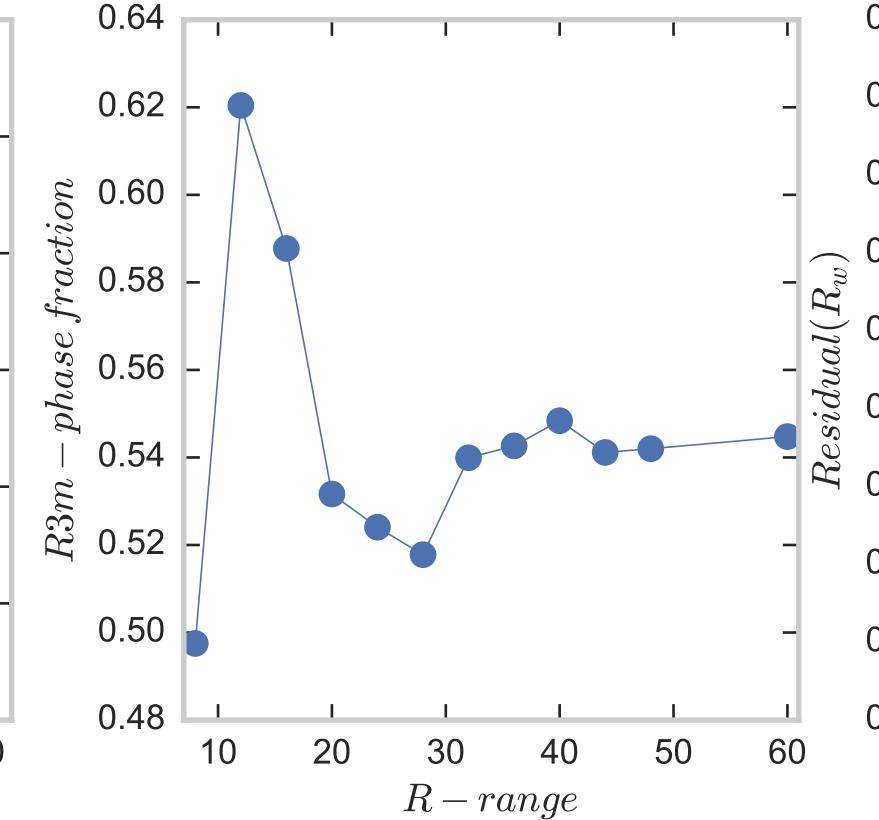
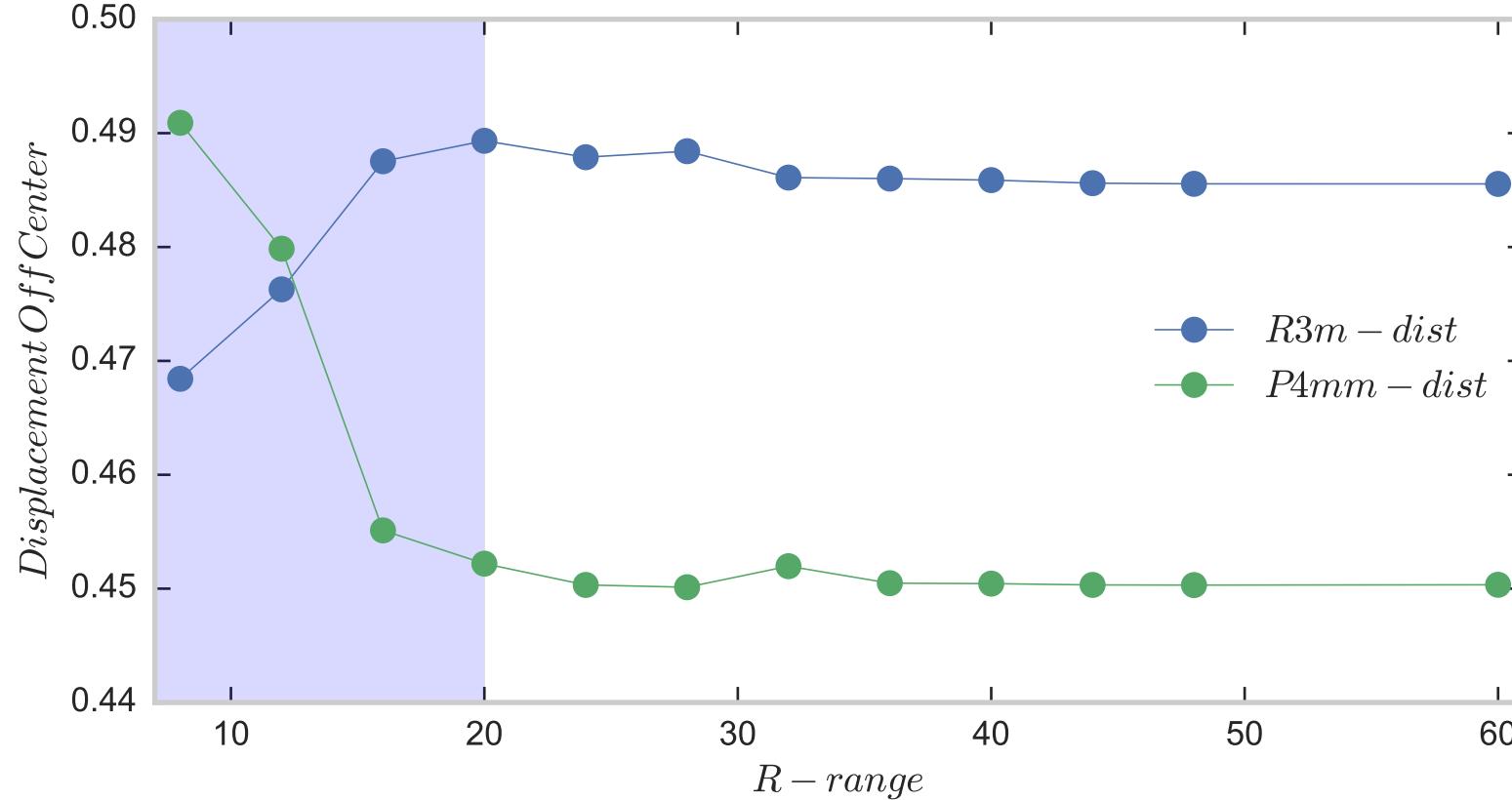
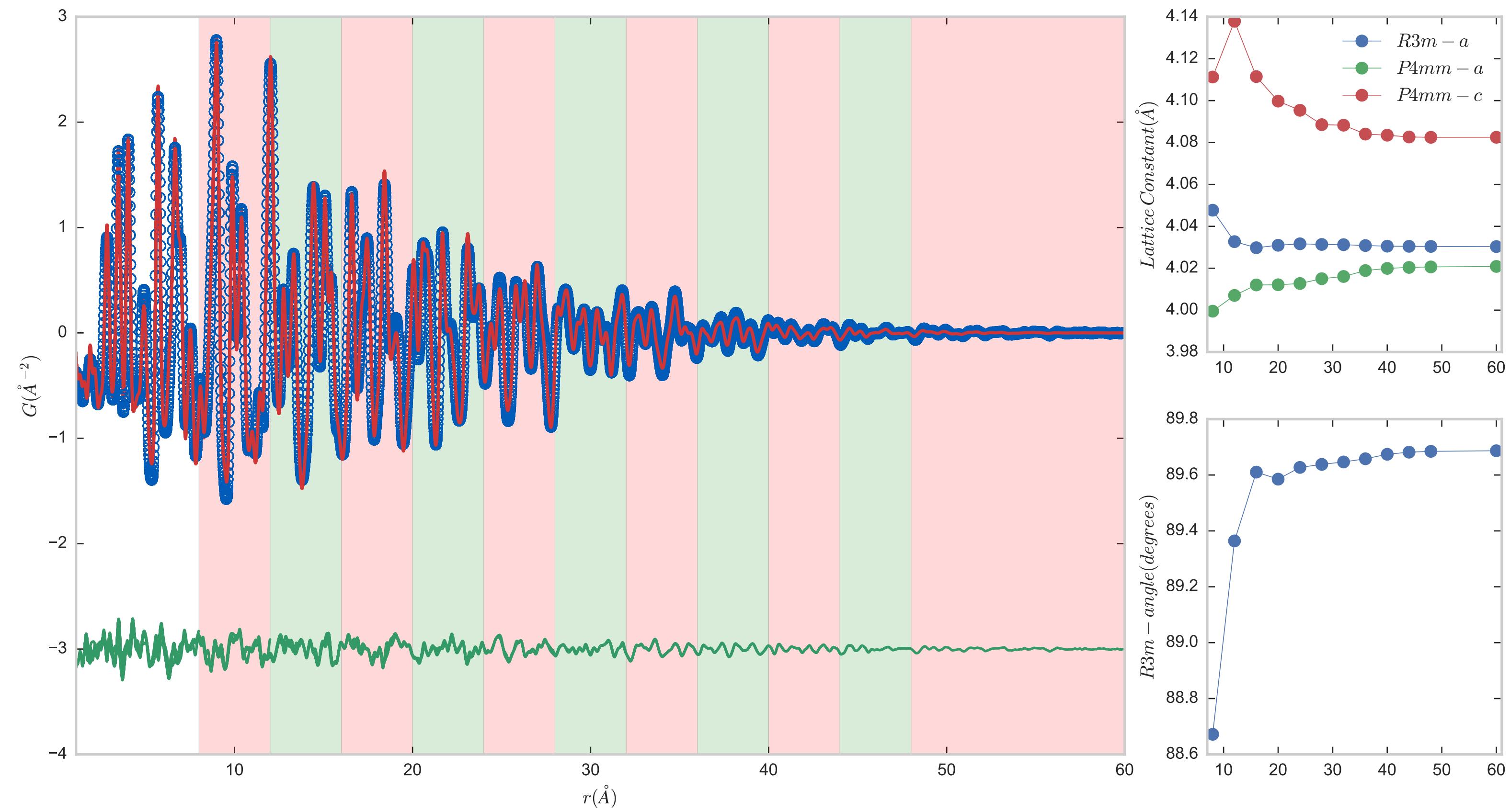


Kapton(Automask;No-Pol)

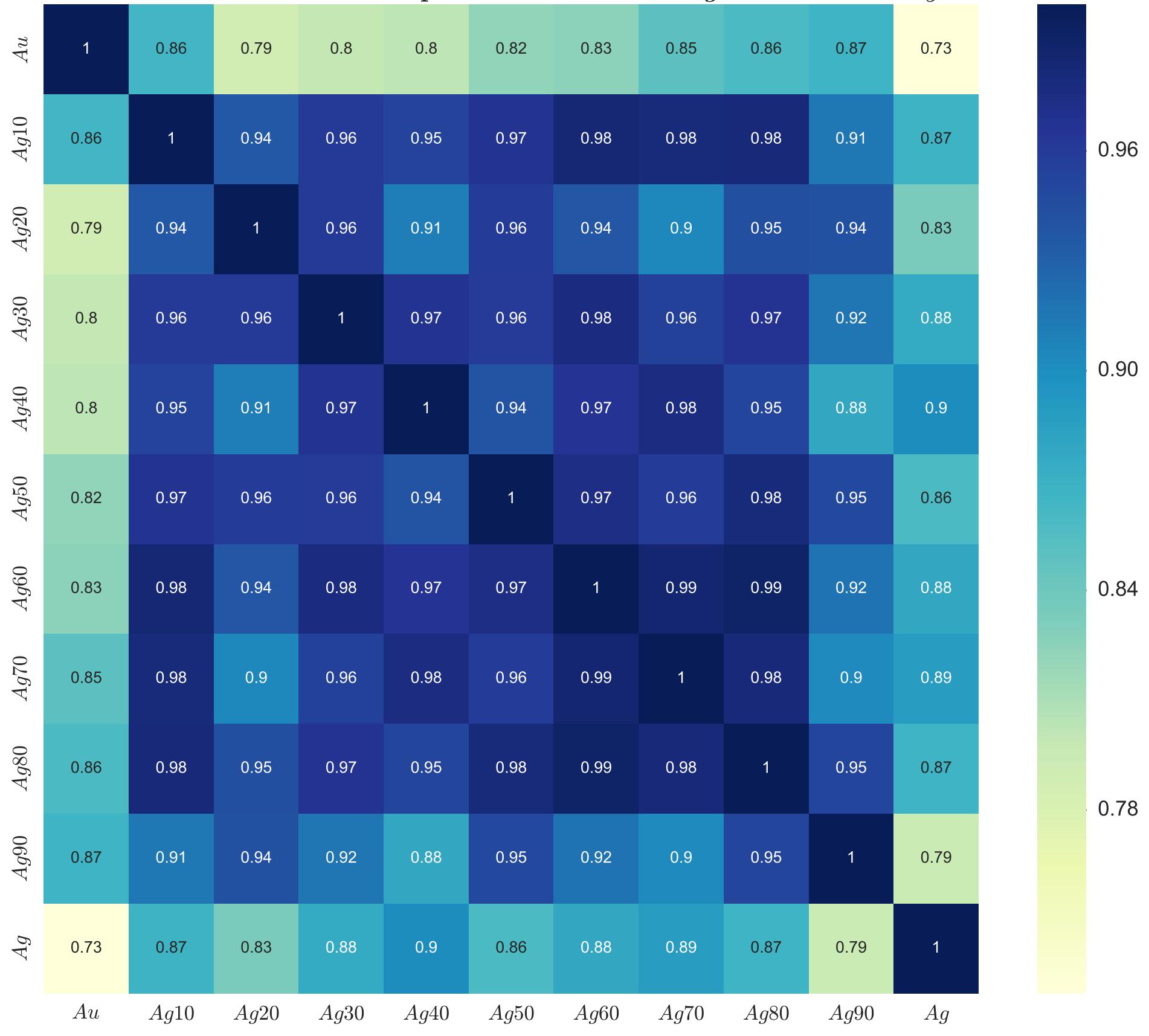


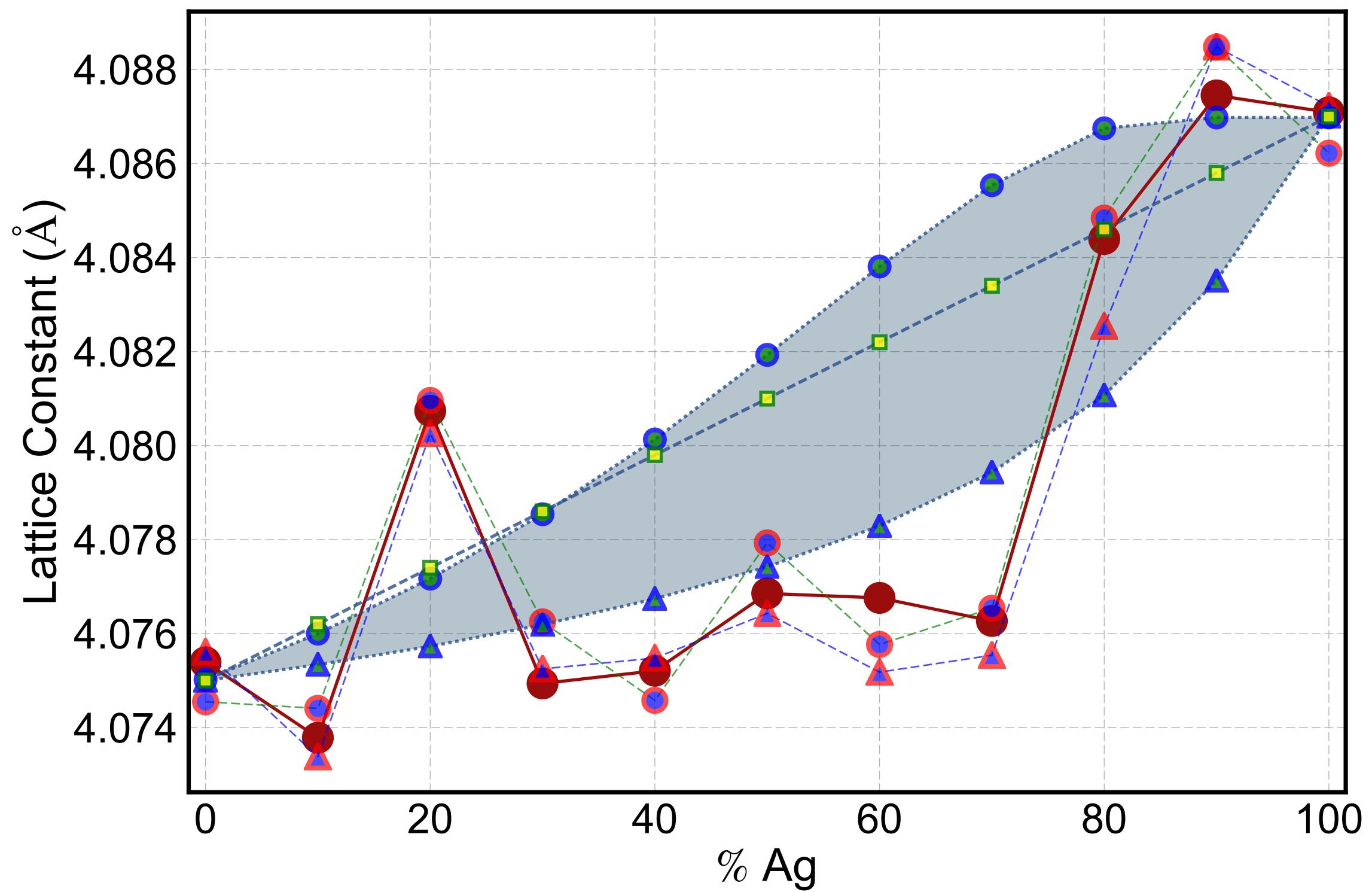


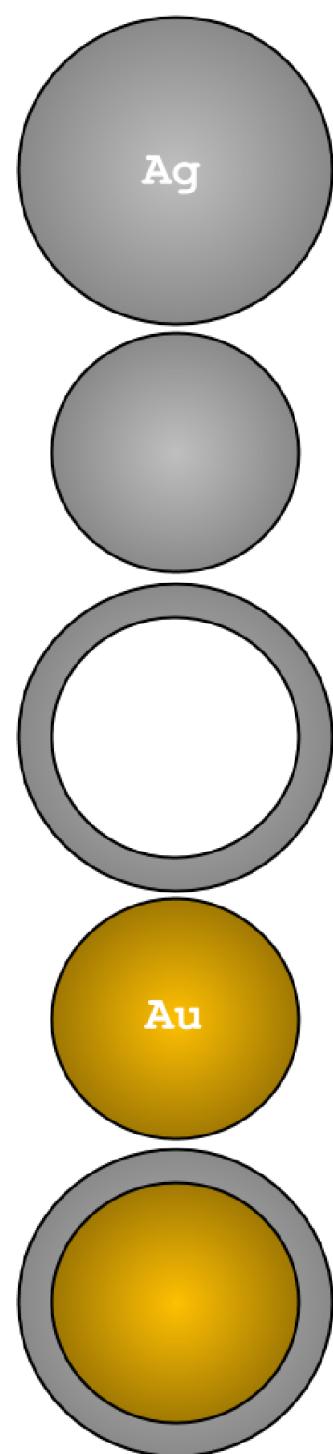
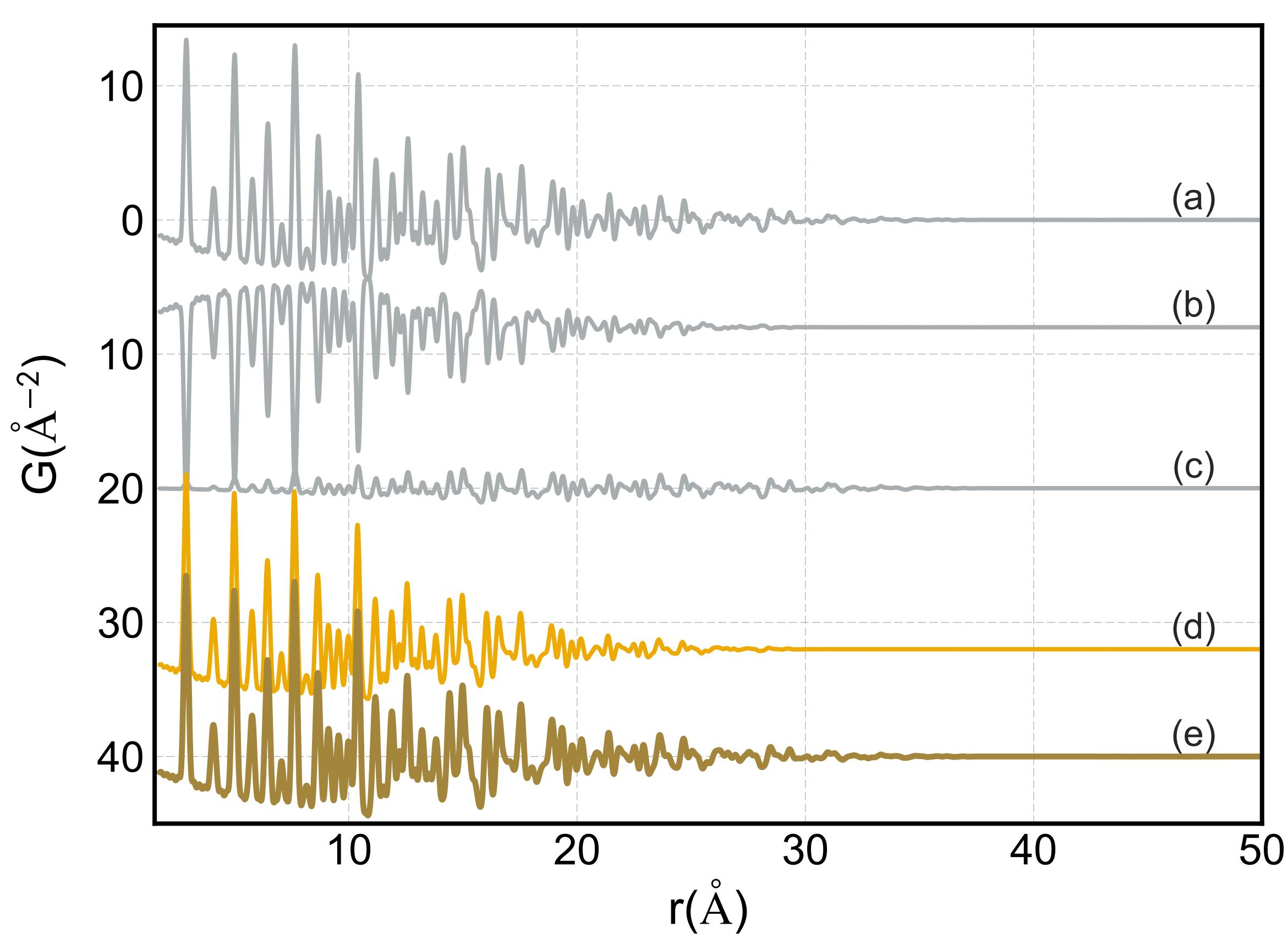


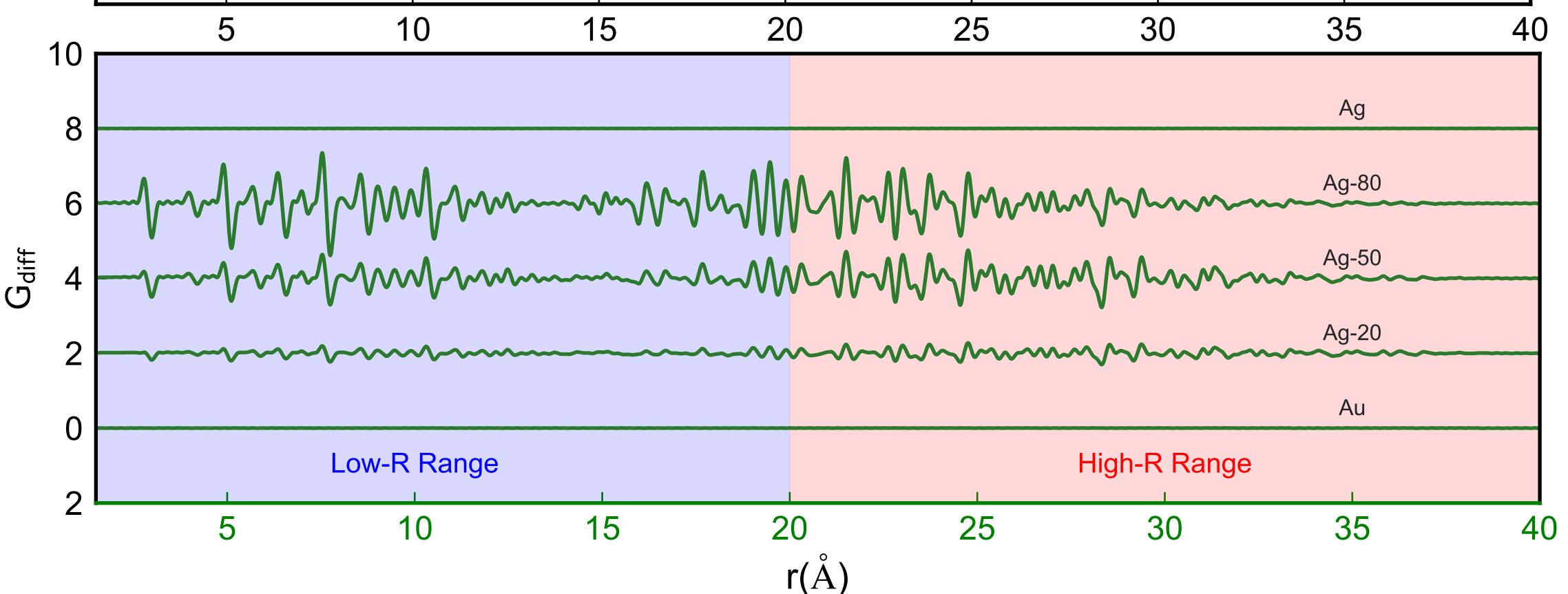
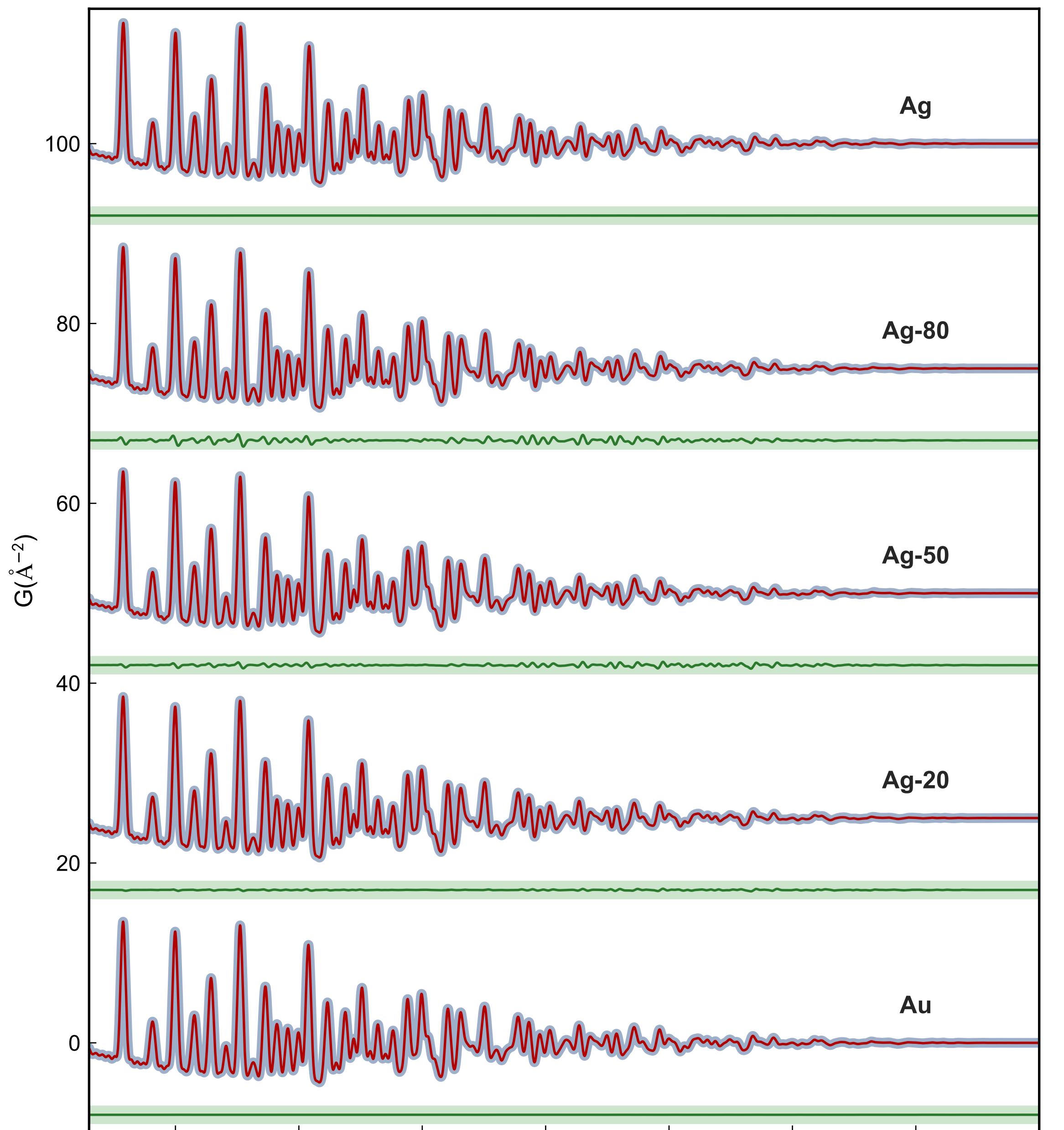


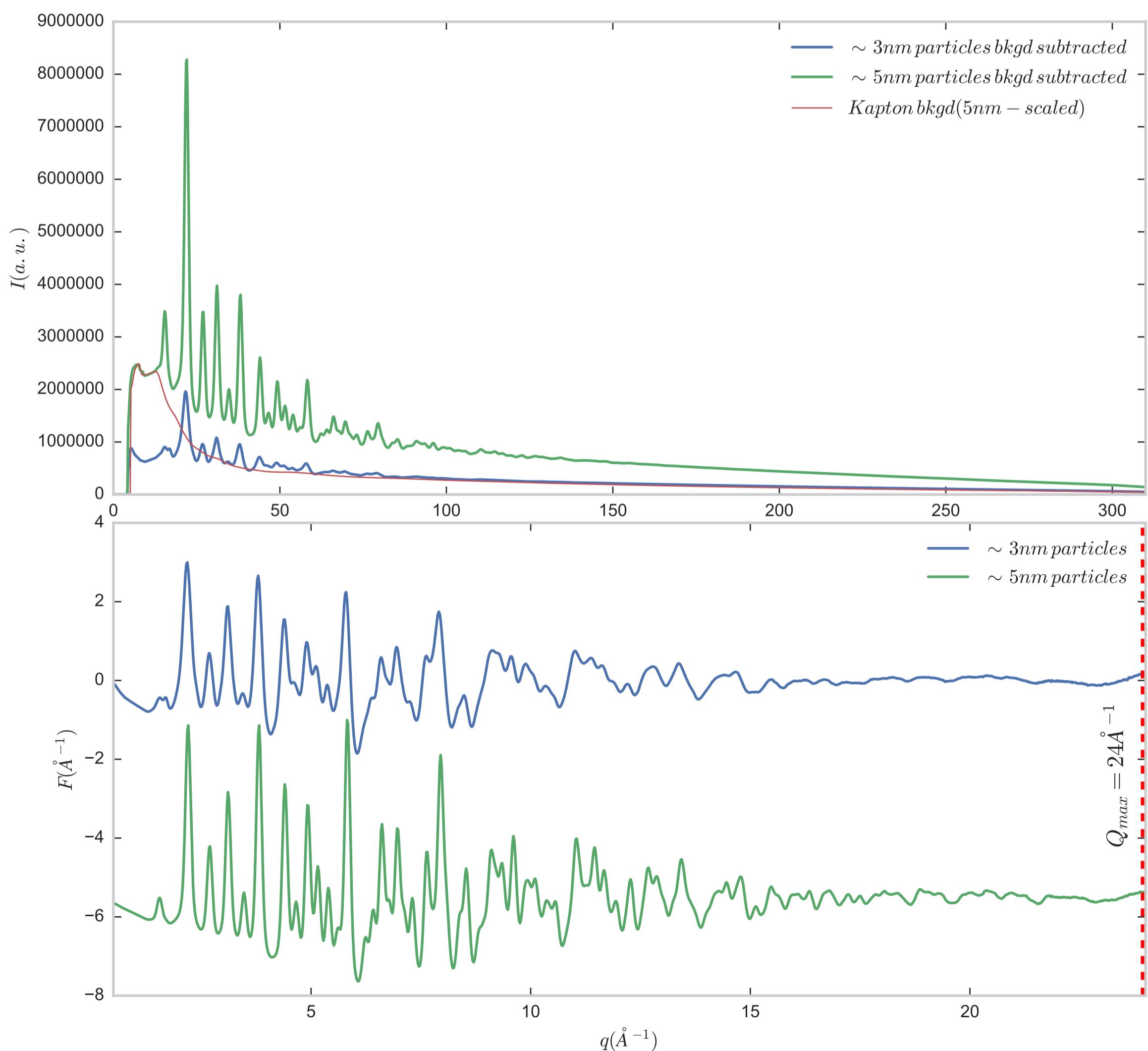
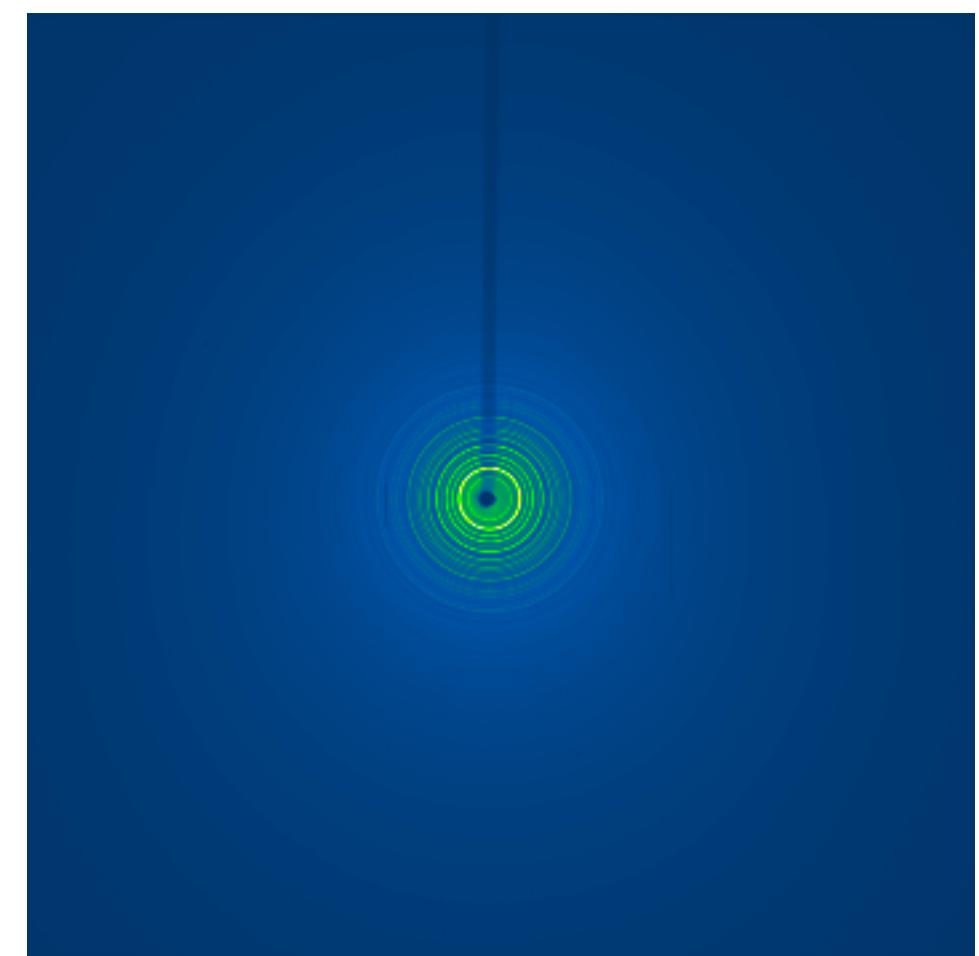
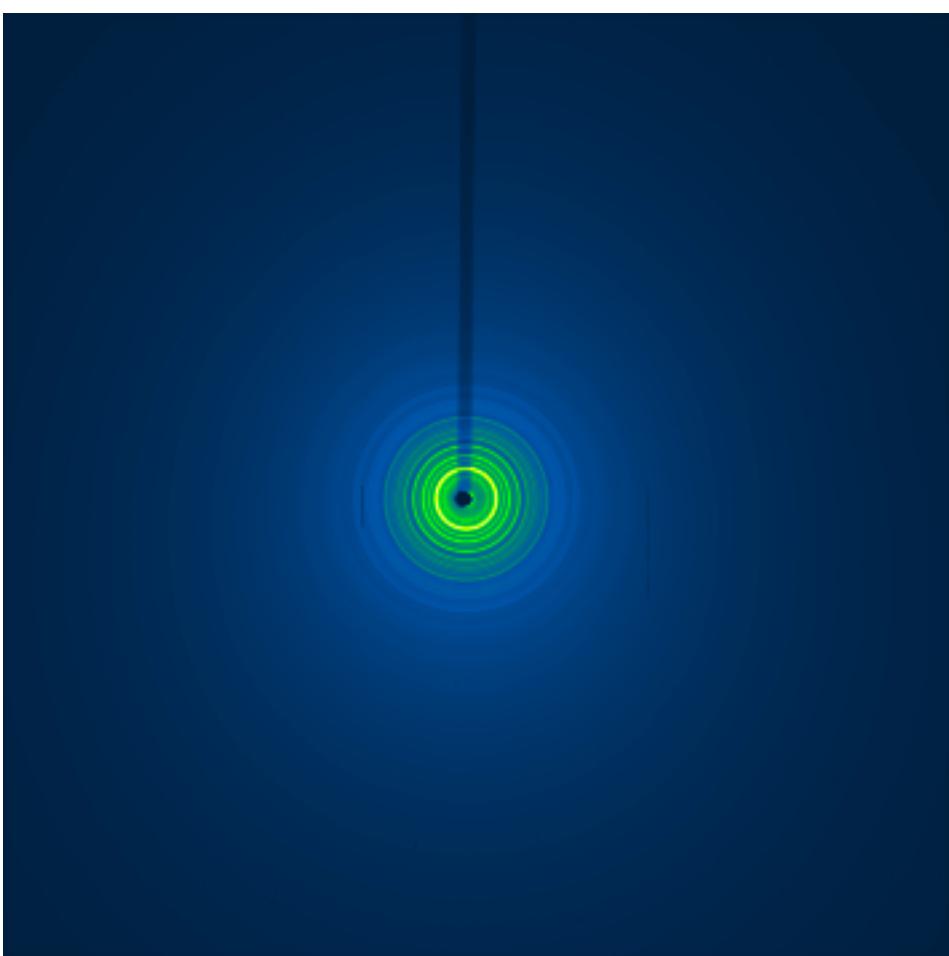
Pearson Correlation Map : FitResiduals – AgAu – FCCAlloy

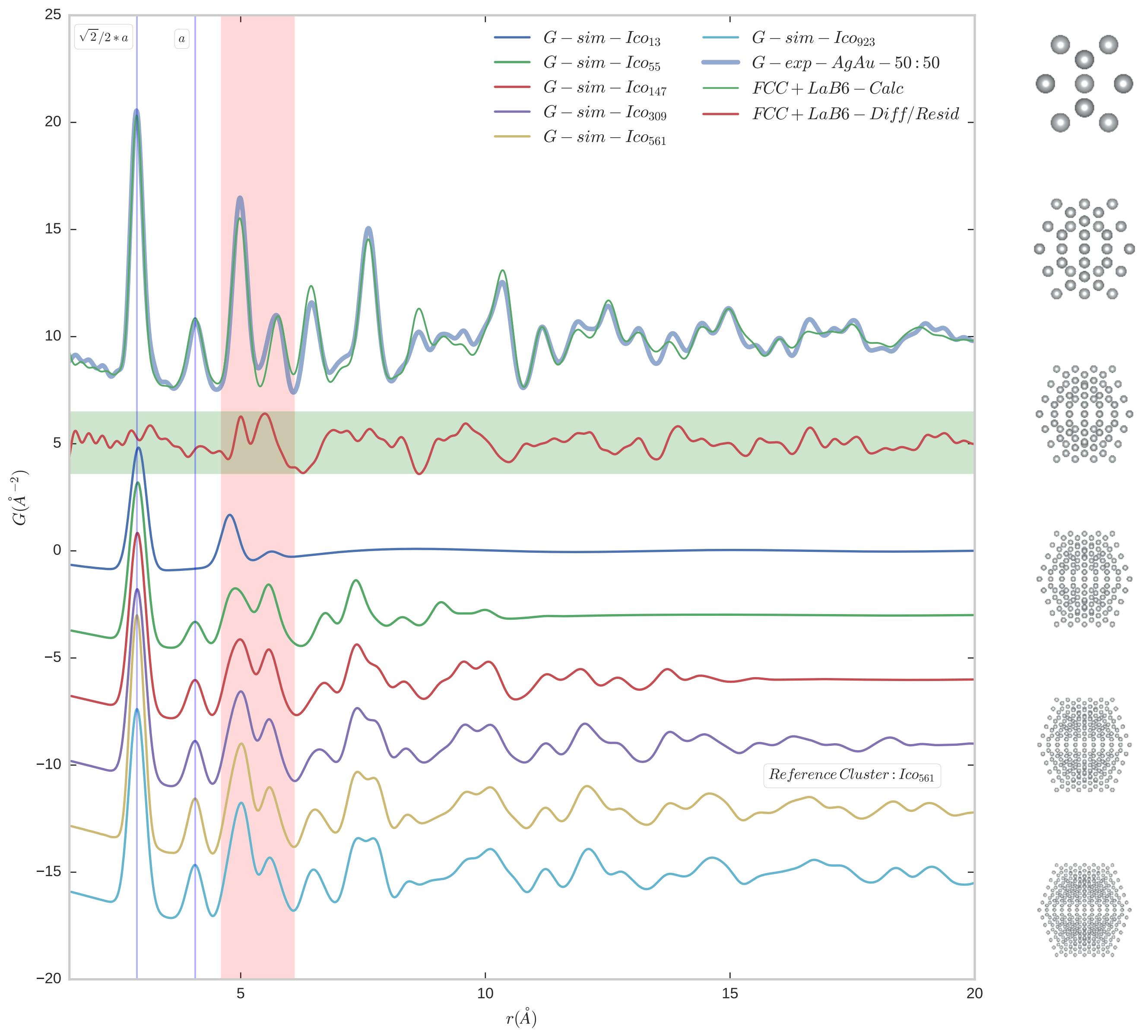


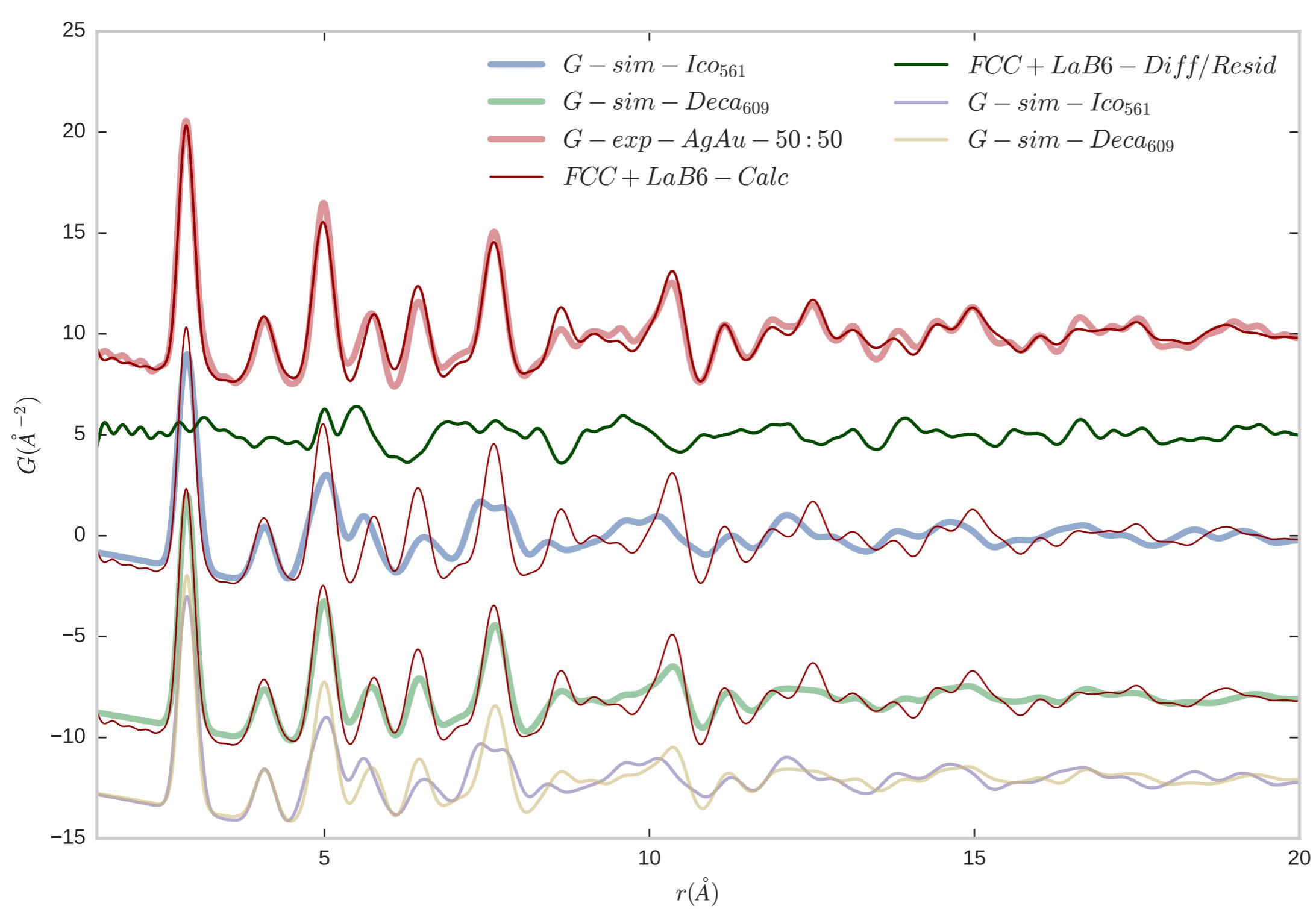




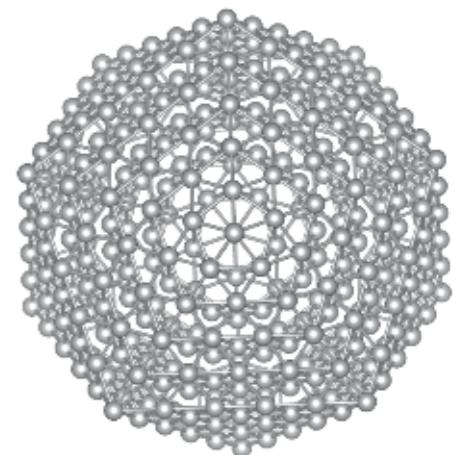




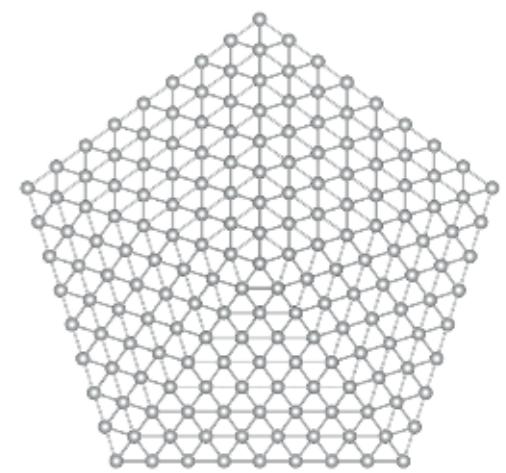


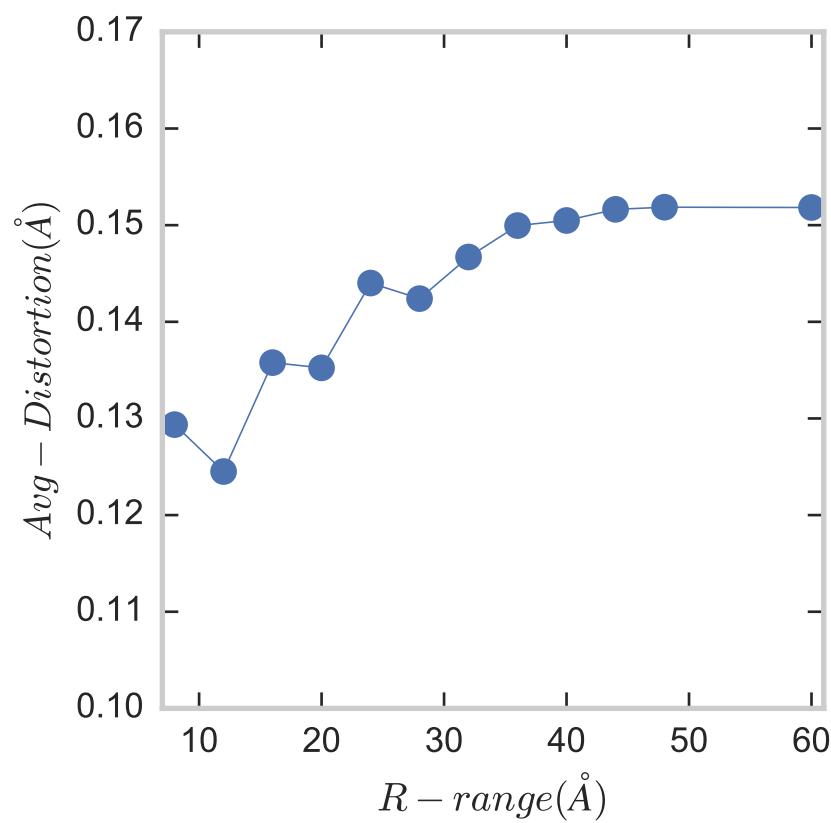
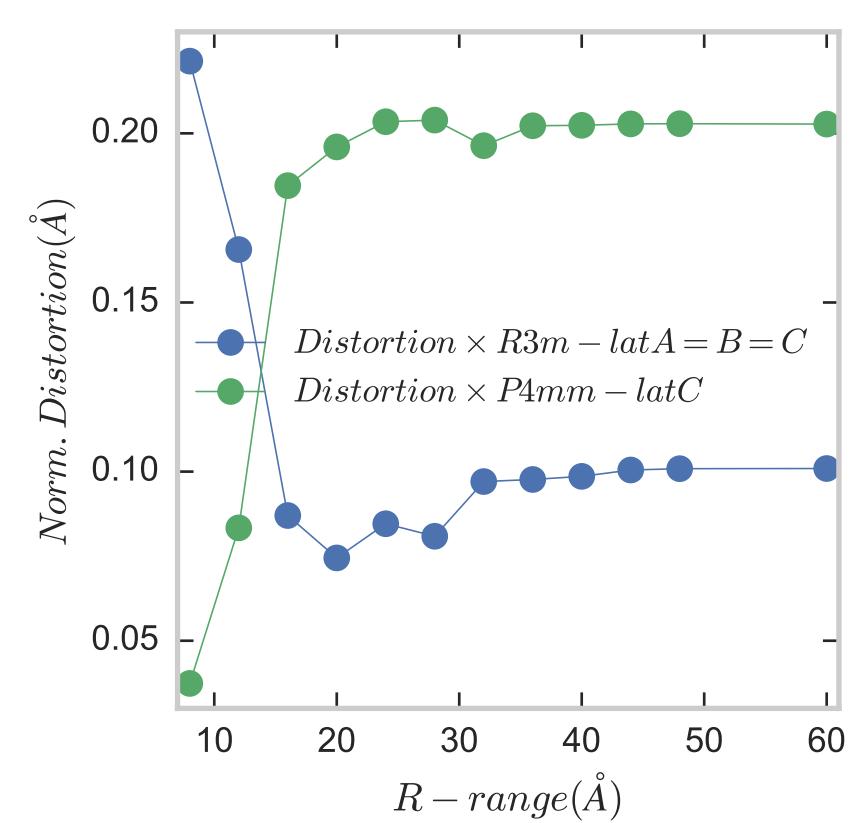
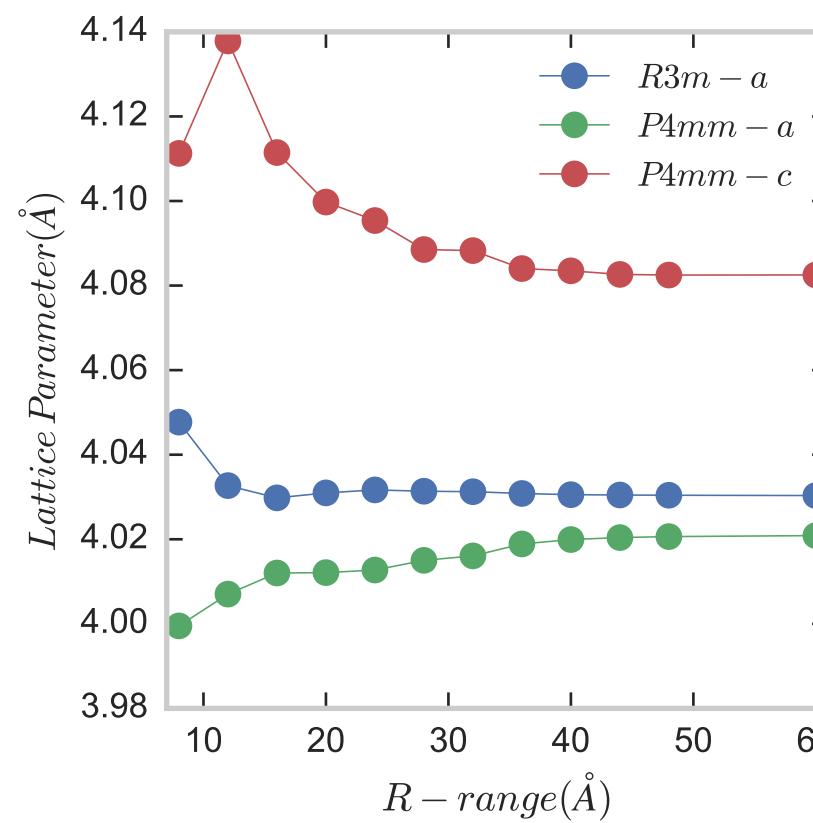
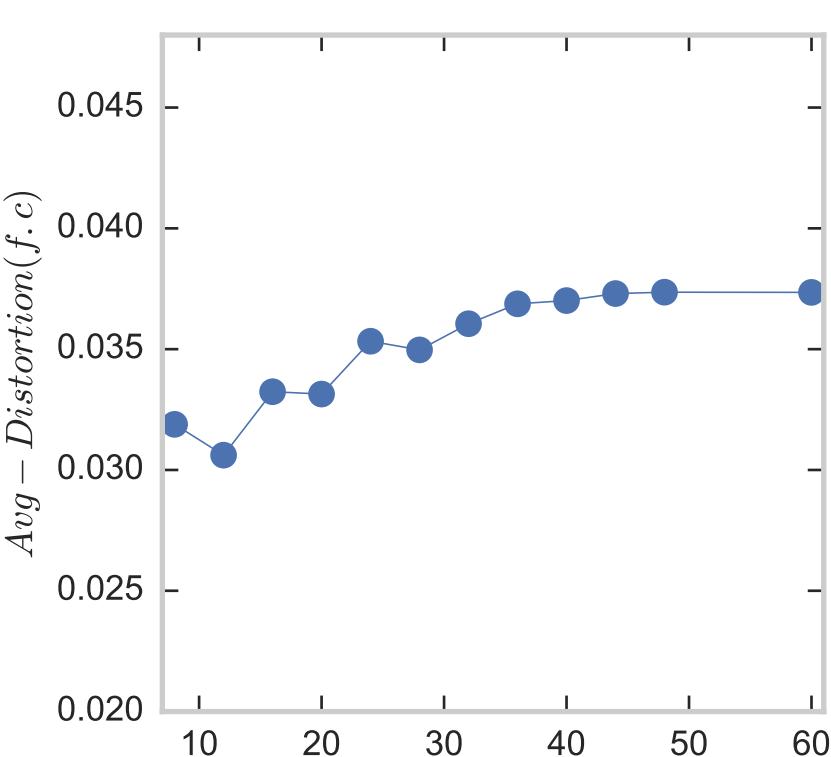
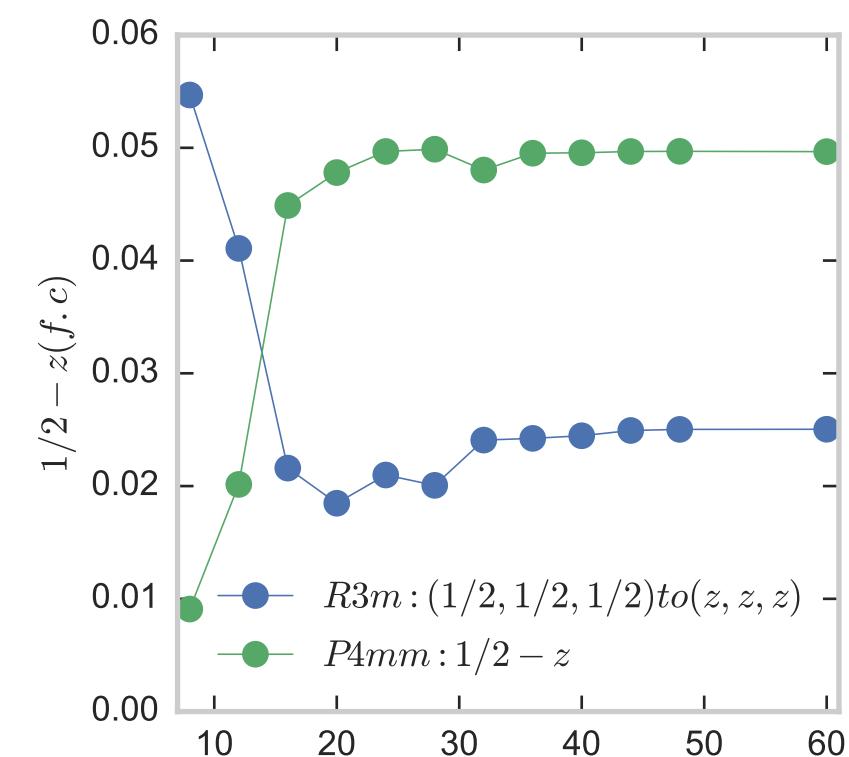
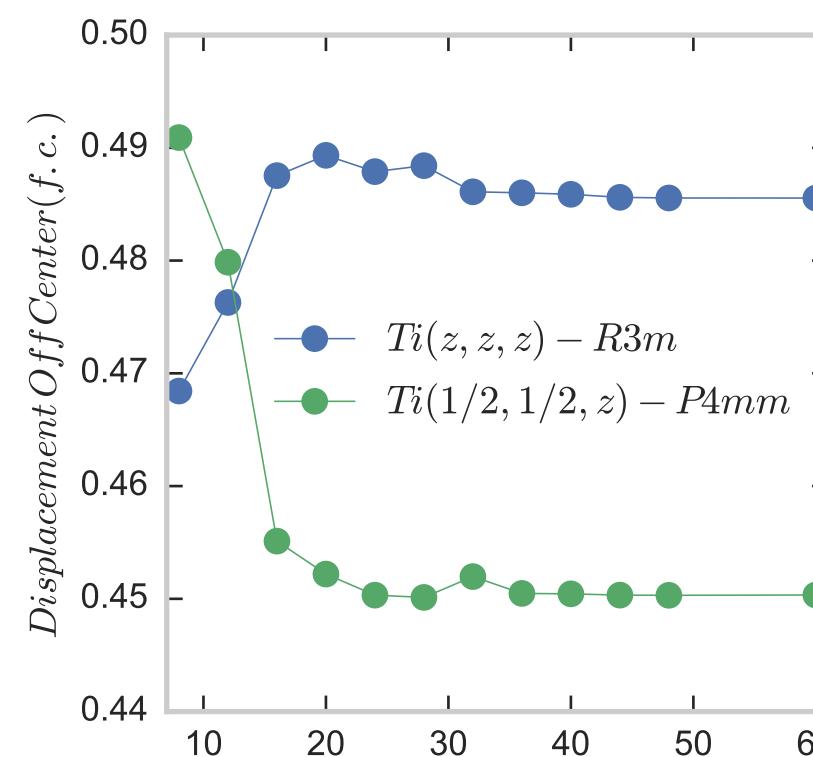


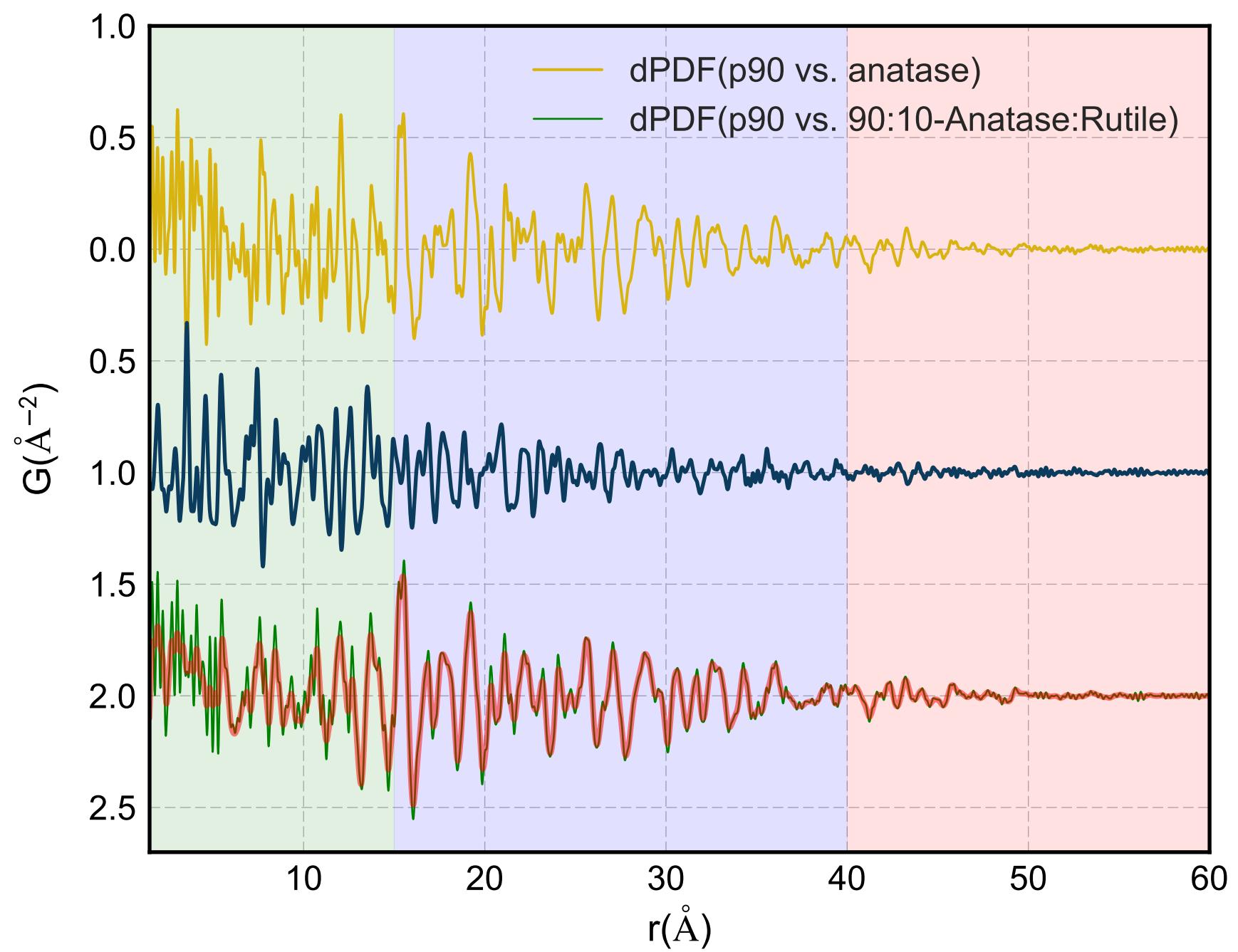
Ico_{561}

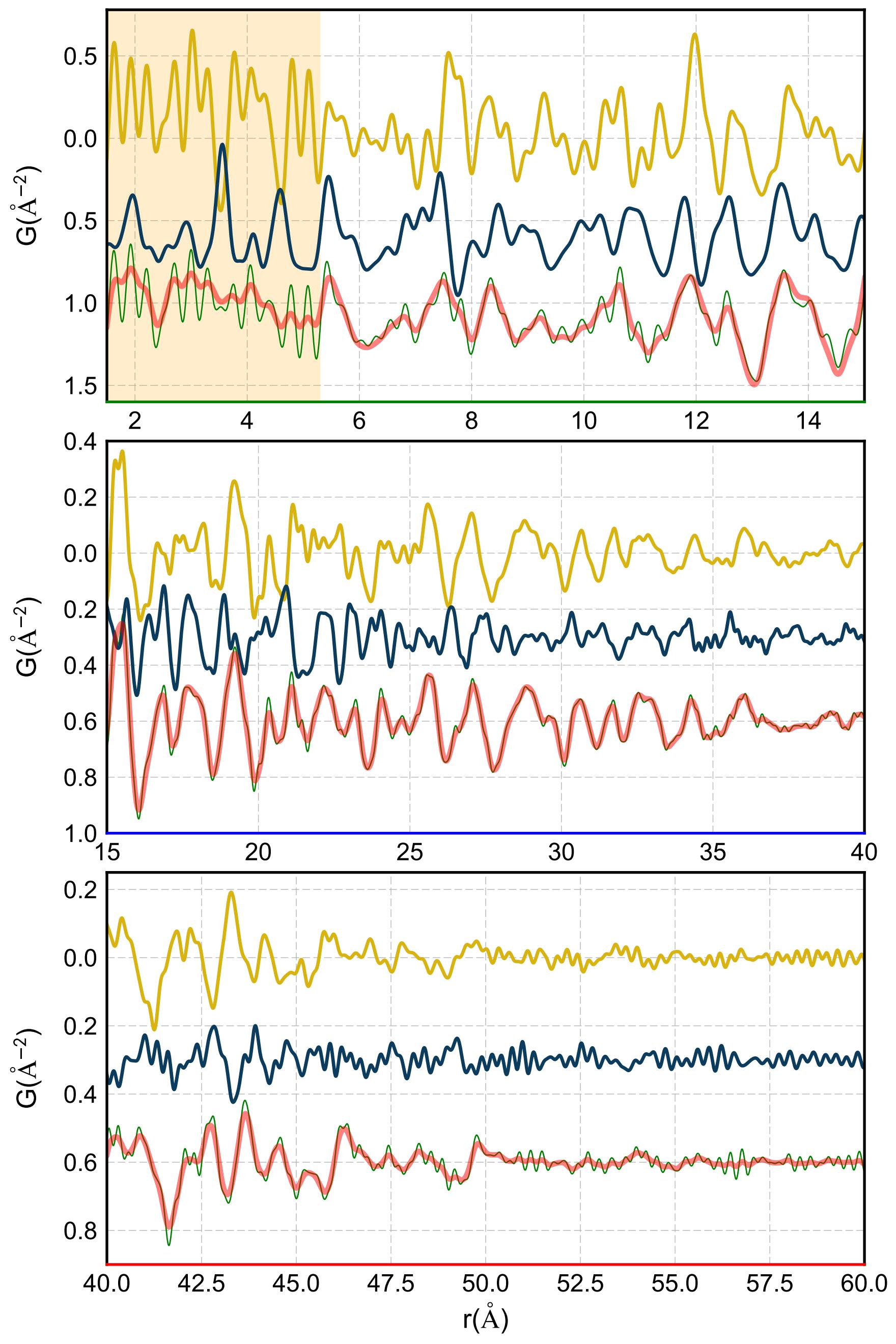


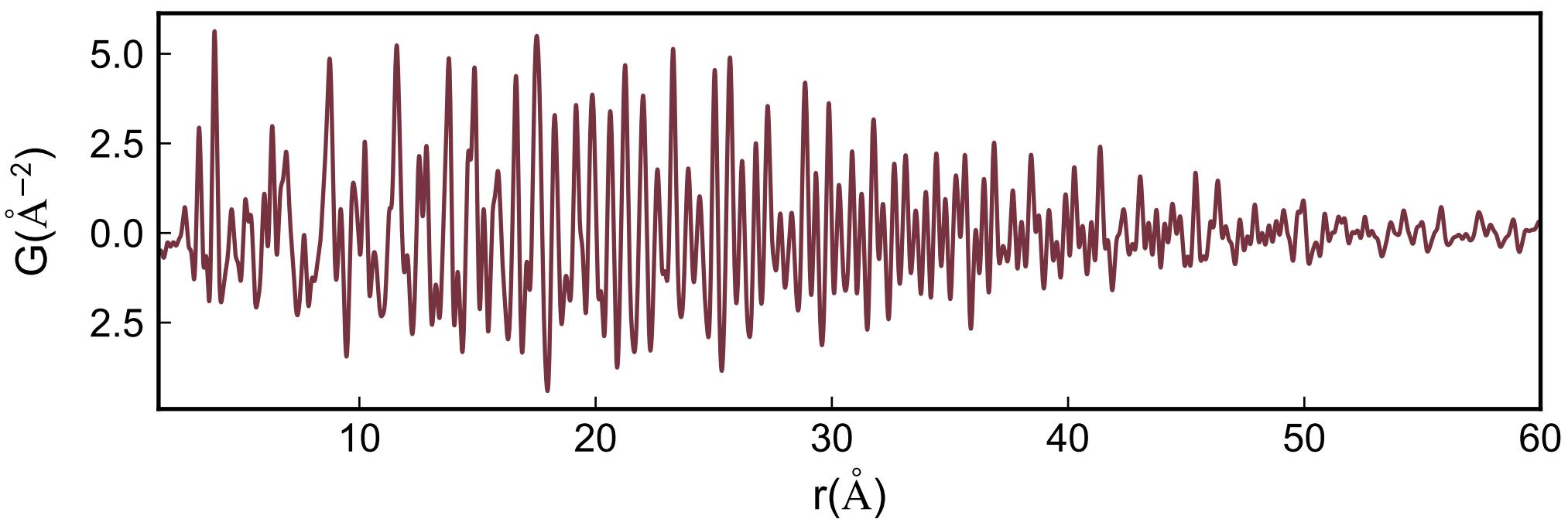
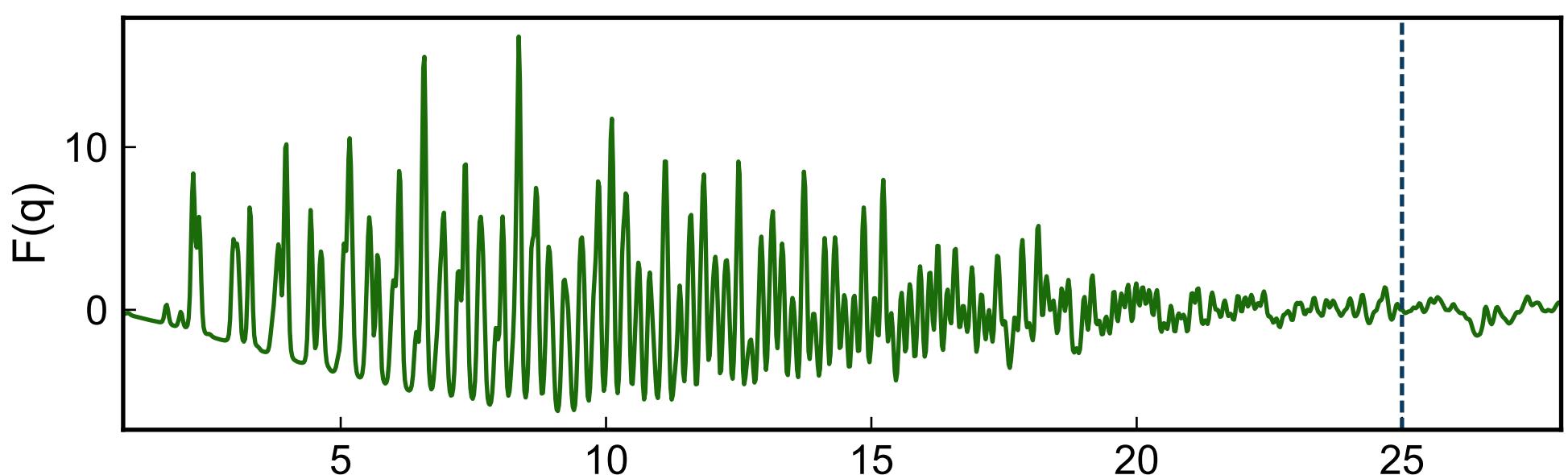
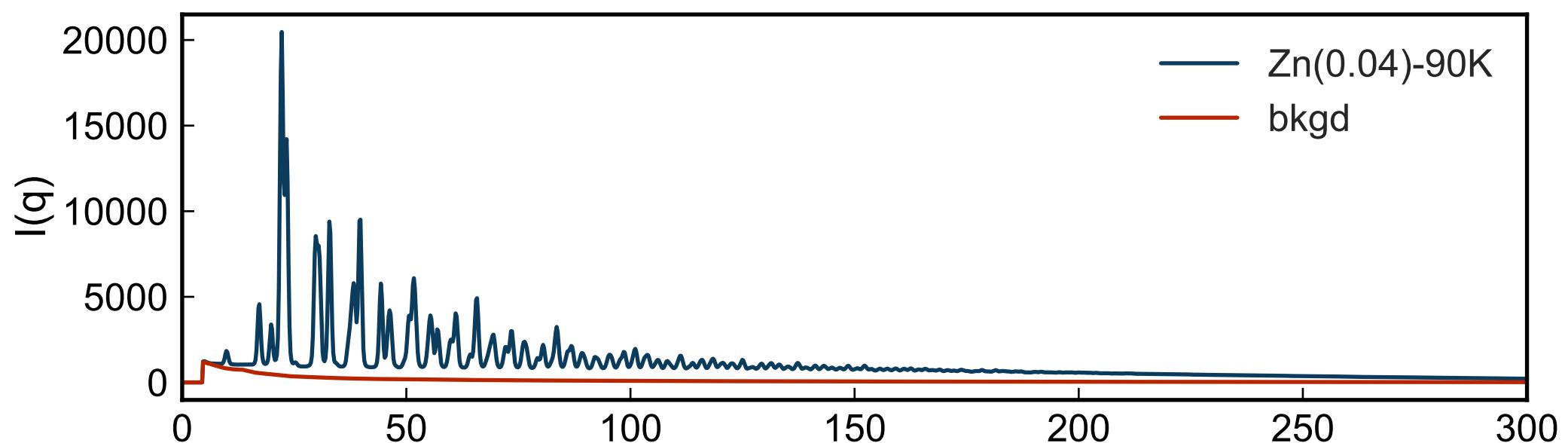
$Marks_{609} - 9 - 9 - 9$

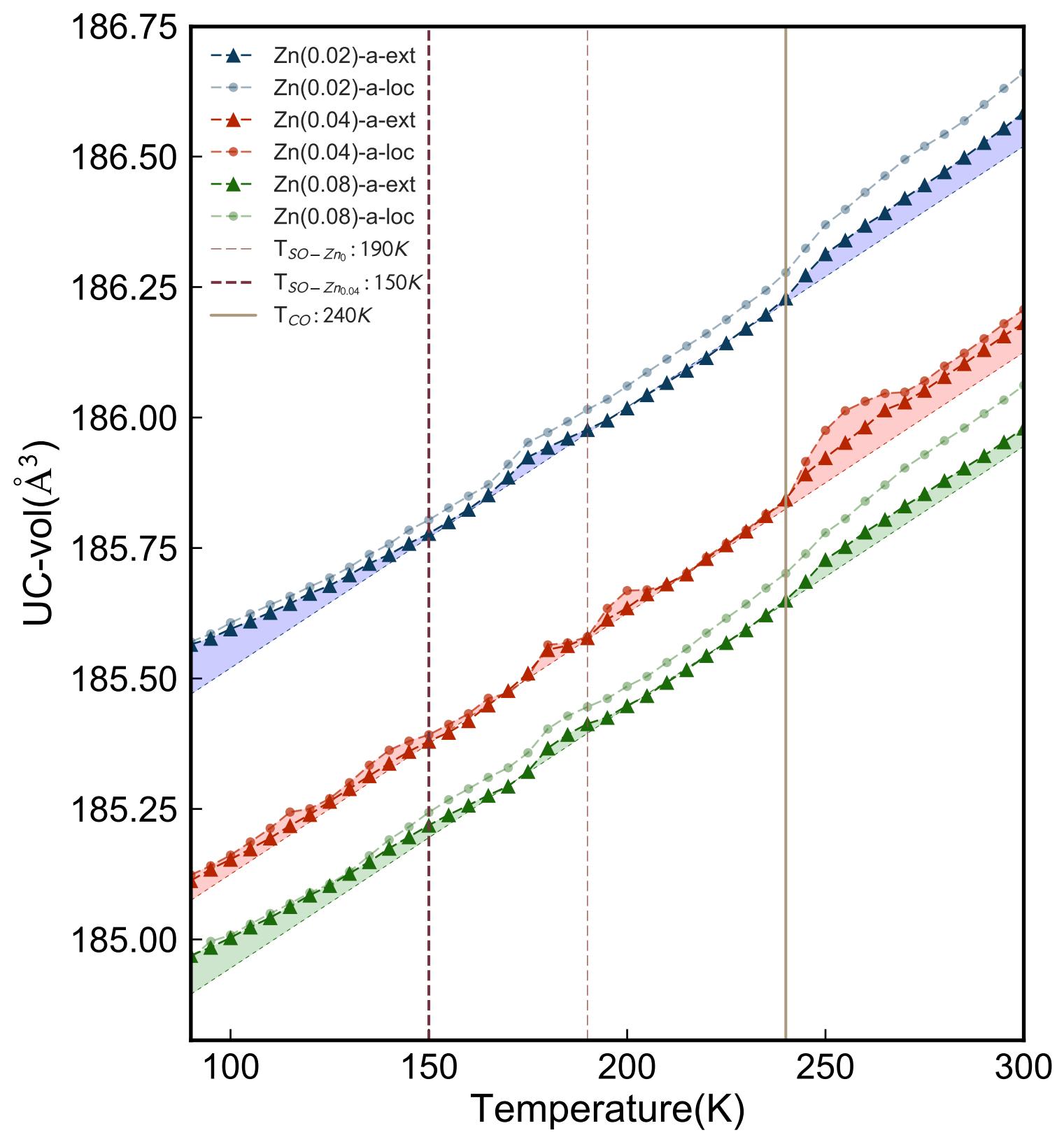


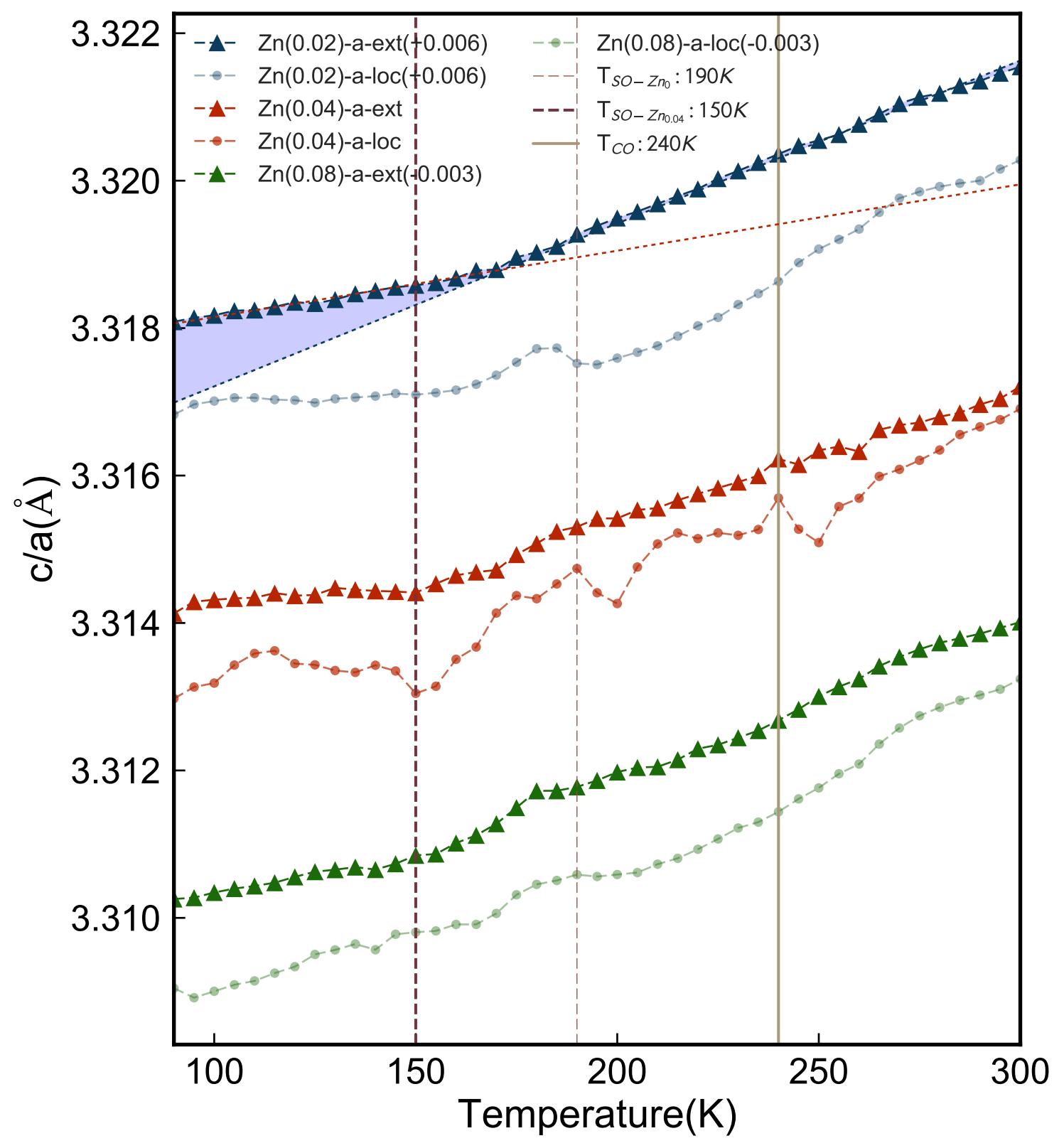


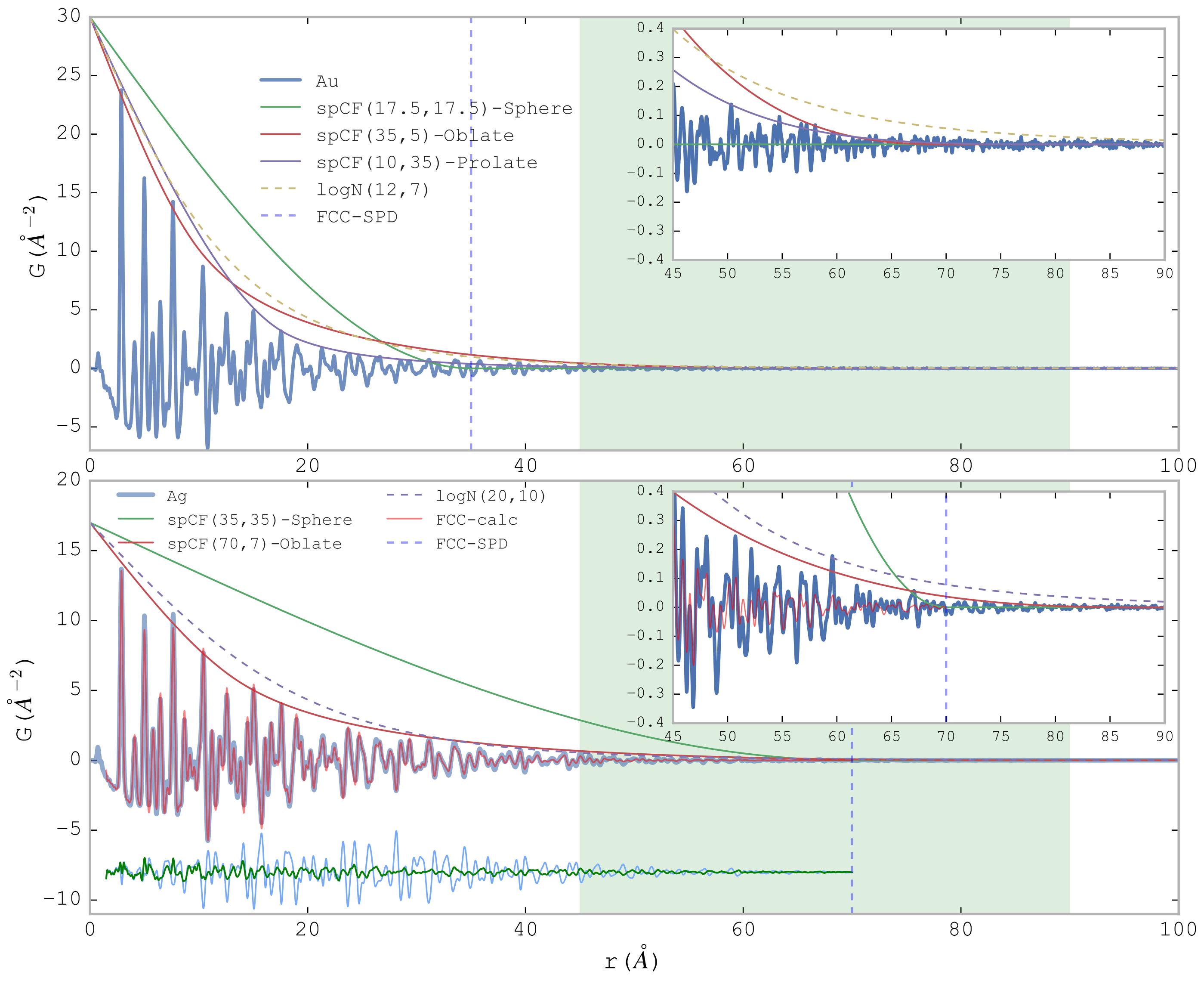




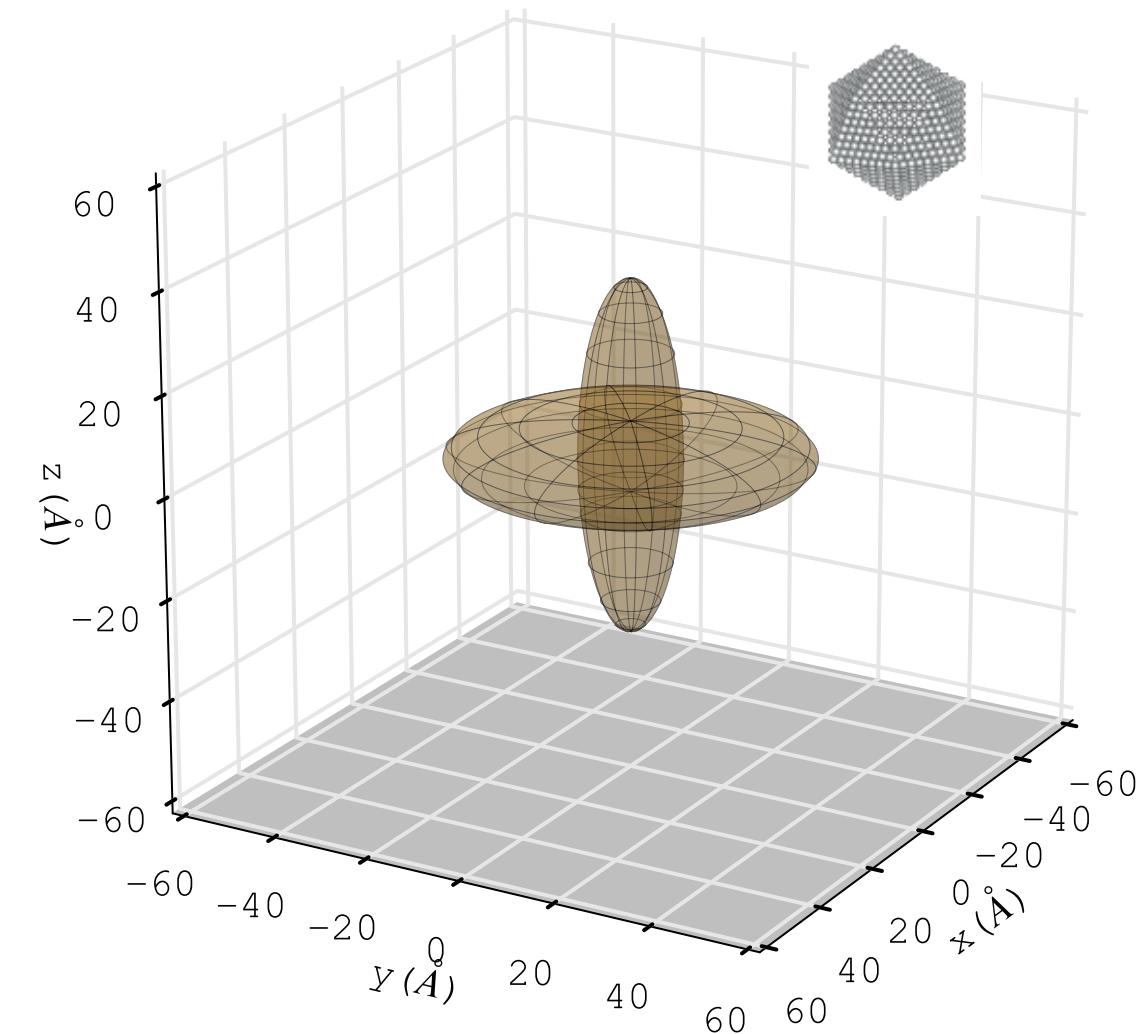




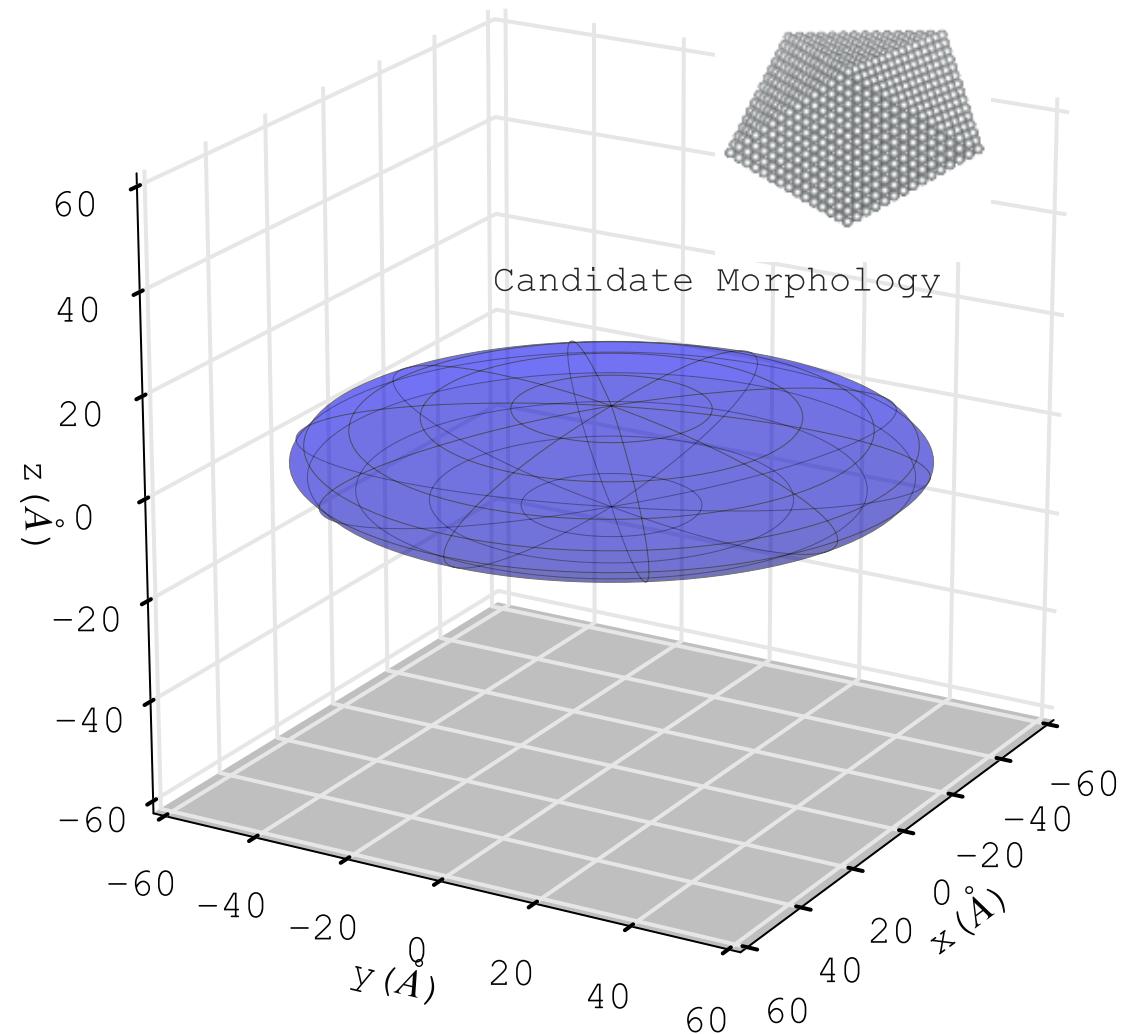


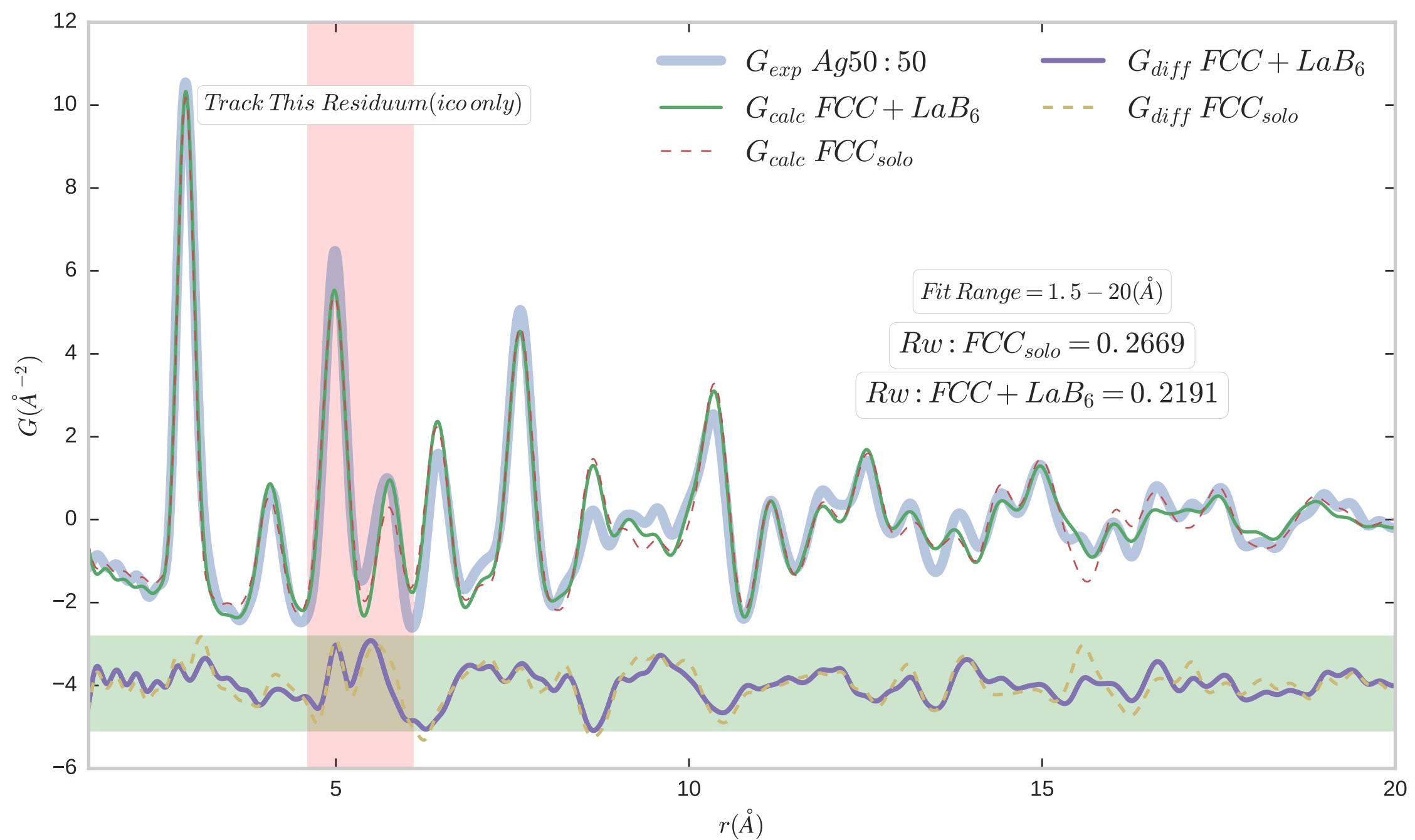


Au Form Factor (Oblate+Prolate)

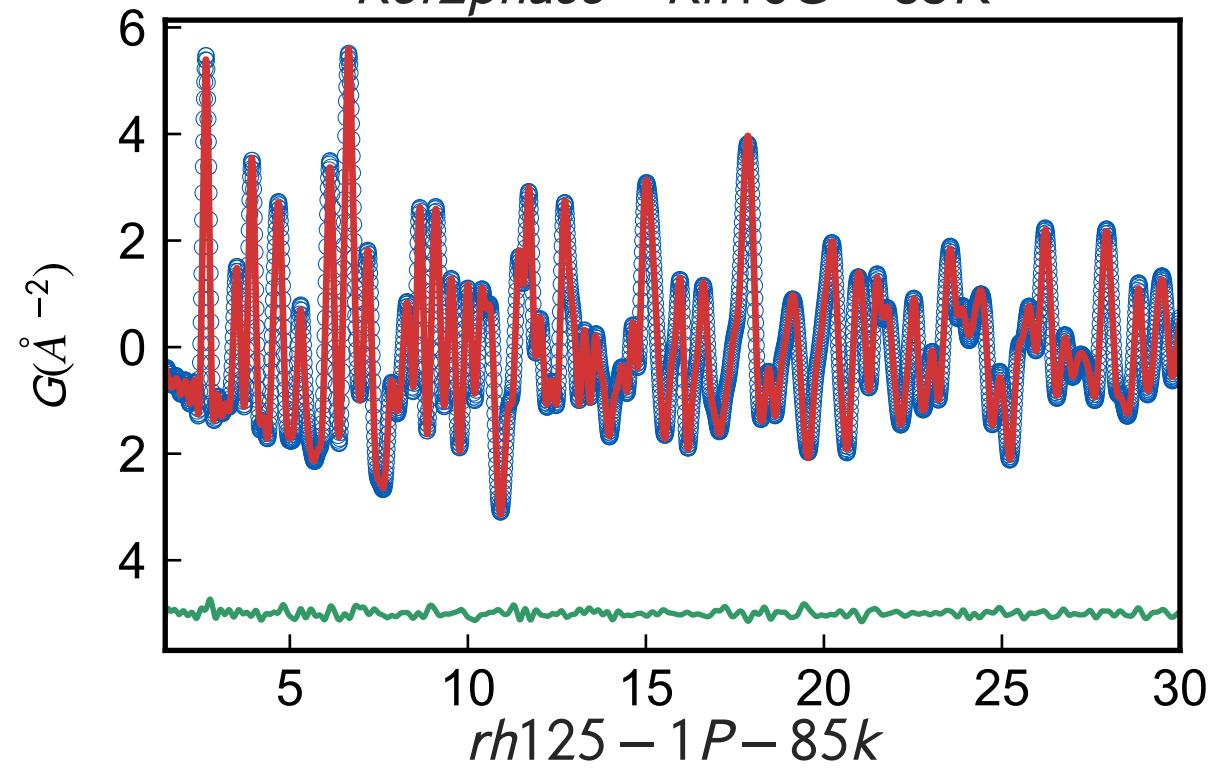


Ag Form Factor (Oblate)

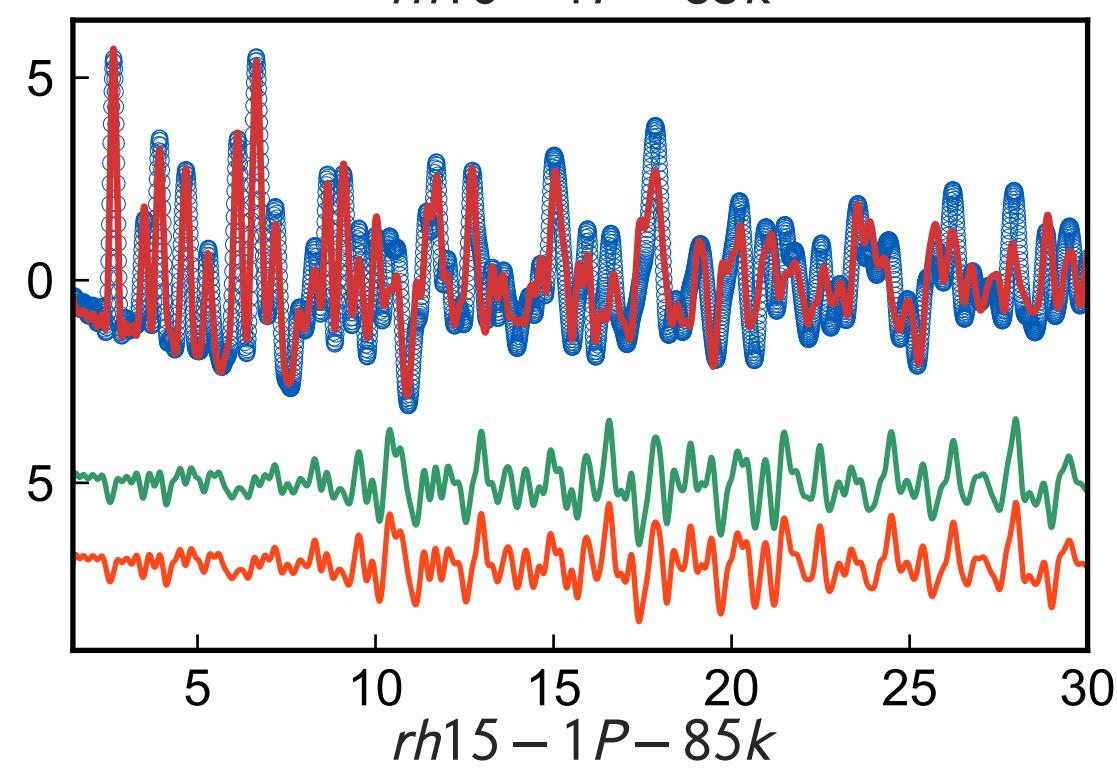




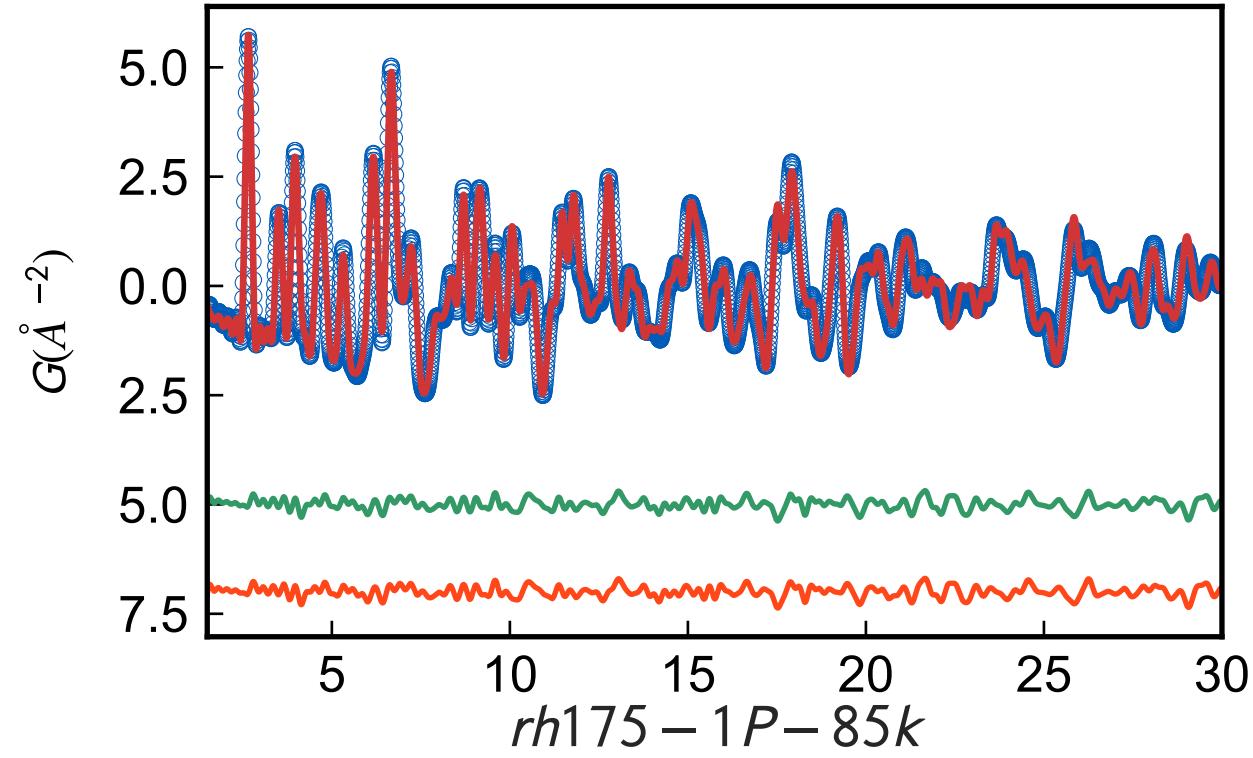
Ref2phase – Rh10C – 85K



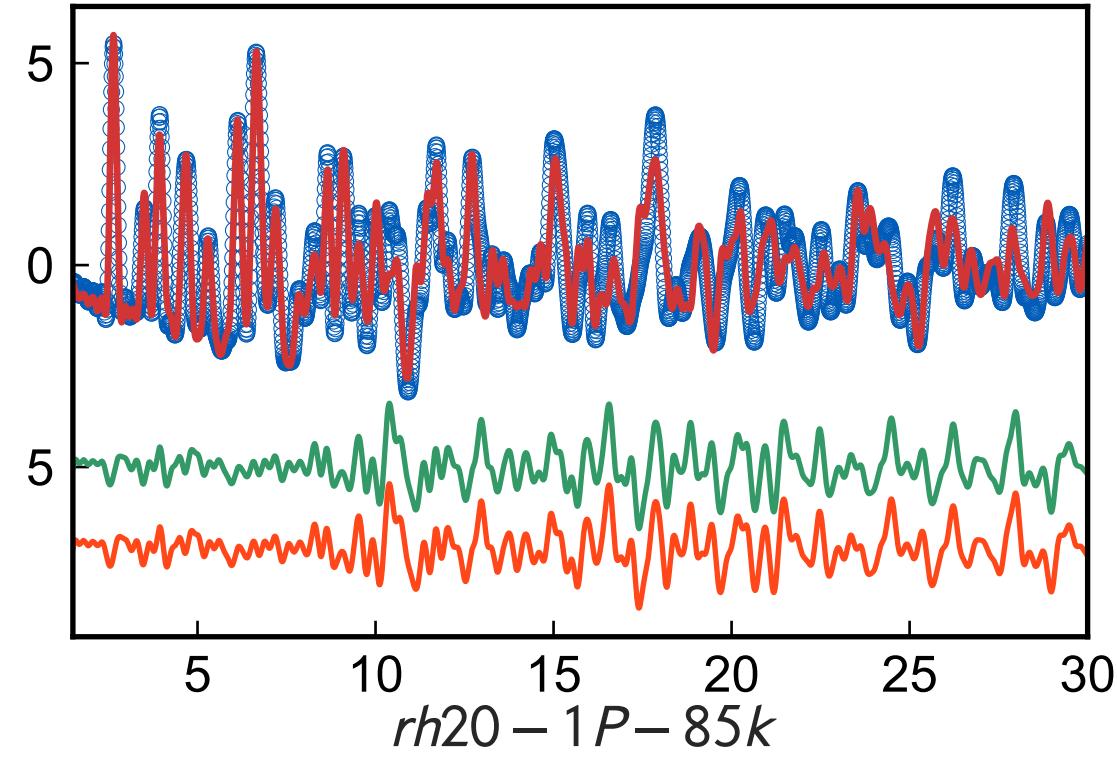
rh10 – 1P – 85k



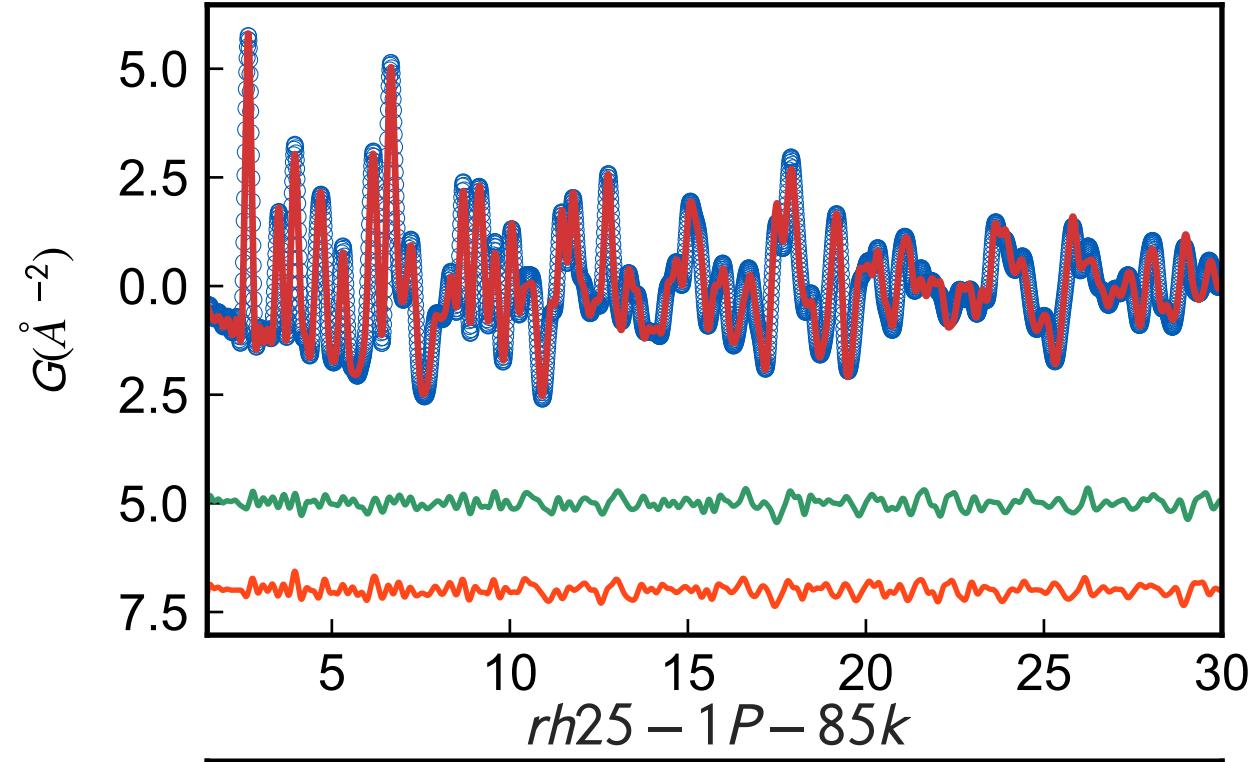
rh125 – 1P – 85k



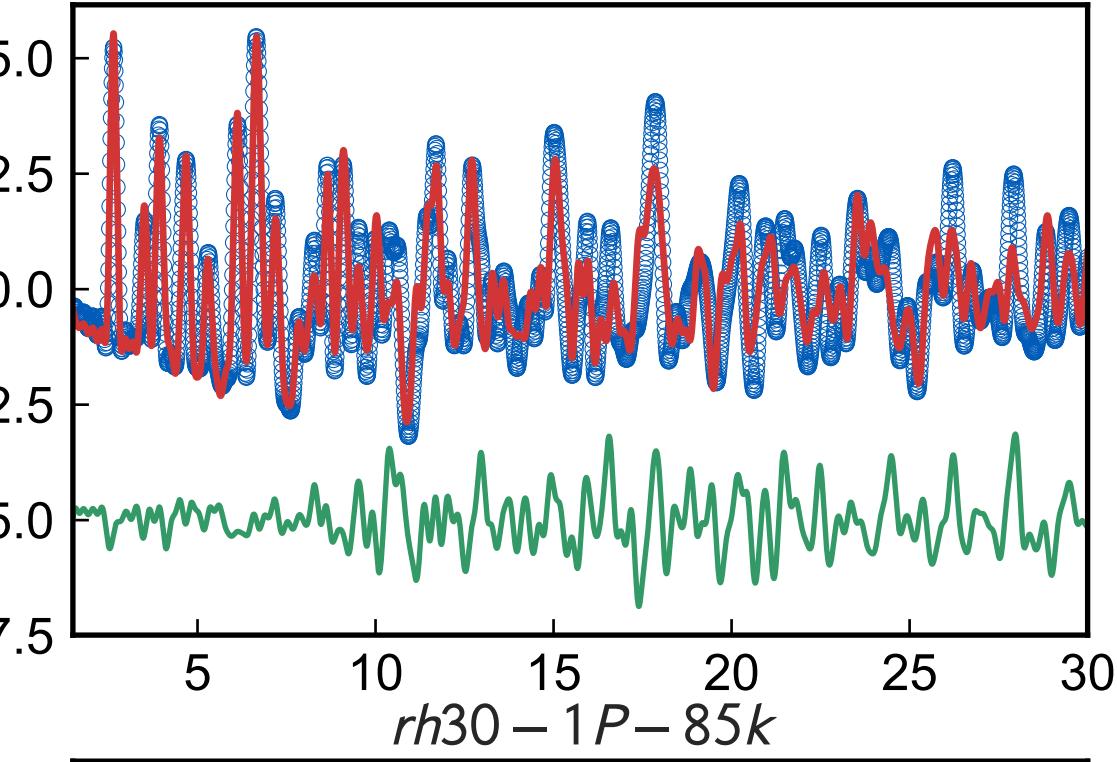
rh15 – 1P – 85k



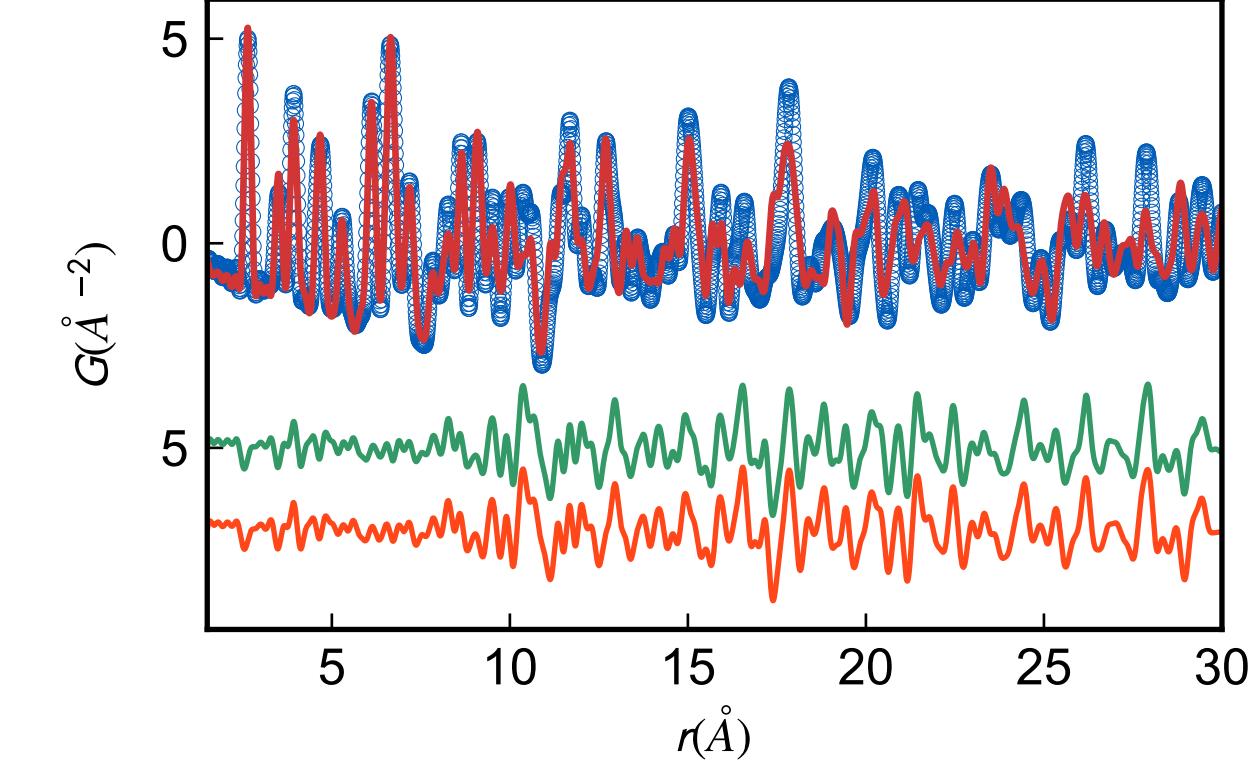
rh175 – 1P – 85k



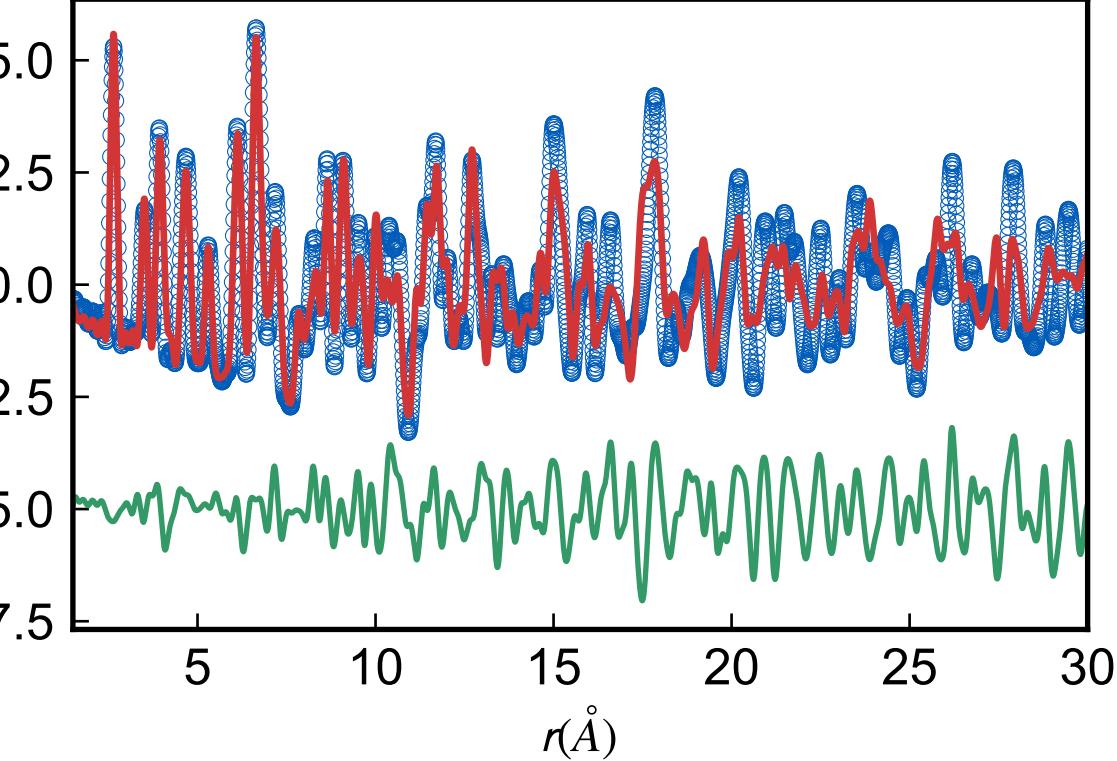
rh20 – 1P – 85k

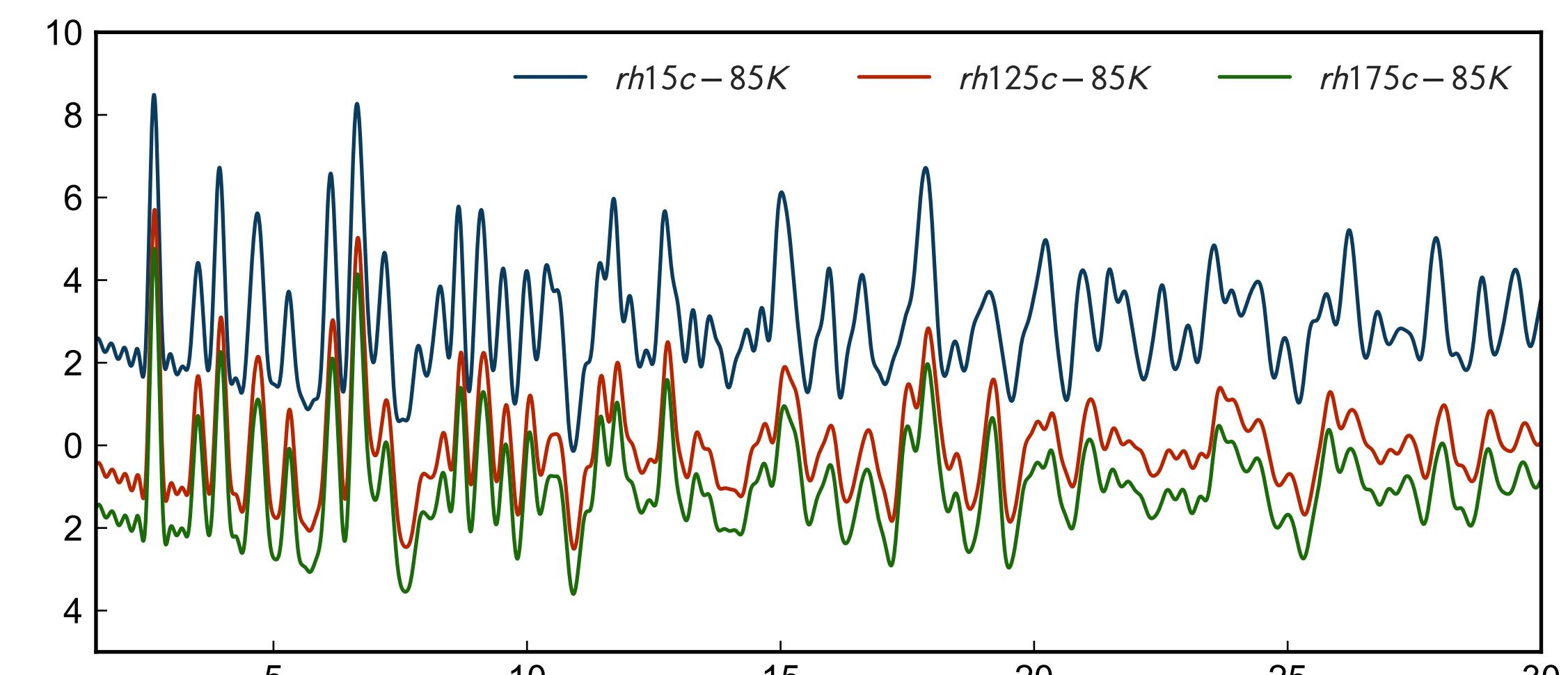
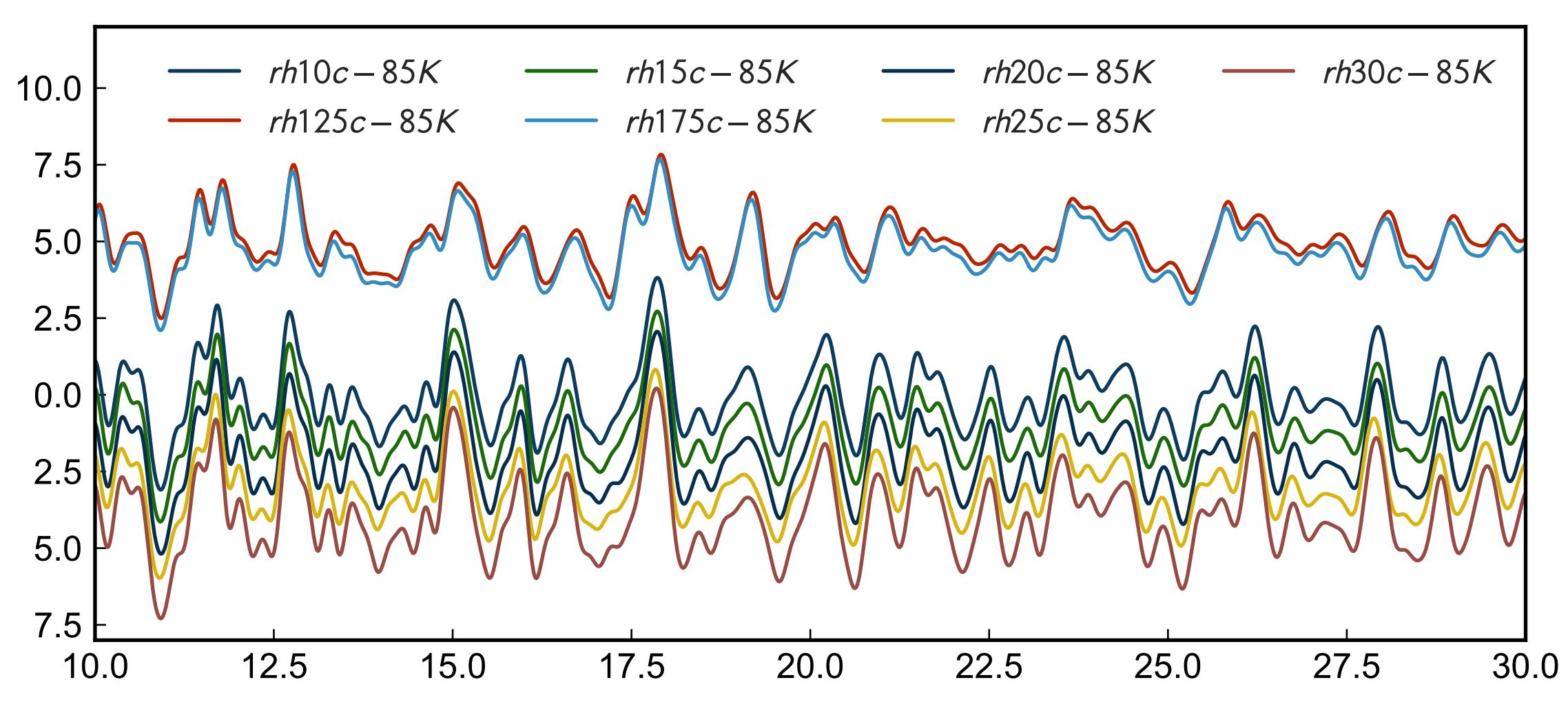
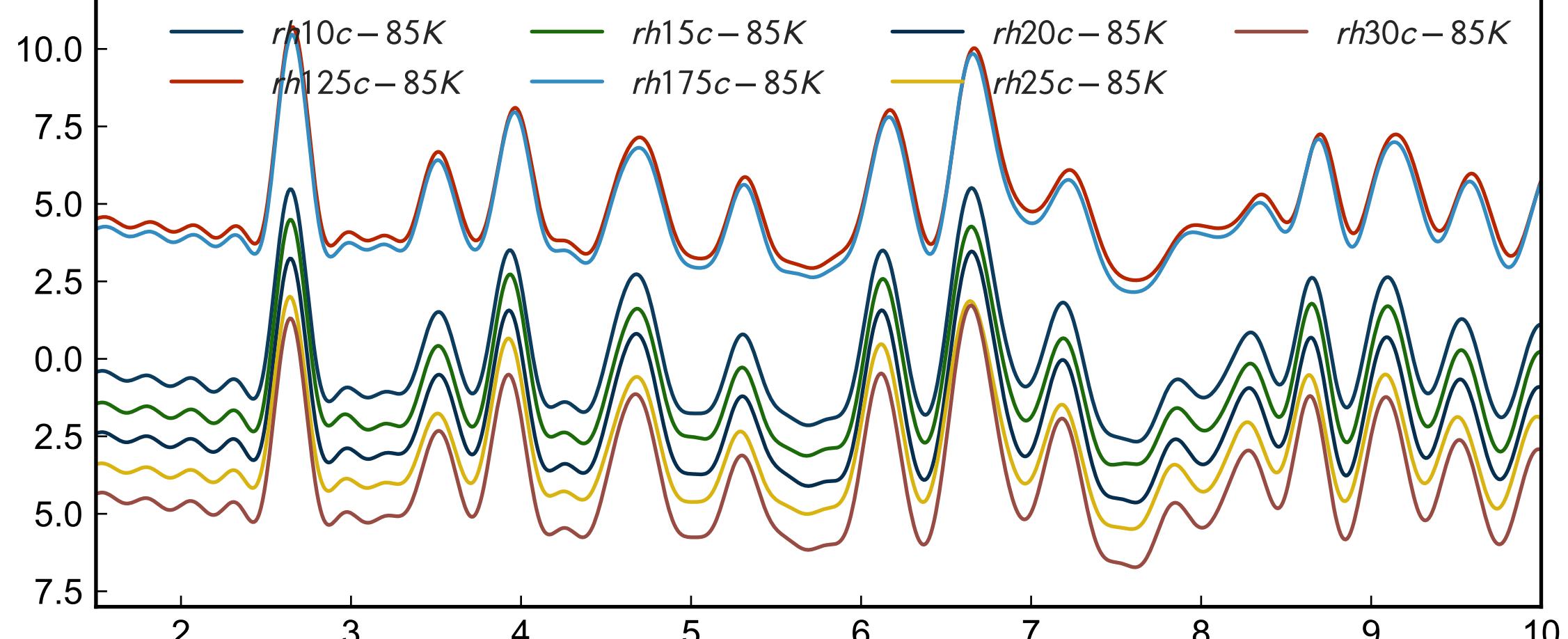
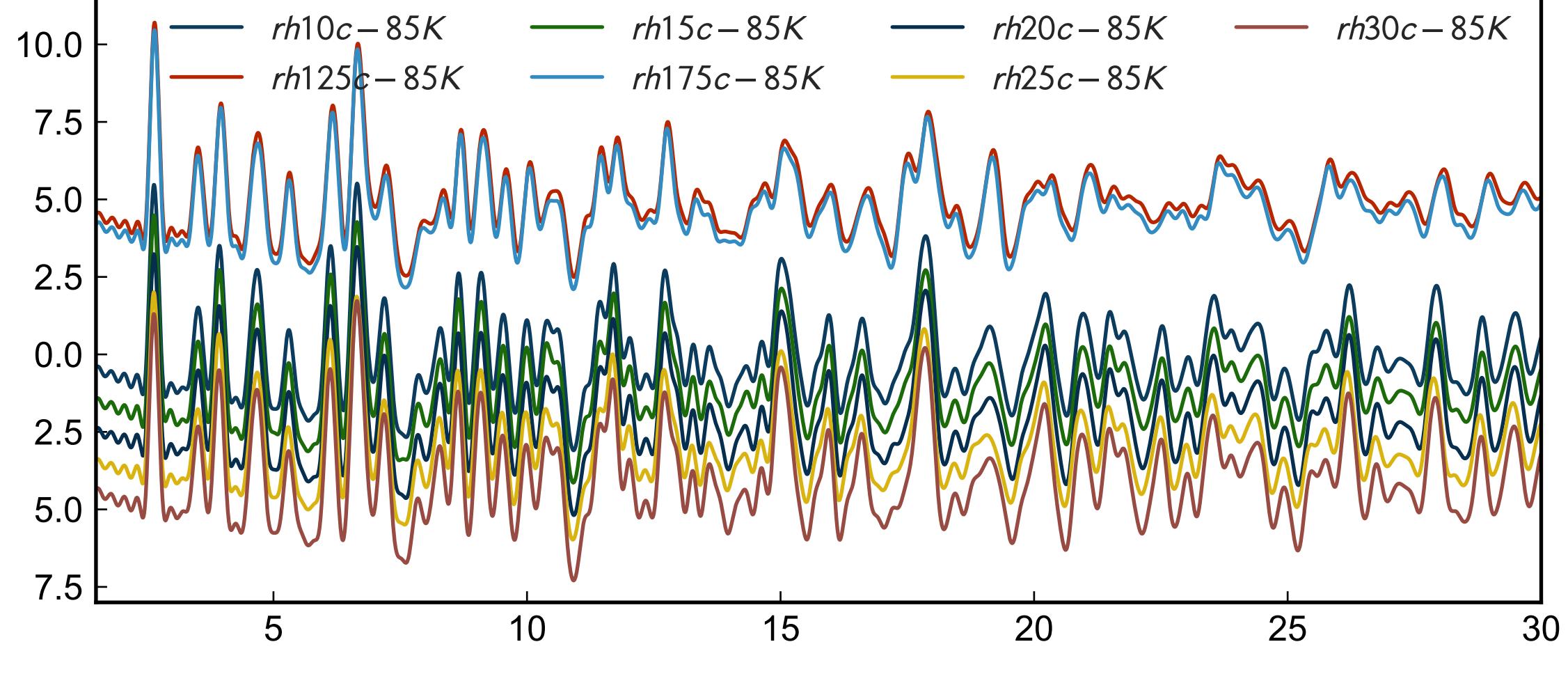
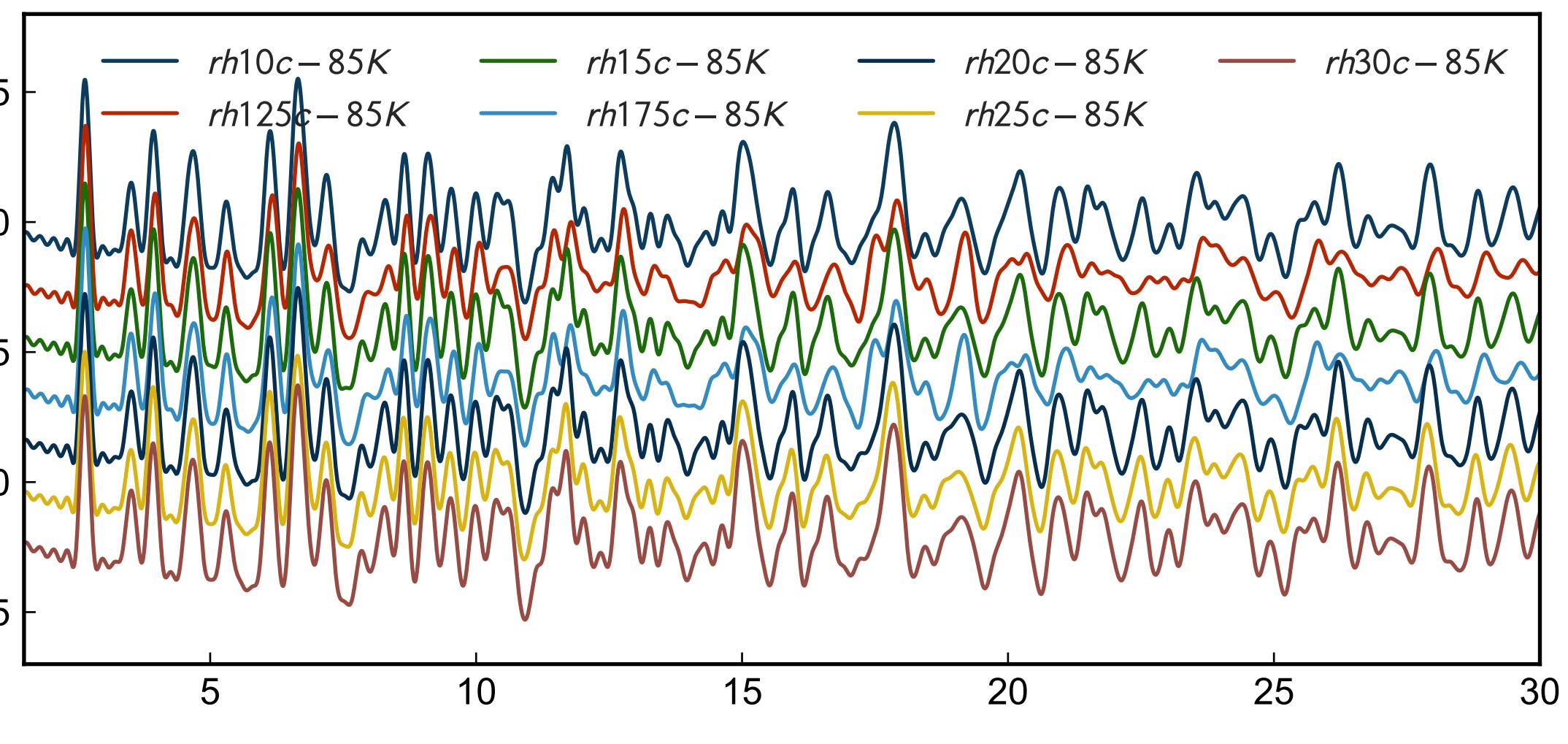


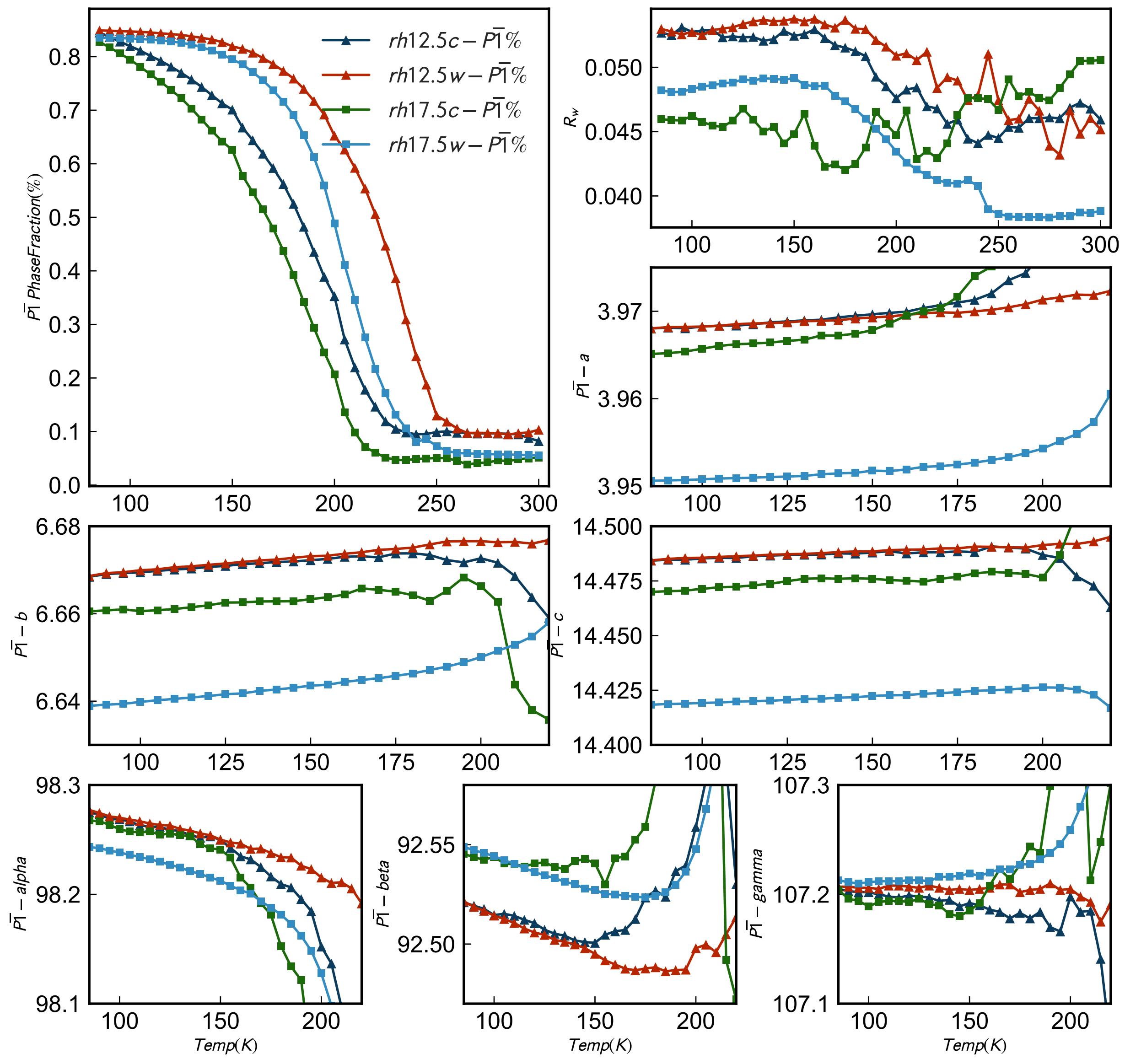
rh25 – 1P – 85k

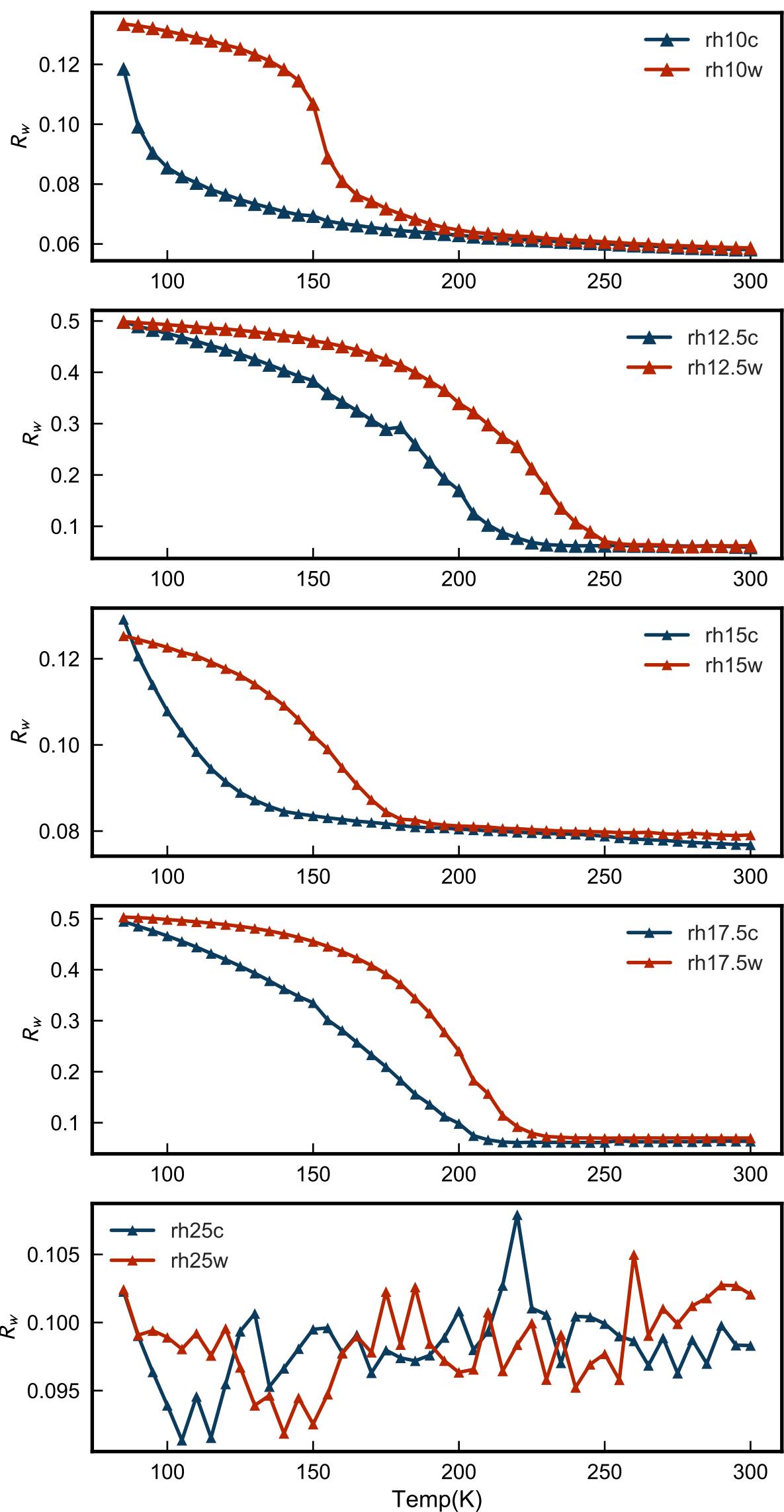


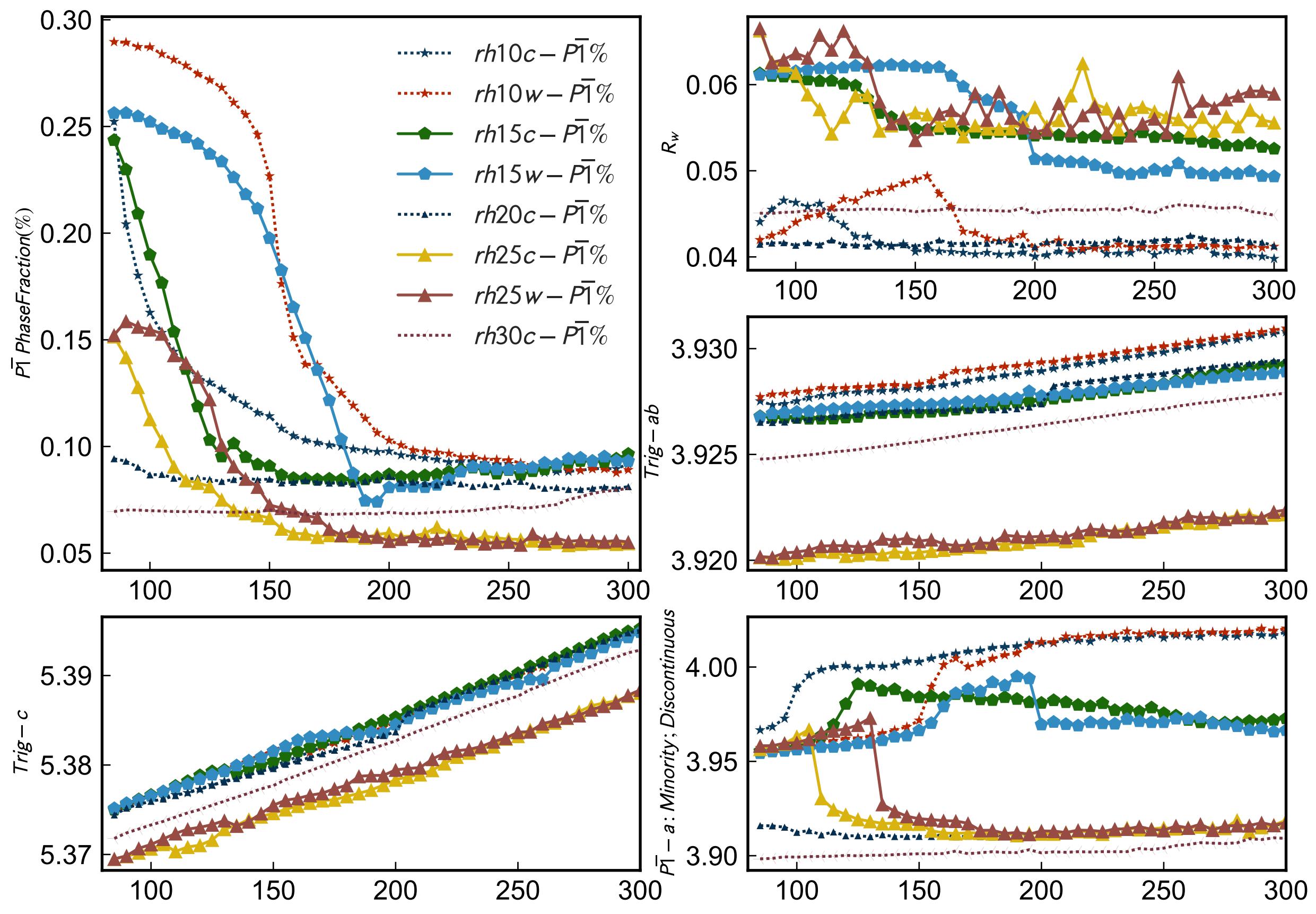
rh30 – 1P – 85k

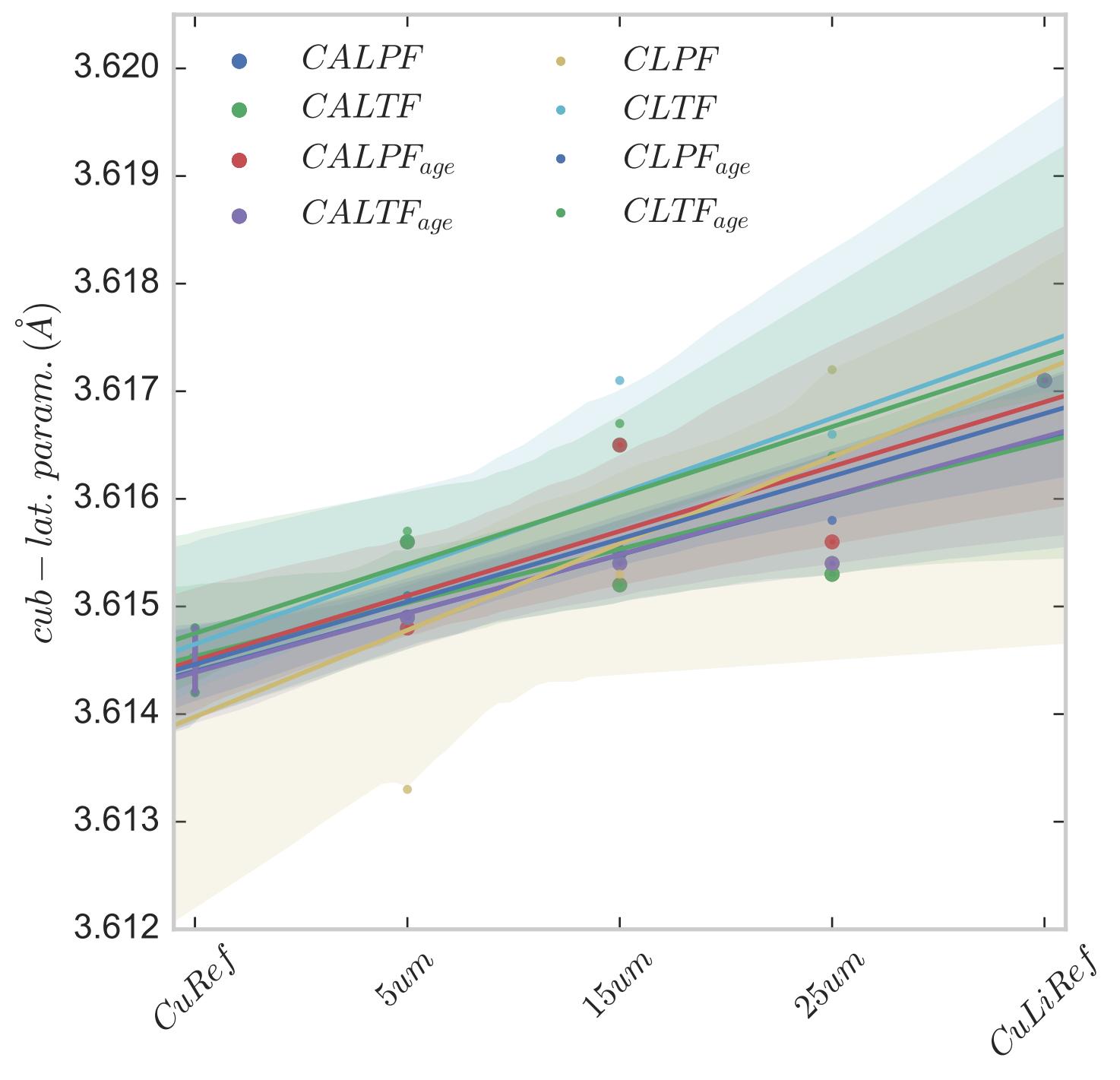


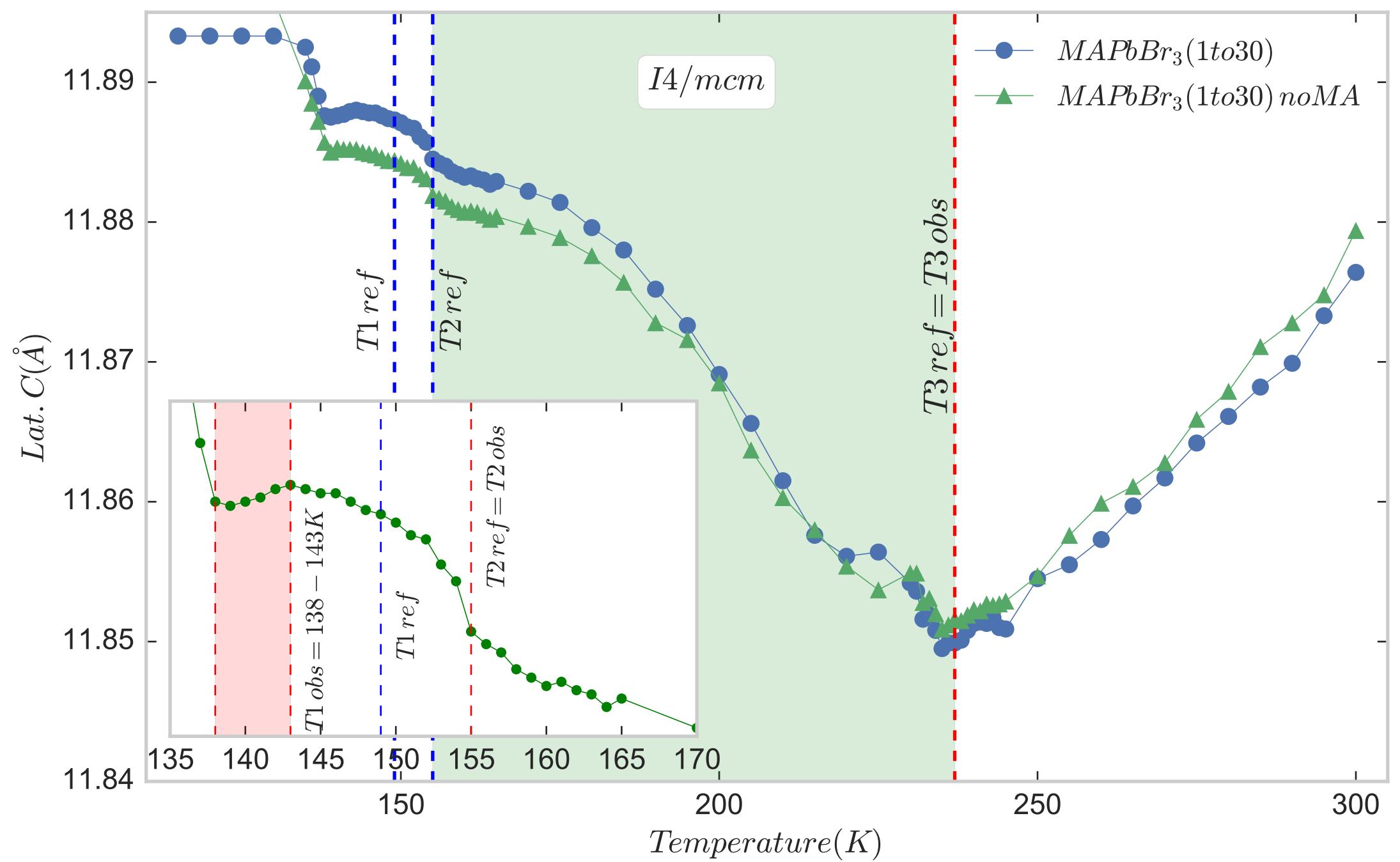


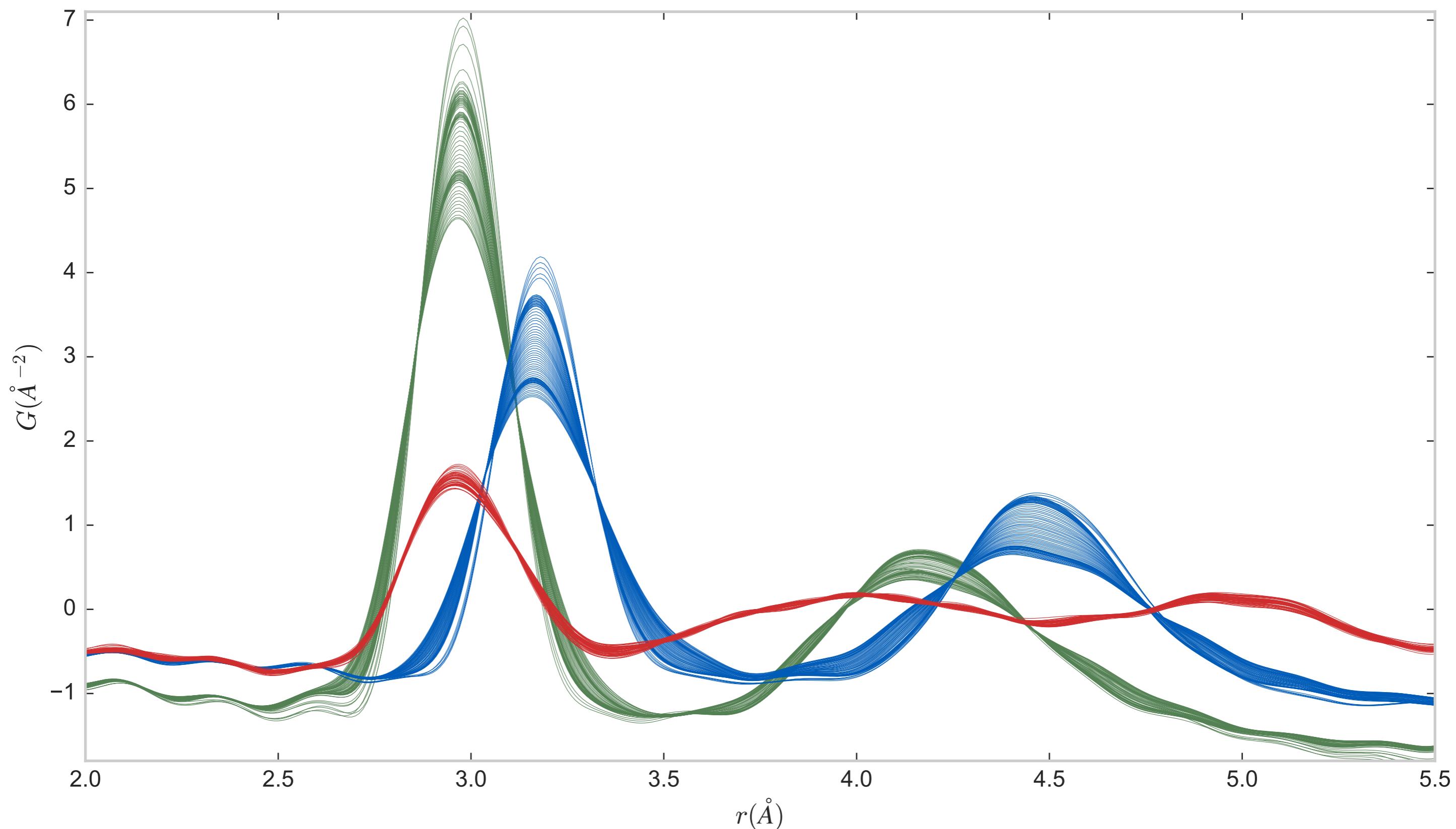


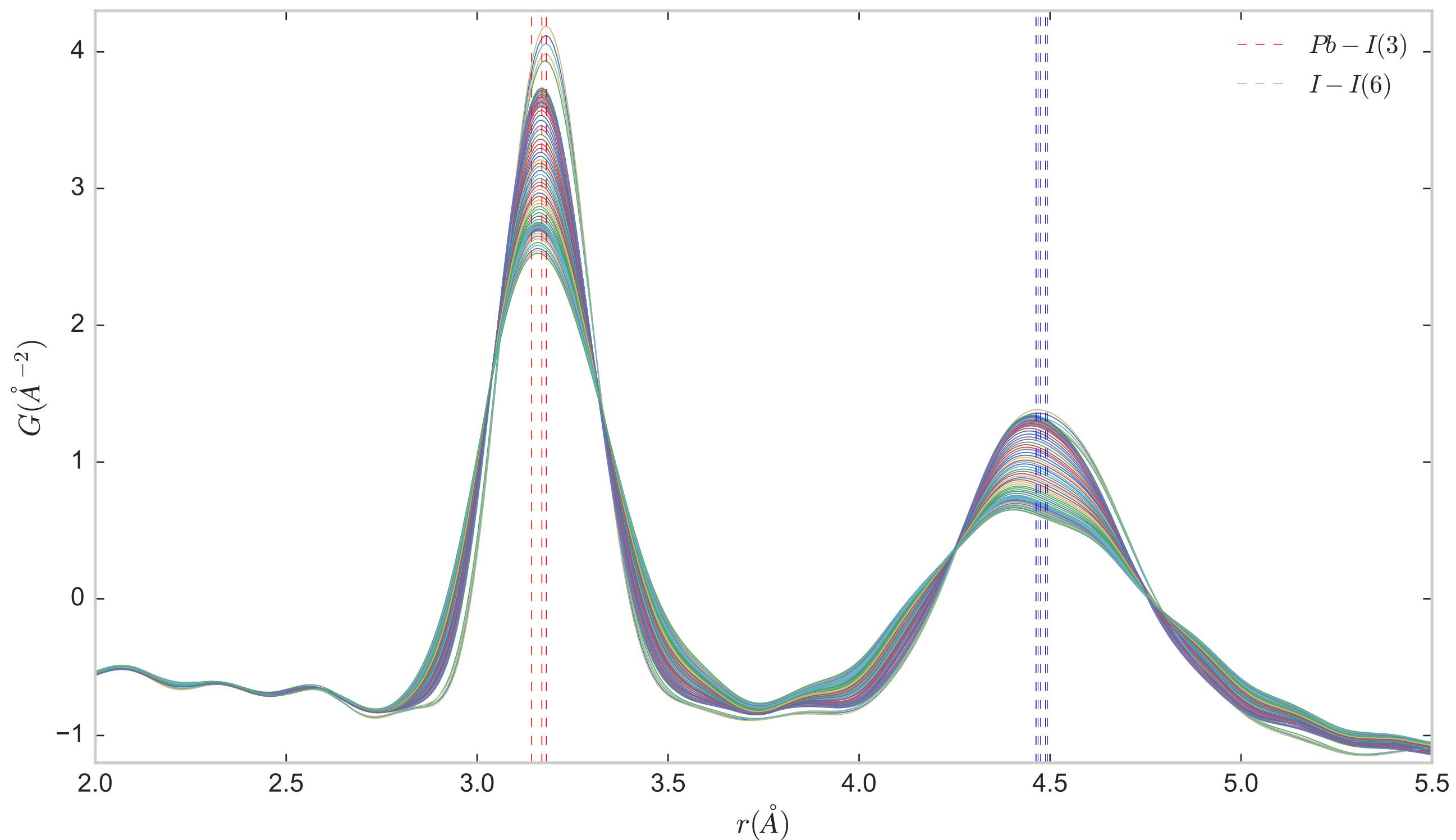


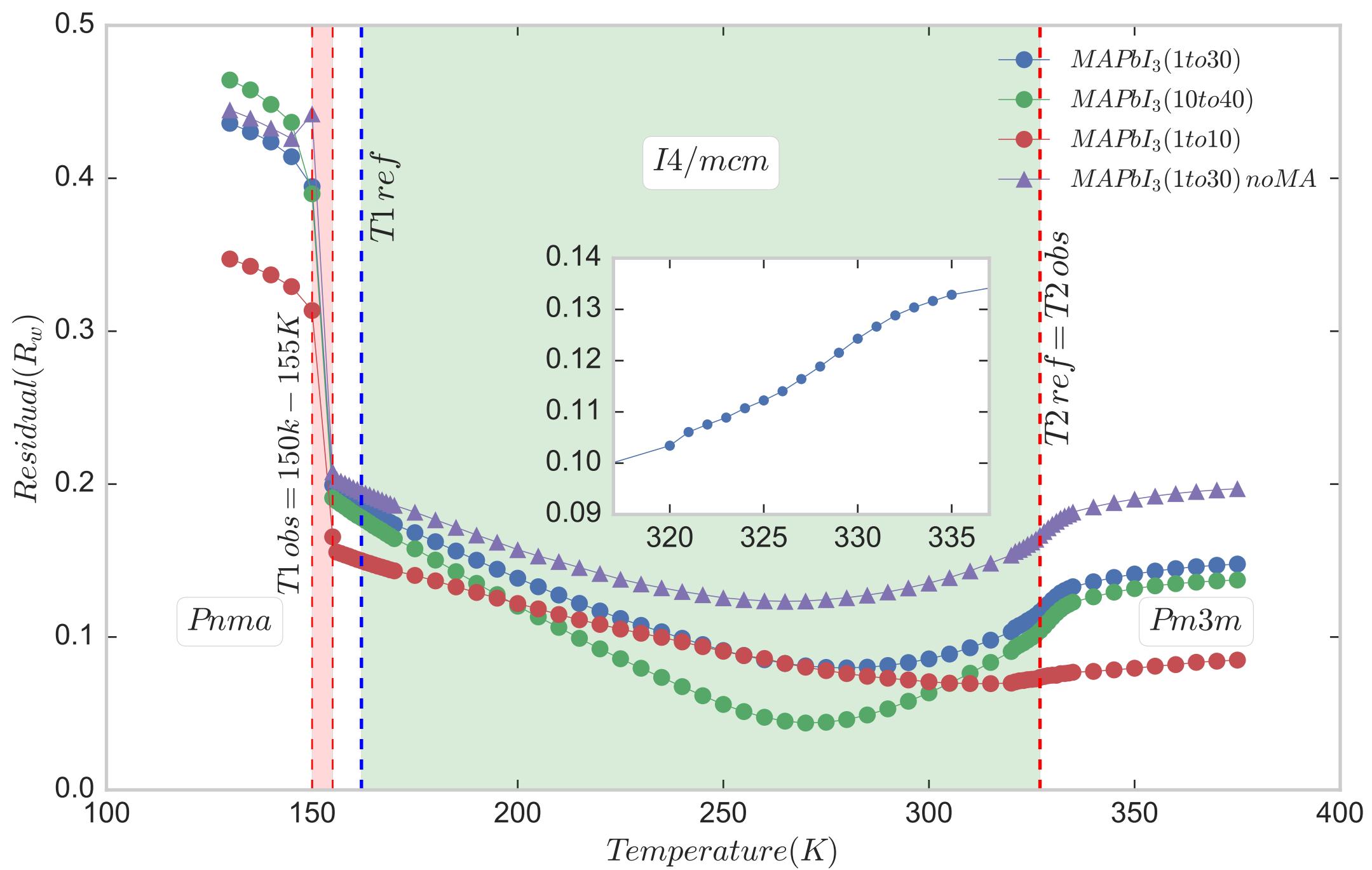


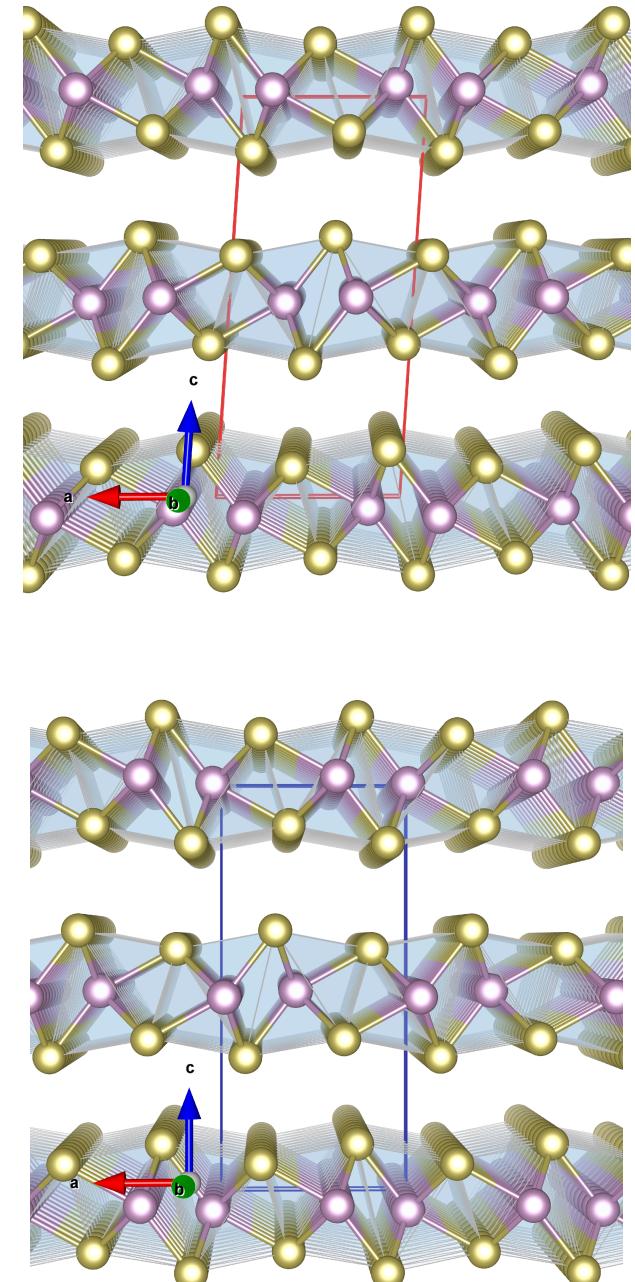
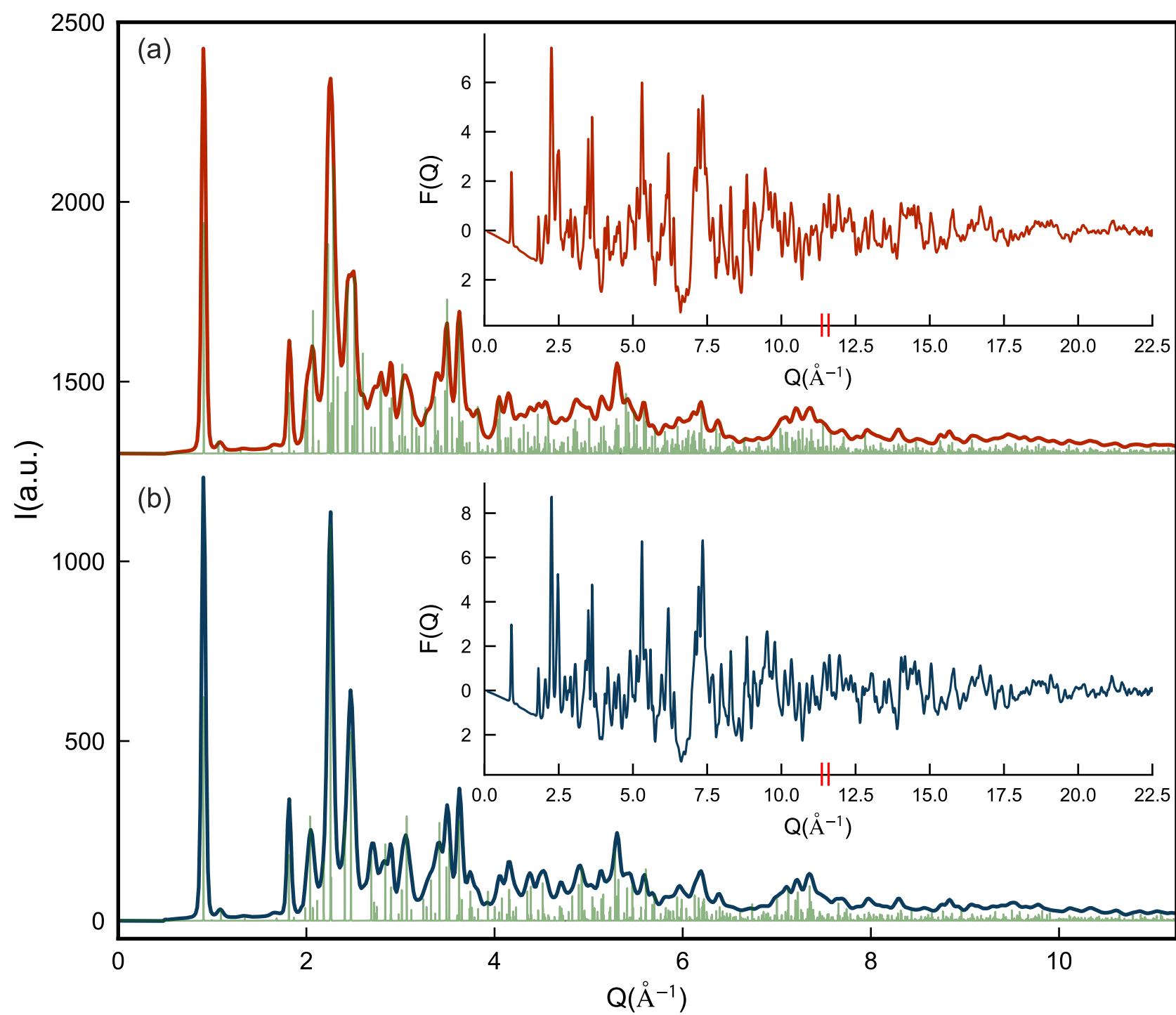


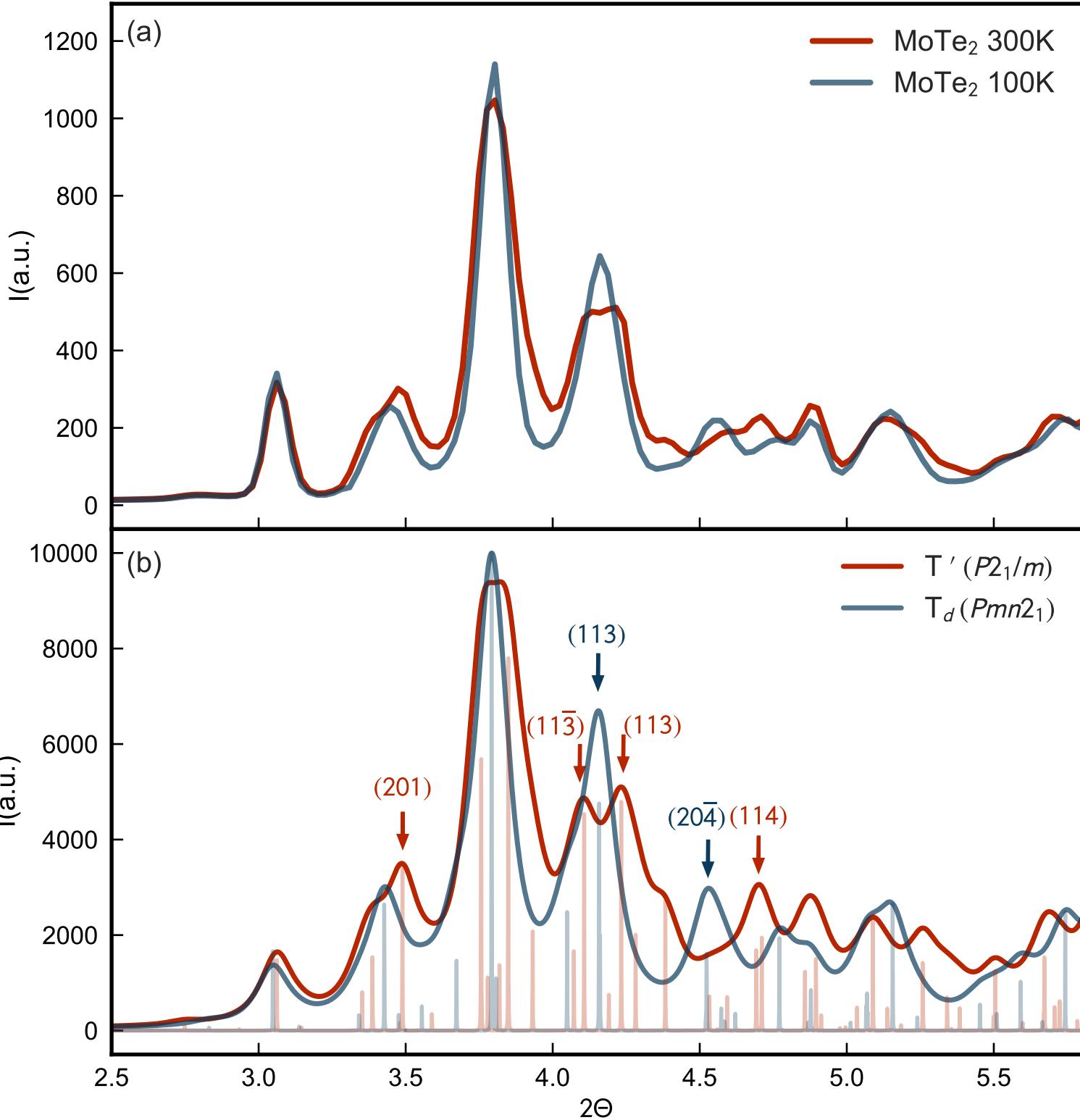


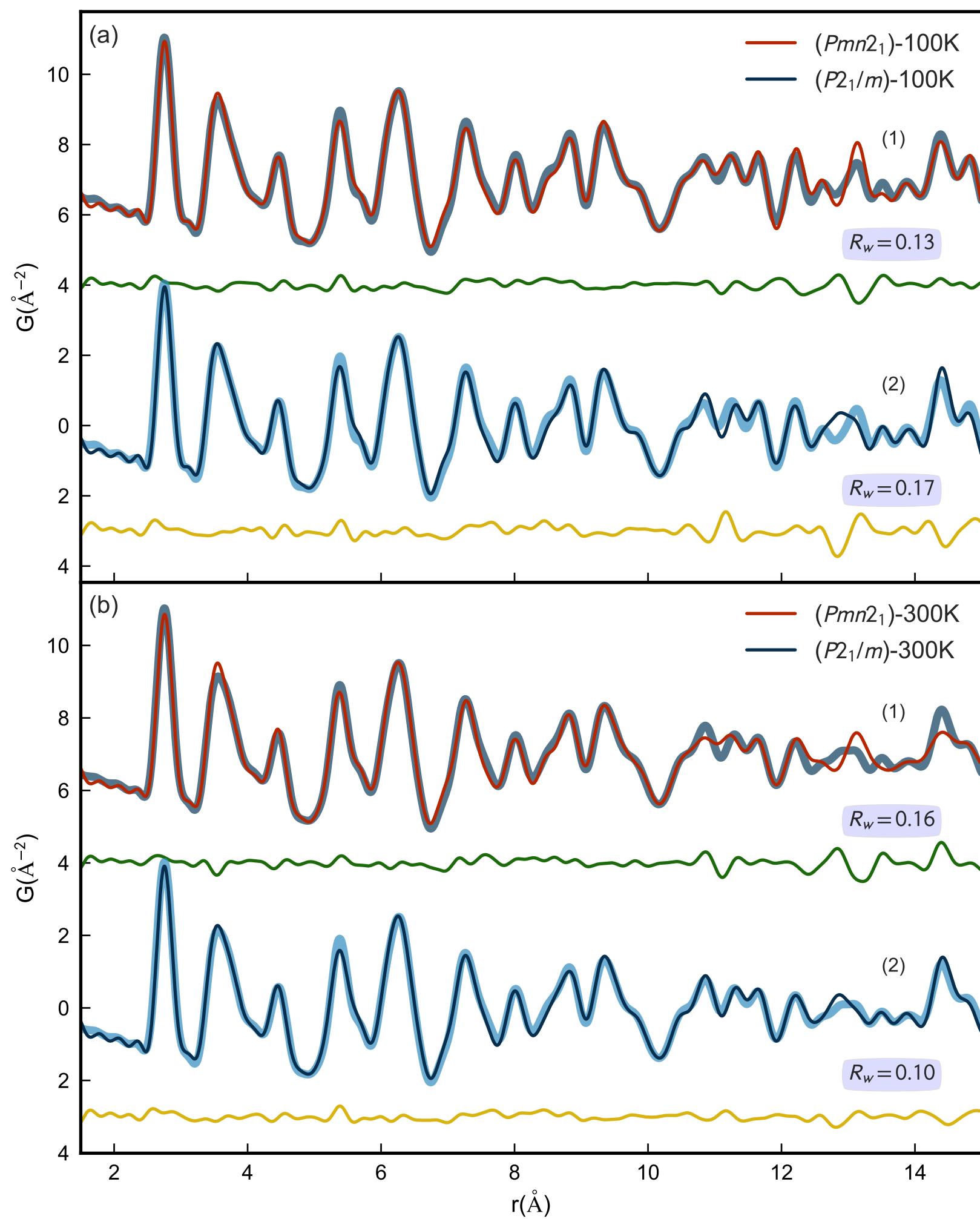


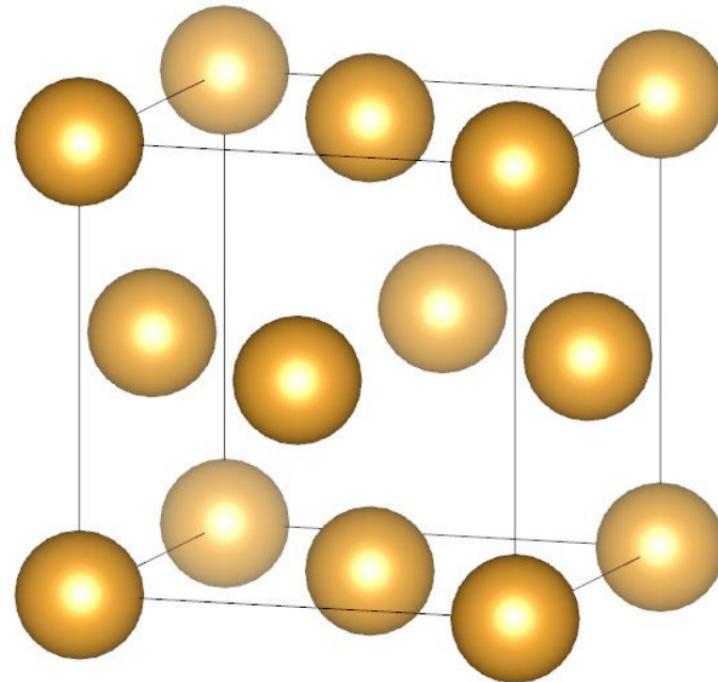




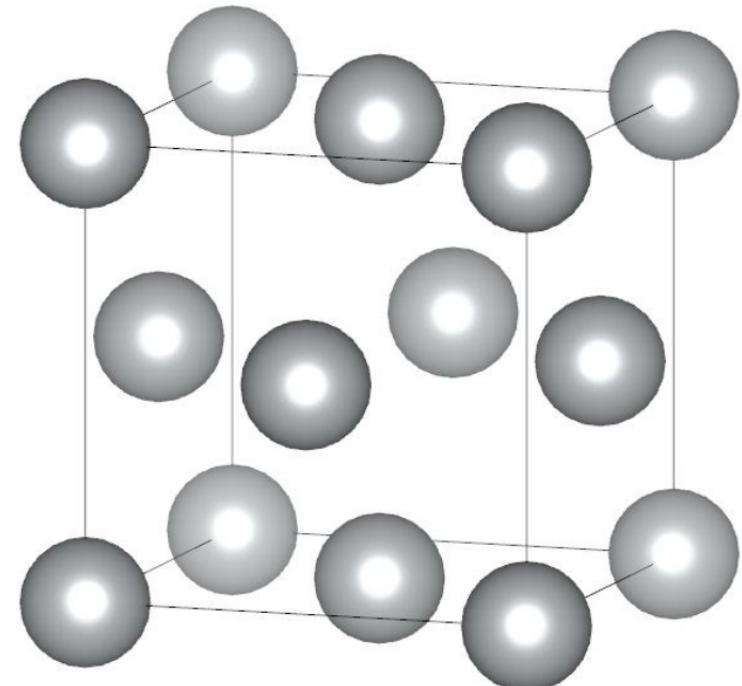
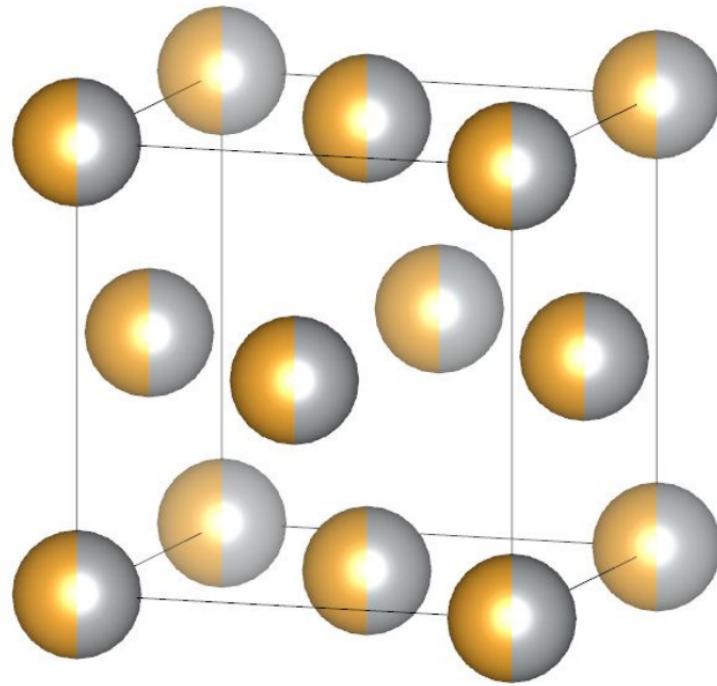




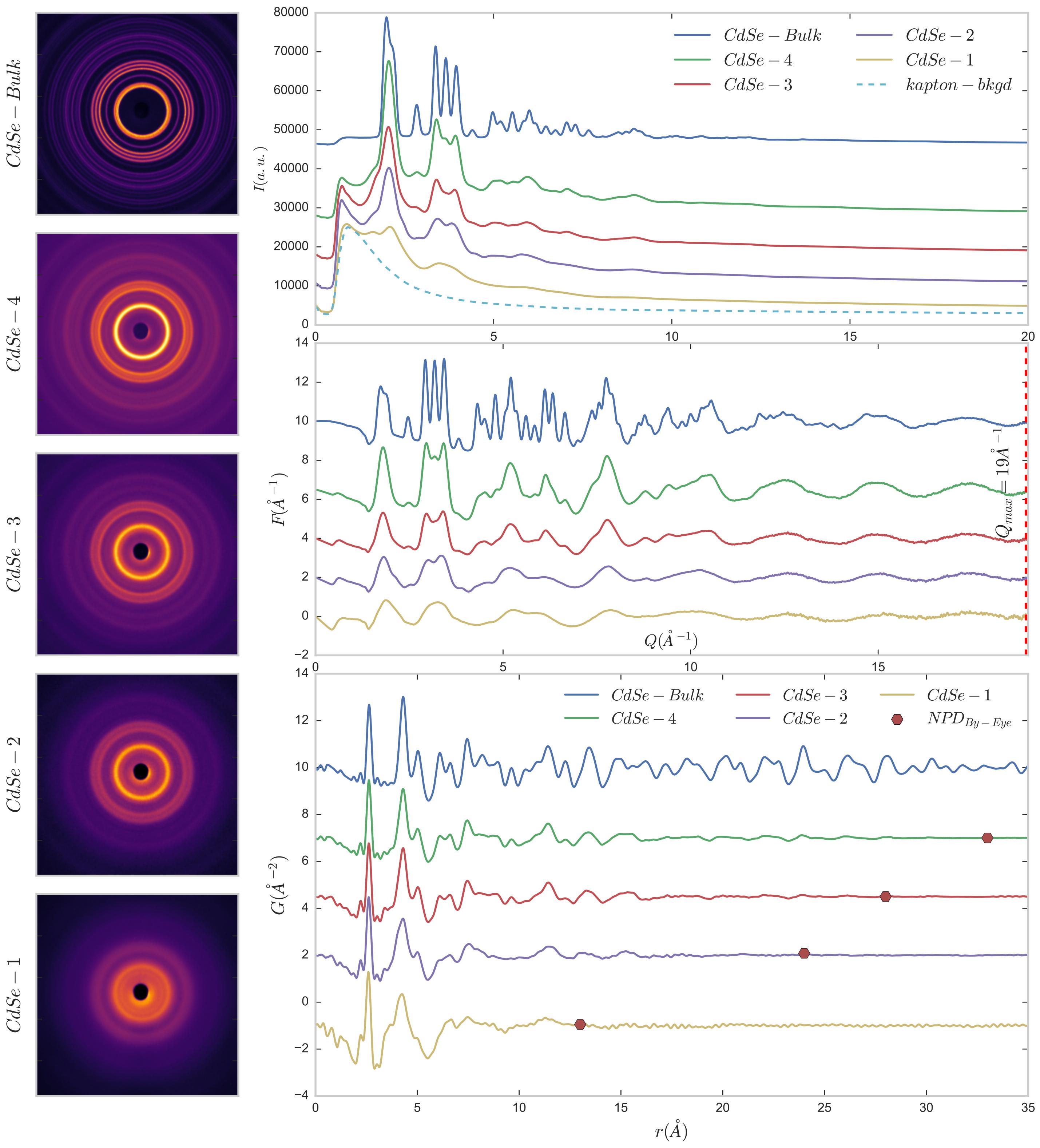




Au

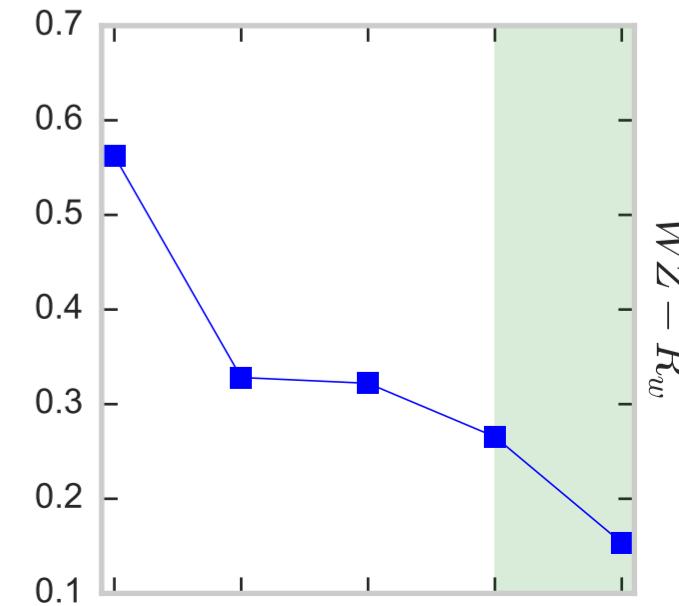
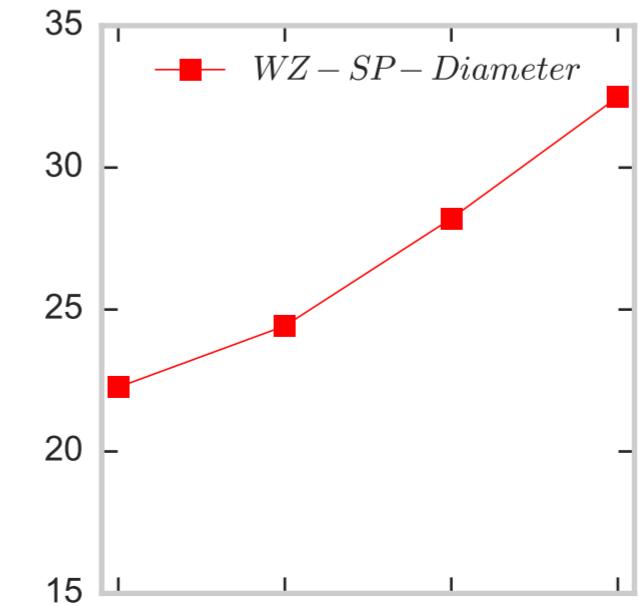
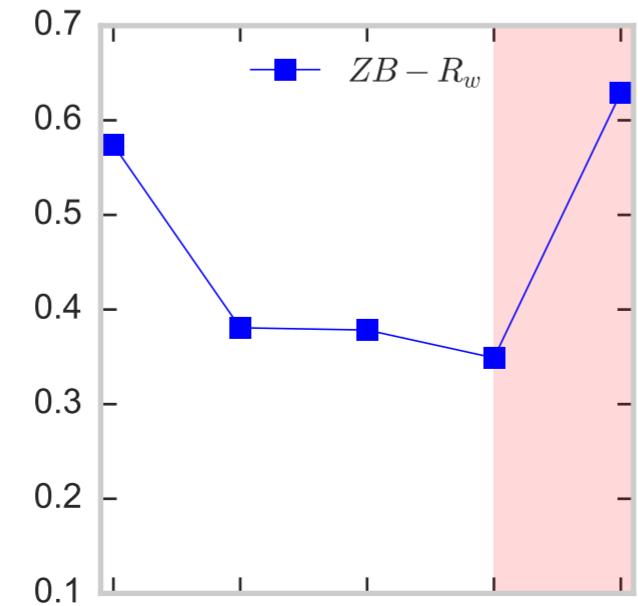
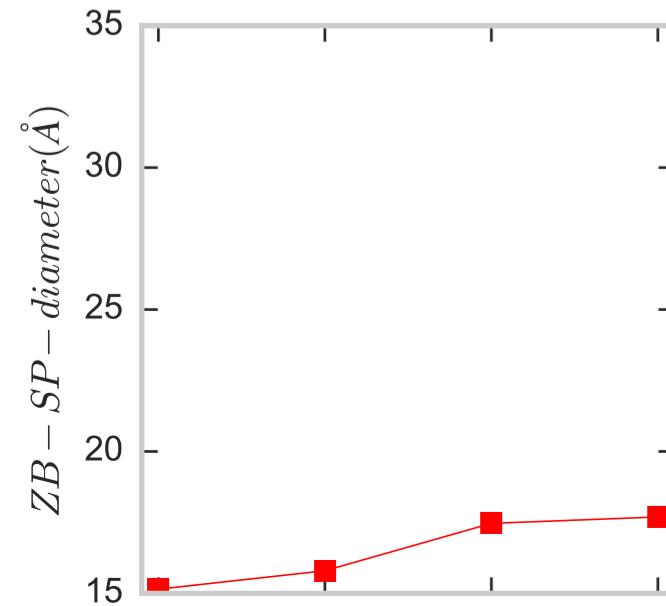
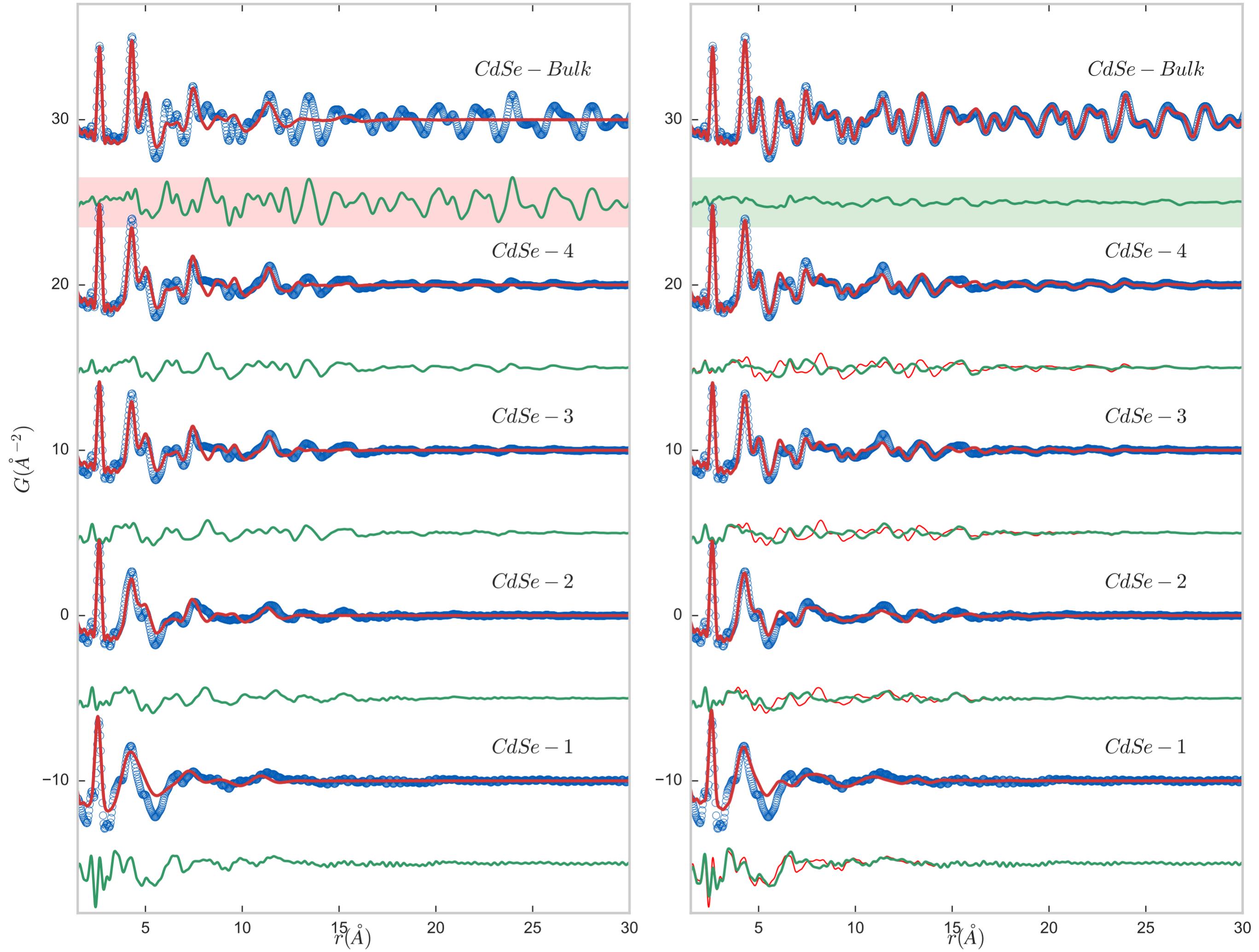


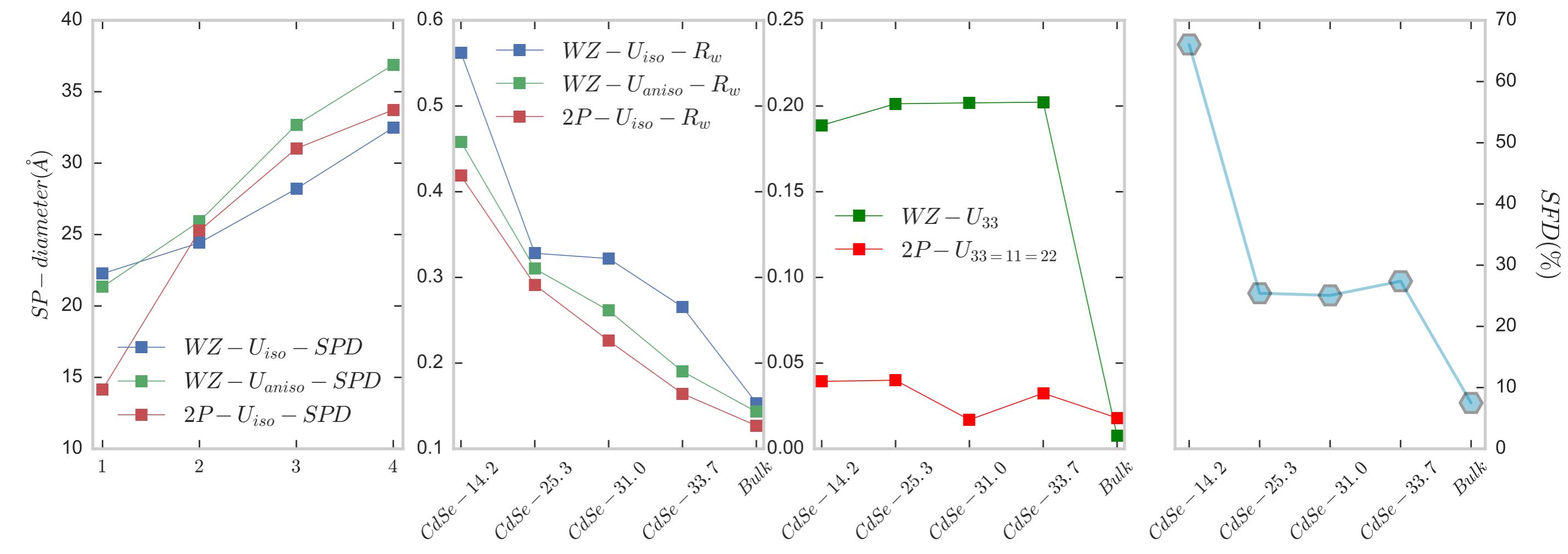
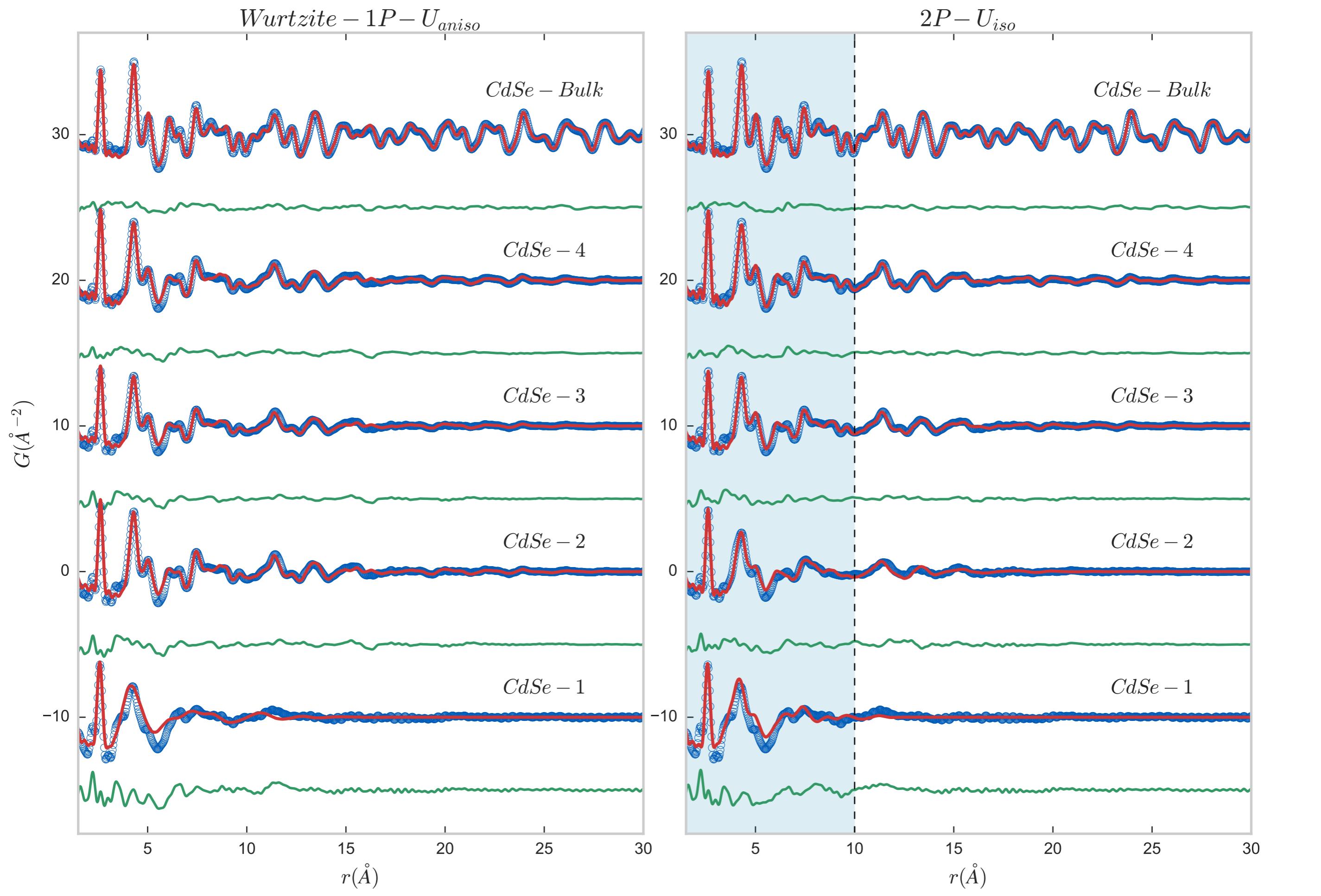
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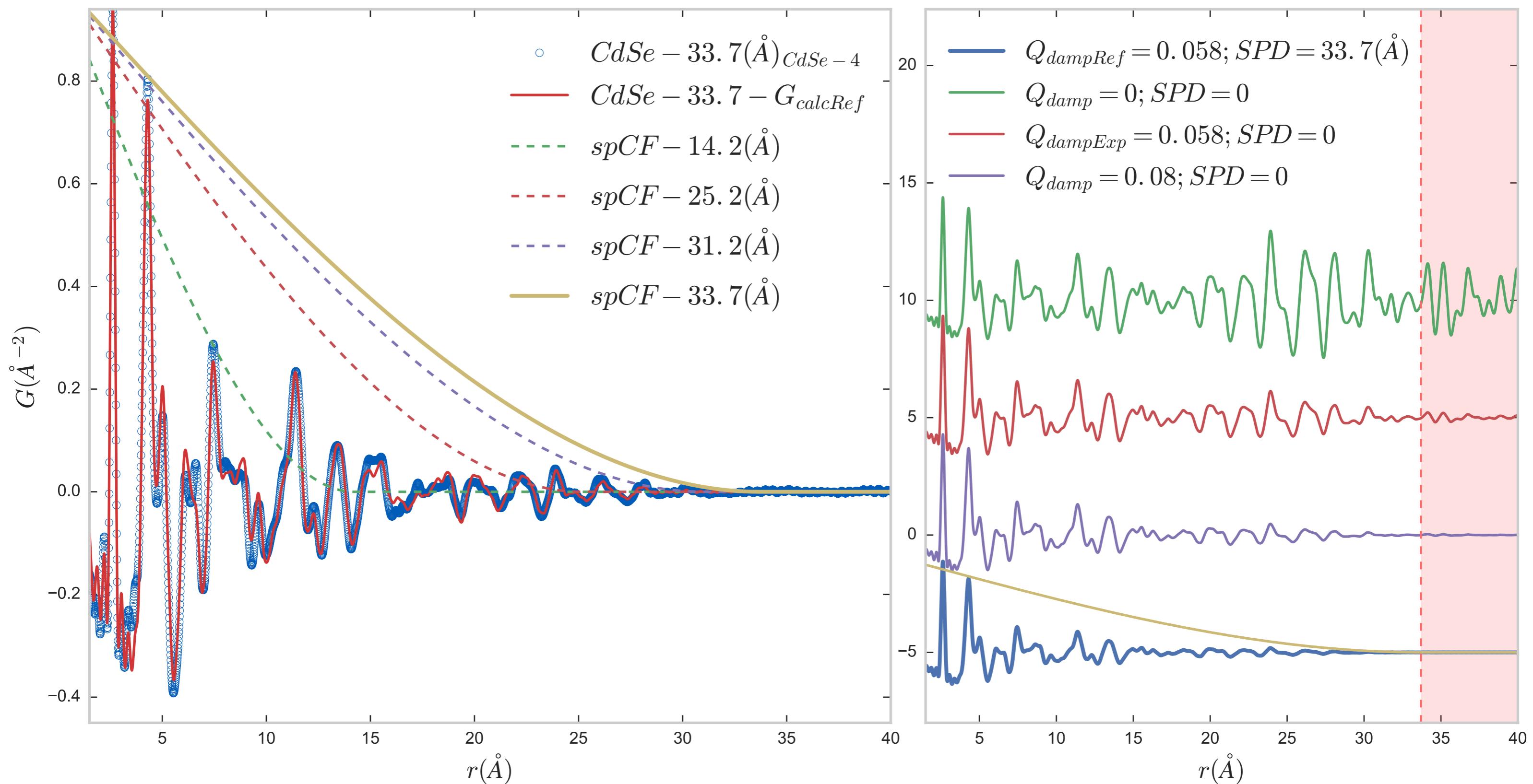


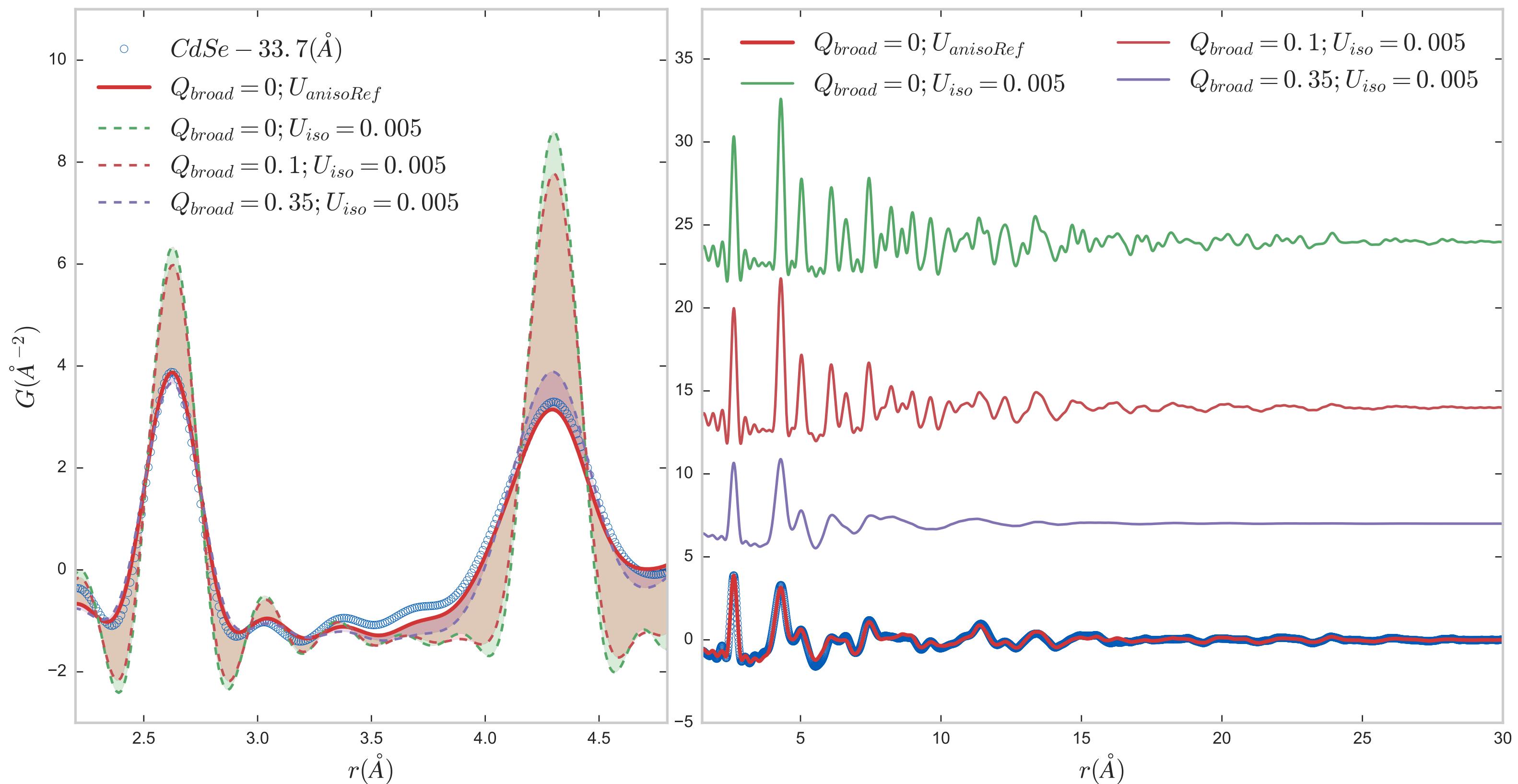
Zinc-blende - 1P

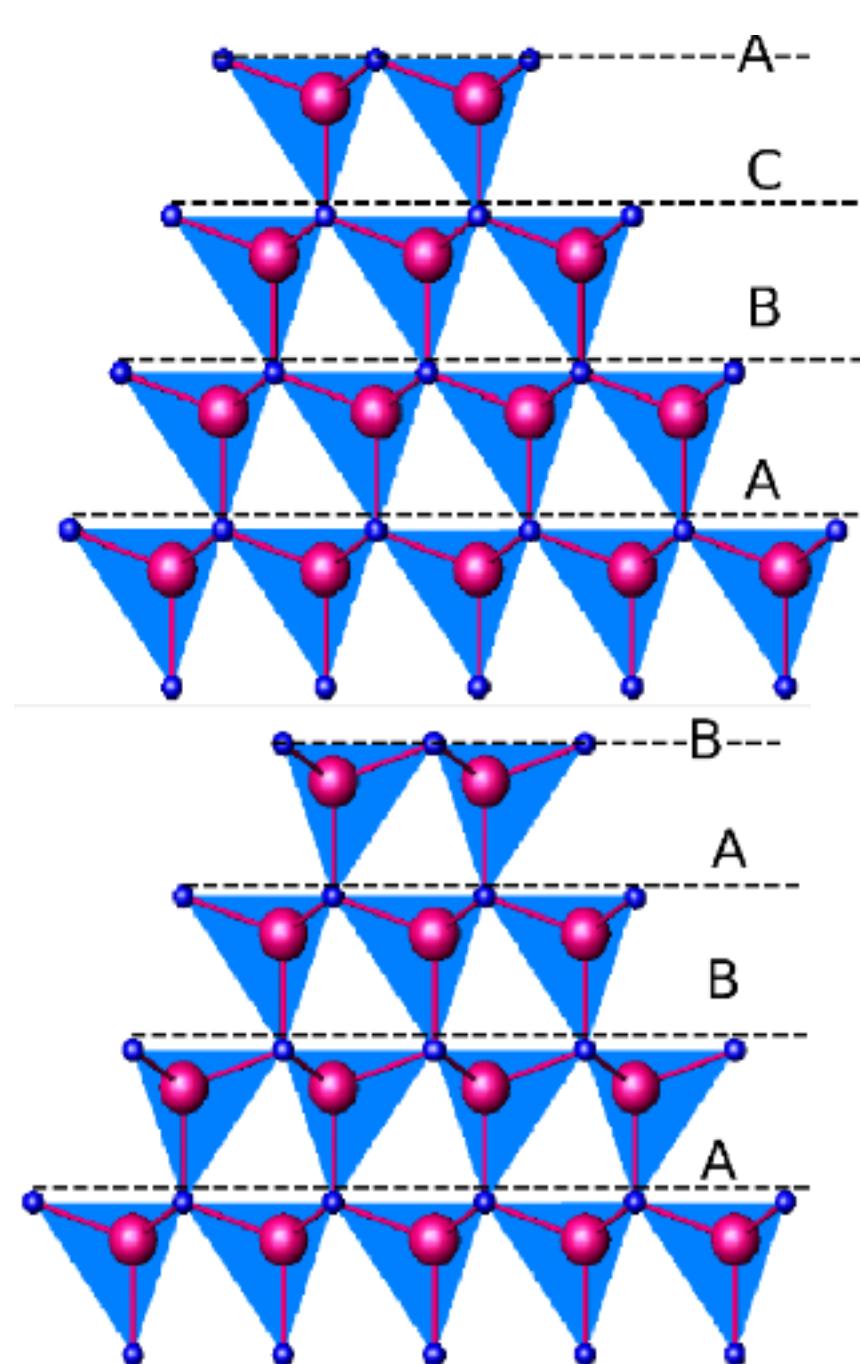
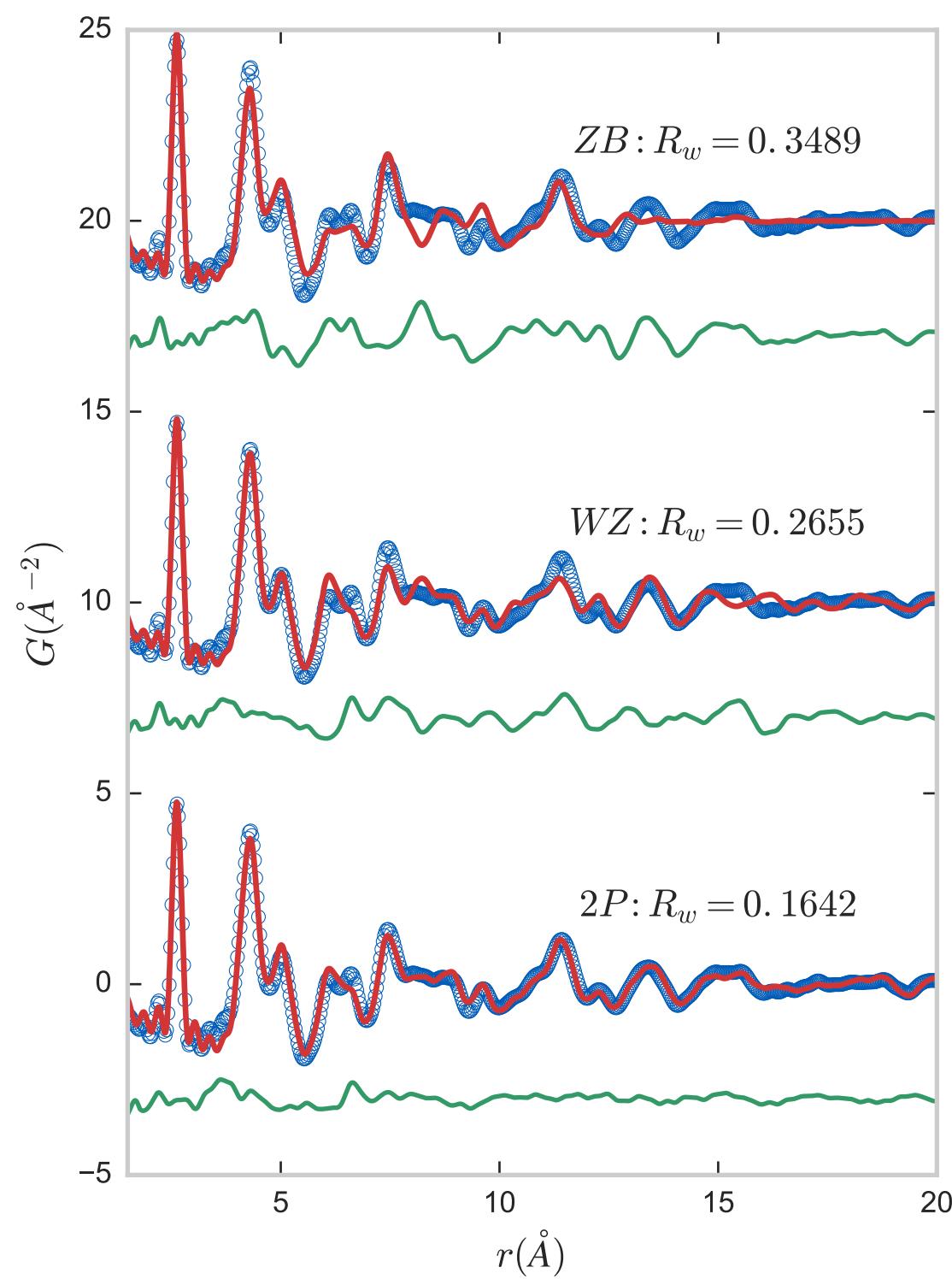
Wurtzite - 1P

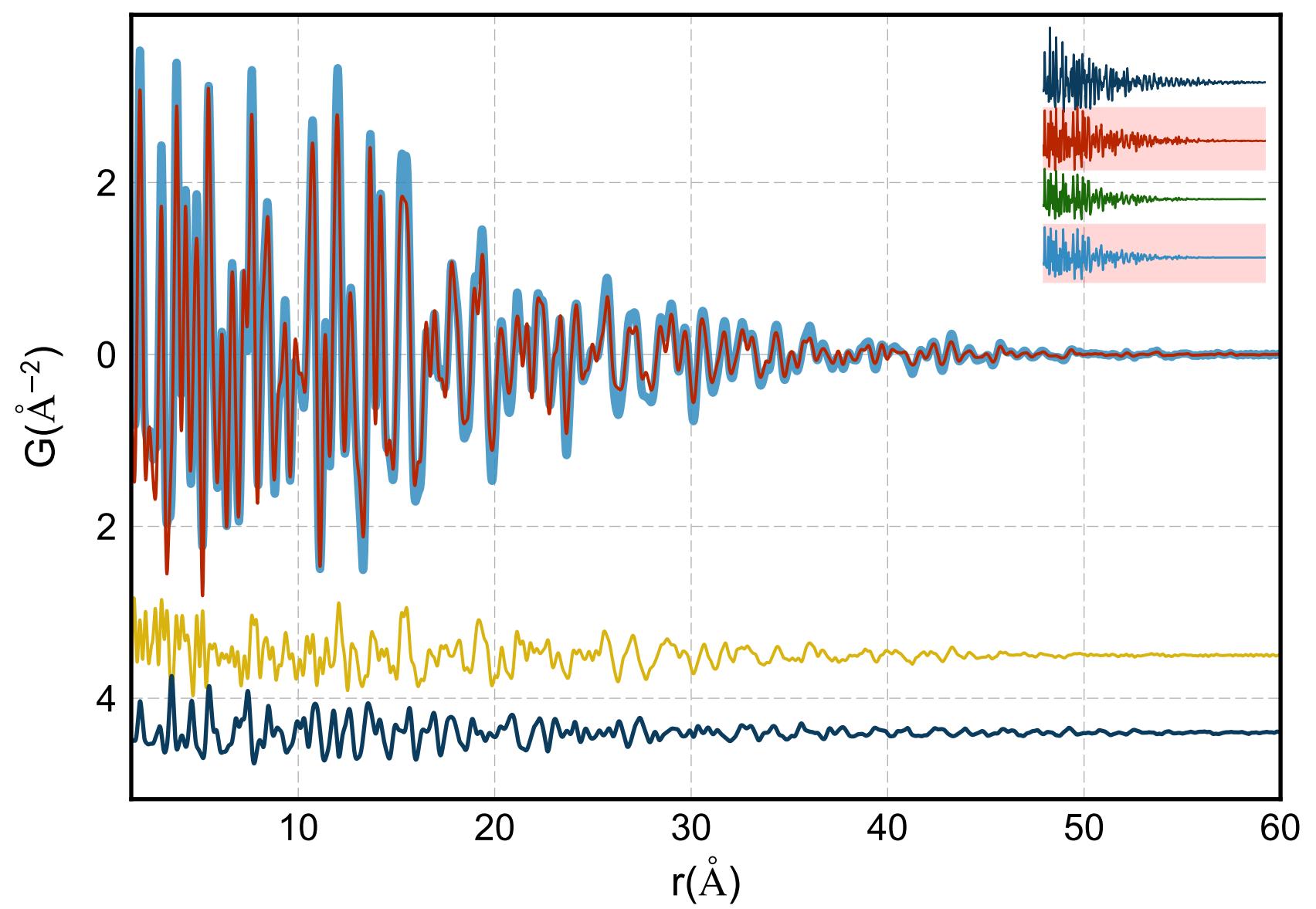


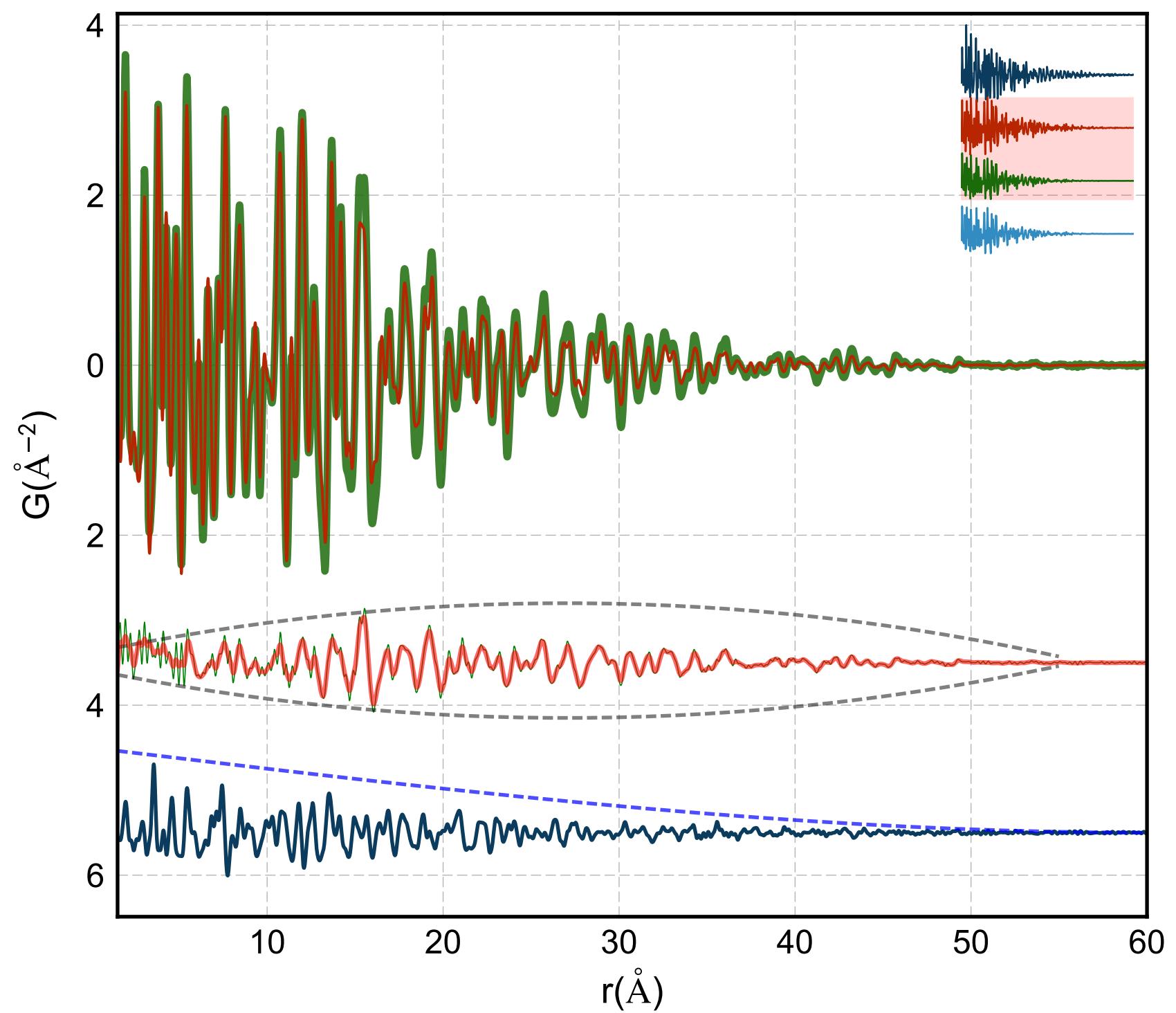


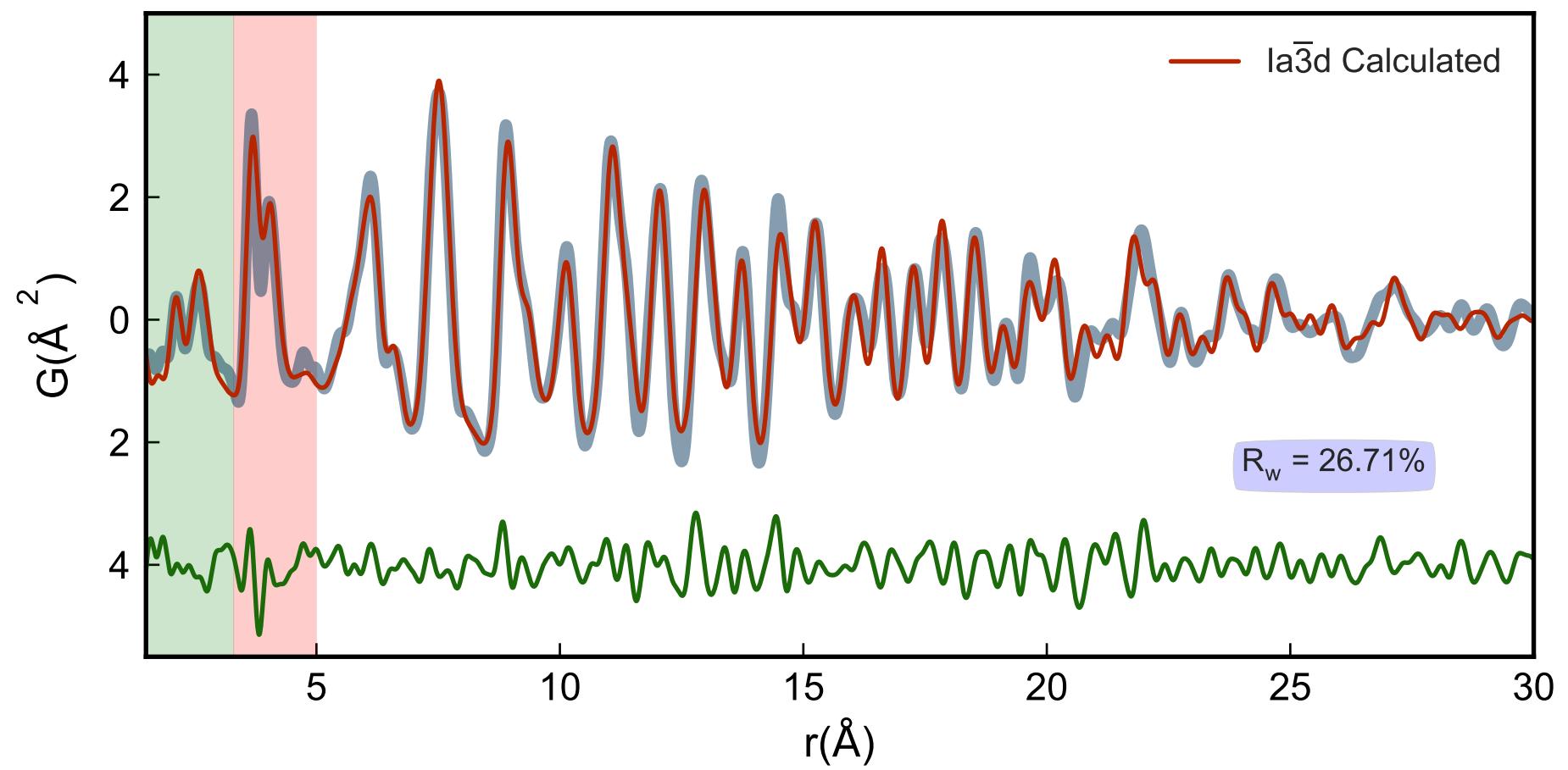
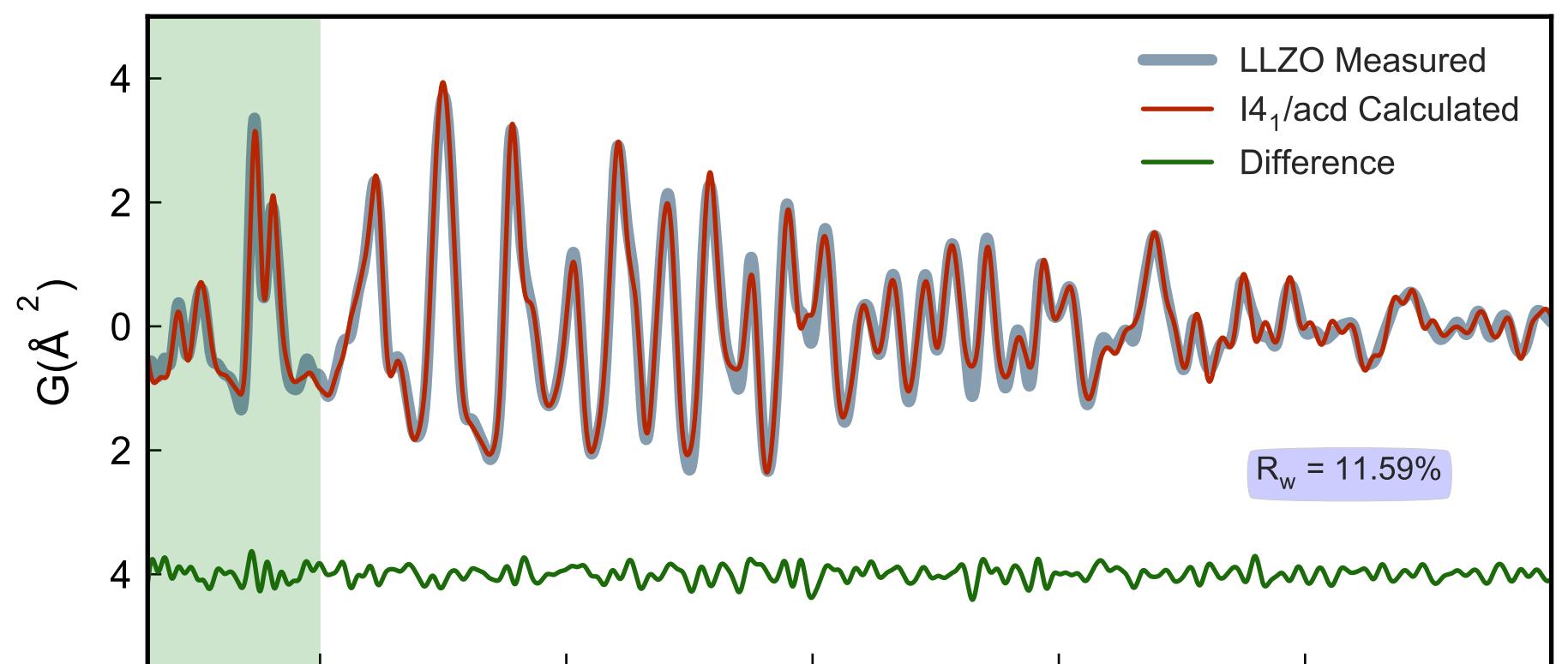


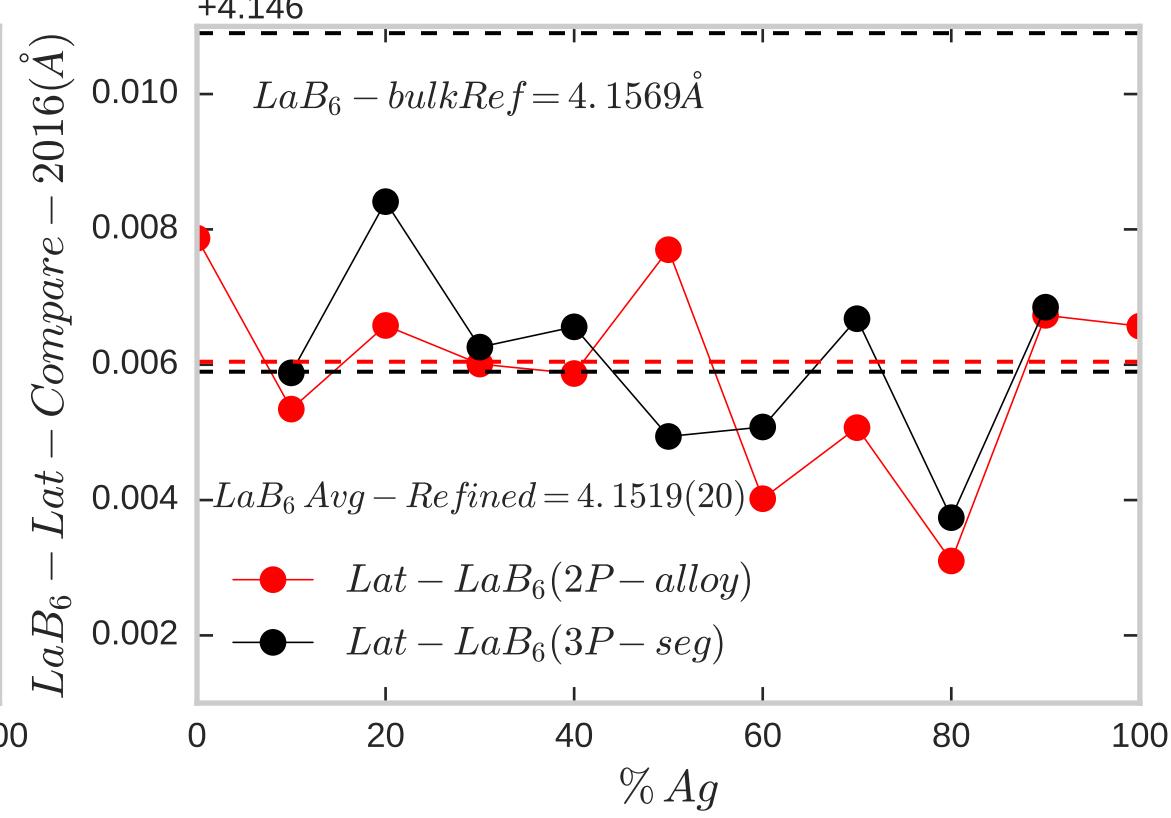
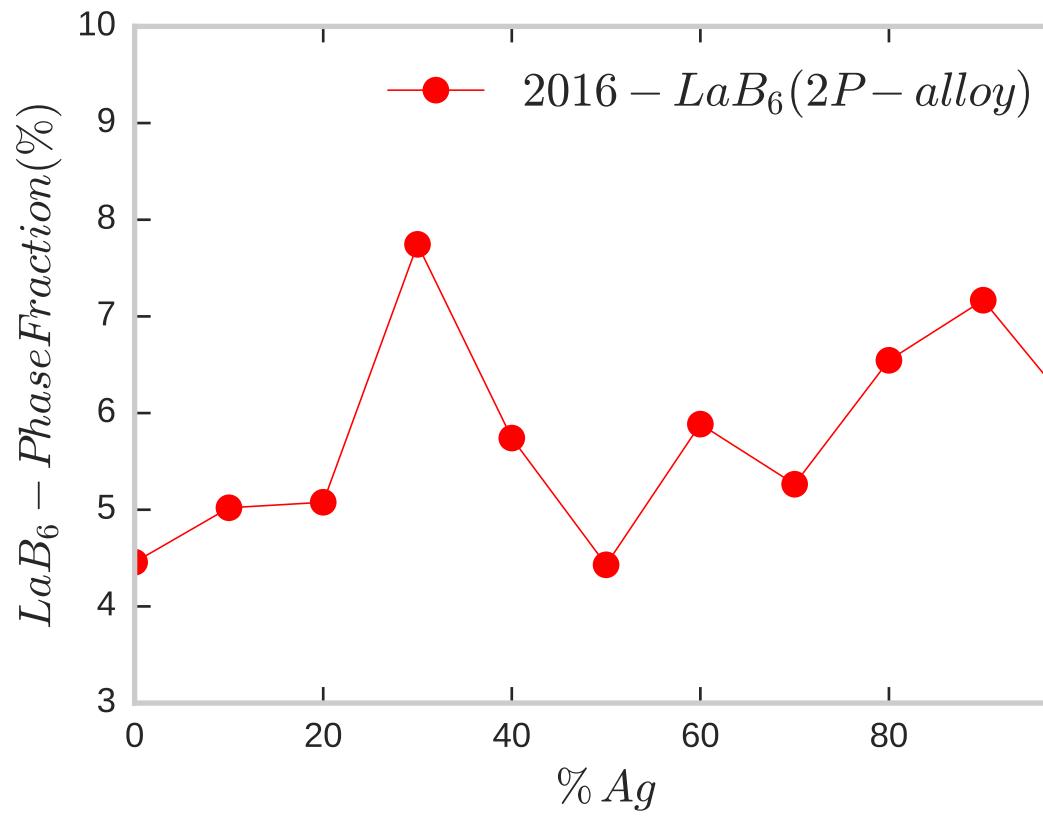
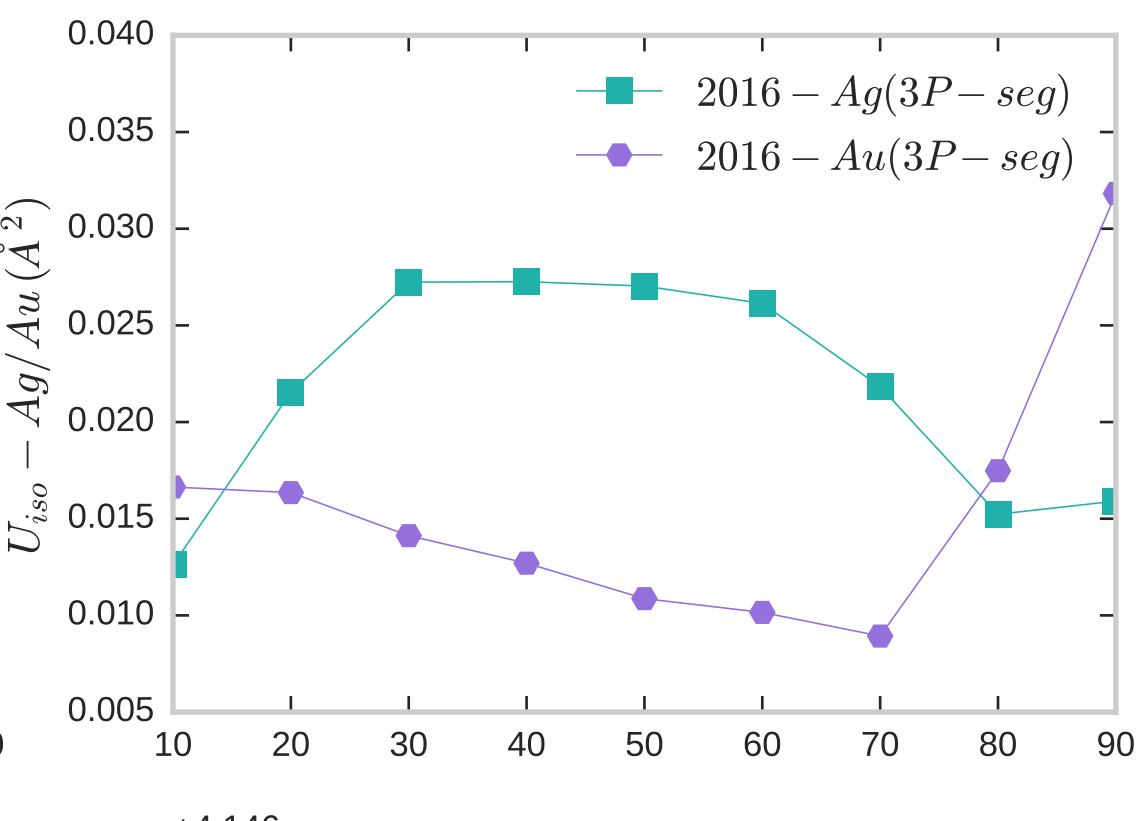
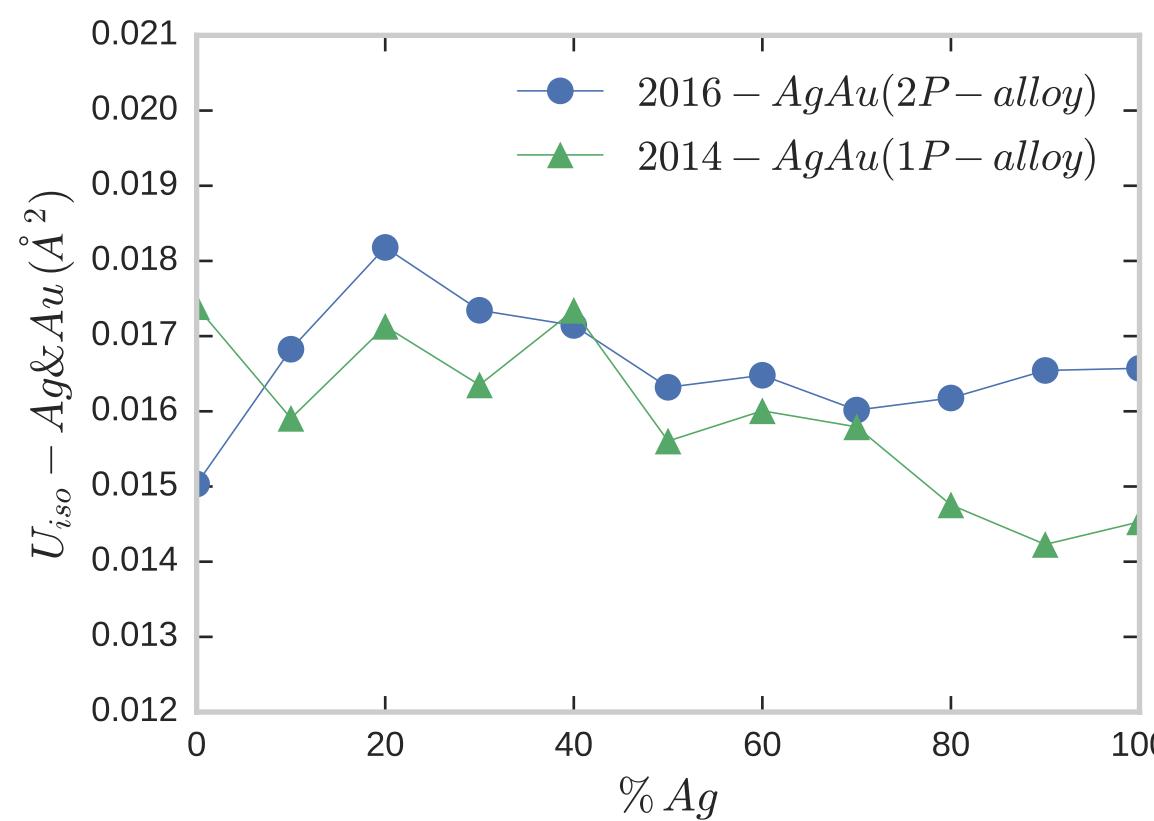




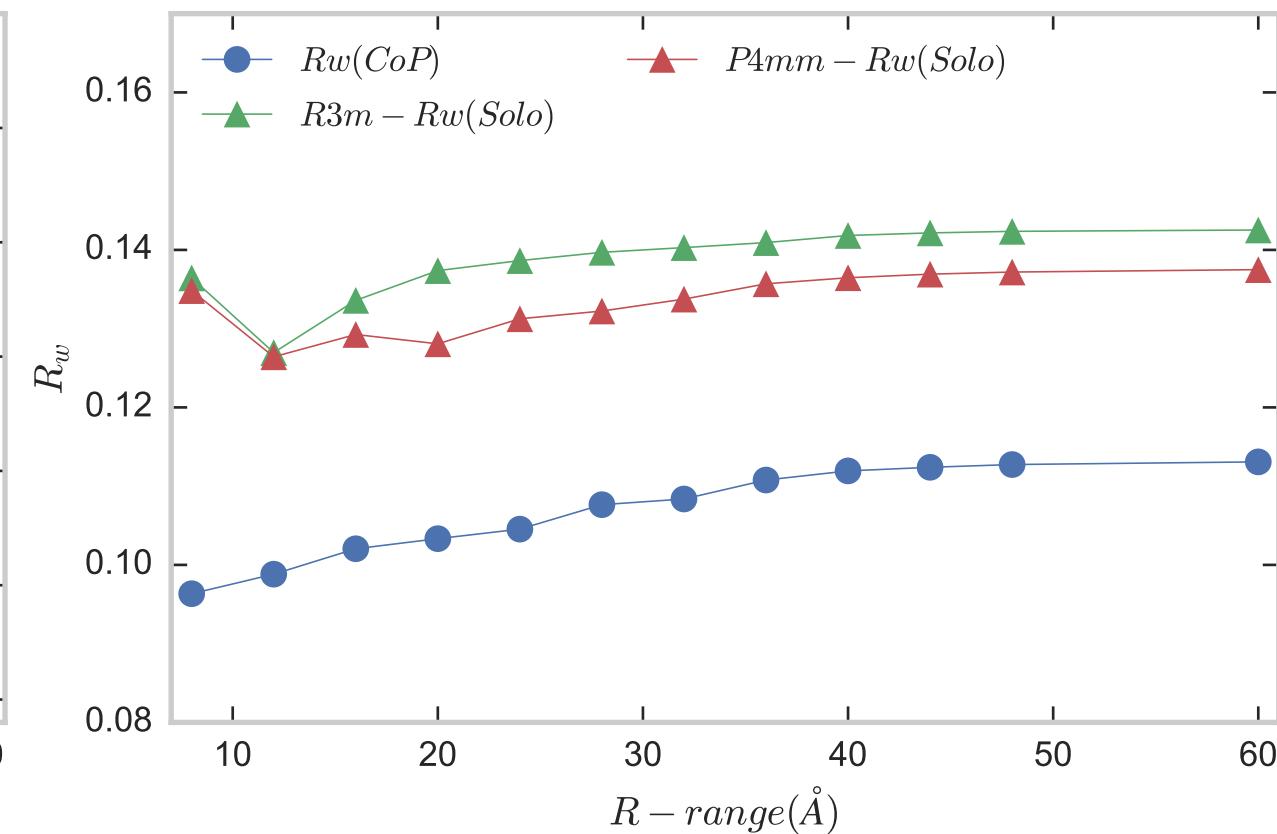
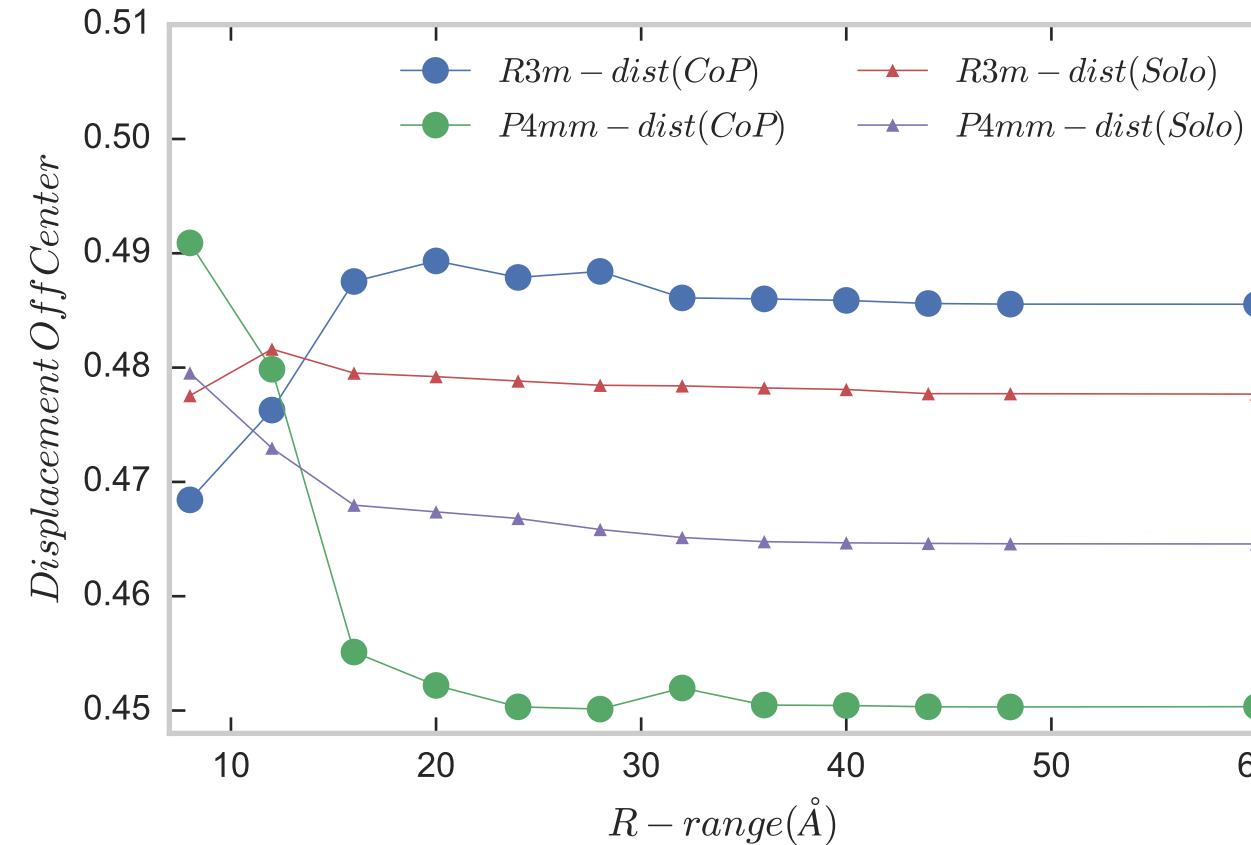
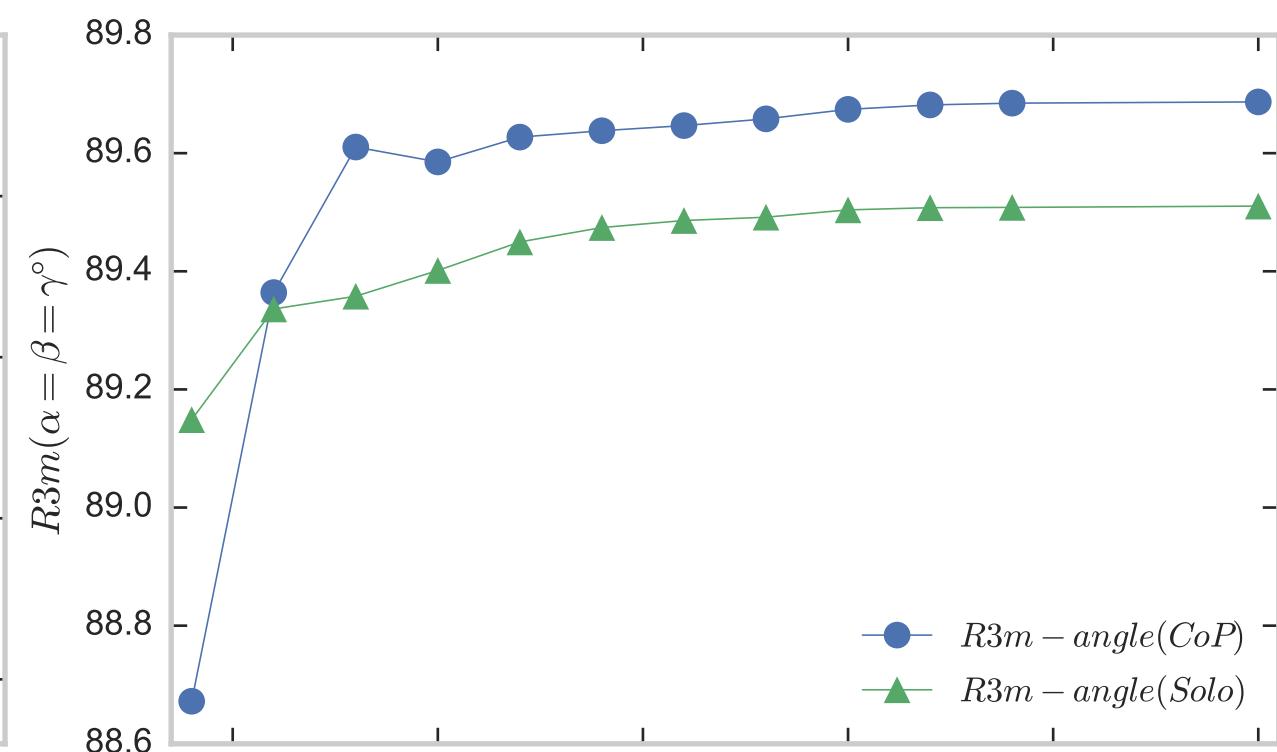
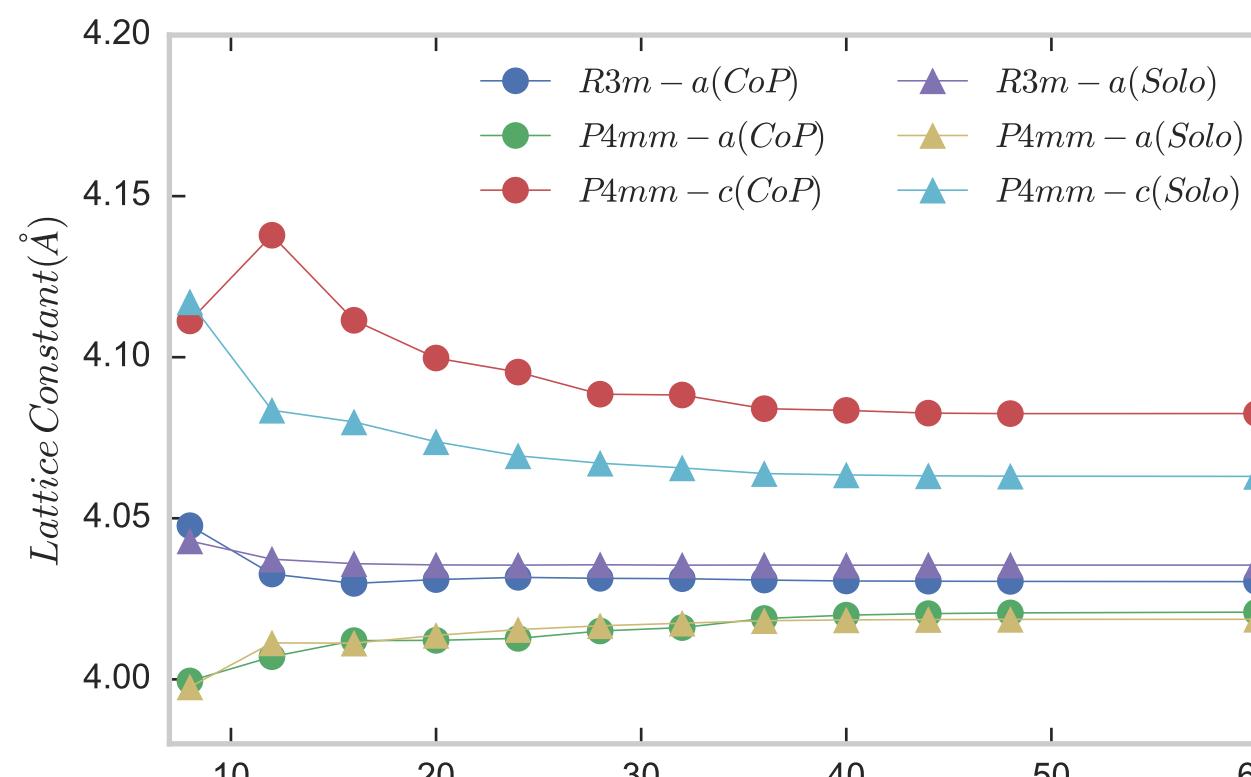


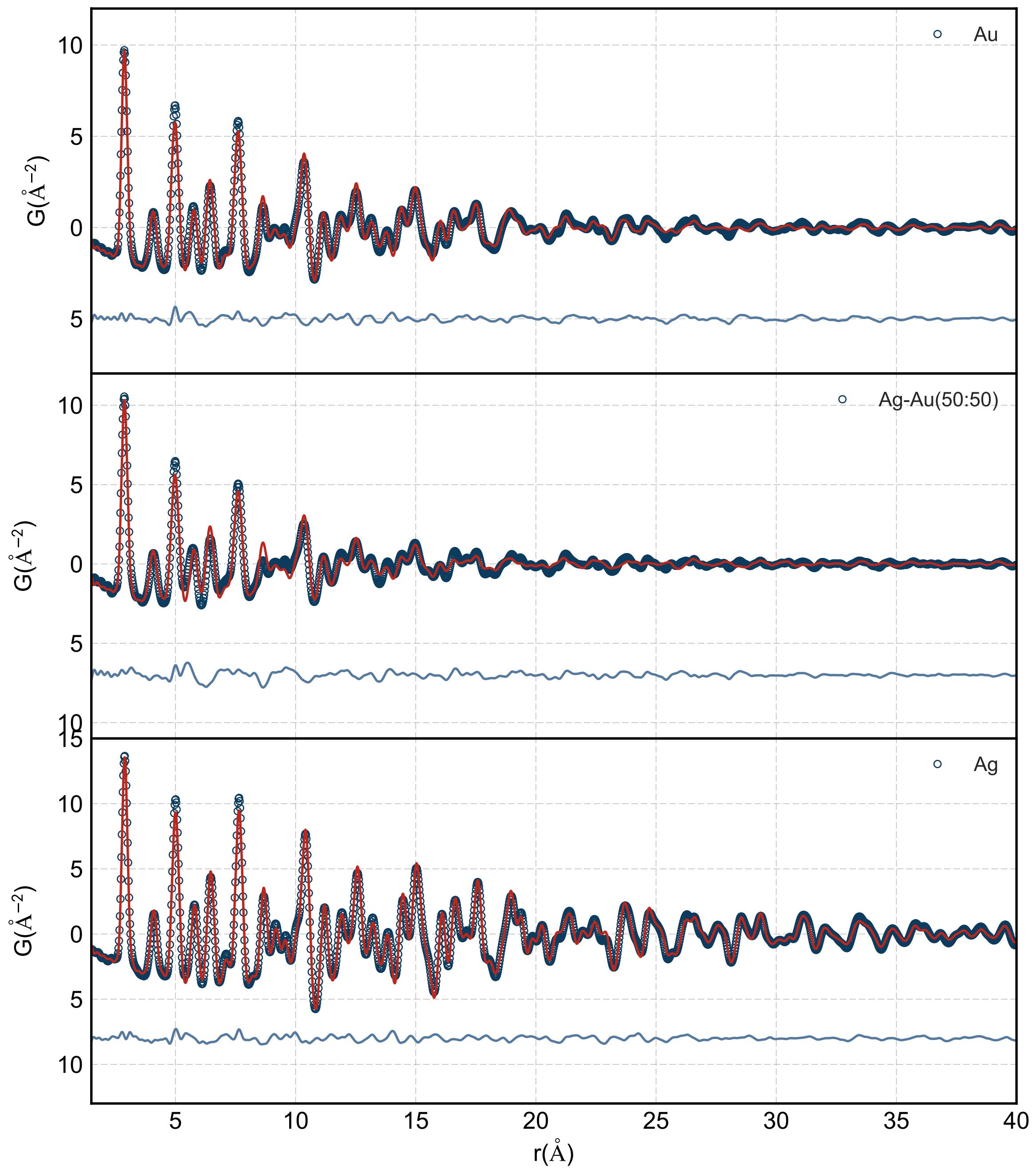


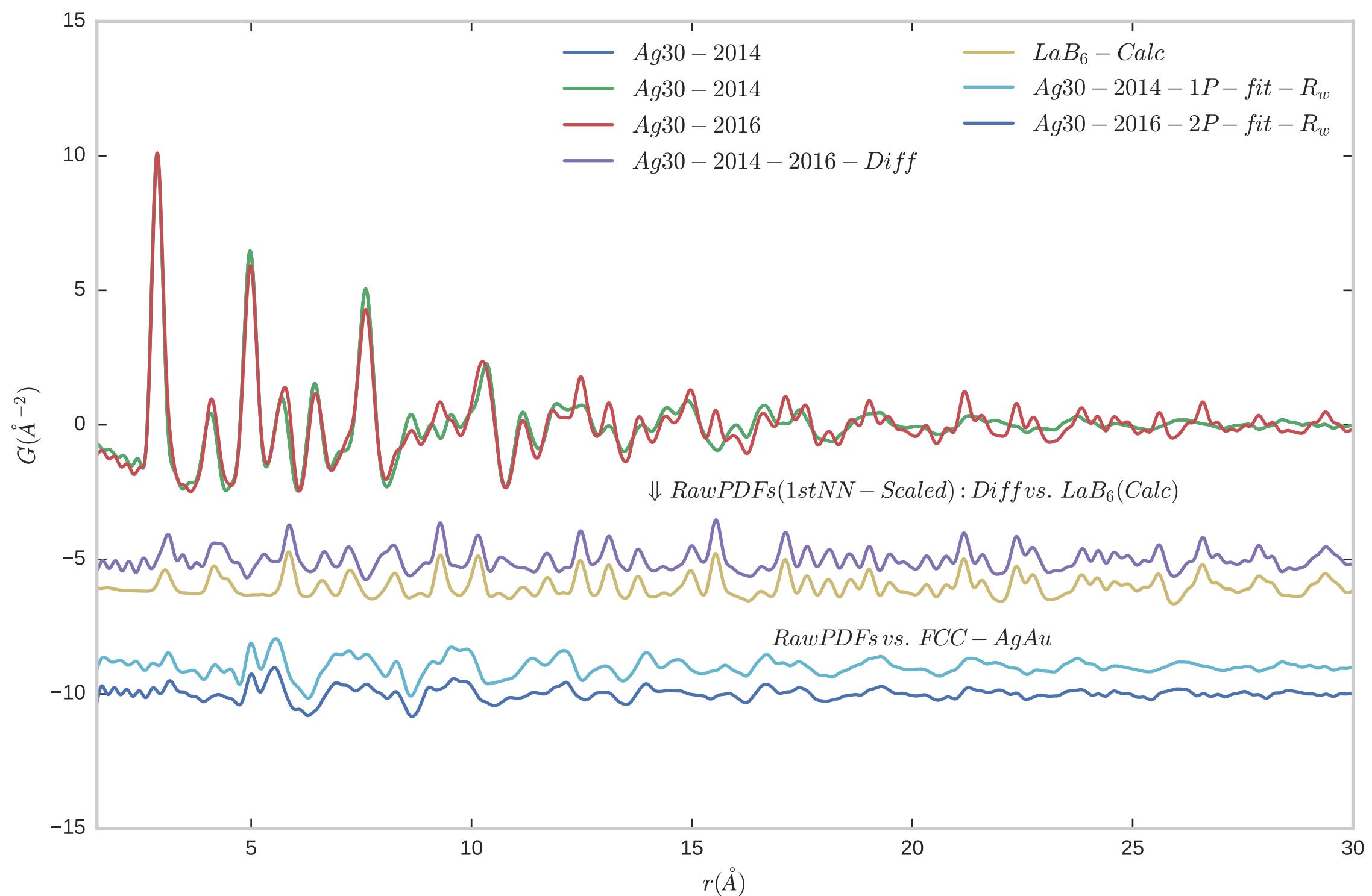






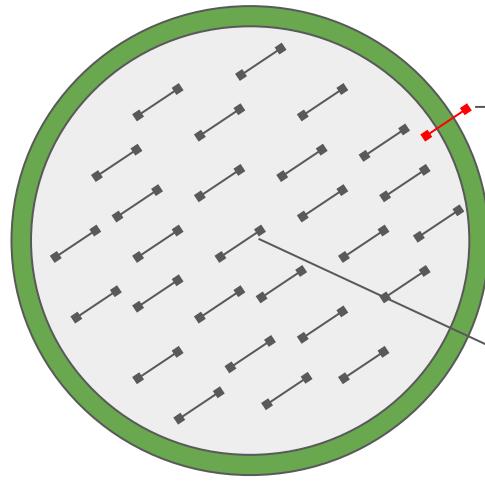








CS-Model (low-R)



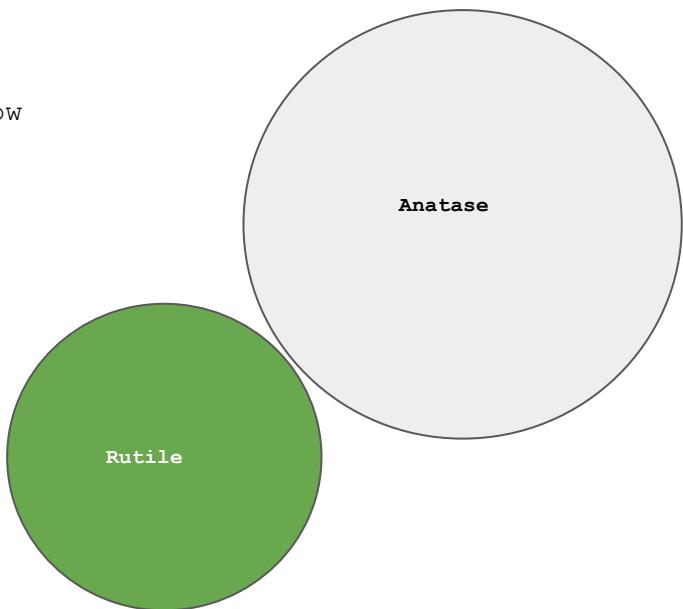
P-size: >25nm

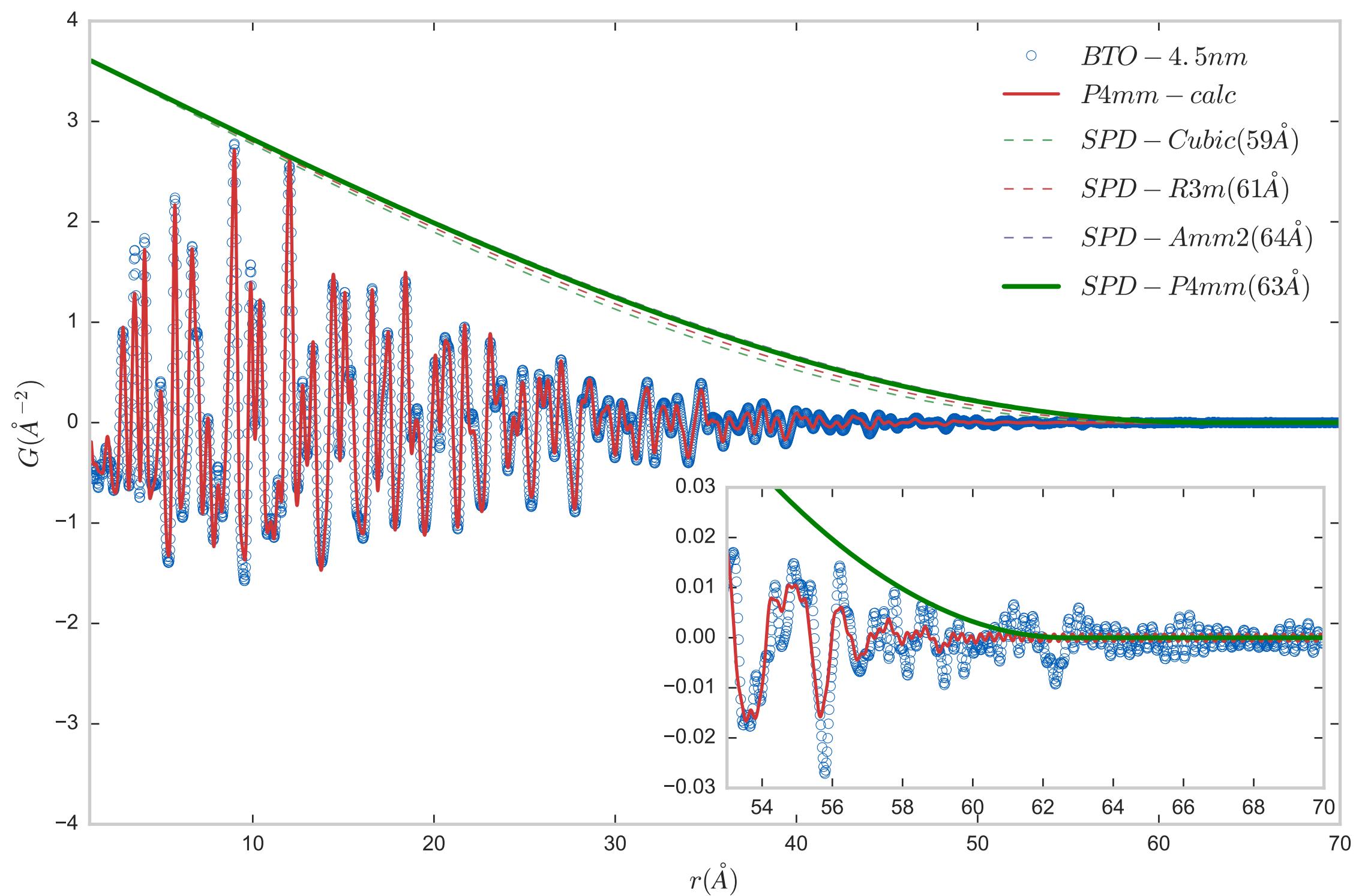
WAXS resolution: ~7-8nm

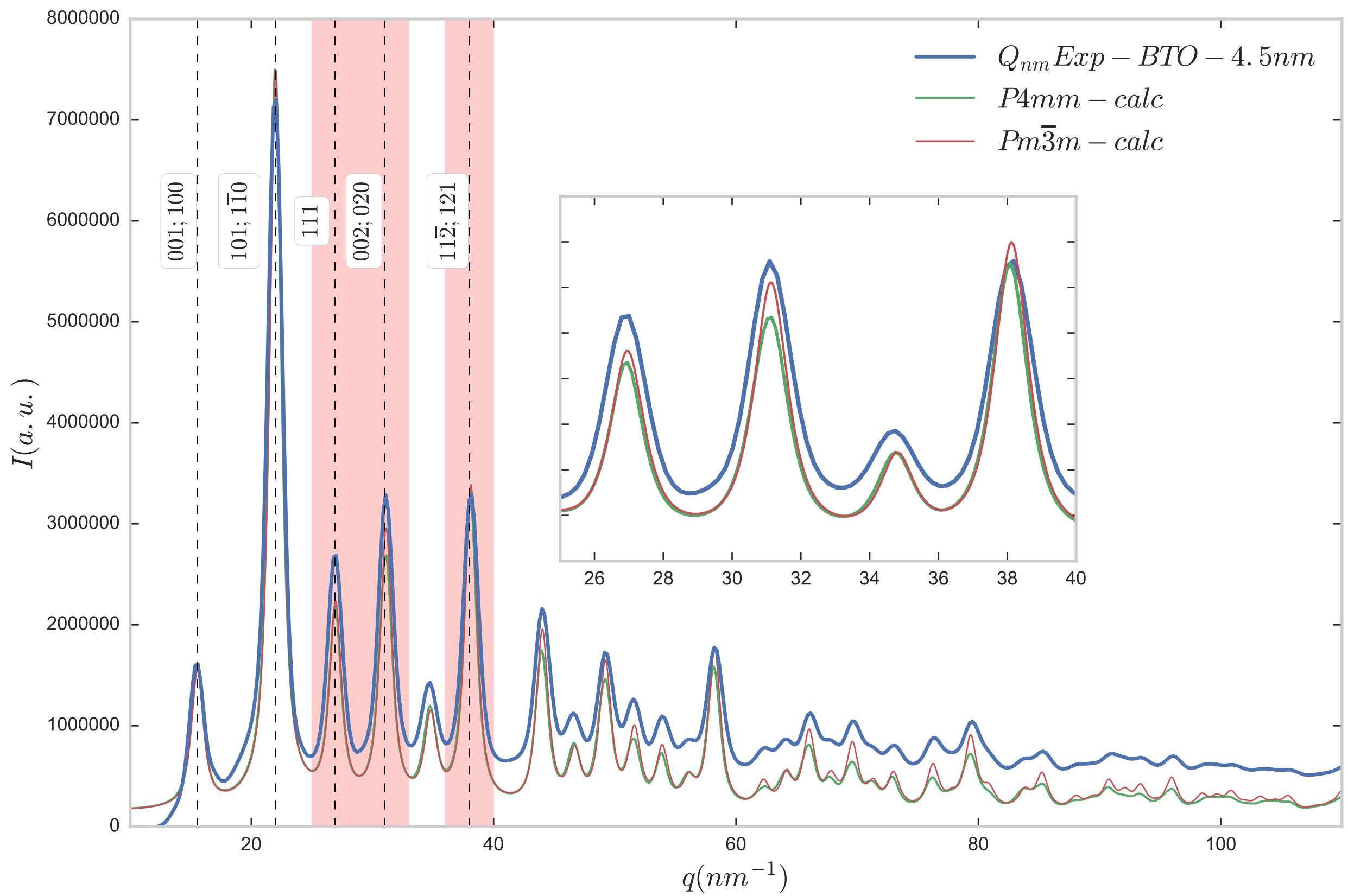
Rutile Correlations (low-R, low probability/phase %, reduced coherence)

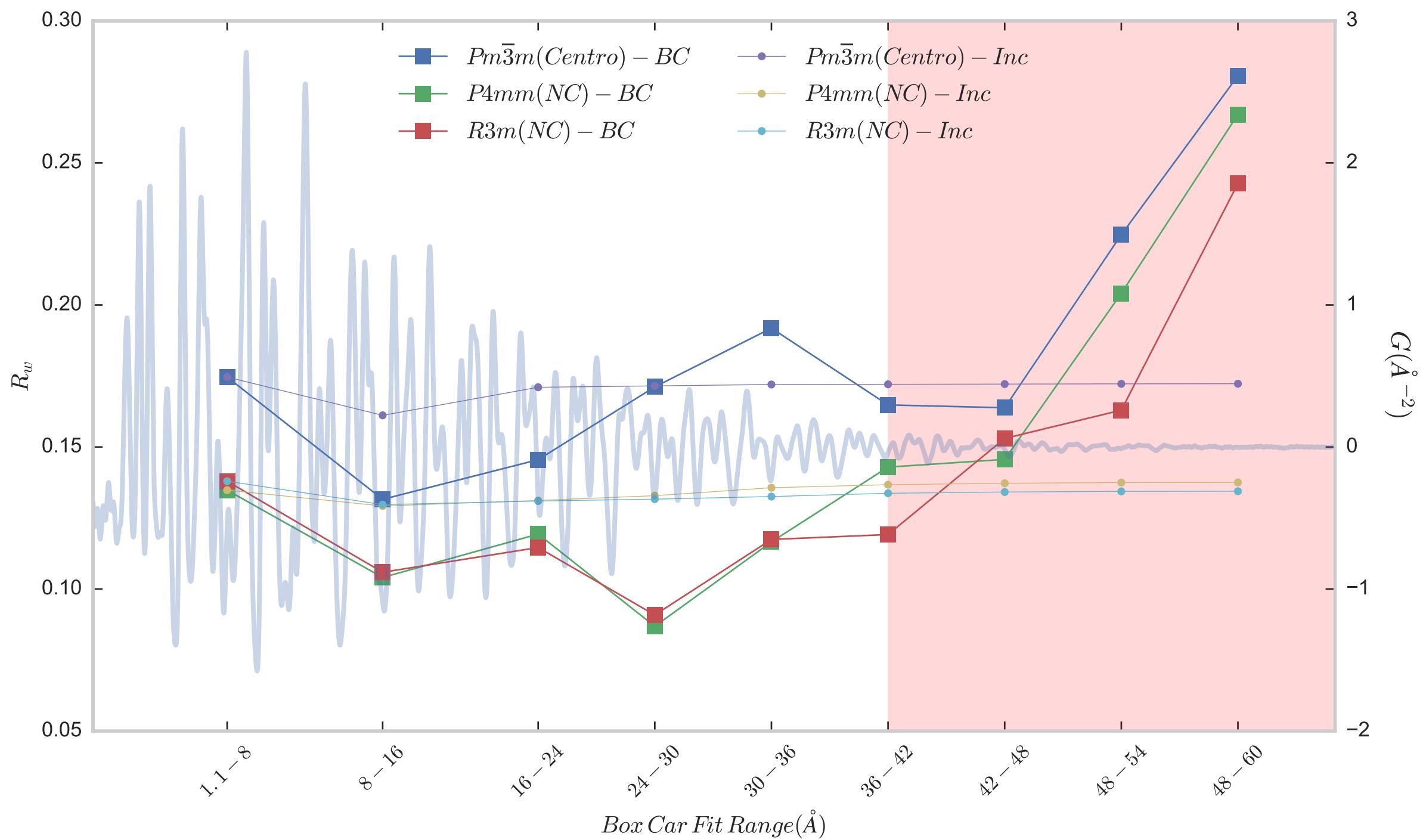
Anatase Correlations (low-R, high probability/phase %, LRO coherence)

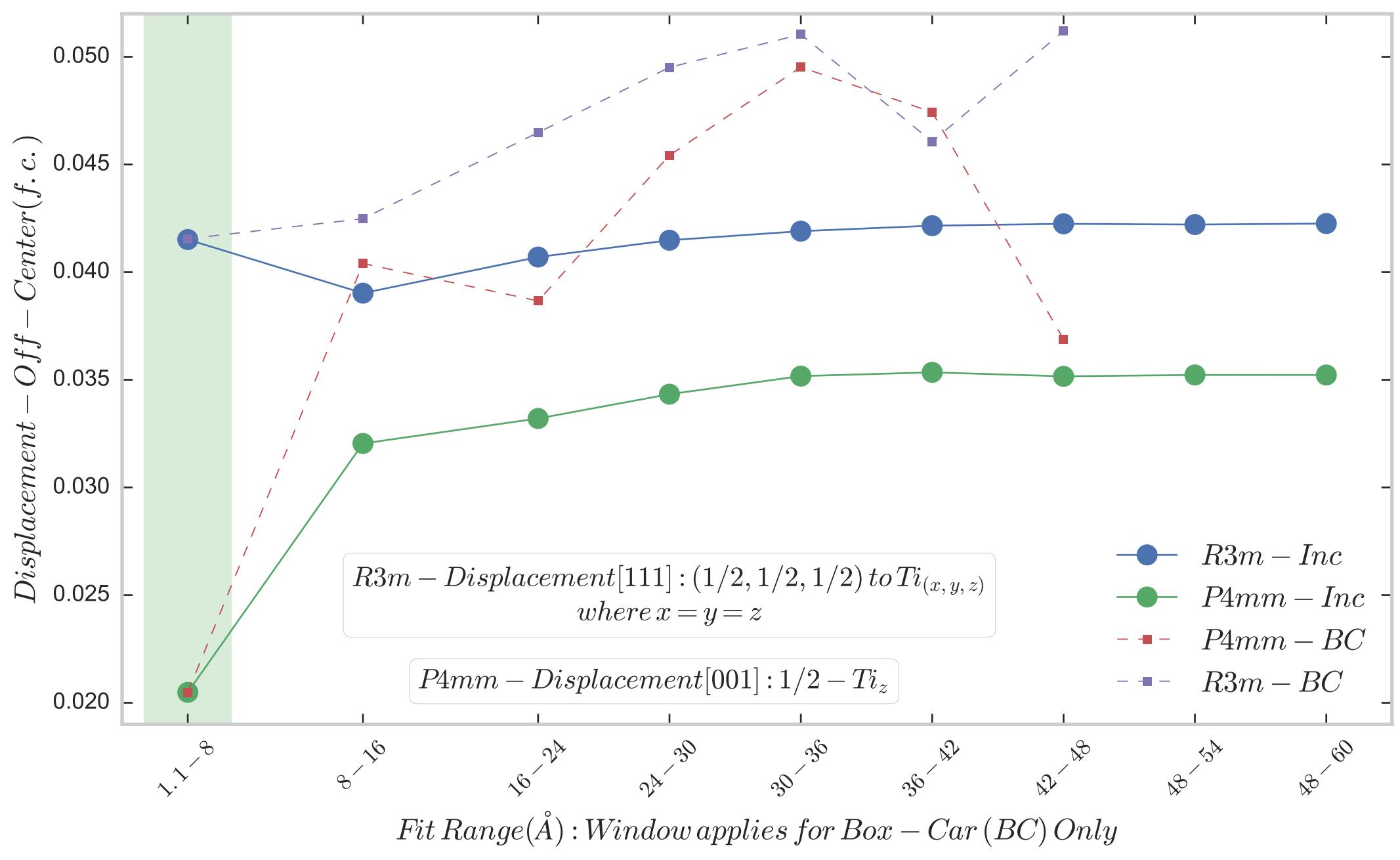
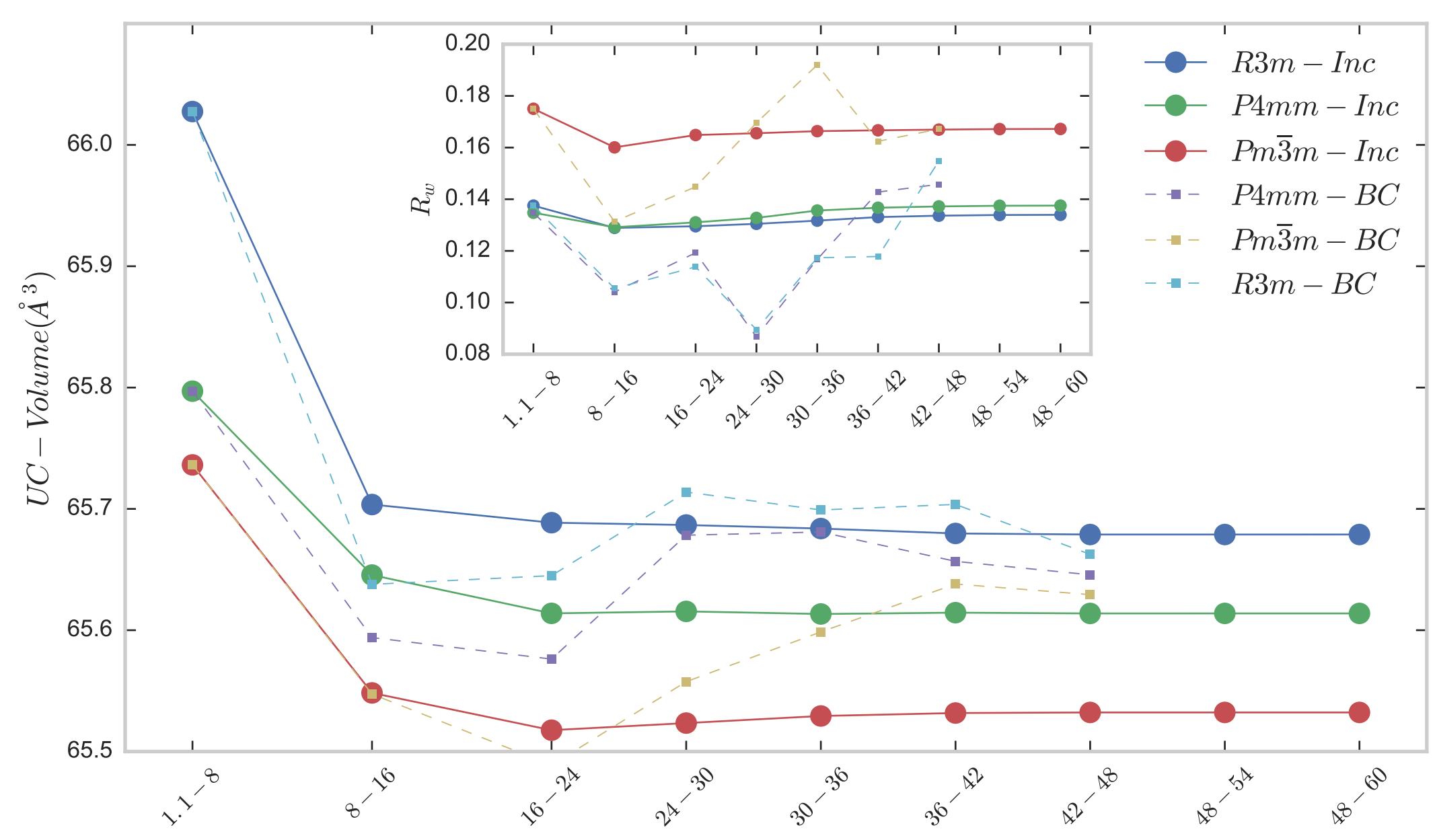
Poly-Model

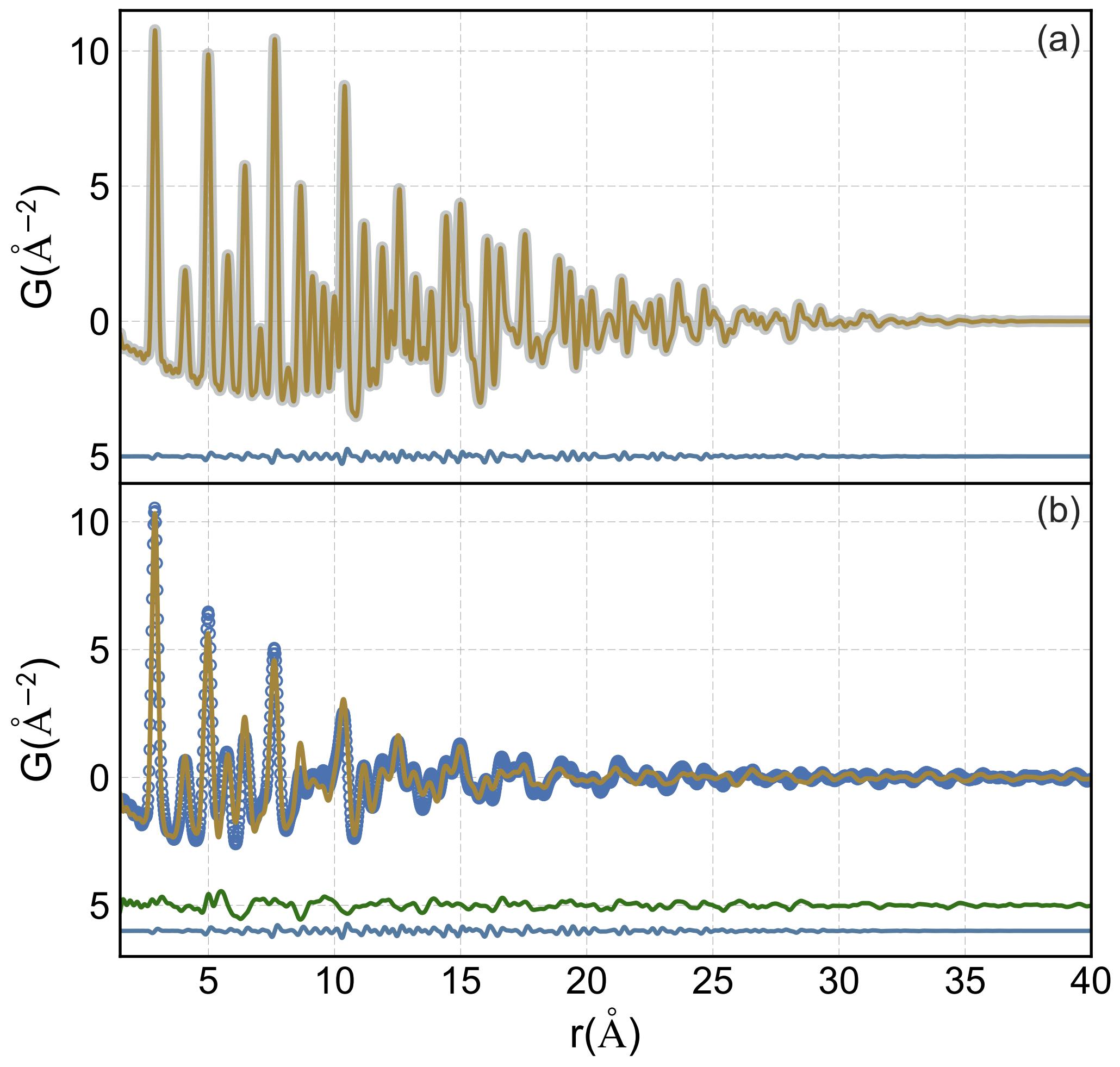












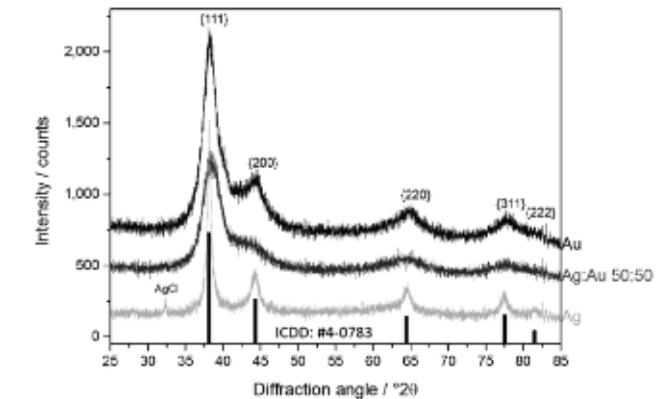
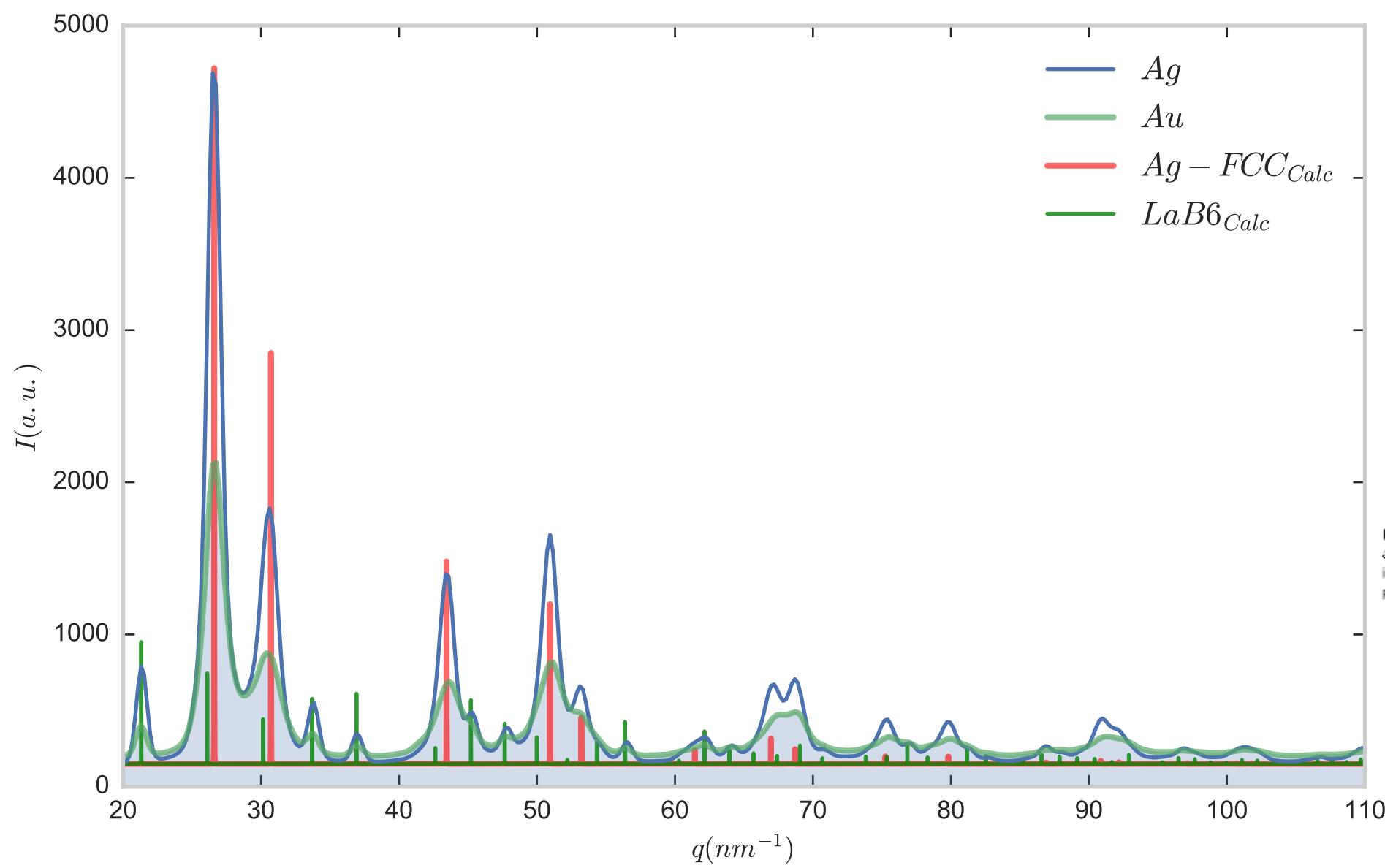
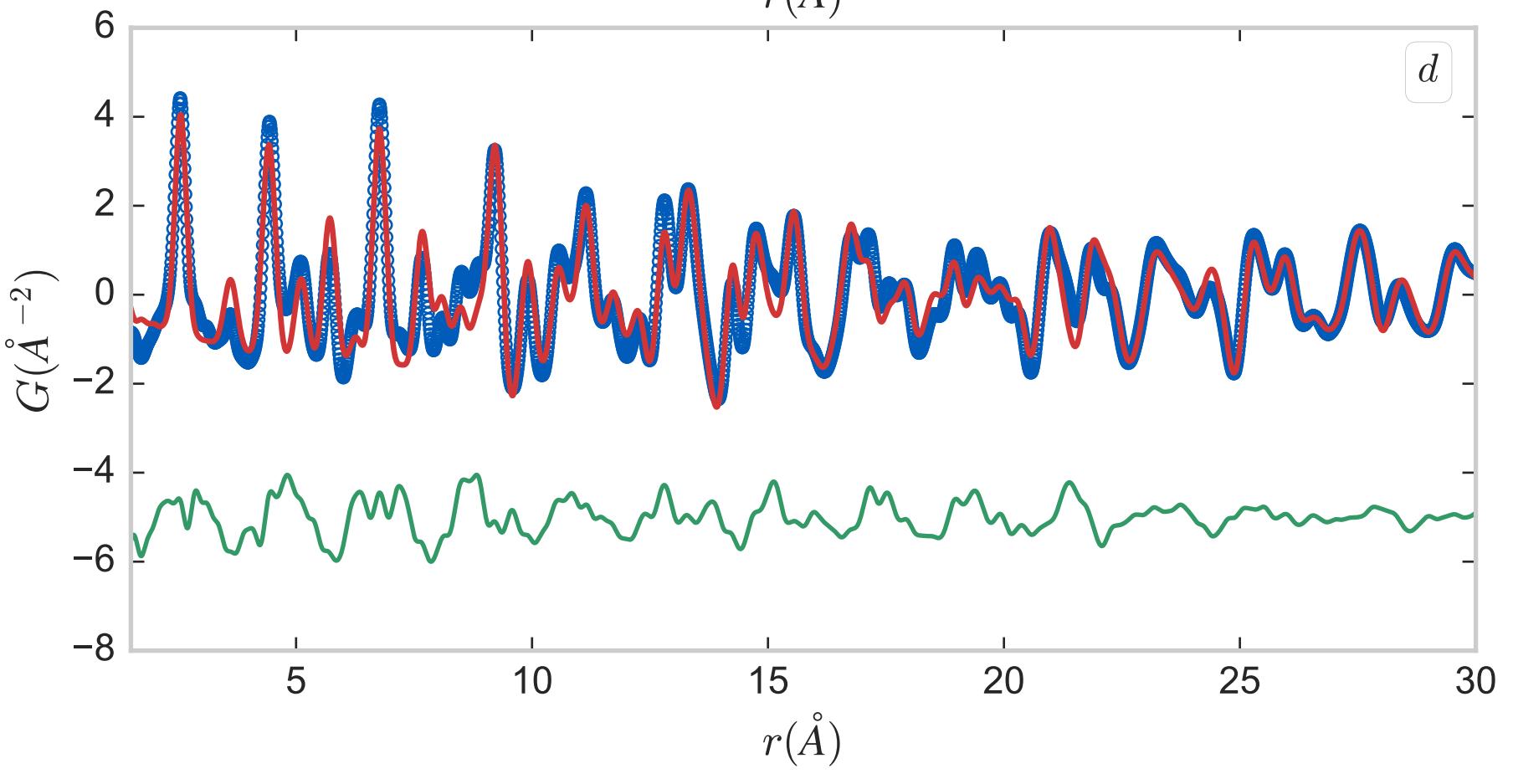
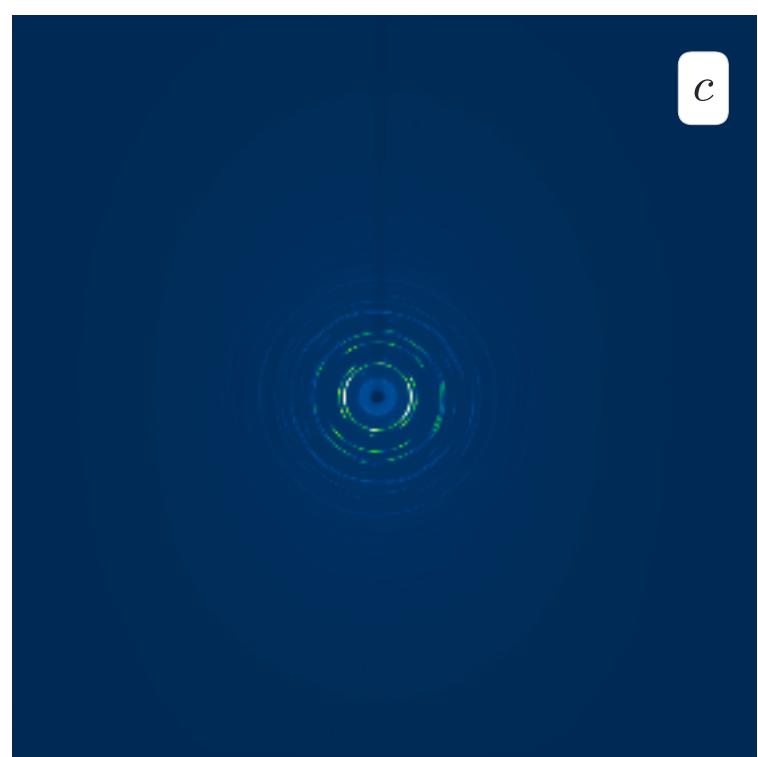
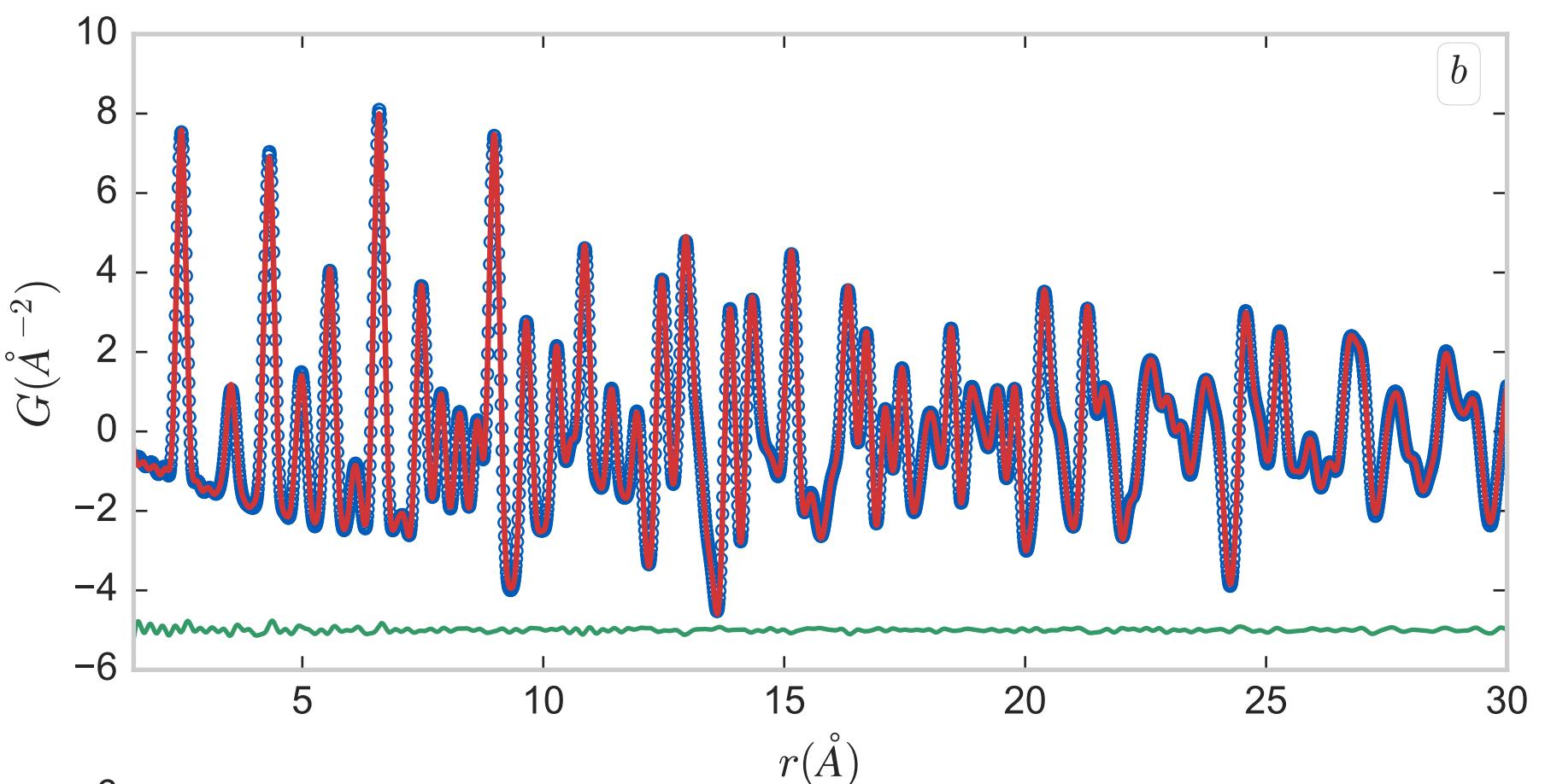
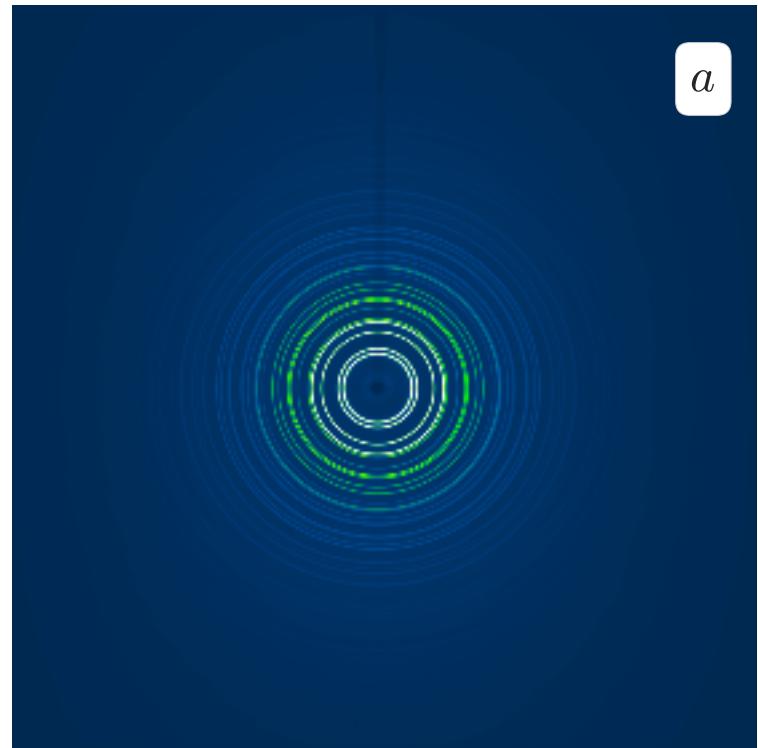
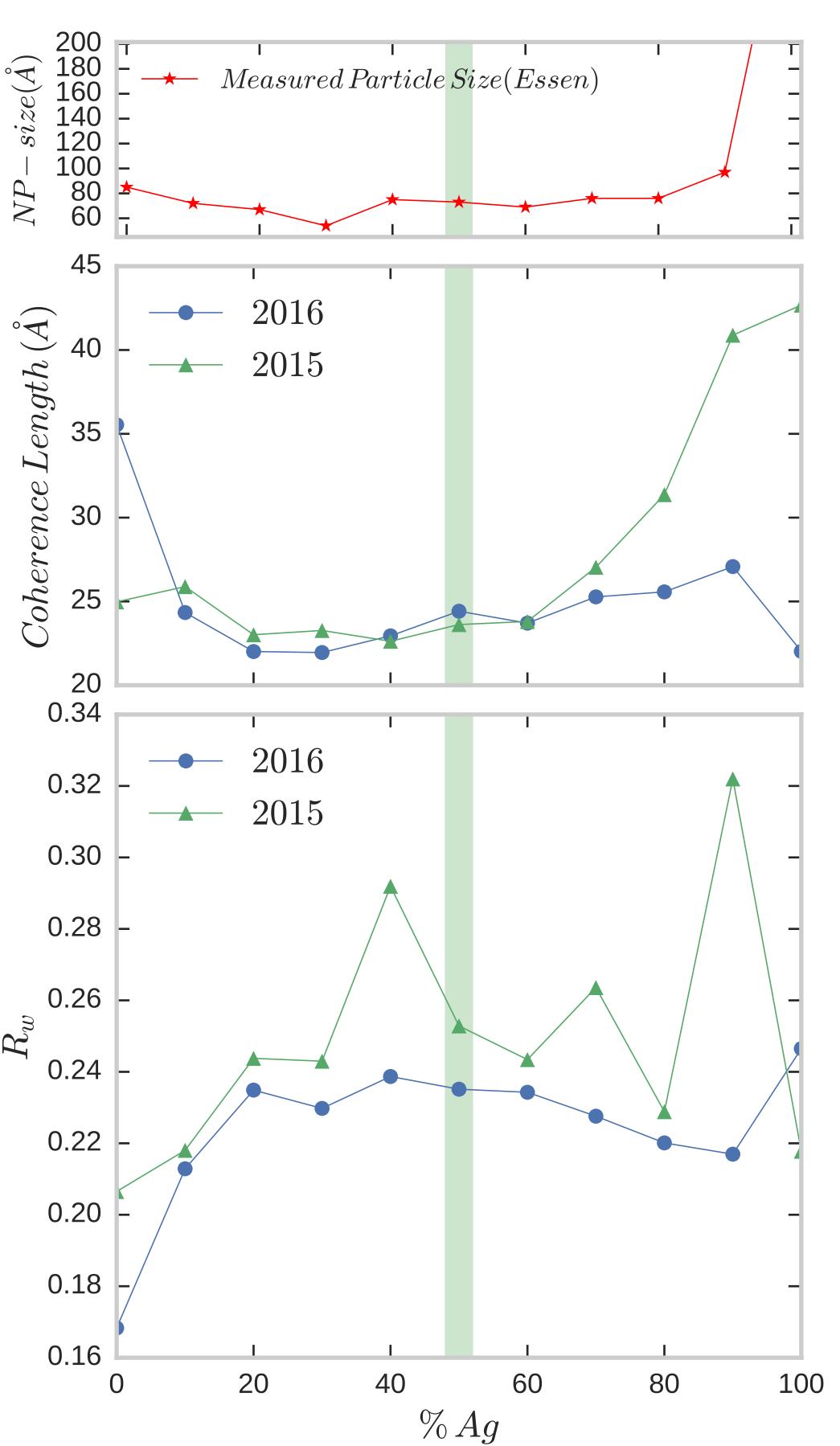
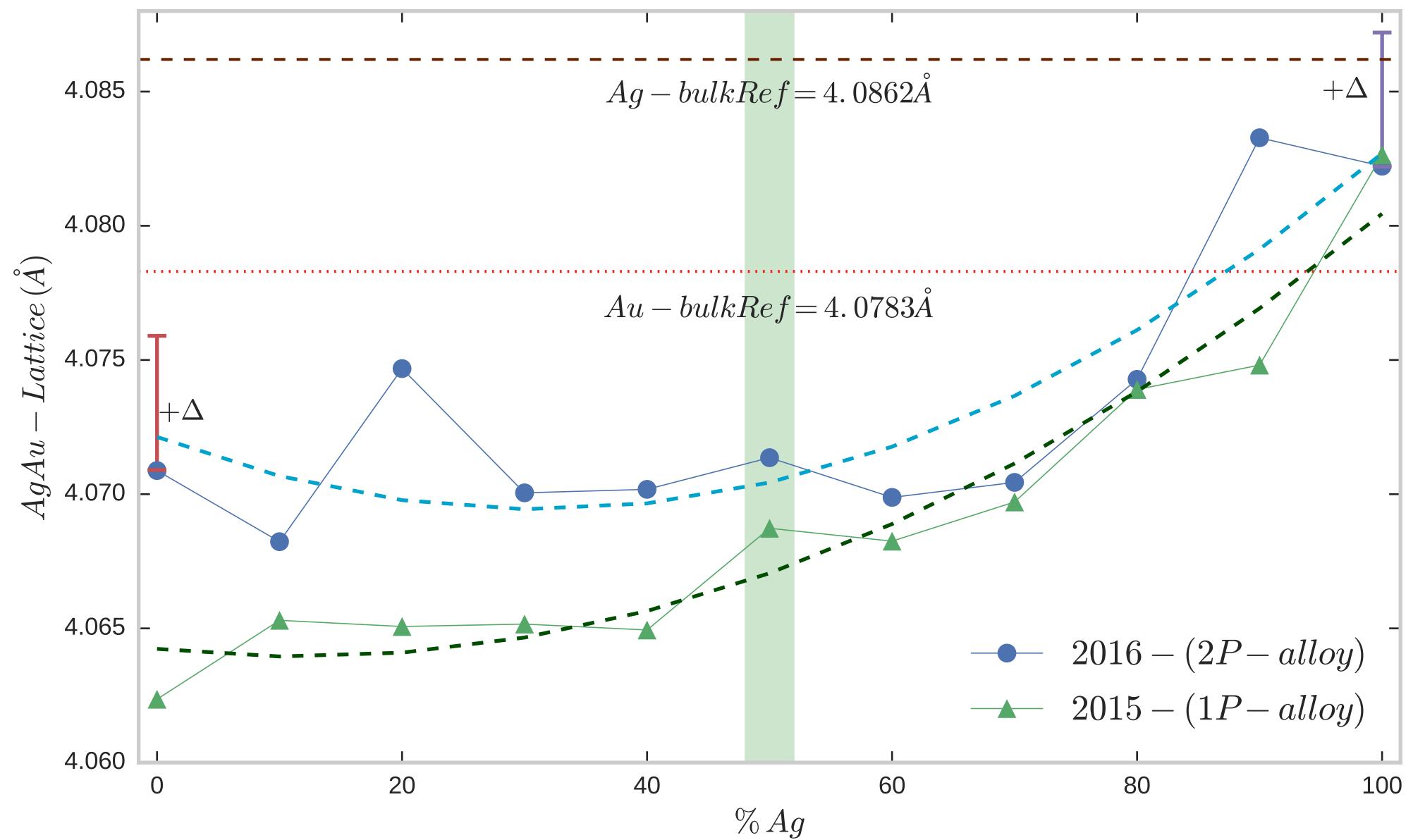
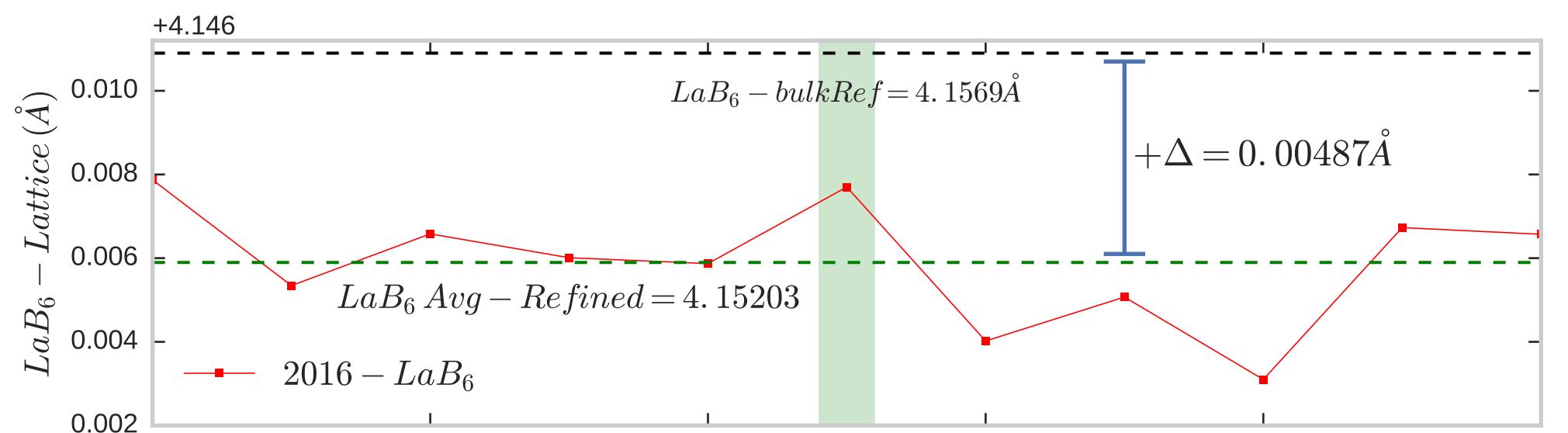
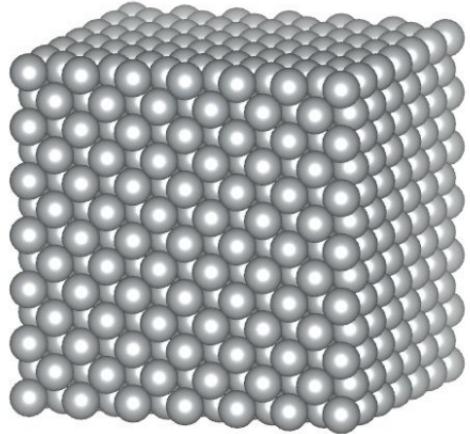


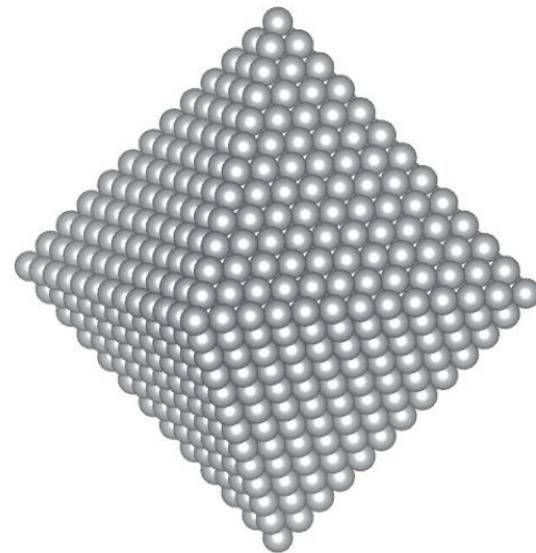
Fig. 5 Representative X-ray powder diffractograms of Au , $Ag : Au\ 50:50$, and Ag nanoparticles. At the bottom, the peaks of elemental silver are indicated. Note the traces of $AgCl$ from the synthesis which were found in pure silver nanoparticles.



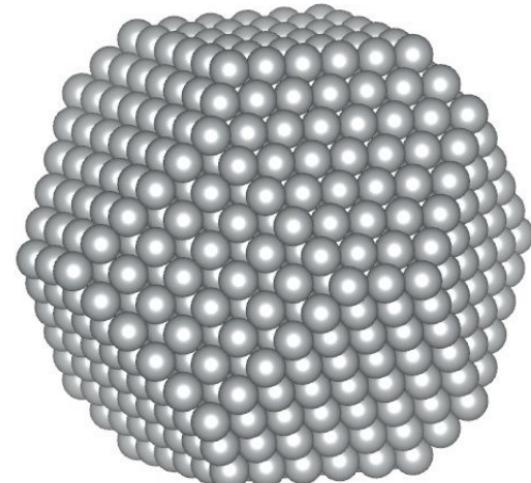




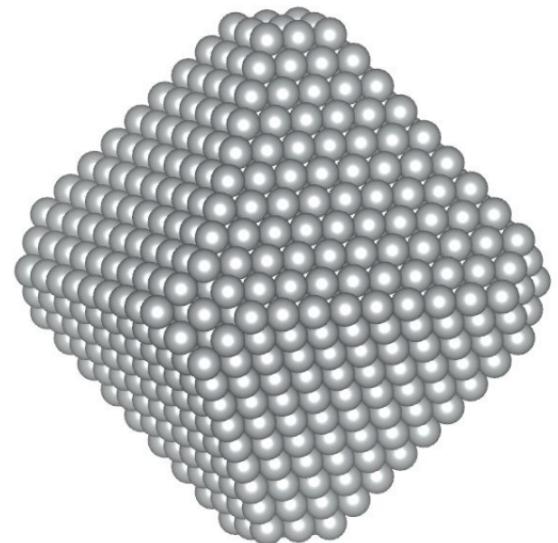
[200]>>>[111]



[111]>>>[200]



Ag-Sim



Ag-Exp

