

Supplemental Table OM4. Selected interatomic distances (Å) for benneshierite

Atom 1	Atom 2	Distance	
Ba1/Ca1	O1	2.808(16)	
	O2	2.609(19)	
	O2	2.770(14)	×2
	O3	2.721(13)	×2
	O3	2.908(15)	×2
	Mean	2.776 (5)	
Fe1/Mg1	O3	1.957(14)	×4
	Mean	1.957(14)	
Si1	O1	1.643(9)	
	O2	1.583(19)	
	O3	1.651(14)	×2
	Mean	1.632(7)	