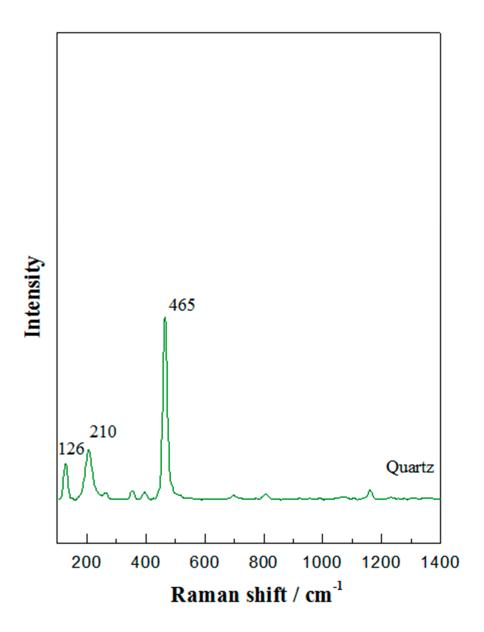


Supplementary 1: The Raman analysis of upper (A) and bottom (B) sections for monoculture, and upper (C) and bottom (D) sections for coculture.



Supplementary 2: The Raman analysis of quartz only