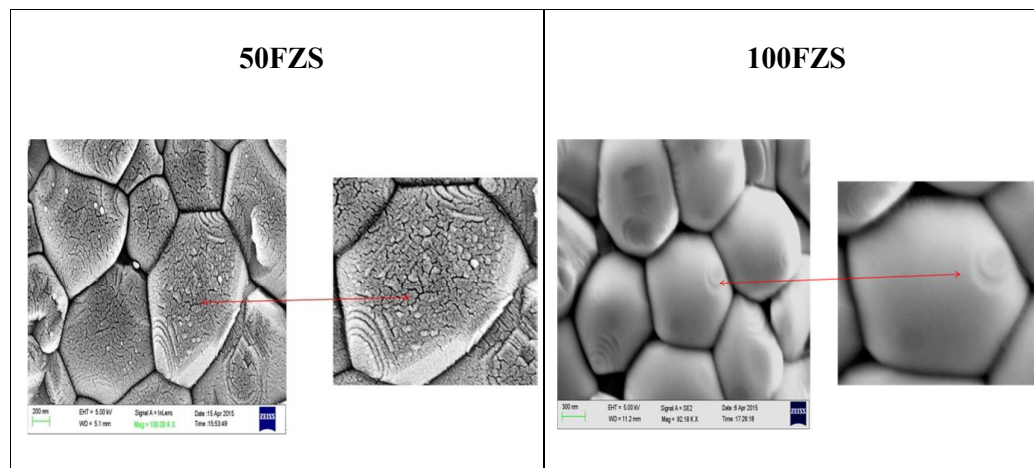


**Supporting Information 1**

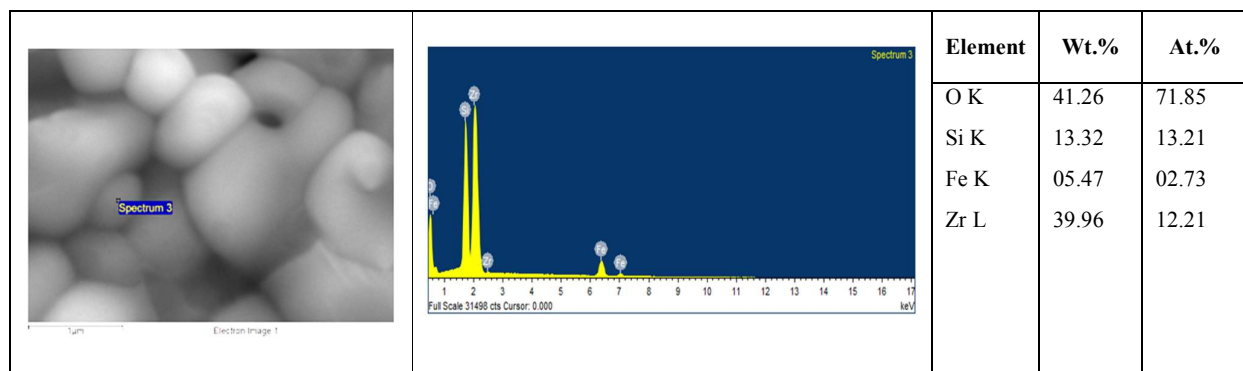
**Figure showing the fractures on the surfaces of 50FZS and 100FZS samples that are heat treated to 1300 °C**

(Magnified images showing the decrease in cracks with increase in Iron concentration)



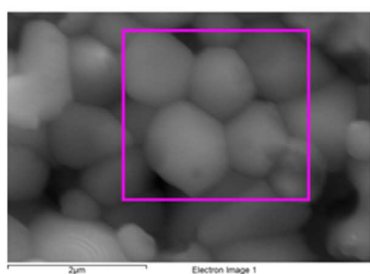
## Supporting Information -2

Point EDX spectrum images obtained for 100FZS at 1300 °C

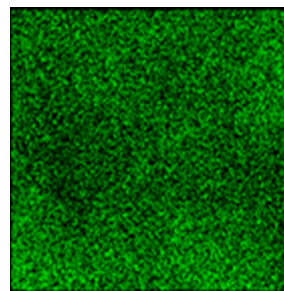


## Supporting Information -3

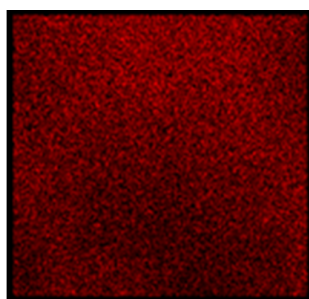
Elemental mapping images of the 100FZS sample at 1300 °C



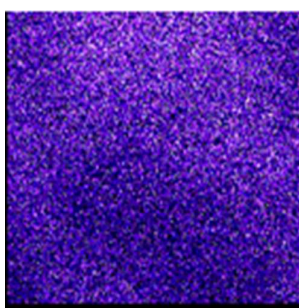
Fe ka1



O ka1



Si ka1



Zr ka1

