

Fig. S1. Average EDS Sr-K α depth profiles of as implanted Sr-SiC-600 (black), Sr-SiC-600 annealed at annealing at 1100 and 1300 $^{\circ}$ C together with their corresponding HAADF STEM micrographs and Sr EDS maps.

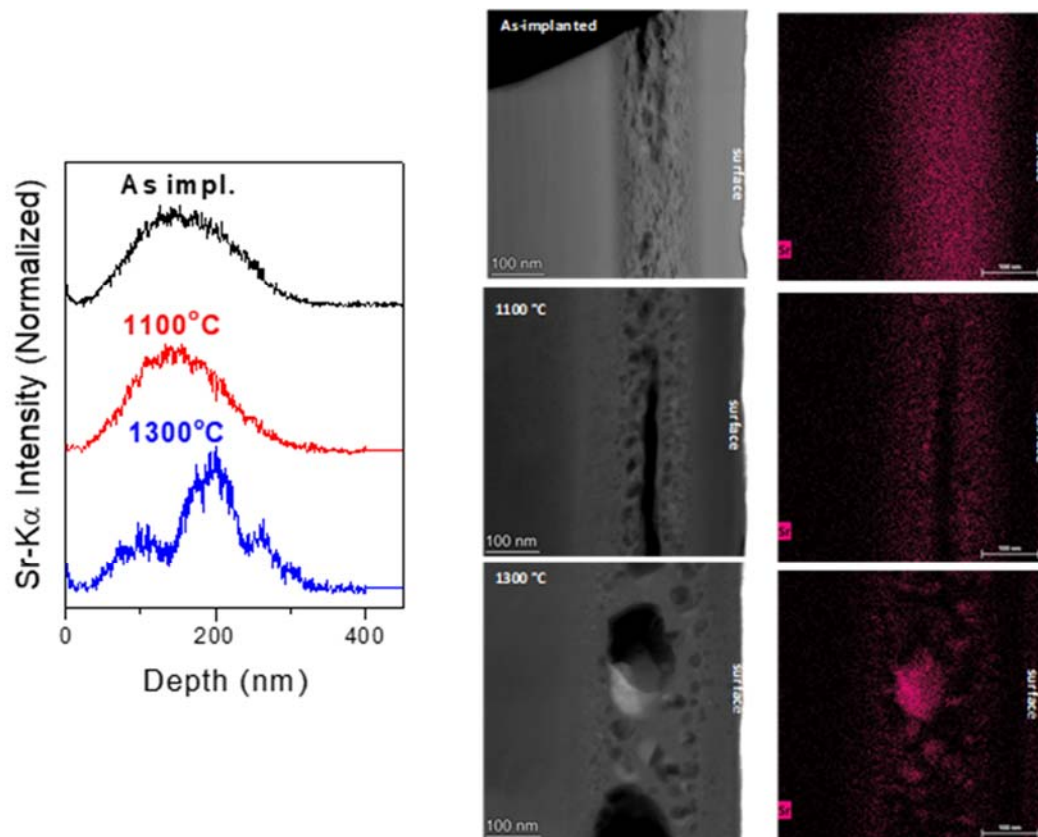


Fig. S2: Average EDS Sr-K α depth profiles of as implanted Sr+He-SiC-600 (black), Sr+He-SiC-600 annealed at annealing at 1100 and 1300 °C together with their corresponding HAADF STEM micrographs and EDS maps.