

Fig.S1 Fatigue fracture morphology of unpeened bainitic spring steel [yellow circle – macro voids; red circle – microvoids; arrow mark – cracks; purple circle – quasi-ductile nature]

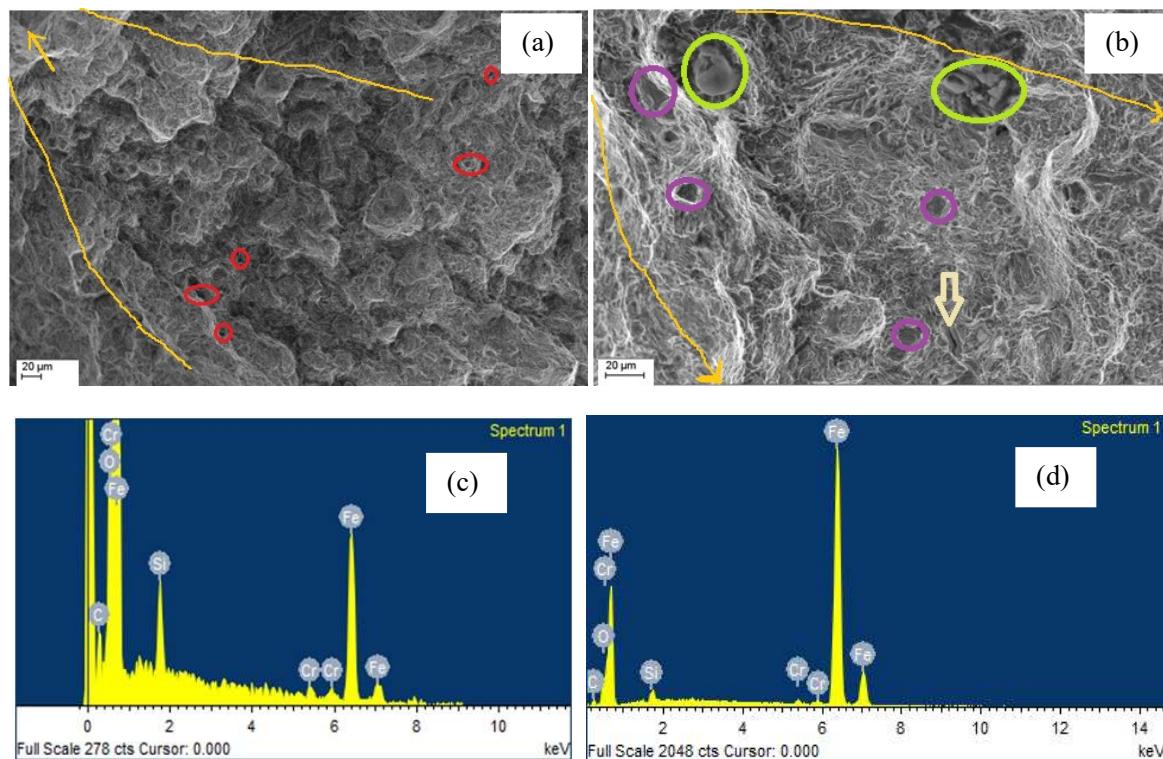


Fig.S2 Fatigue fracture morphology of (a,b) LSPwC specimen and (c) EDS profile obtained from complex oxide inclusion region in Fig.S2b&d EDS profile obtained away from inclusion [Yellow arrow mark – crack initiation or fracture flow; red circles – microvoids; light yellow arrow mark – cracks; purple circles – quasi-ductile nature; green circles – complex oxide inclusion of Cr and Si]

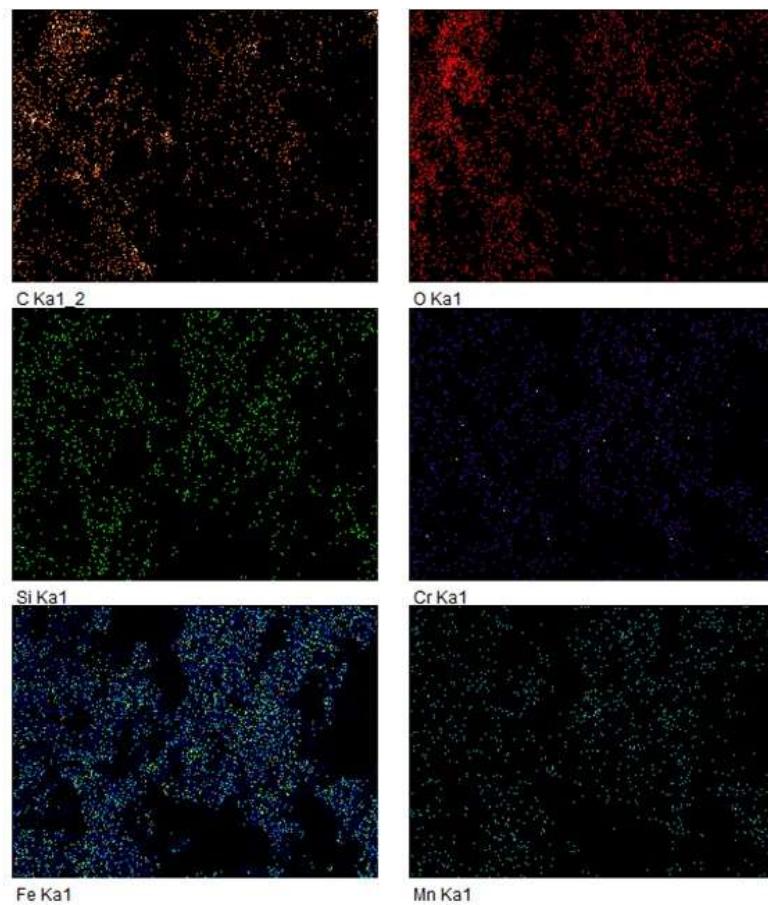


Fig.S3 Distribution mapping of various elements present in the fracture surface Fig.S2d

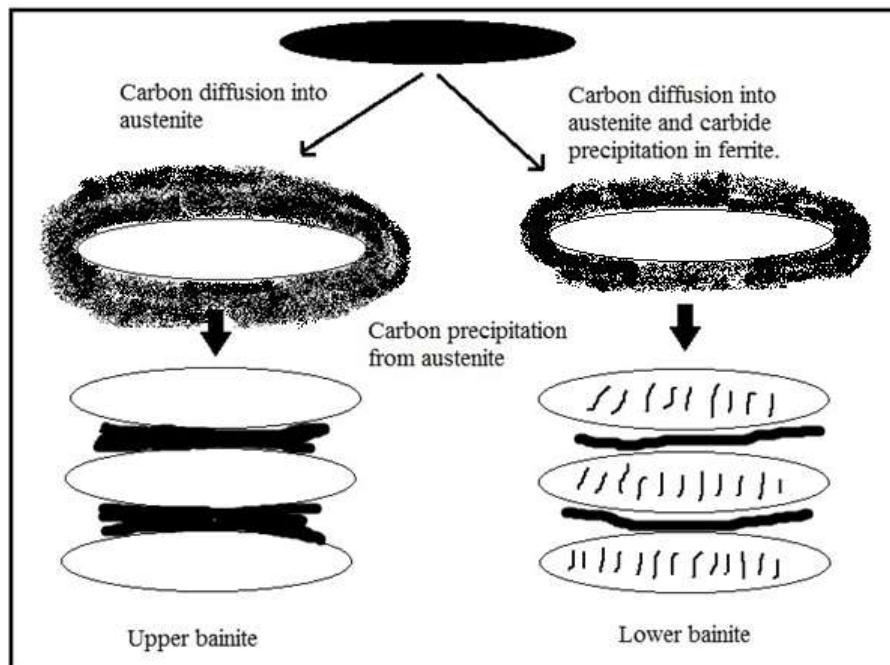


Fig.S4 Schematic representation of formation of upper and lower bainitic structures