

Supplementary Materials

The Microstructure, Hardness, Phase Transformation and Mechanical Properties of a NiTi Coating Applied to Graphite Substrate via a Plasma Spraying Process

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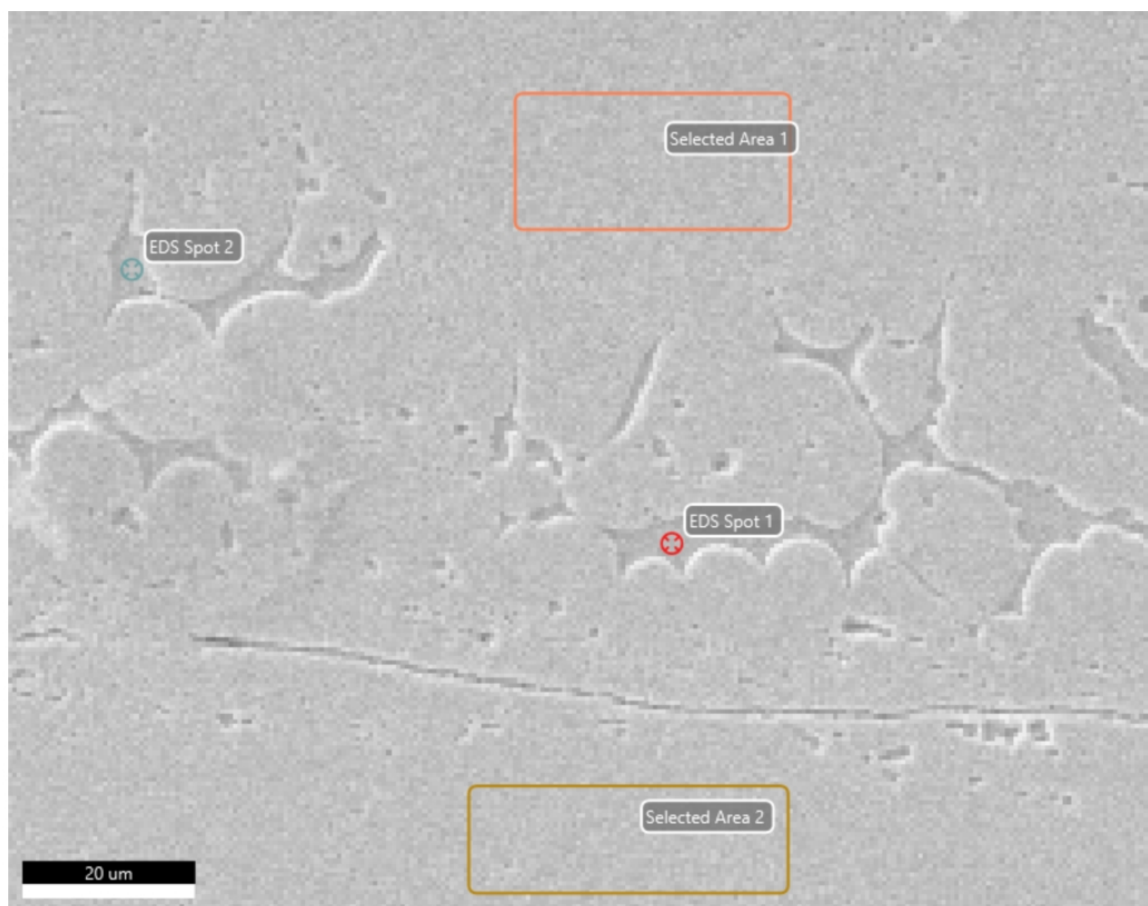


Figure S1. EDX analysis of Sample 1 at various locations.

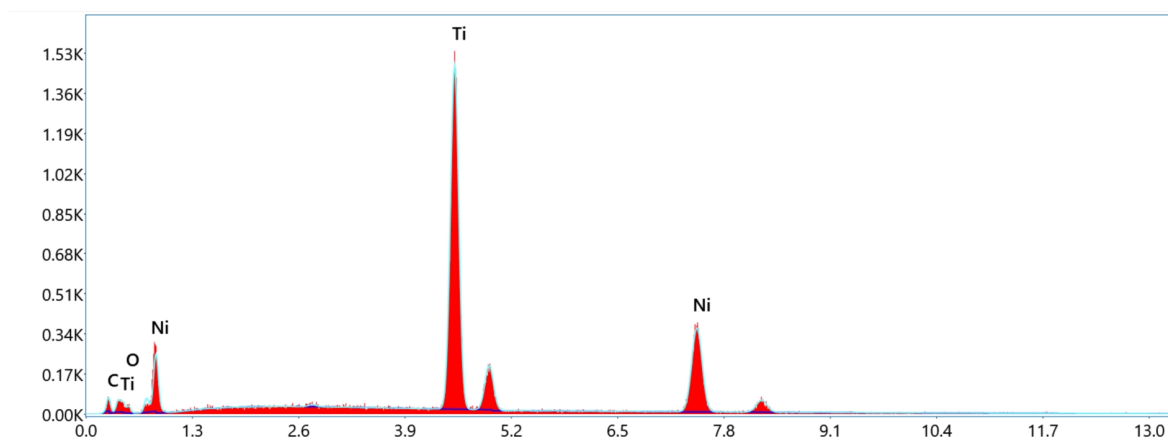


Figure S2. EDX peaks of various elements of spot 1.

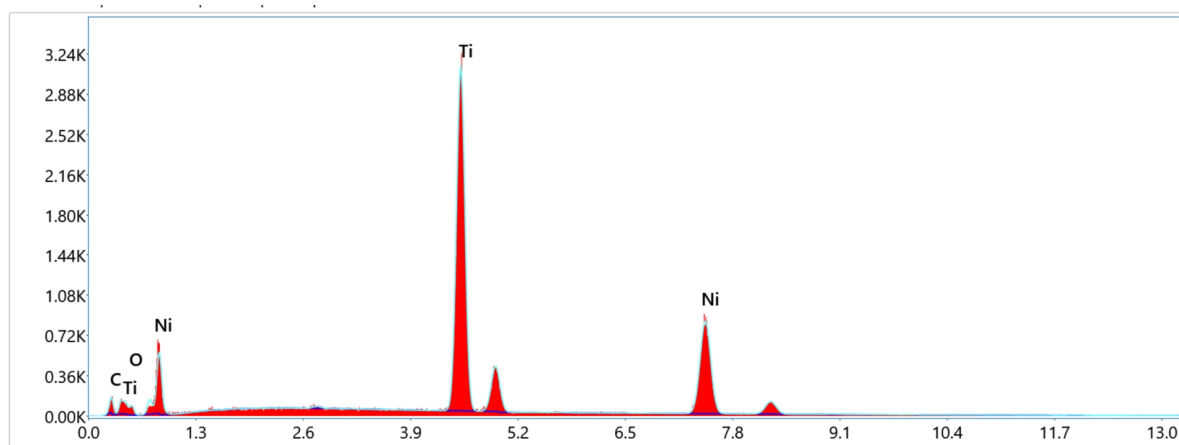


Figure S3. EDX peaks of various elements of spot 2.

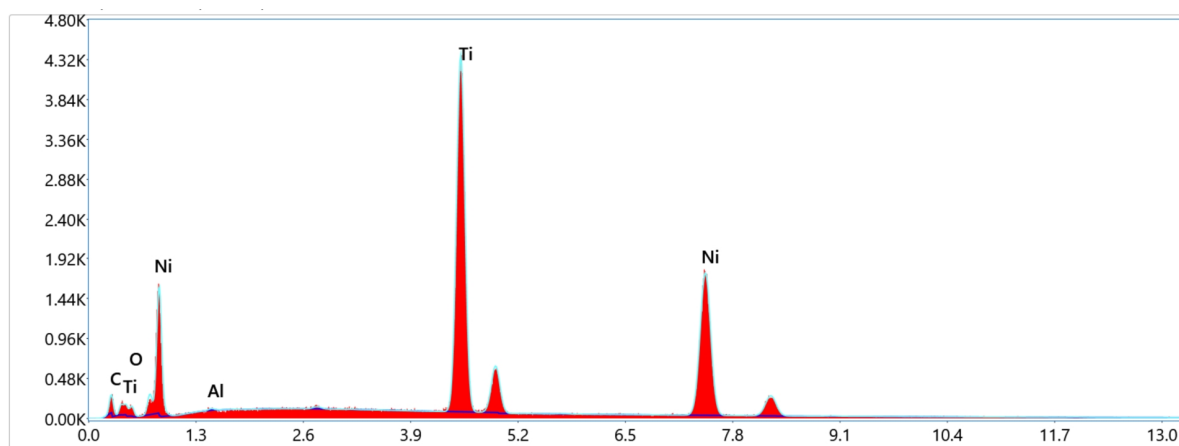


Figure S4. EDX peaks of various elements of Area 1.

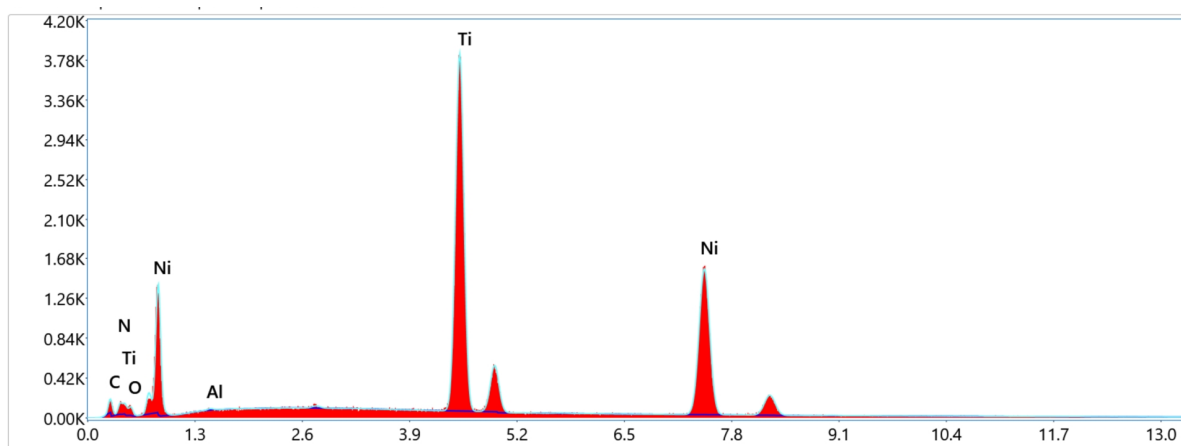


Figure S5. EDX peak of various elements of Area 2.

Table S1. Elemental analysis for various spots and areas of sample 1.

Element	Spot 1 (wt. %)	Spot 2 (wt. %)	Area 1 (wt. %)	Area 2 (wt. %)
C K	18.1	19.4	20.5	16.9
O L	6.1	7.5	5.9	5.3
Ti K	44.5	41.2	34.2	35.8
Ni K	31.3	31.8	39.2	41.9

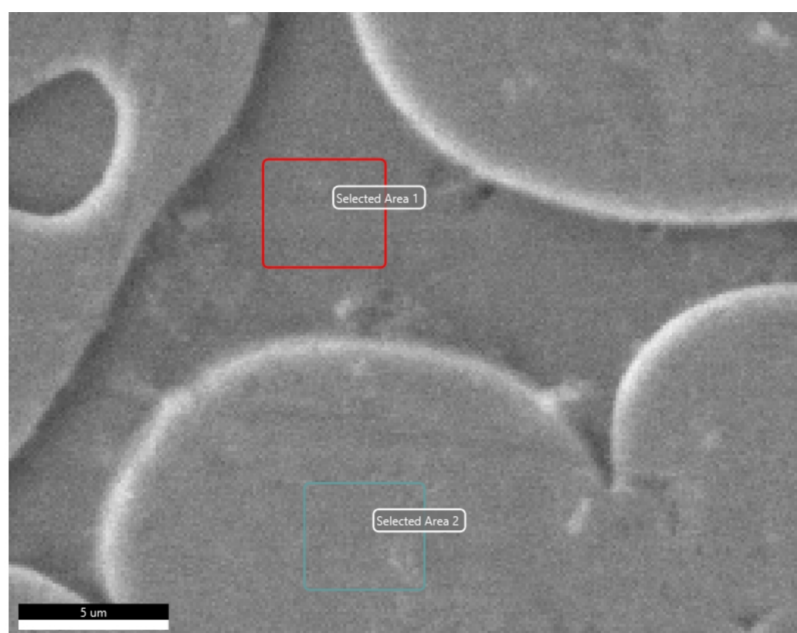


Figure S6. EDX analysis of Sample 2 at various locations.

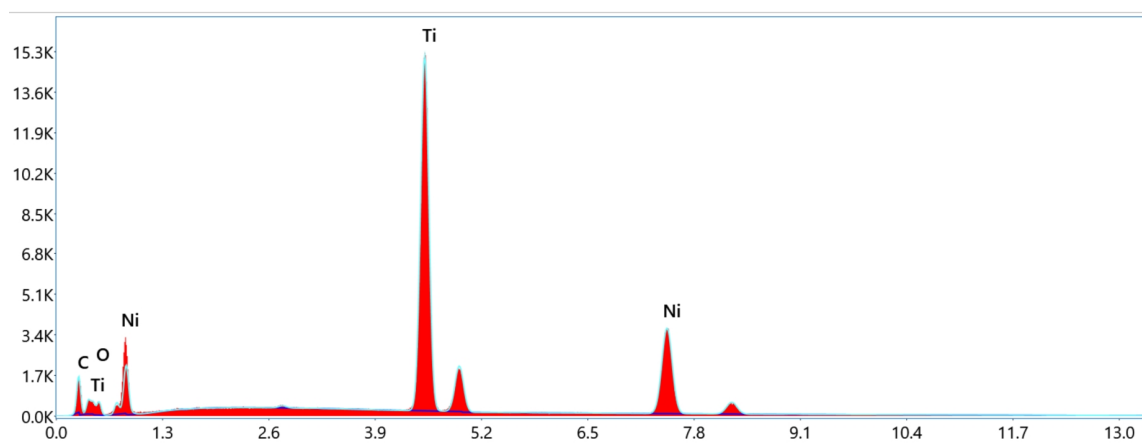


Figure S7. EDX peak of various elements of Area 1 in sample 2.

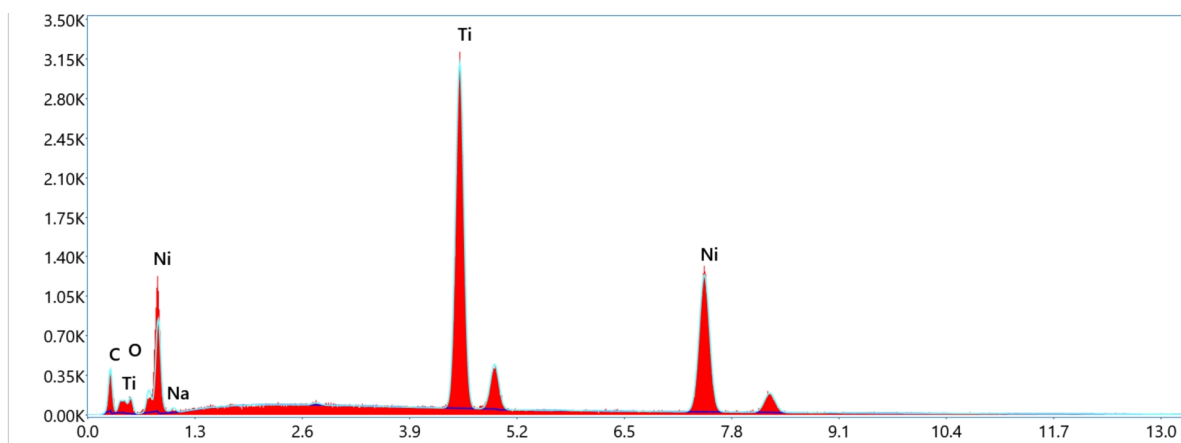


Figure S8. : EDX peak of various elements of Area 2 in sample 2.

Table S2. Elemental analysis for various areas of sample 2.

Element	Area 1 (wt. %)	Area 2 (wt. %)
C	31.7	32.5
O	9.2	8.1
Ni	35.0	27.4
Ti	24.2	31.3

Image analysis in sample 2 with corresponding peak and element analysis

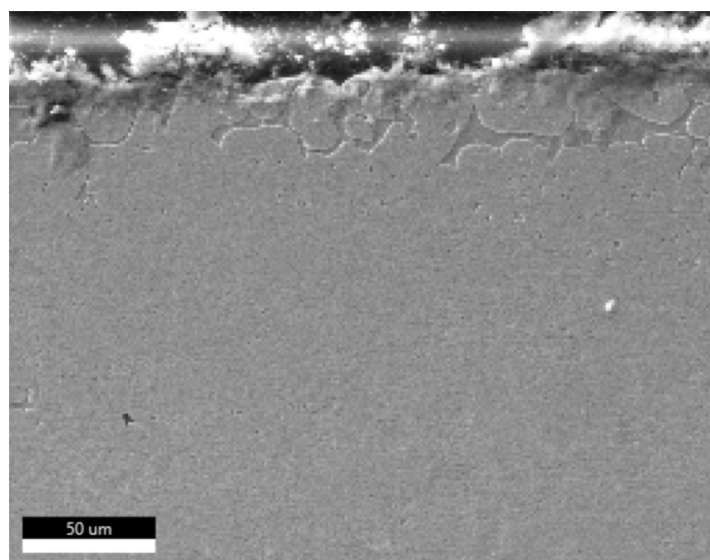


Figure S9. : Selected area for image analysis in Sample 2.

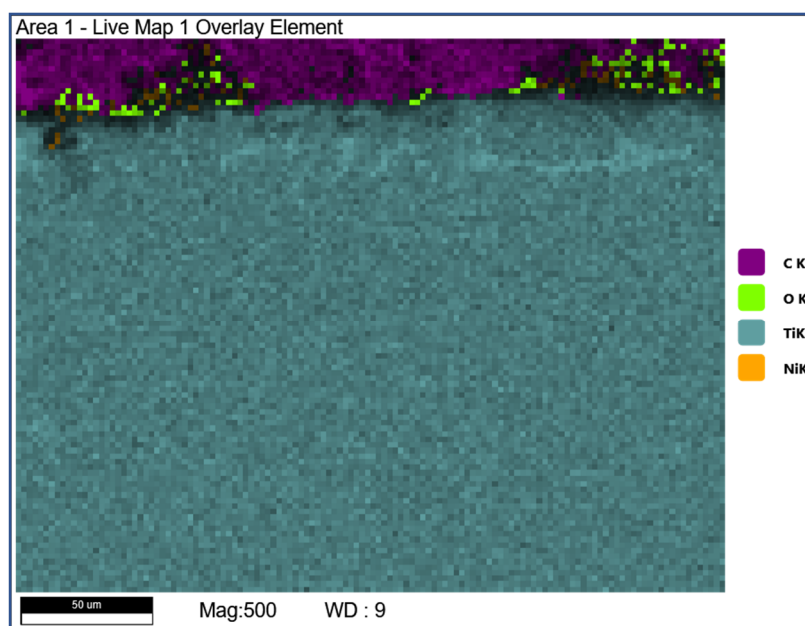


Figure S10. : Various elements of C, O, Ti, Ni for the sample 2 as above figure S9.

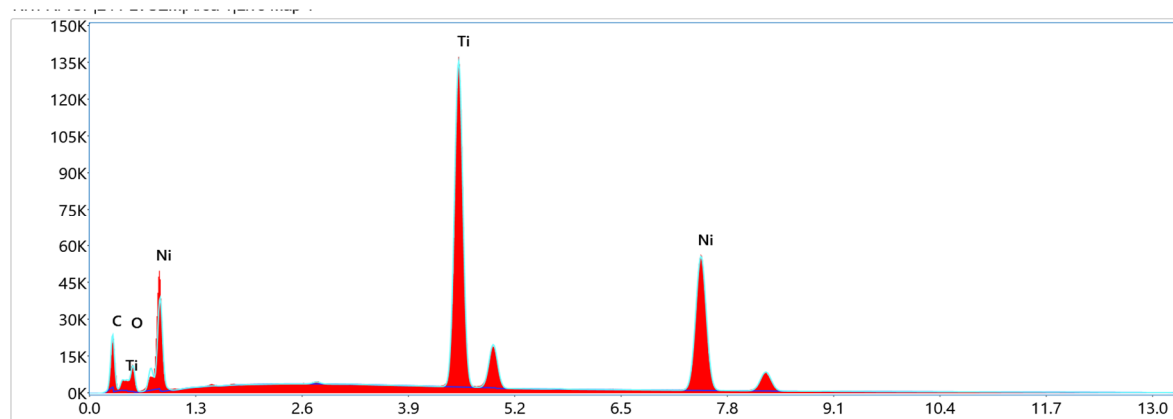


Figure S11. EDX peak of various element in the selected area (Fig. S 9).

Table S3. Elemental quantitative analysis of sample 2 in selected area Fig. S 9 with corresponding EDX Fig. S 11.

eZAF Quant Result - Analysis Uncertainty: 3.66 %								
Element	Weight %	MDL	Atomic %	Error %	Net Int.	R	A	F
C K	35.8	0.23	63.3	10.7	97.9	0.8658	0.0625	1.0000
O K	12.0	0.13	15.9	11.0	50.3	0.8788	0.0448	1.0000
Ti K	23.9	0.03	10.6	2.2	1275.5	0.9366	0.9326	1.0546
Ni K	28.3	0.05	10.2	2.2	653.9	0.9560	0.9584	1.0432

Various element mapping in selected area of Sample 2 as Fig. S 9.

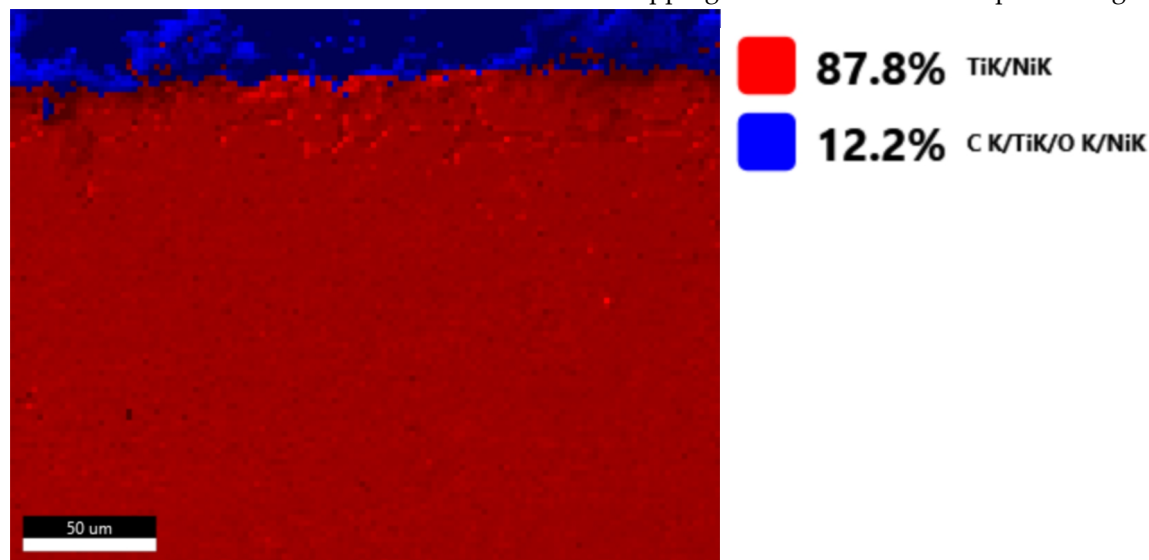


Figure S12. : Elemental mapping for Ti/Ni and C/Ti/O/ Ni.

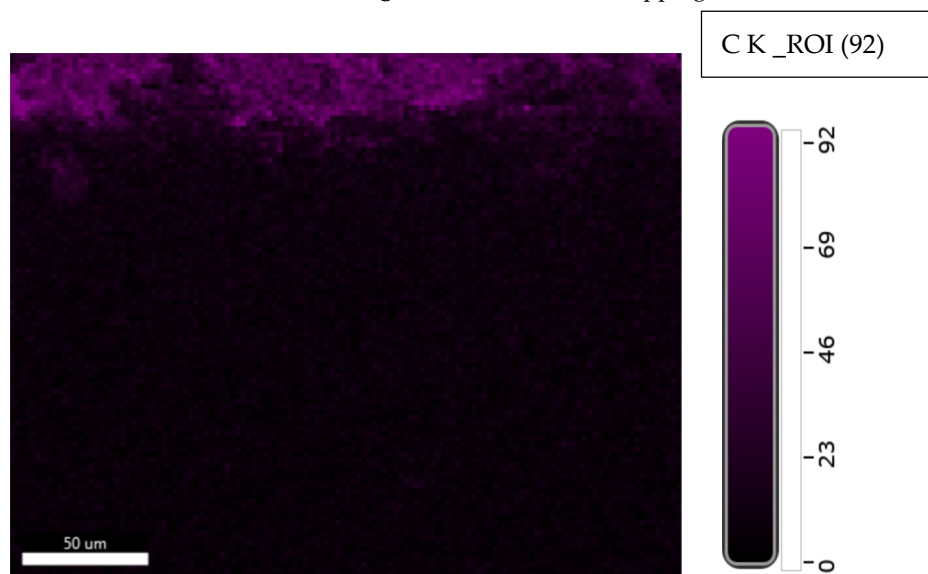


Figure S13. Elemental mapping of C in selcted area of Fig. S 9.

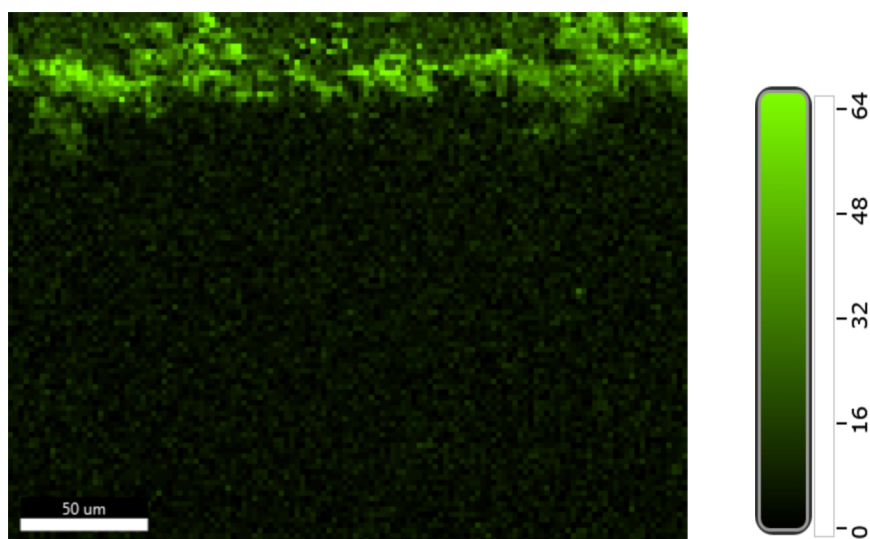


Figure S14. Elemental mapping of C in selcted area of Fig. S 9.

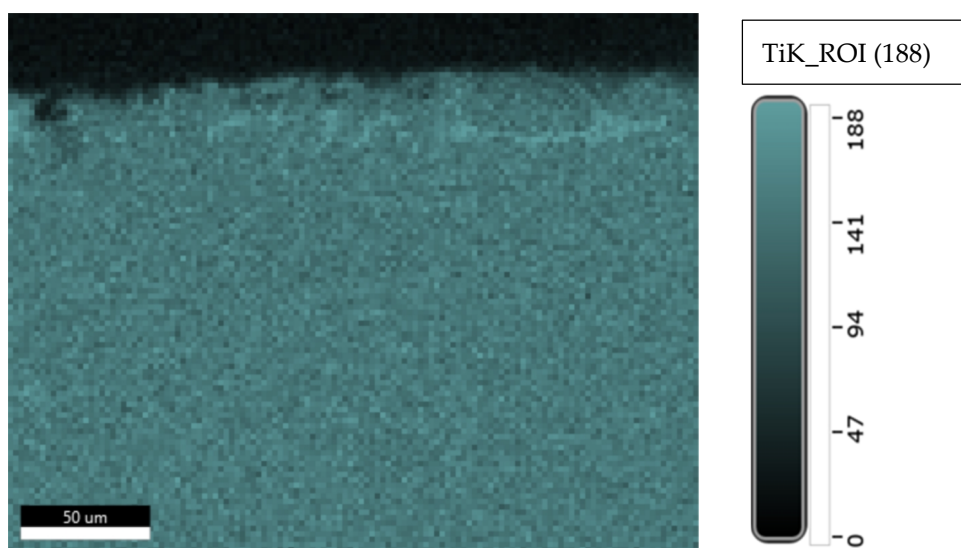


Figure S15. Elemental mapping of C in selcted area of Fig. S 9.

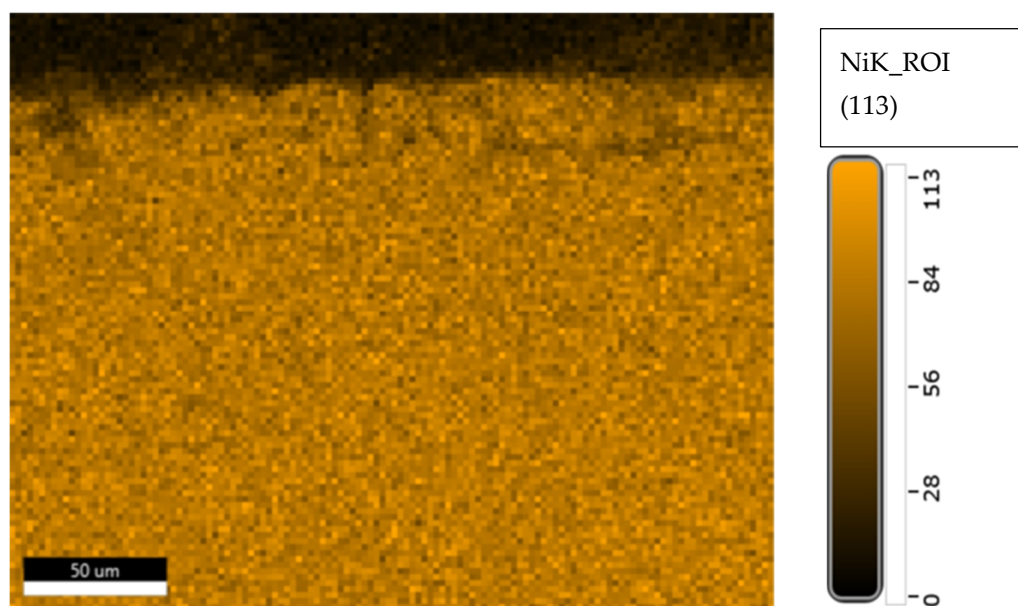


Figure S16. Elemental mapping of C in selcted area of Fig. S 9.