

Supporting information for:

Oxidation Engineering Triggered Peroxidase-like Activity of VO_xC for Detection of Dopamine and Glutathione

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Notes

The authors declare no competing financial interest.

Table S1. Elemental atomic percentages of V_4C_3 and VO_xC calculated by XPS fitted spectra.

Survey	V 2p	C 1s	O 1s
V_4C_3	18.86%	55.91%	25.23%
VO_xC	35.11%	21.79%	43.10%

V 2p	V–C	V^{3+}	V^{4+}	V^{5+}
V_4C_3	22.62%	36.42%	29.15%	11.81%
VO_xC	0%	25.74%	50.80%	23.46%

O 1s	V– O_x	V–O	C–O	V–C–(OH) $_x$
V_4C_3	22.21%	36.25%	28.52%	13.02%
VO_xC	0%	75.36%	15.44%	9.20%

C 1s	V–C	C–C	C–H	C–O
V_4C_3	23.89%	32.52%	37.68%	5.91%
VO_xC	0%	71.38%	16.94%	11.69%

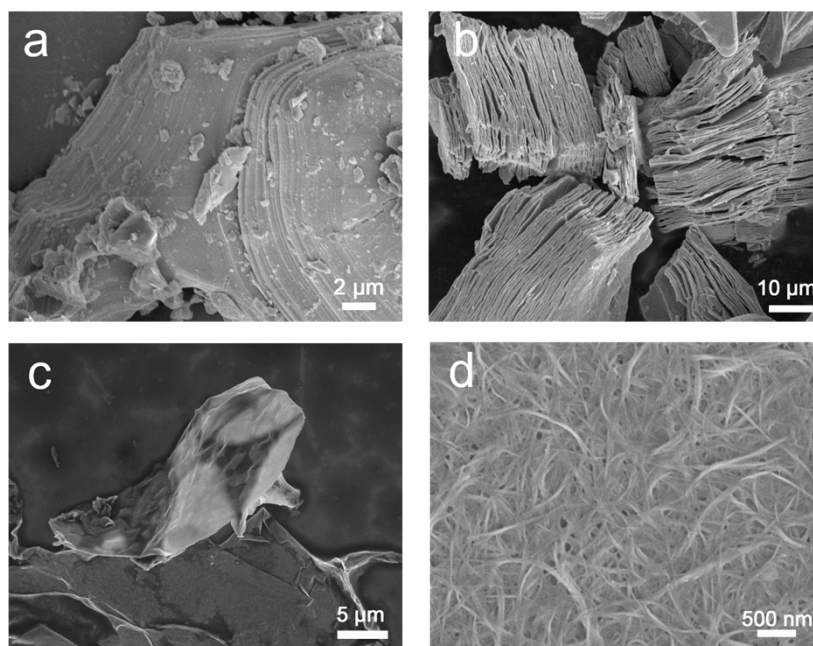


Figure S1. SEM image of MAX phase V_4AlC_3 , multilayered V_4C_3 , few layered V_4C_3 NSs and VO_xC .



Figure S2. Dindar optical effect of V_4C_3 NSs dilute solution under laser pointer irradiation.

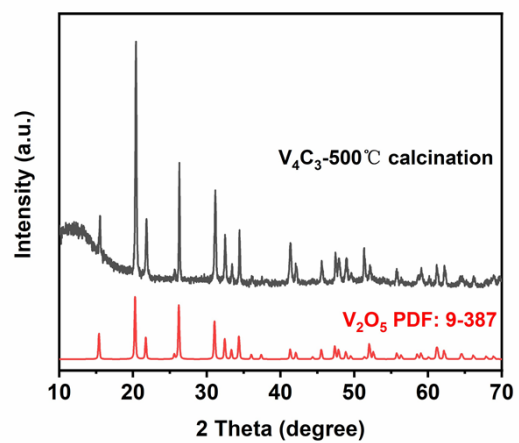


Figure S3. XRD pattern of V₂O₅ after calcination of V₄C₃ NSs.