SUPPLEMENTARY MATERIAL

One-step approach for preparing ozone gas sensors based on hierarchical NiCo₂O₄ structures.

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FIGURES AND CAPTIONS:

Figure S1: Schematic illustration of the synthesis of NiCo₂O₄ hexagonal platelets.

Figure S2: XRD patterns of (a) NiCo-pre and (b) NiCo₂O₄ hexagonal platelets

Figure S3: TEM images (a and b) of NiCo₂O₄ hexagonal platelets and corresponding SAED pattern (inset)

Figure S4: TGA curve of NiCo₂O₄ under air flow with temperature ramp of 10 °C min⁻¹

Figure S5: Gas sensing response of the NiCo₂O₄ exposed for different times for 80 ppb O₃ at 200 °C.

Figure S6: Gas sensing response for $NiCo_2O_4$ hexagonal platelets upon exposure to ozone (80 ppb) at room temperature.

Figure S7: Gas sensing response for NiCo₂O₄ hexagonal platelets upon exposure to ozone (80 ppb) at an operating temperature 50 °C.

Figure S8: Gas sensing response for $NiCo_2O_4$ hexagonal platelets upon exposure to ozone (80 ppb) at an operating temperature 100 °C.

Figure S9: Gas sensing response for $NiCo_2O_4$ hexagonal platelets upon exposure to ozone (80 ppb) at an operating temperature 150 °C.

Figure S10: Gas sensing response for NiCo₂O₄ hexagonal platelets upon exposure to ozone (80 ppb) at an operating temperature 200 $^{\circ}$ C.

Figure S11: Gas sensing response for NiCo₂O₄ hexagonal platelets upon exposure to ozone (80 ppb) at an operating temperature 250 $^{\circ}$ C.

Figure S12: Gas sensing response for NiCo₂O₄ hexagonal platelets upon exposure to ozone (80 ppb) at an operating temperature 300 $^{\circ}$ C.

Figure S13: Ozone gas sensing response for the NiCo₂O₄ thin film as a function of the gas level at an operating temperature of 200 $^{\circ}$ C

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Figure S14: Gas sensing response for $NiCo_2O_4$ hexagonal platelets upon exposure to different NH_3 concentrations at an operating temperature of 200 °C.

Figure S15: Gas sensing response for $NiCo_2O_4$ hexagonal platelets upon exposure to different NO_2 concentrations at an operating temperature of 200 °C.

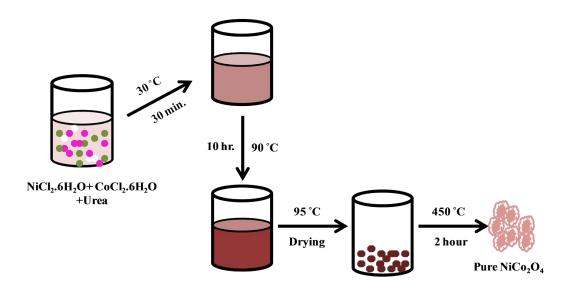


Figure S1. Nirav Joshi et al.

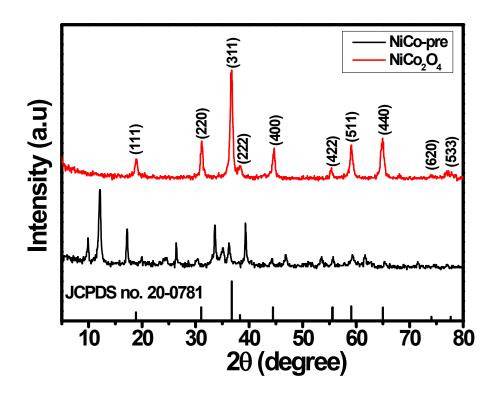


Figure S2. Nirav Joshi et al.

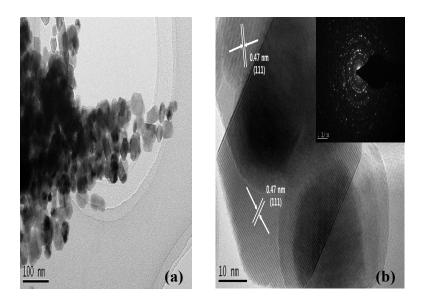


Figure S3. Nirav Joshi et al.

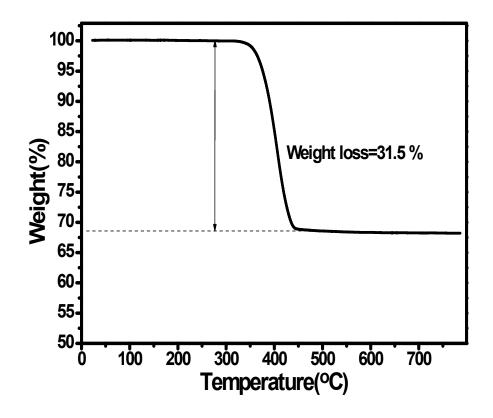


Figure S4. Nirav Joshi et al.

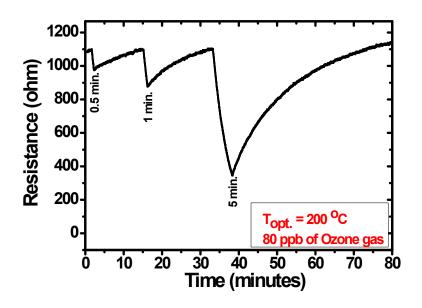


Figure S5. Nirav Joshi et al.

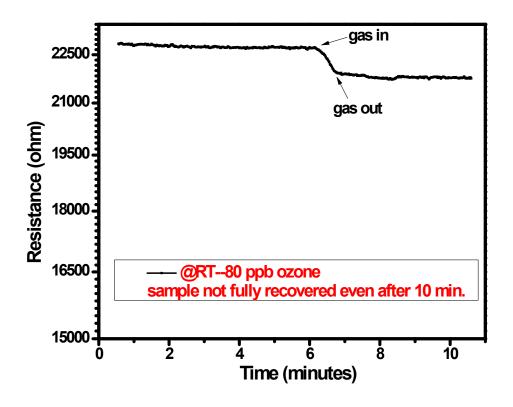


Figure S6. Nirav Joshi et al.

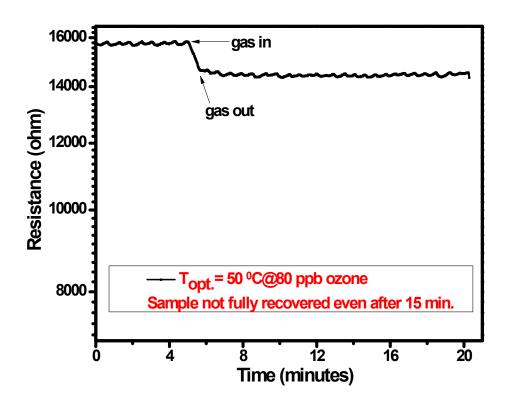


Figure S7. Nirav Joshi et al.

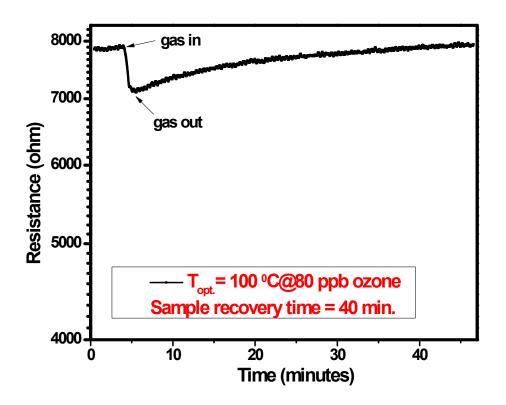


Figure S8. Nirav Joshi et al.

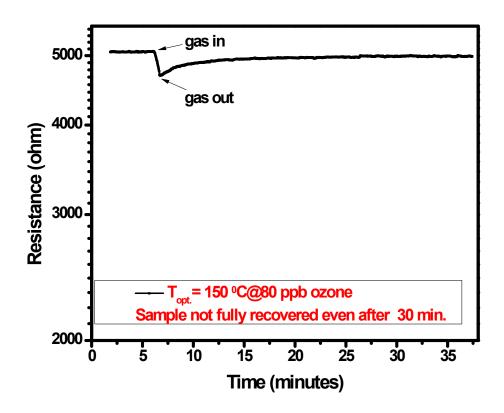


Figure S9. Nirav Joshi et al.

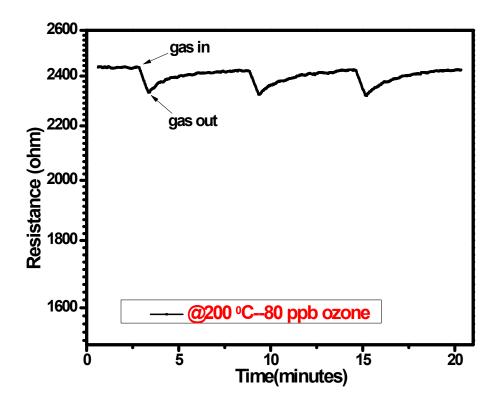


Figure S10. Nirav Joshi et al.

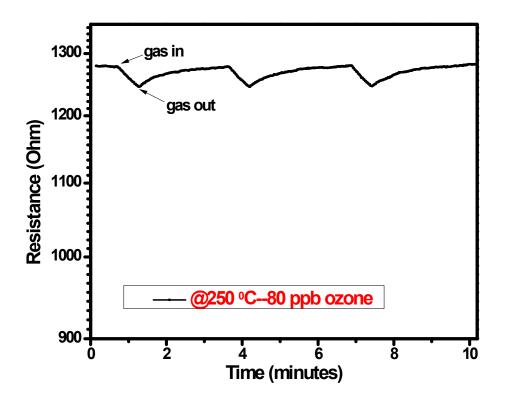


Figure S11. Nirav Joshi et al.

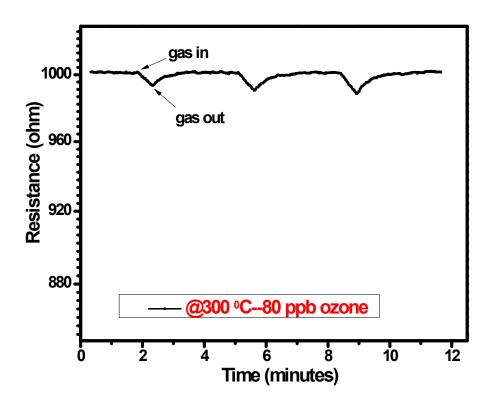


Figure S12. Nirav Joshi et al.

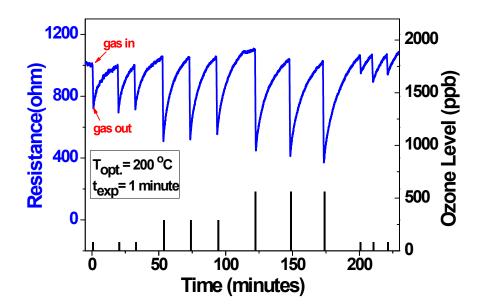


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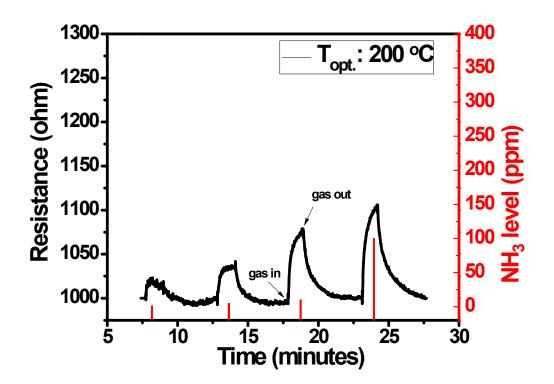


Figure S14. Nirav Joshi et al.

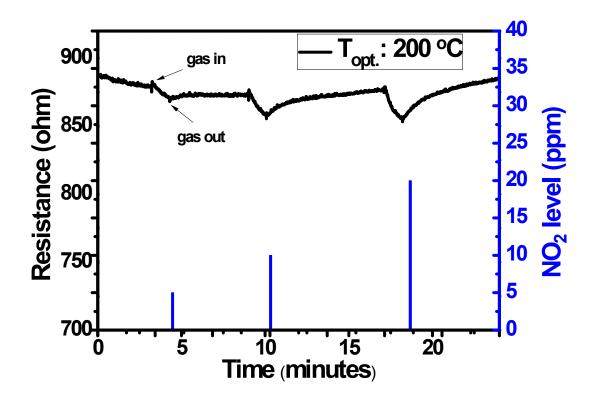


Figure S15. Nirav Joshi et al.