

## Supporting Information For

# Enhanced Gas Sensing Properties of ZnO/SnO<sub>2</sub> Hierarchical Architectures by Glucose-induced Attachment

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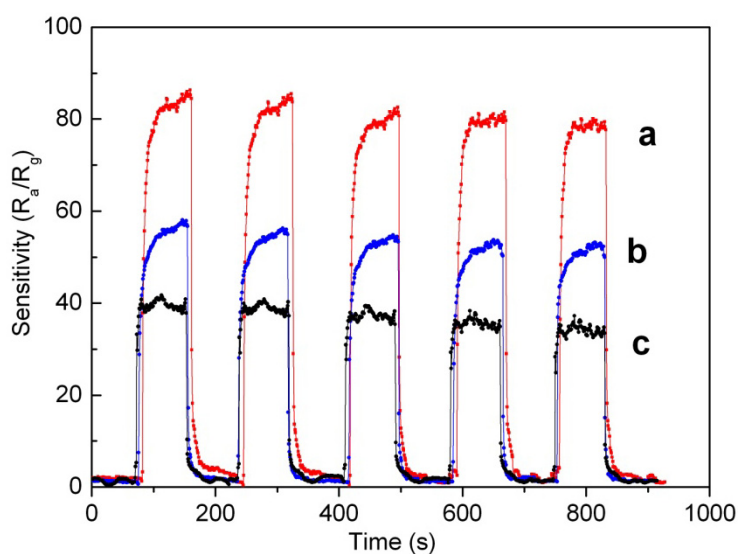


Figure S11. Reproducibility characterization of the sensors when exposed to 300 ppm ethanol.

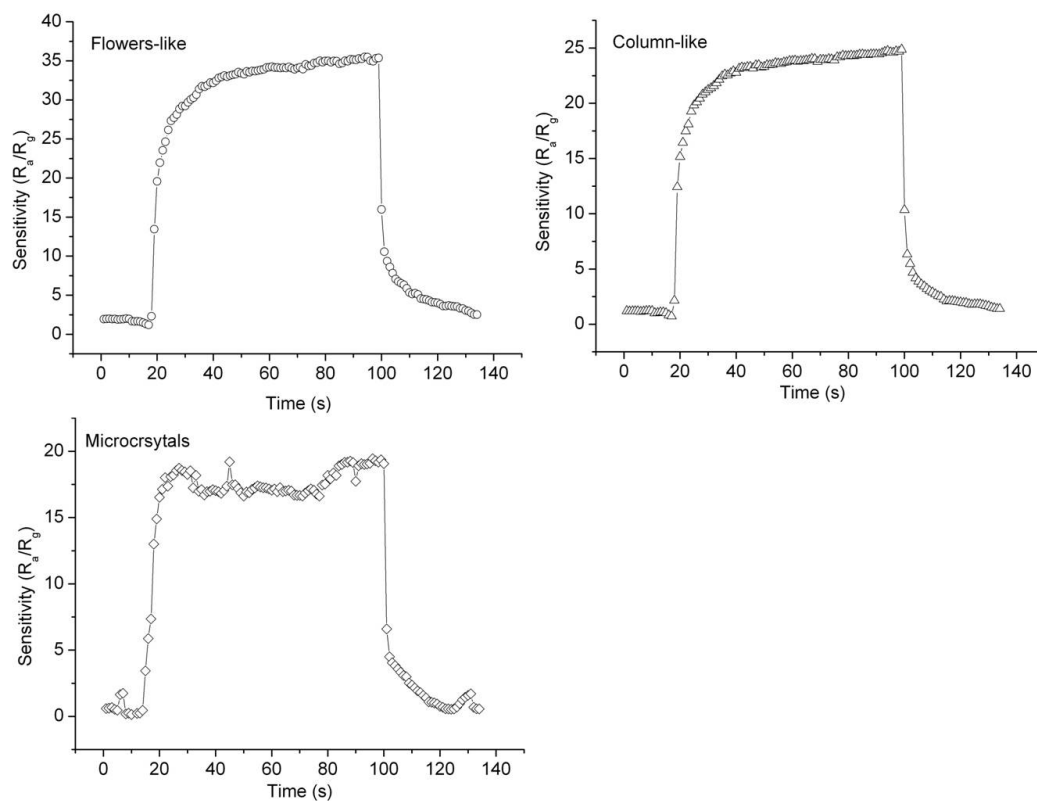


Figure SI2. Enlarged response and recovery processes of the ZnO/SnO<sub>2</sub> nanostructures (a. flowers-like, b. column-like, c. microcrystals) when exposed to 100 ppm ethanol.

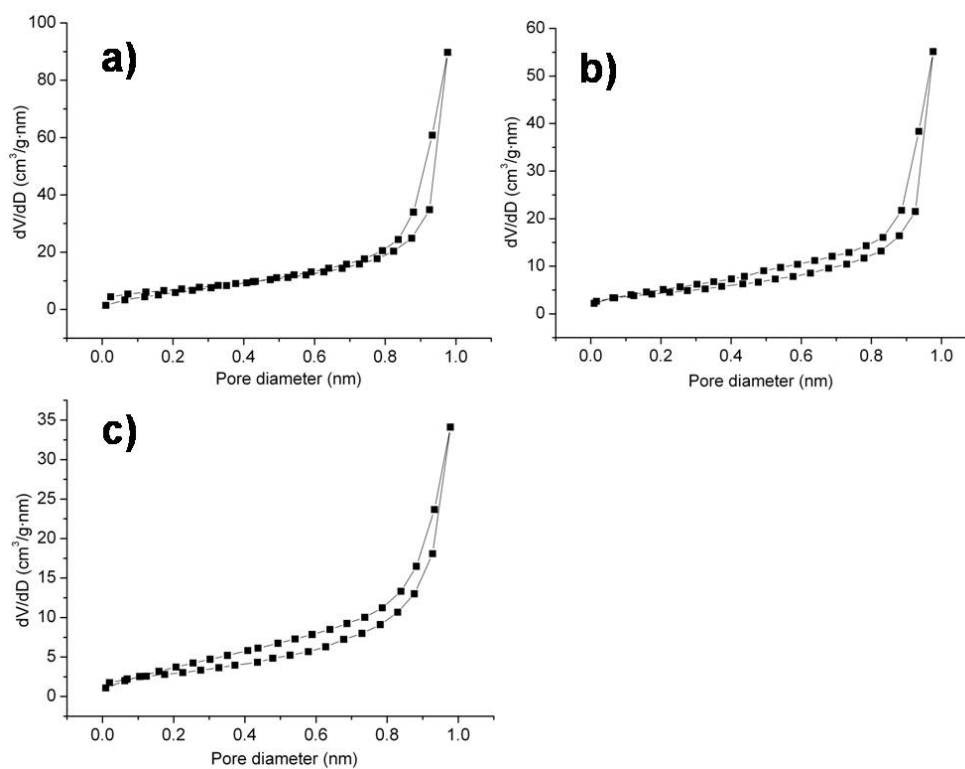
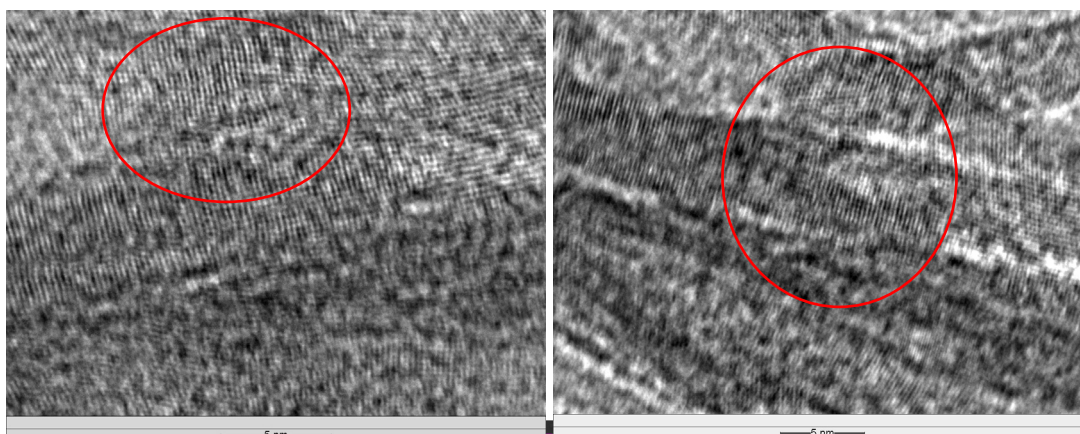
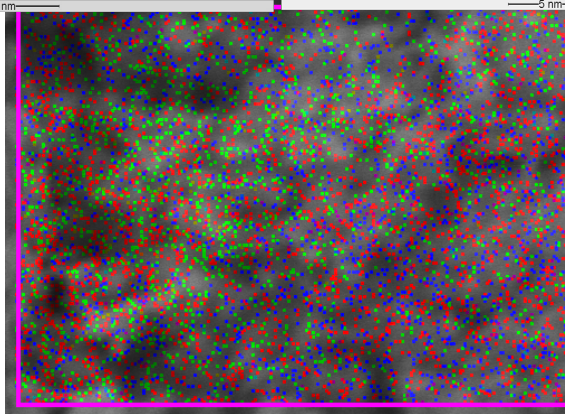


Figure SI3. Nitrogen physisorption isotherm curves of the ZnO/SnO<sub>2</sub> nanostructures (a. flowers-like, b. column-like, c. microcrystals).

SI4: Flowers-like nanostructures



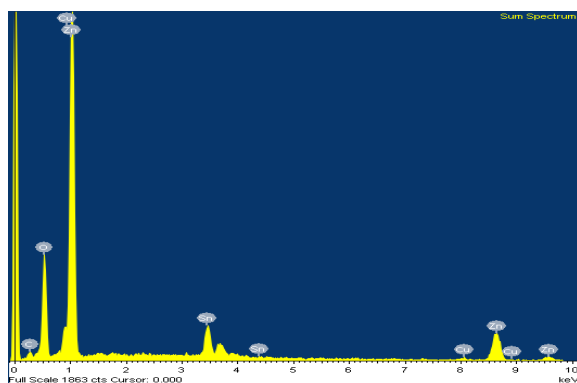
**Red: Oxygen**  
**Blue: Tin**  
**Green: Zn**



Zn Ka1

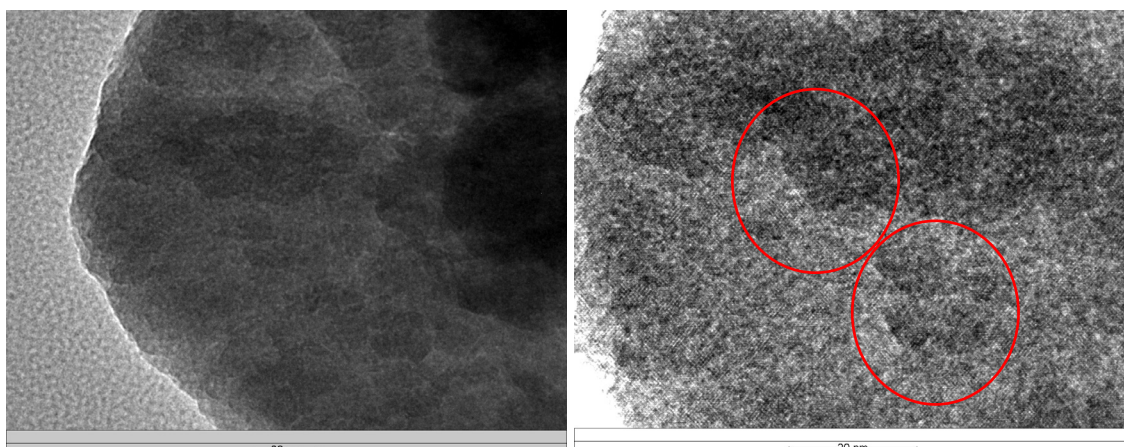


Sn La1

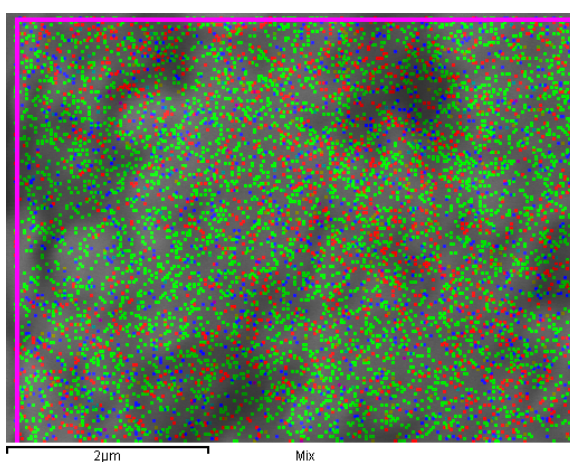


| Element | Weight % | Atomic % |
|---------|----------|----------|
| O K     | 27.20    | 62.55    |
| Zn L    | 58.85    | 33.12    |
| Sn L    | 13.96    | 4.33     |
| Totals  | 100.00   |          |

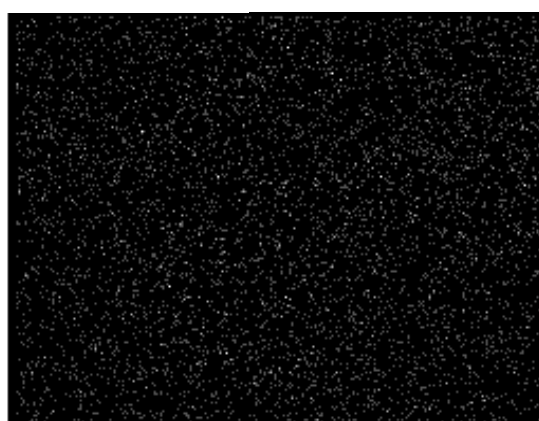
## Nanoplate-stacking column



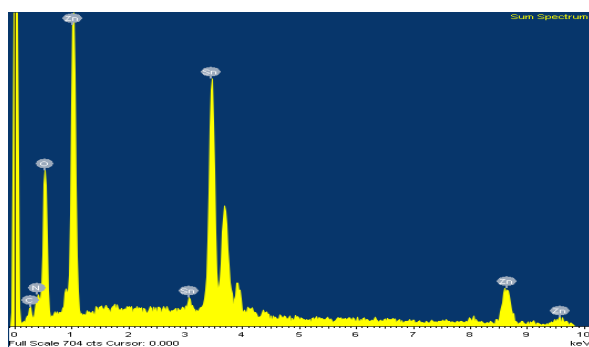
**Red: Oxygen**  
**Blue: Tin**  
**Green: Zn**



Zn Kα1

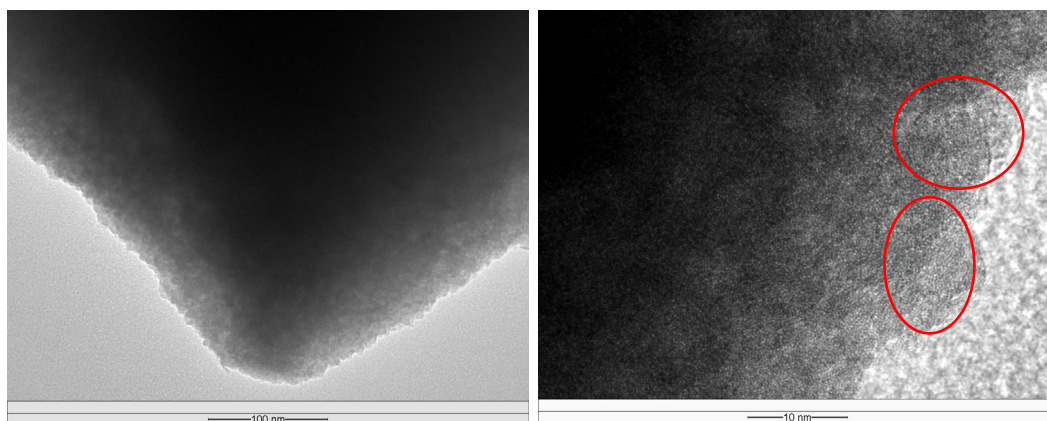


Sn Lα1



| Element | Weight% | Atomic% |
|---------|---------|---------|
| O K     | 29.02   | 64.01   |
| Zn L    | 61.37   | 33.13   |
| Sn L    | 9.61    | 2.86    |
| Totals  | 100.00  |         |

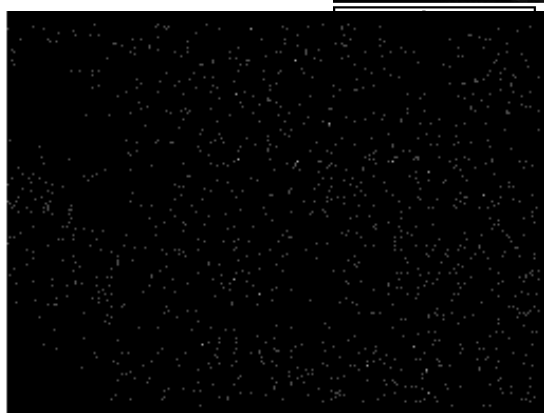
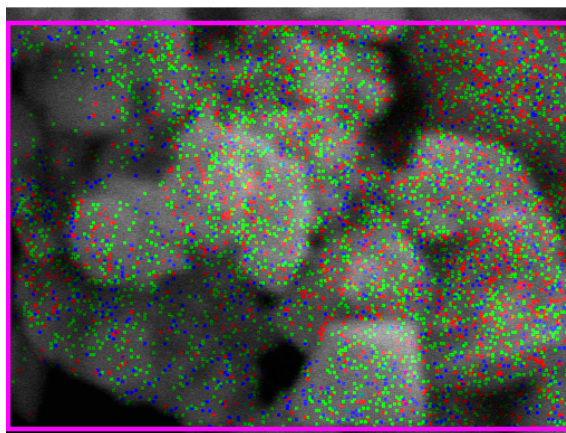
Octahedral particles:



Red: Oxygen

Blue: Tin

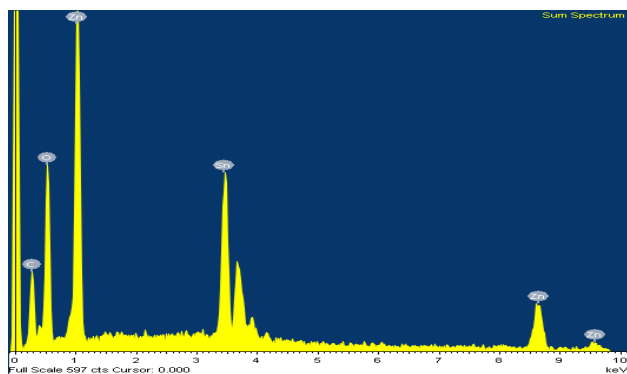
Green: Zn



Zn Kα1



Sn Lα1



| Element | Weight% | Atomic% |
|---------|---------|---------|
| O K     | 35.22   | 72.99   |
| Zn L    | 39.12   | 19.84   |
| Sn L    | 25.66   | 7.17    |
| Totals  | 100.00  |         |