## Supplementary Information

## Hexagonal cesium tungsten bronze nanoparticles produced by solvent-free spray pyrolysis and their near infrared adsorption properties

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- 1. XRD analysis of precursor powders
- 2. TEM and EDS analyses of  $Cs_{0.32}WO_3$  NPs produced by SFSP
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- 4. XRD analysis of  $Cs_{0.32}WO_3$  NPs produced by SFSP and LFSP



Fig. S1 XRD spectrum of precursor powder



Fig. S2 (a-d) TEM images and (e) EDS spectra of powder produced by SFSP at 1300°C under  $1\%H_2/Ar$  gas flow. Some particles showed core-shell structure. The lattice spacing of core particle was attributed to the (110) planes of W (2.2 Å). From the EDS measurement of the cores (a position marked by blue circle in the Fig. S2(d)) and the surrounding area (a position marked by red dashed circle in the Fig. S2(d)), the W count at core particle is higher than that of the surrounding area (Fig.



Fig. S3 TEM images of Cs<sub>0.32</sub>WO<sub>3</sub> NPs produced by LFSP: (a) before and (b) after annealing



Fig. S4 XRD spectra of Cs<sub>0.32</sub>WO<sub>3</sub> NPs produced by SFSP and LFSP