

# High Reactivity of Mesoporous CeO<sub>2</sub> to Dissociate Chemical Warfare Agent Sarin

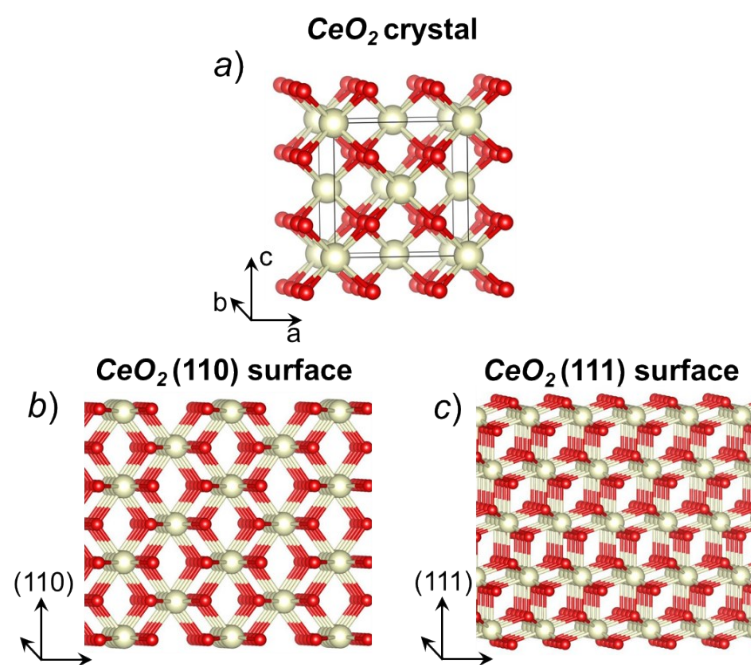
Tianyu Li<sup>a</sup>, Matthew Leonard<sup>a</sup>, Roman Tsyshevsky<sup>b</sup>, Monica McEntee<sup>c</sup>, Christopher Karwacki<sup>c</sup>, Erin M. Durke<sup>c</sup>, Maija M. Kuklja<sup>b</sup>, and Efrain E. Rodriguez<sup>a</sup>

<sup>a</sup> Department of Chemistry and Biochemistry, University of Maryland, College Park, Maryland 20742, United States

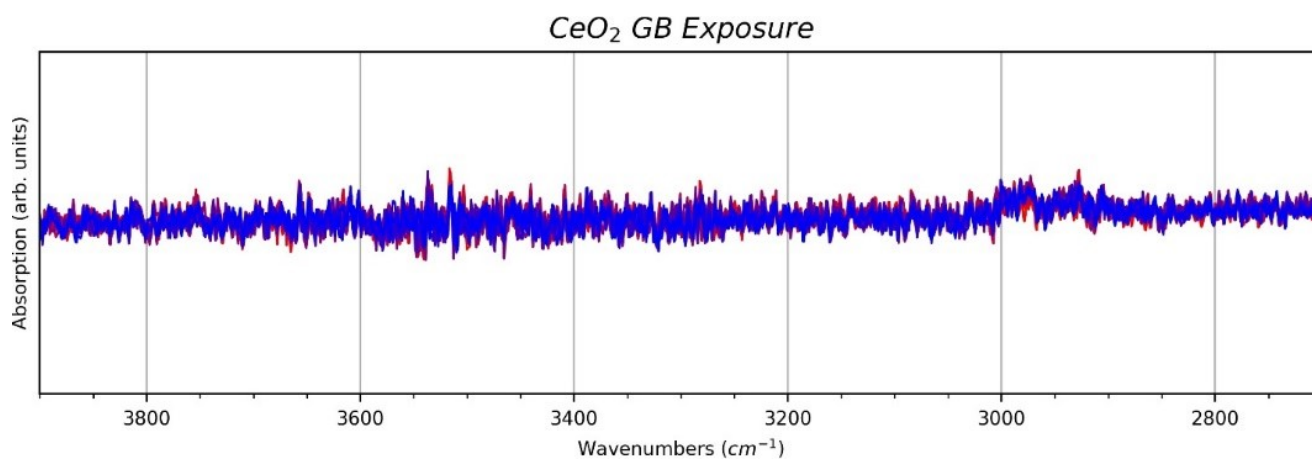
<sup>b</sup> Department of Materials Science and Engineering, University of Maryland, College Park, Maryland 20742, United States

<sup>c</sup> US Army Combat Capabilities Development Command Chemical Biological Center, 8198 Blackhawk Road, Aberdeen Proving Ground, Maryland 21010, United States

## Supplementary Information



**Figure S1** a) Structure of CeO<sub>2</sub> crystal; Structures of CeO<sub>2</sub> b) (110) and c) (111) surfaces. (Ce atoms are in white color, oxygen – red).



**Figure S2.** High wavenumber region IR spectrum of mesoporous CeO<sub>2</sub> exposed GB over 1h.