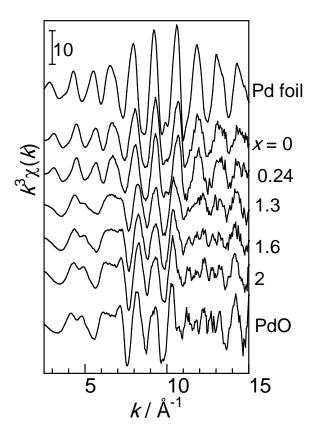
## **Supporting information**

## Average Pd oxidation state in Pd/SiO<sub>2</sub> quantified by L<sub>3</sub> edge XANES analysis and its effects on catalytic activity for CO oxidation

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**Fig. S1.** Pd K-edge EXAFS for the reference compounds and the  $PdO_{x/2}/SiO_2$  samples with different average oxidation number (x).

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