

1 **Supplementary Information**

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3 **Fine Pd single microwire H₂ sensor fabricated by femtosecond laser**
4 **for low detection limit at room temperature**

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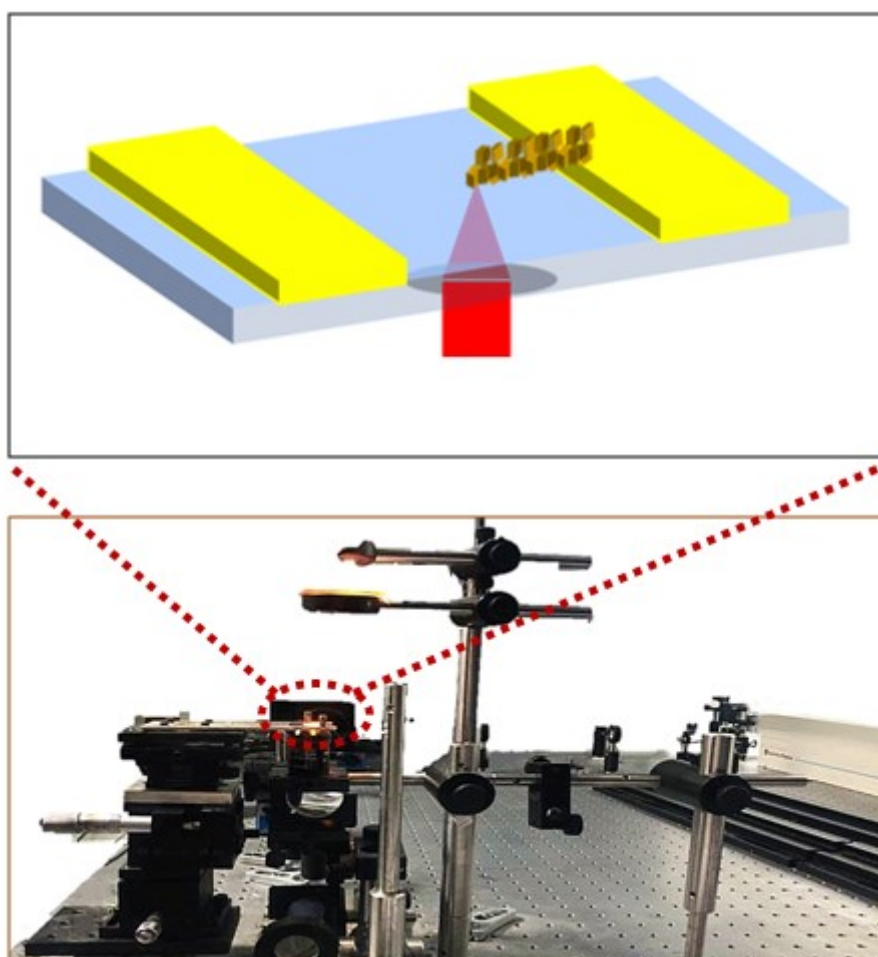
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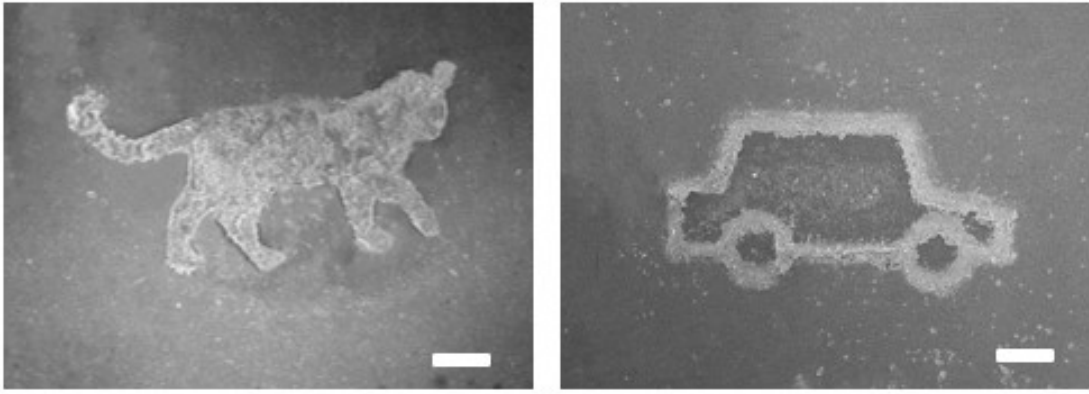
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12 Fig. S1. The practicality photo of femtosecond laser processing system.

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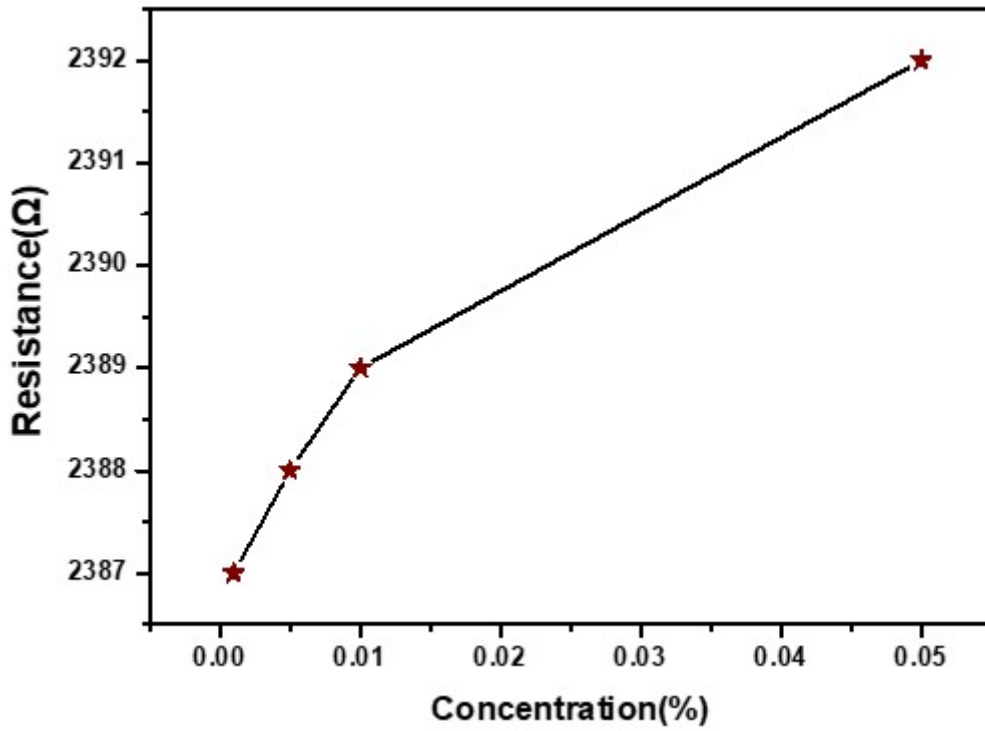
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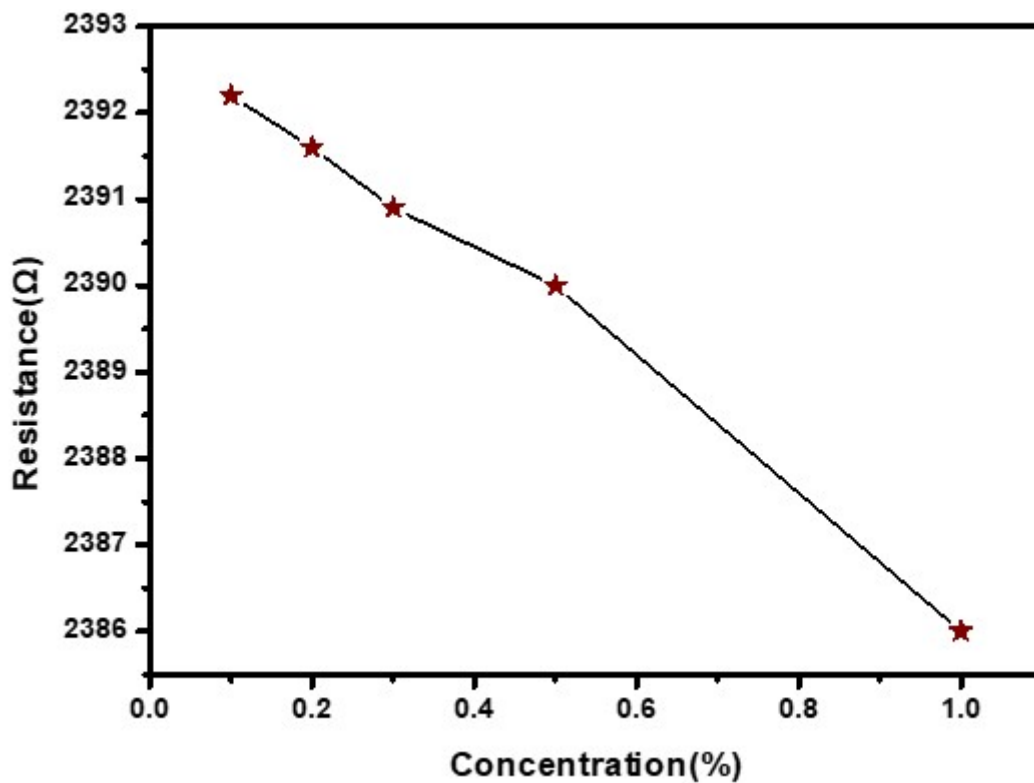
Fig. S2. SEM images of cartoon patterns cat and car made of Pd.

The scale bar is 10 μm .



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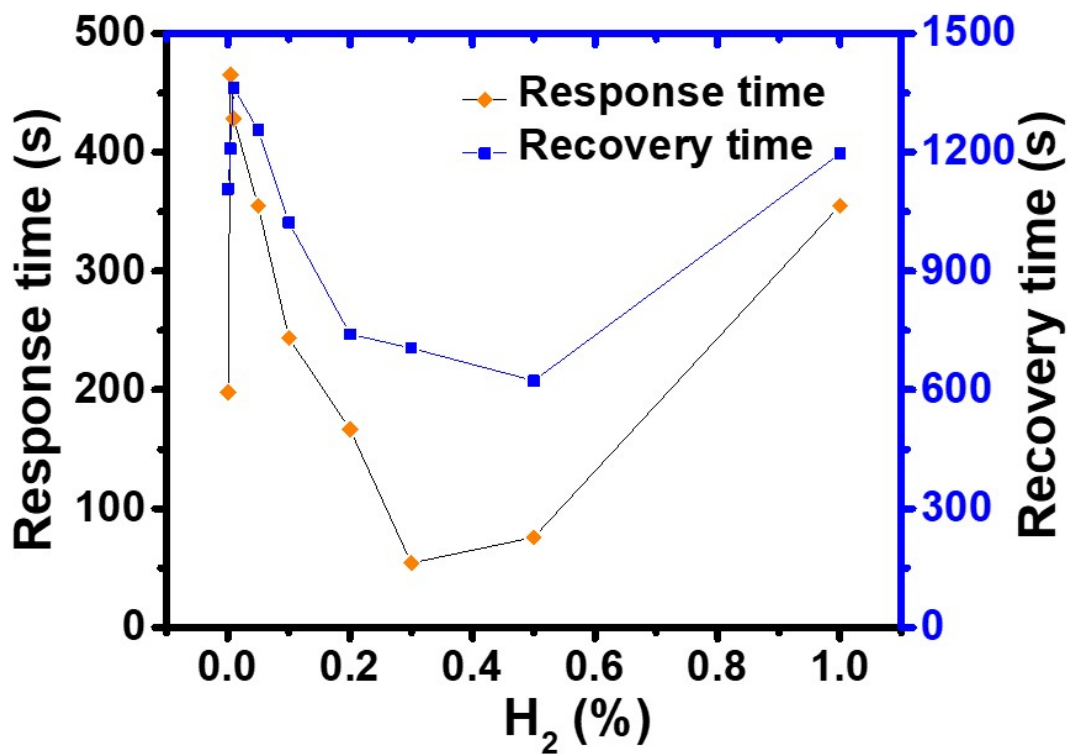
Fig. S3. The resistance changing curve of the Pd microwire exposes 0.001-0.05%



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2 Fig. S4. The resistance changing curve of the Pd microwire exposes 0.01-0.1%

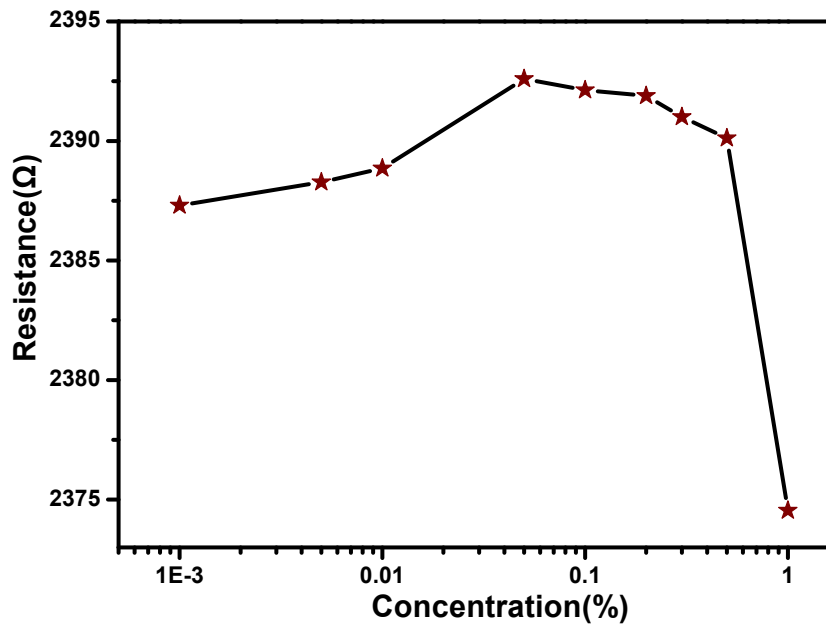
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5 Fig. S5. Contrast between the response time and recovery time of Pd microwire
6 sensor exposed to hydrogen concentration of 0.001% to 1.0% at room temperature.

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6 Fig. S6. The resistance changing of the Pd microwire exposed 0.01-1% after storing in
7 ambience for two months.

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