

## Supplyment Materials

Table S1 summary of brand, category and alcoholic strength of the 5 red wines

<b>Number</b>	<b>Brand</b>	<b>Category</b>	<b>Alcoholic strength</b>	<b>Year</b>
W1	Great wall	Cabernet Sauvignon	12.5% (v%)	2009
W2	Changyu	Cabernet Sauvignon	12.5% (v%)	2009
W3	Moutai	Cabernet Sauvignon	12.5% (v%)	2009
W4	Dynasty	Cabernet Sauvignon	12.5% (v%)	2009
W5	Shangri-la	Cabernet Sauvignon	12.5% (v%)	2009

Table S2 summary of grades and price of the five green teas

<b>Number</b>	<b>Grade</b>	<b>Price (RMB/kg)</b>
T1	Special grade	1100.00
T2	Special grade	760.00
T3	First grade	560.00
T4	First grade	240.00
T5	First grade	229.00

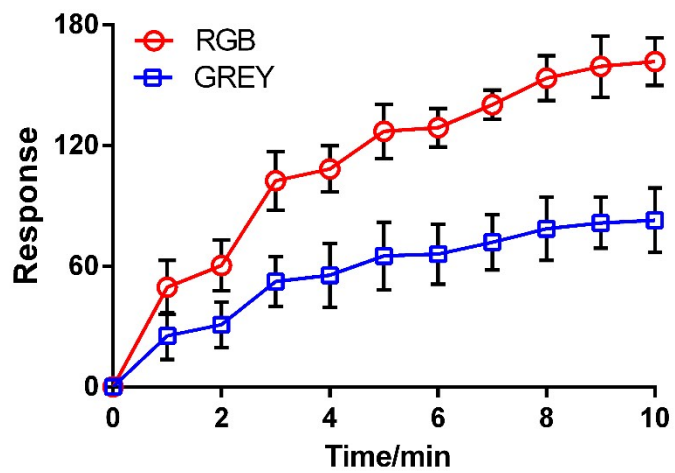


Fig. S1 Influence of reaction time to the response of the multilayer sensors (5 cycles) toward gallic acid (0.1mg/ml)

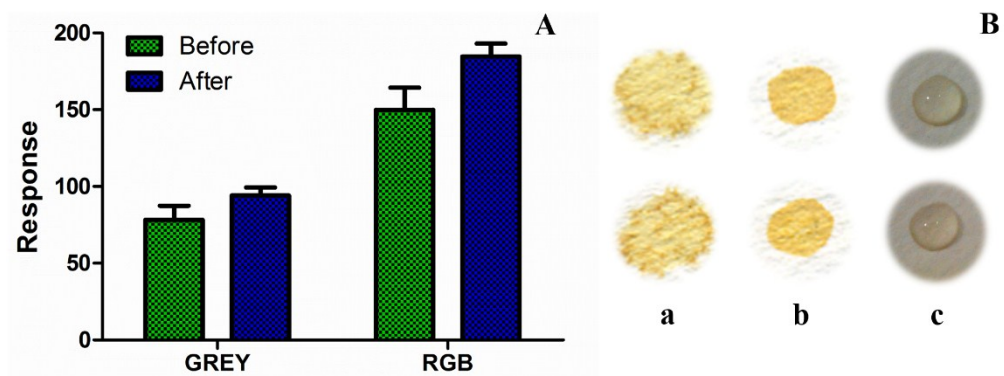


Fig. S2 Response of the cellulose paper before and after multilayer modification (A) and real images after addition of aqueous gallic acid samples (B). a, without multilayer modification; b, with multilayer modification; c, liquid drops formed at the multilayer surface.

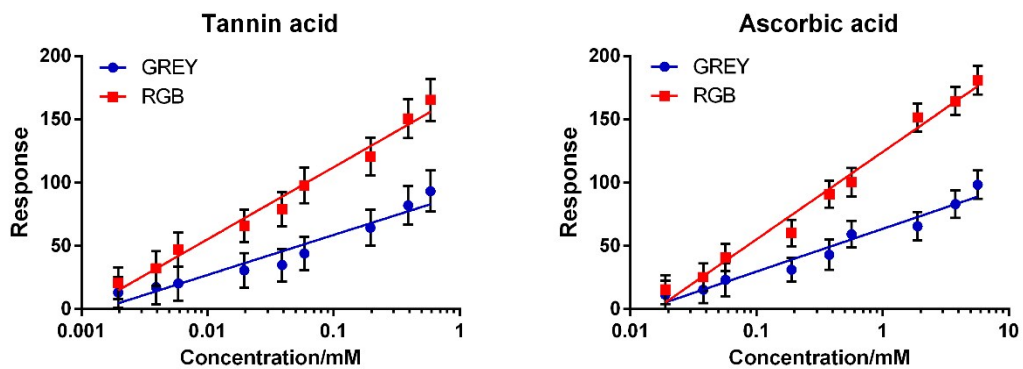


Fig. S3 Linear fitting of colorimetric response of the sensor toward different concentrations of tannic acid (left) and ascorbic acid (right)

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