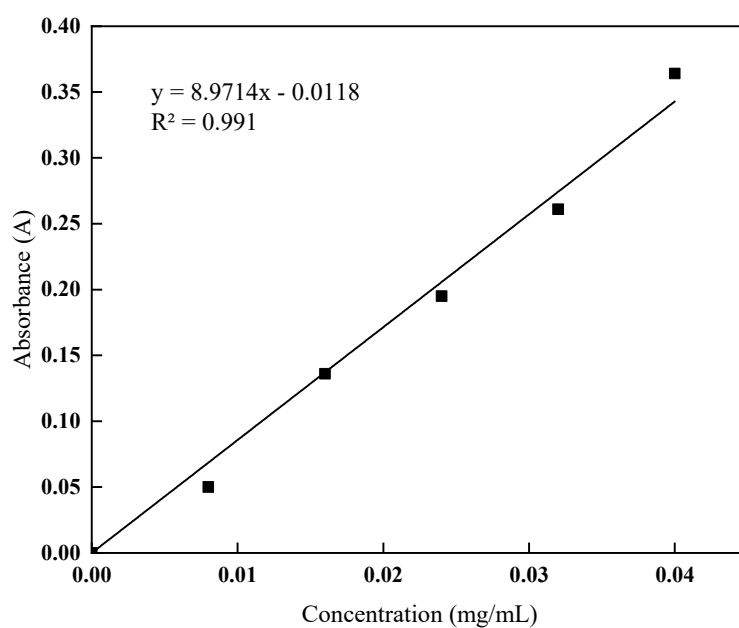
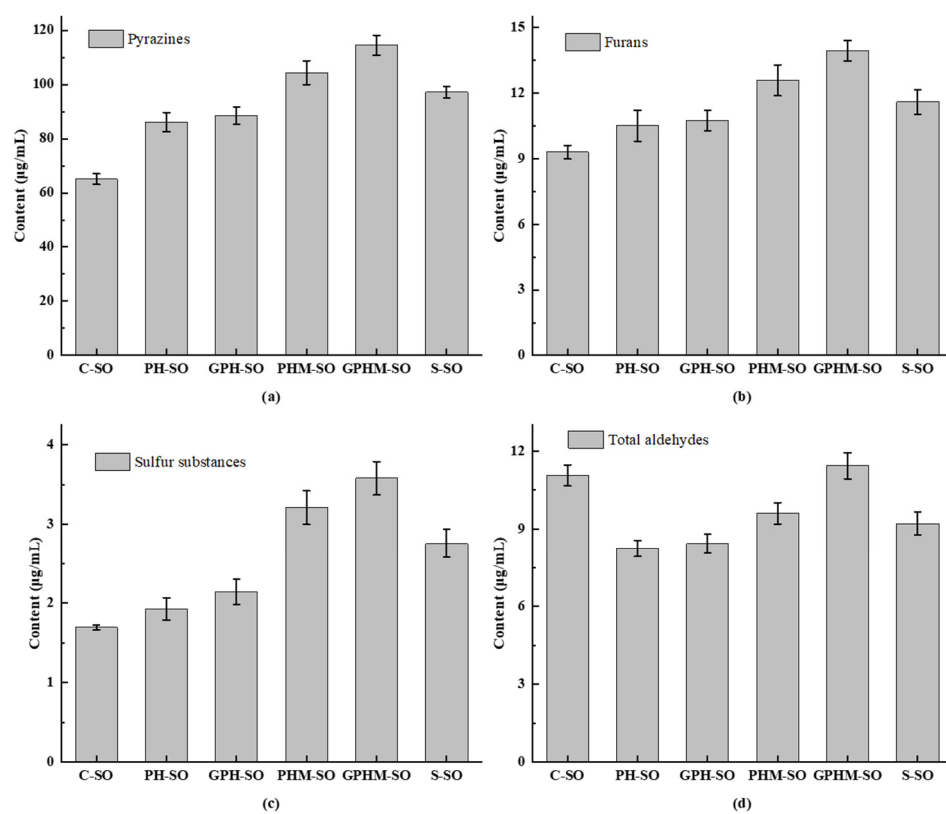


## Electronic supporting information

### Application of Maillard reaction products derived only from enzymatically hydrolyzed sesame meal to enhance the flavor and oxidative stability of sesame oil

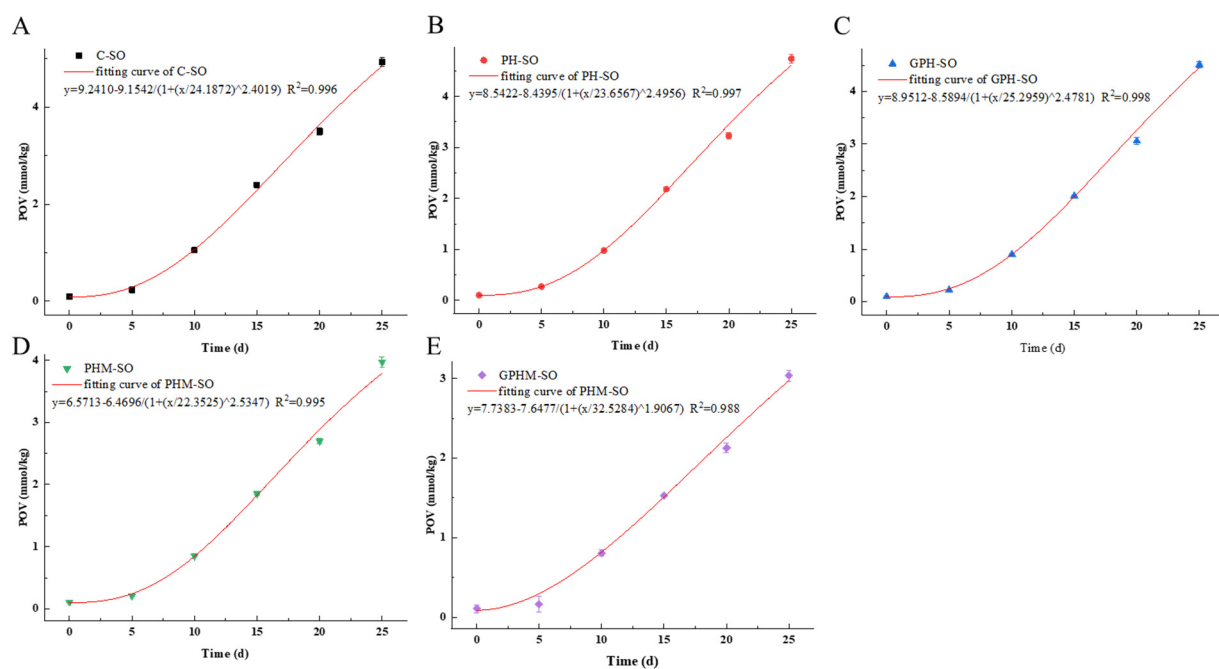


**Figure S1.** Standard curve of reducing sugar content.



**Figure S2.** Four main flavor substances contents in different oils.

(a) Pyrazines, (b) furans, (c) sulfur substances, and (d) aldehydes.



**Figure S3.** Fitting curves between peroxide value (y) and storage time (x) of different oil samples in accelerated oxidation process.

Fitting curve for C-SO was (a), for PH-SO was (B), for PH-SO was (C), for PHM-SO was (D), and for GPHM-SO was (E).

**Table S1.** The sesame oil fragrance descriptors definition.

<b>Sensory Indicators</b>	<b>Judging controls</b>	<b>Scoring Criteria</b>
<b>Toasted sesame aroma</b>	The best standard is the aroma of raw sesame roasted at 150 °C for 10 min.	Strong odor: 7-10 points; Medium odor: 5-6 points; Lighter odor: 2-4 points; Odorless :0-2 points.
<b>Caramel aroma</b>	Based on caramel aroma baked at 170 °C for 5 min.	Strong odor: 7-10 points; Medium odor: 5-6 points; Lighter odor: 2-4 points; Odorless: 0-2 points.
<b>Aroma persistence</b>	Based on the primary sesame oil sold on the market, counted as 5 points.	Strong persistence: 7-10 points; Medium persistence: 5-6 points; Lighter persistence: 2-4 points; Less persistence: 0-2 points.
<b>Off-flavor</b>	The standard is the aroma of raw sesame roasted at 250 °C for 10 min.	Odorless: 0-2 points; Lighter odor: 2-4 points; Medium odor: 5-6 points; Strong odor: 7-10 points.
<b>Overall satisfaction</b>	<b>The evaluation based on toasted sesame aroma, caramel aroma, aroma persistence and off-flavor.</b>	

**Note:** the score was given on a scale of 0 (undetected) to 10 (strong) for the flavors of toasted sesame aroma, caramel aroma and aroma persistence; the score was given on a scale of 10 (strong) to 0 (undetected) for off-flavor.