## **Supplementary Materials**



Product name	Rosemary extract	Part used	Whole herb
Source	Rosmarinus oficinalis L.	Extract solvent	Water & Ethanol

Item	Specification	Test method	
Active ingredients			
Carnosic acid, rosemarinic acid	Customized	HPLC	
Physical control			
Identification	Positive	TLC	
Odor	Characteristic	Organoleptic	
Taste	Characteristic	Organoleptic	
Sieve analysis	100% pass 80 mesh	80 mesh screen	
Moisture content	NMT 7.0%	Mettler toledo hb43-s	
Chemical control			
Arsenic (As)	NMT 2 ppm	Atomic absorption	
Cadmium (Cd)	NMT 1 ppm	Atomic absorption	
Lead (Pb)	NMT 3 ppm	Atomic absorption	
Mercury (Hg)	NMT 0.1 ppm	Atomic absorption	
Heavy metals	10 ppm Max.	Atomic absorption	
Microbiological control			
Total plate count	1,000 CFU/mL Max.	AOAC/Petrifilm	
Salmonella	Negative in 10 g	AOAC/Neogen Elisa	
Yeast & mold	100 CFU/g Max.	AOAC/Petrifilm	
Escherichia coli	Negative in 1 g	AOAC/Petrifilm	
Staphlococcus aureus	Negative	CP2015	

Fig. S1. Specification.

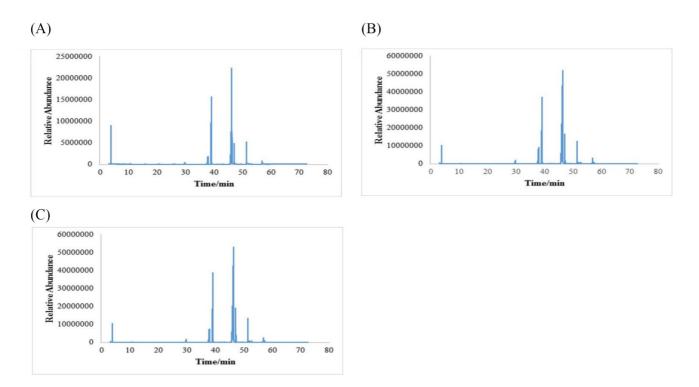


Fig. S2. The GC-MS total ion chromatogram of fatty acids in salted duck egg supplemented with rosemary extract at 28 days of salting. (A) Salted duck egg control, (B) salted duck egg supplemented with rosemary extract 0.1% (w/v), (C) salted duck egg supplemented with rosemary extract 0.5% (w/v).

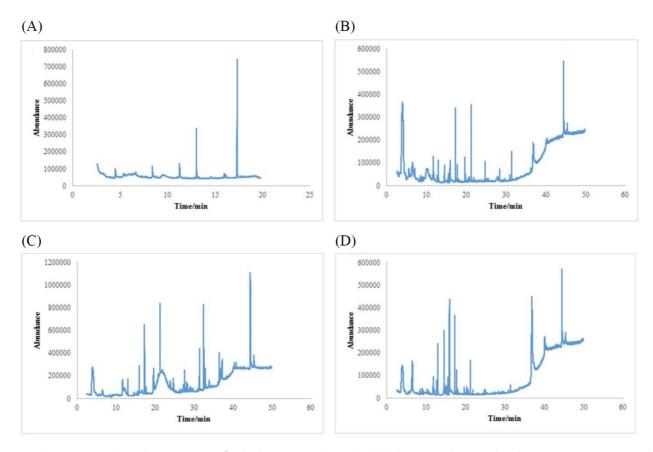


Fig. S3. The GC-MS total ion chromatogram of volatile compounds in salted duck egg supplemented with rosemary extract at 28 days of salting. (A) Fresh duck egg, (B) salted duck egg control, (C) salted duck egg supplemented with rosemary extract 0.1% (w/v), (D) salted duck egg supplemented with rosemary extract 0.5% (w/v).

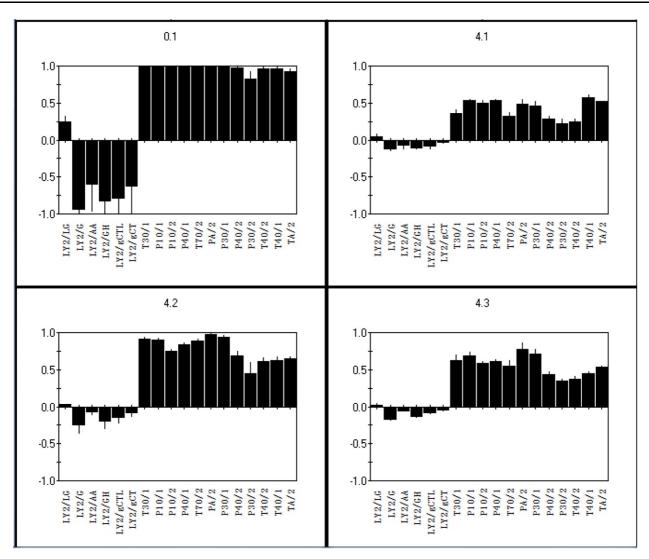


Fig. S4. Response value of different samples on e-nose metal sensor. 0.1-Fresh duck egg, 4.1-salted egg control, 4.2-salted egg supplemented with 0.1% rosemary extract, w/v, 4.3-salted egg supplemented with 0.5% rosemary extract, w/v. The 18 metal oxide sensors of the sensory array divided into following three: LY, T, and P, chambers.