



Article

Long-Term Antibacterial Effect of Electrospun Polyvinyl Alcohol/Polyacrylate Sodium Nanofiber Containing Nisin-Loaded Nanoparticles

Yue Jiang ^{1,†}, Donghui Ma ^{1,†}, Tengting Ji ¹, Dur E Sameen ¹, Saeed Ahmed ¹, Suqing Li ^{1,*} and Yaowen Liu ^{1,2,*}

¹ College of Food Science, Sichuan Agricultural University, Yaan 625014, China; jiangyue@stu.sicau.edu.cn (Y.J.); 18894314357@163.com (D.M.); jtt5881@163.com (T.T.J.); sameen0388@gmail.com (D.E.S.); saeedahmedM1993@gmail.com (S.A.)

² School of Materials Science and Engineering, Southwest Jiaotong University, Chengdu 610031, China

* Correspondence: lsq03_2001@163.com (S.L.); lyw@my.swjtu.edu.cn (Y.L.); Tel.: +86-835-8763-4068 (S.L. and Y.L.); Fax: +86-835-8763-4069 (Y.L.)

† These authors contributed equally to this work

Table S1. Actual levels at coded factor levels of independent variables used in the RSM.

Symbol	Independent variable	Actual levels at coded factor levels		
		-1	0	1
X ₁	pH	3	4	5
X ₂	Ultrasonic time (min)	0	2.5	5
X ₃	E ₁ /E ₂	0.43	1.38	2.33

Table S2. Experimental designs and results of the response surface methodology.

Samples	Factor X ₁	Factor X ₂	Factor X ₃	EE %	
	E ₁ /E ₂	pH	UT min	Actual Value	Predicted Value
1	-1	0	-1	78.00	77.78
2	1	-1	0	69.4	69.28
3	0	0	0	84.38	85.41
4	-1	-1	0	69.60	69.86
5	0	-1	-1	67.20	67.17
6	1	0	-1	81.10	81.25
7	0	1	-1	74.64	74.75
8	0	0	0	85.00	85.41
9	0	0	0	85.58	85.41
10	0	-1	1	70.81	70.71
11	1	1	0	83.00	82.74
12	0	0	0	86.51	85.41
13	-1	0	1	83.9	83.75
14	0	1	1	82.52	82.44
15	0	0	0	85.60	85.41
16	1	0	1	84.40	85.12
17	-1	1	0	75.7	75.82

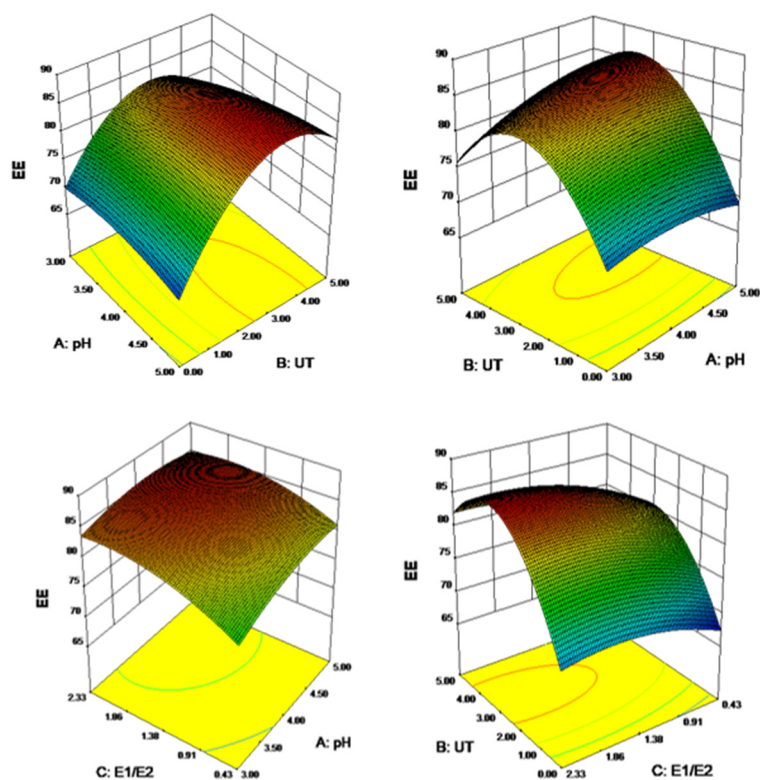


Figure S1. Response surface plots and contour plots showing the effects of pH (X₁), ultrasonic time (X₂) and E₁/E₂ (X₃) on and encapsulation efficiency and interactions between them.



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