Electronic Supplementary Information

Microencapsulation of *Citrus aurantifolia* Essential Oil with Optimized $CaCl_2$ Crosslinker and Their Antibacterial Study for Cosmetic Textile

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Table ESI 1 Chemical compositions of LOs based on GC-MS analysis

No.	tr (min)	Area (%)	Compound	Similarity Quality
1.	6.068	0.61	(1R)-2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene	94
2.	**7.962**	**14.60**	**β-pinen**	**94**
3.	**9.999**	**22.22**	**D-Limonene**	**99**
4.	10.480	0.52	p-Cymene	95
5.	11.264	0.42	gamma.-Terpinene	93
6.	13.335	1.04	3-Carene	95
7.	16.036	0.52	Carveol	45
8.	16.184	0.49	Cyclohexene, 5-methyl-3-(1-methyle thenyl)-, trans-(-)-	90
9.	16.923	0.97	1,4-Cyclohexadiene, 3-ethenyl-1,2- dimethyl-	64
10.	17.260	2.68	.gamma.-Terpinene	93
11.	17.775	1.23	Verbenol	49
12.	17.993	0.76	Decanal	83
13.	18.204	2.36	Cyclohexene, 1-methyl-5-(1-methyle thenyl)-, (R)-	90
14.	19.085	0.88	3-Carene	90
15.	20.327	1.34	3-Carene	95
16.	**20.796**	**14.21**	**2,6-Dimethyl-1,3,5,7-octatetraene,E,E-**	**76**
17.	**22.147**	**18.23**	**Citral**	**95**
18.	23.177	0.42	1-Cyclohexene-1-carboxaldehyde, 4- (1-methylethenyl)-	91
19.	23.921	0.90	Cyclohexane, 1-ethenyl-1-methyl-2, 4-bis(1-methylethenyl)-, [1S-(1.alpha.,2.beta.,4.beta.)]-	99
20.	24.292	0.97	.gamma.-Terpinene	97
21.	25.071	1.69	Bicyclo[3.1.1]hept-2-ene, 2,6-dimethyl-6-(4-methyl-3-pentenyl)-	98
22.	25.219	4.49	3-Carene	96
23.	25.609	1.40	1,5-Cyclodecadiene, 1,5-dimethyl-8 -(1-methylethylidene)-, (E,E)-	98
24.	26.770	0.26	1,4,7,-Cycloundecatriene, 1,5,9,9- tetramethyl-, Z,Z,Z	97
25.	28.412	4.61	.beta.-Bisabolene	97
26.	31.153	0.30	1H-Cycloprop[e]azulene, 1a,2,3,4,4 a,5,6,7b-octahydro-1,1,4,7-tetrame thyl-, [1aR-(1a.alpha.,4.alpha.,4a .beta.,7b.alpha.)]-	98
27.	33.144	1.46	Neoisolongifolene, 8,9-dehydro-	90
28.	34.987	0.50	Cycloisolongifolene, 8,9-dehydro-	90
29.	35.685	0.50	Naphthalene, 1,2,3,5,6,8a-hexahydr o-4,7-dimethyl-1-(1-methylethyl)-, (1S-cis)-	86
30.	36.446	0.83	.beta.-Bisabolene	70

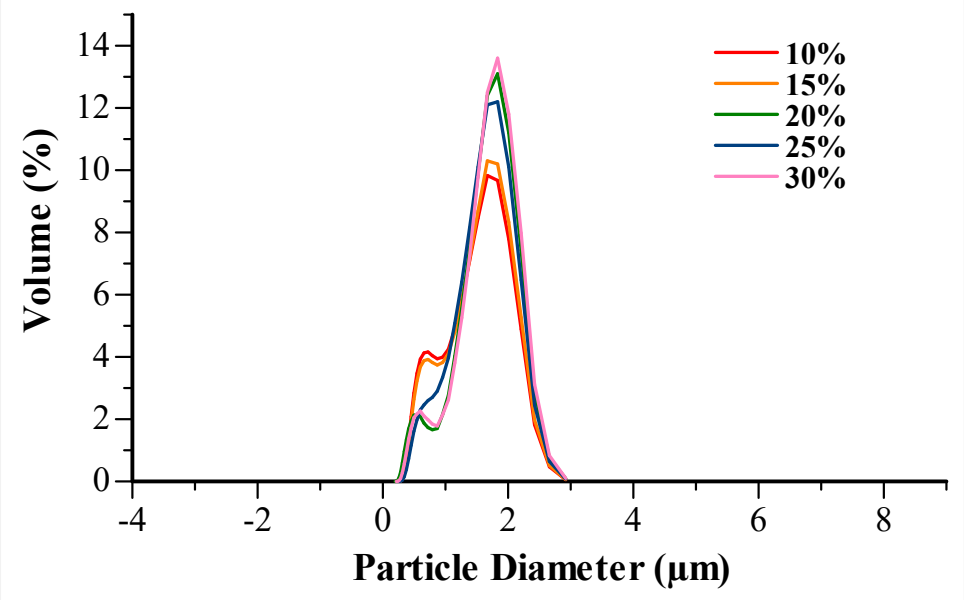

Fig. ESI 1 PSA spectra of LOs microcapsules crosslinked with various amounts of $CaCl_2$

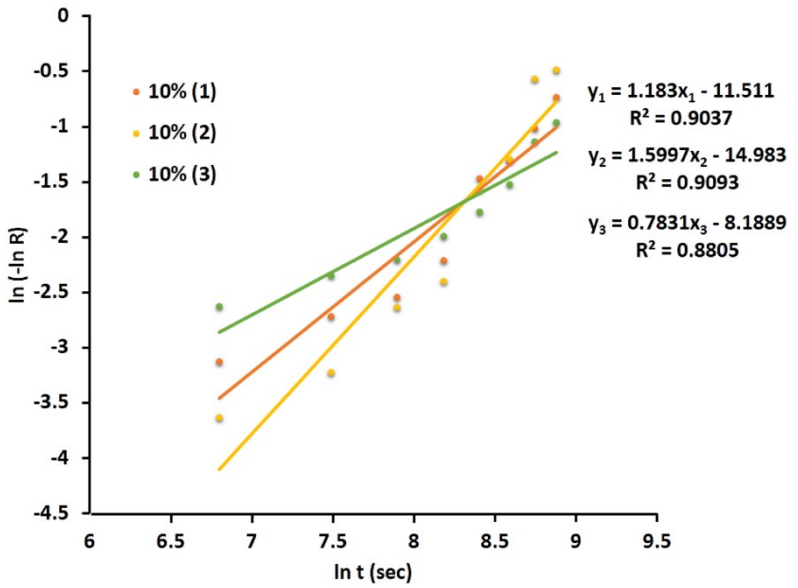

Fig. ESI 2 Avrami's kinetic model of LOs release out of microcapsules crosslinked with 10% of $CaCl_2$

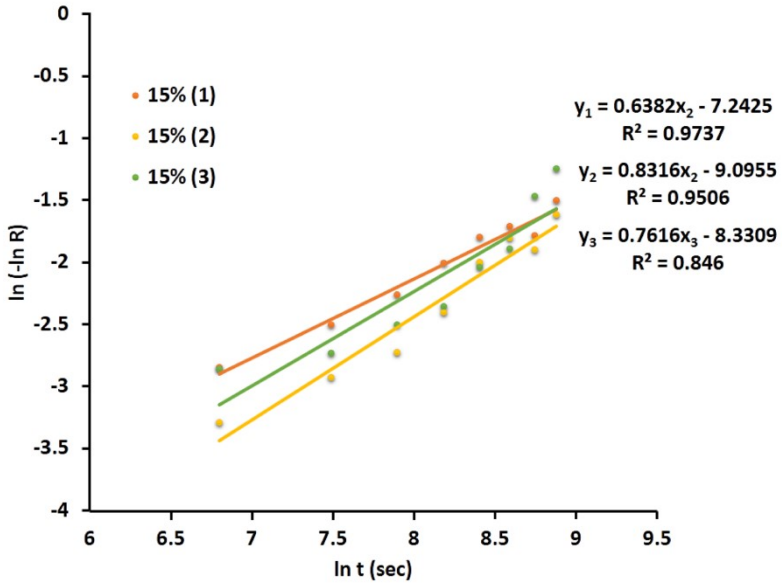

Fig. ESI 3 Avrami's kinetic model of LOs release out of microcapsules crosslinked with 15% of $CaCl_2$

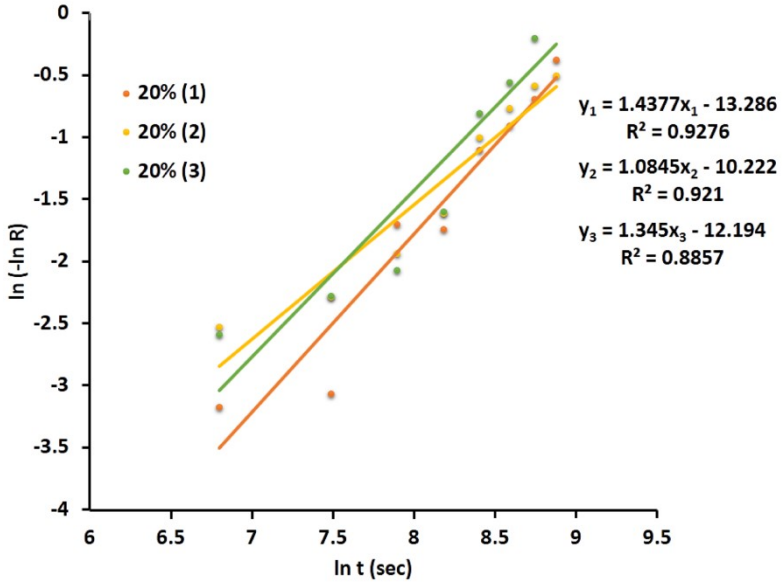

Fig. ESI 4 Avrami's kinetic model of LOs release out of microcapsules crosslinked with 20% of $CaCl_2$

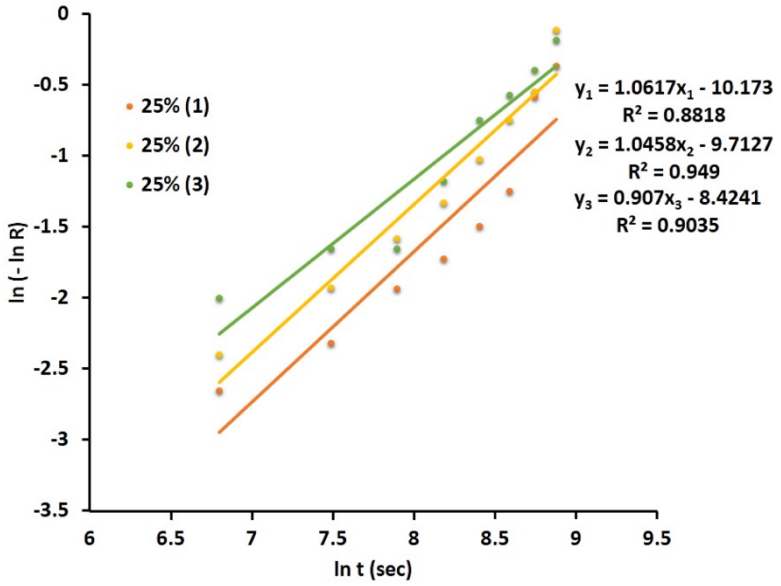

Fig. ESI 5 Avrami's kinetic model of LOs release out of microcapsules crosslinked with 25% of $CaCl_2$

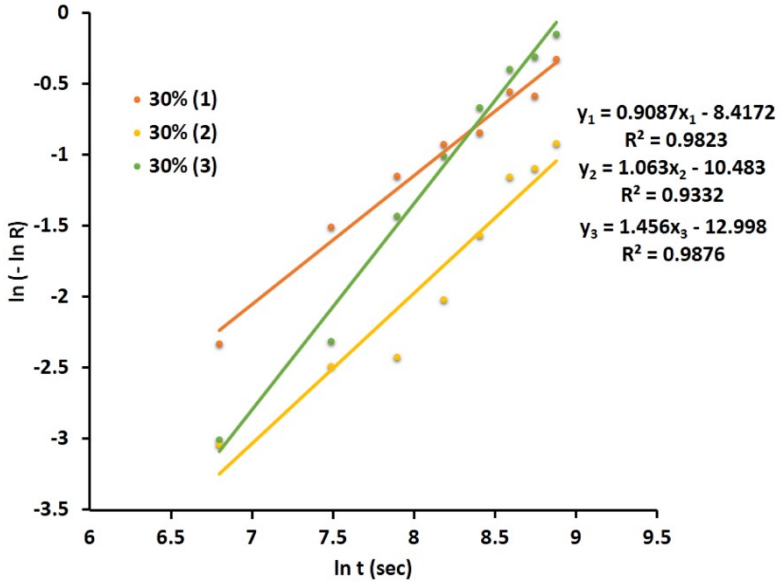

Fig. ESI 6 Avrami's kinetic model of LOs release out of microcapsules crosslinked with 30% of $CaCl_2$

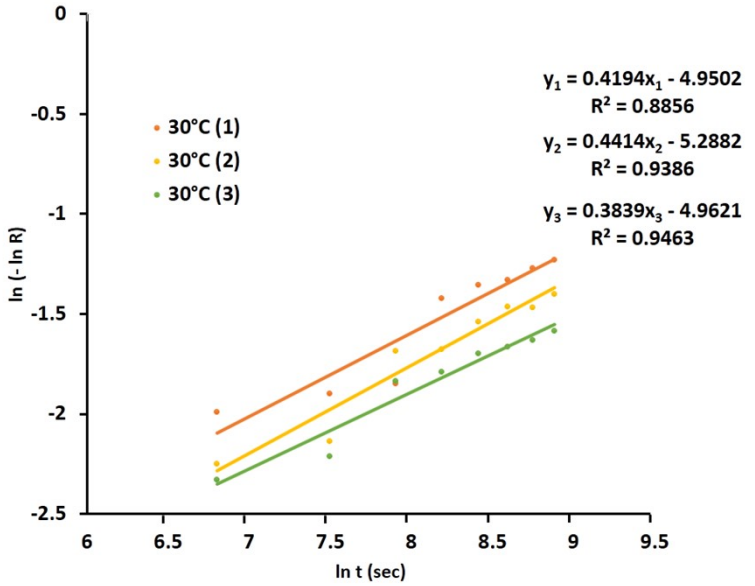

Fig. ESI 7 Avrami's kinetic model of LOs release out of microcapsules crosslinked with 15% of $CaCl_2$ at 30°C

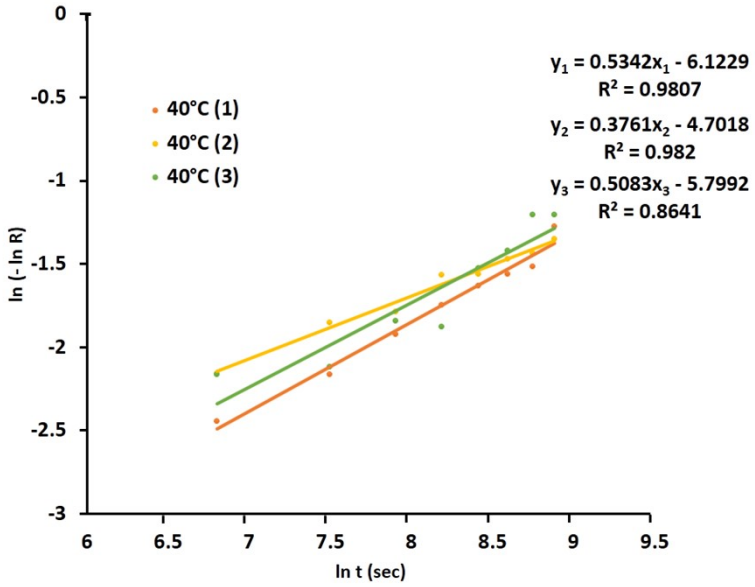

Fig. ESI 8 Avrami's kinetic model of LOs release out of microcapsules crosslinked with 15% of $CaCl_2$ at 40°C

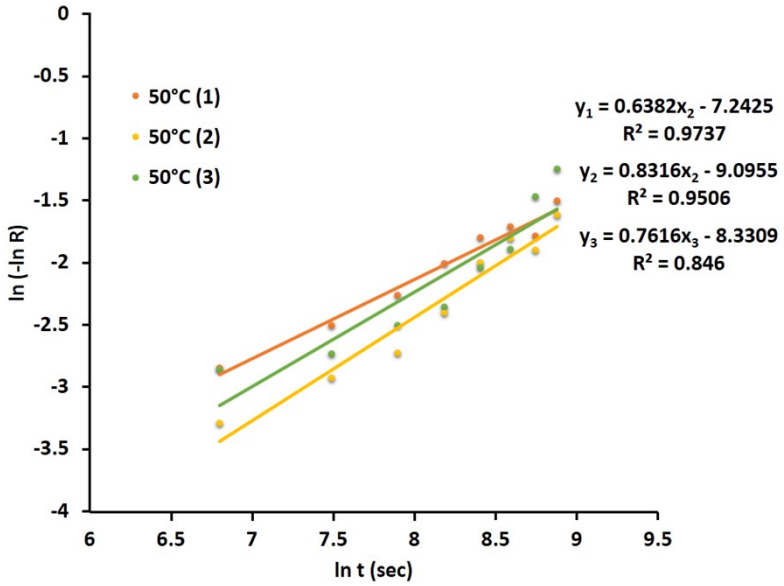

Fig. ESI 9 Avrami's kinetic model of LOs release out of microcapsules crosslinked with 15% of $CaCl_2$ at 50°C

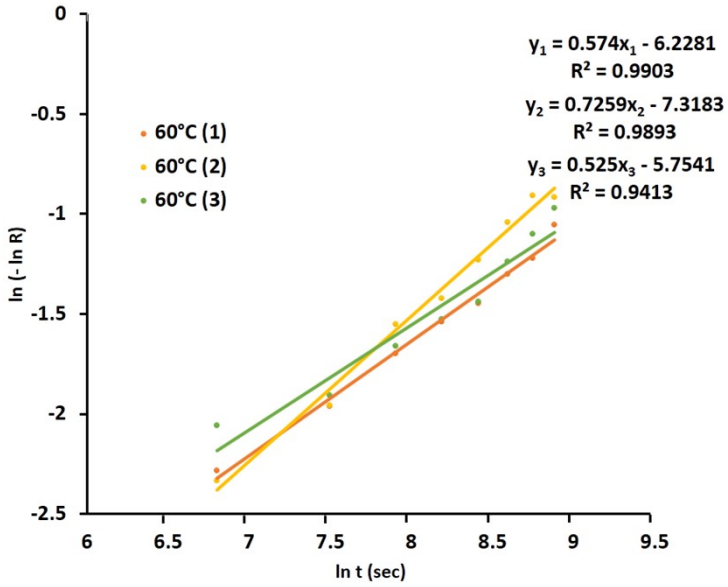

Fig. ESI 10 Avrami's kinetic model of LOs release out of microcapsules crosslinked with 15% of $CaCl_2$ at 60°C