

Article

Nanocapsules of ZnO Nanorods and Geraniol as a Novel Means for the Effective Control of *Botrytis cinerea* in Tomato and Cucumber Plants

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Table S1. Values for d-spacing (Å) and diffraction angles (2θ) of the highest intensity reflections for identified phases are present in the analysis separately.

2 Theta (degrees)	d-spacing group (Å)
31.66	2.82
34.36	2.61
36.17	2.48

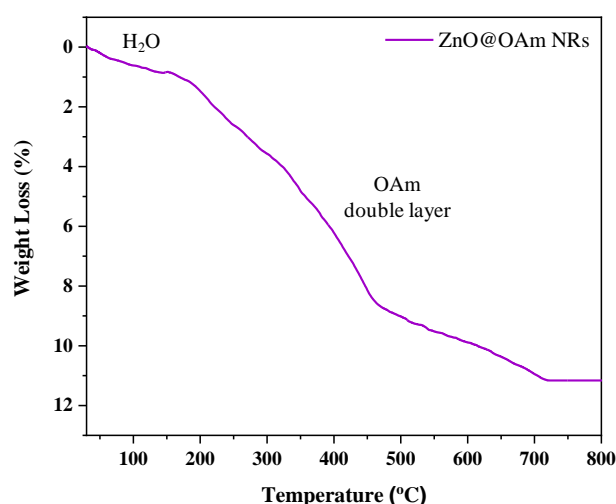


Figure S1. TGA curve for the decomposition of the synthesized ZnO@OAm NRs at the temperature ranges 30–800 °C.

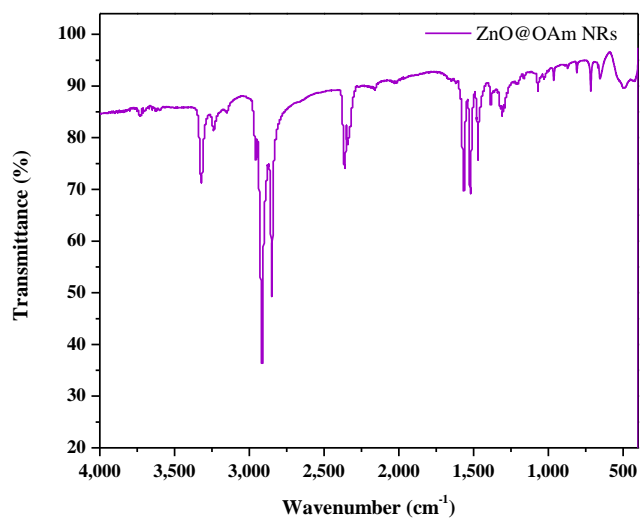


Figure S2. FT-IR spectrum of the ZnO@OAm NRs in the 4,000–450 cm^{-1} region.

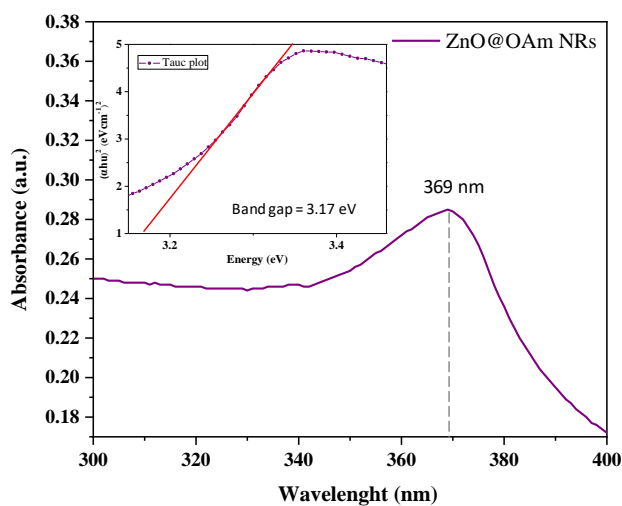


Figure S3. UV-Vis absorption spectrum of the ZnO@OAm NRs with Tauc plots (inset) obtained through standard equations in NPs indicates a band gap of 3.17 eV (B).

Table S2. Pharmacokinetic values (R^2 , K_H , N) for ZnOGer1 NCs and ZnOGer2 NCs are derived from zero-order, first-order, Higuchi, and Korsmeyer-Peppas models. (D). The analyses were performed in triplicate. Adjusted R-squared values are also included.

Nanocapsules	Zero-order	First order	Higuchi		Korsmeyer-Peppas	
	R^2	R^2	R^2	K_H	R^2	N
ZnOGer1 NCs 25 °C	0.7388	0.9257	0.9800	9.42	0.9276	0.530
ZnOGer2 NCs 25 °C	0.8589	0.9103	0.9866	13.20	0.8689	0.488
ZnOGer1 NCs 35 °C	0.8776	0.9189	0.9841	11.32	0.8475	0.516

ZnOGer2 NCs 35 °C	0.8957	0.8141	0.9741	14.52	0.9274	0.355
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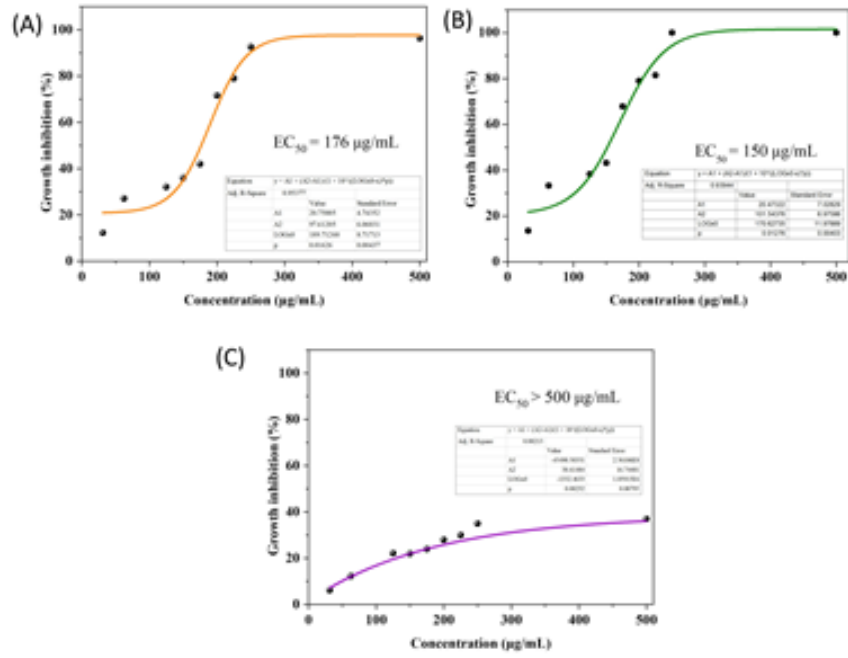


Figure S4. Dose-response growth inhibition curves of *B. cinerea* exposed to nine (9) different concentrations of ZnOGer1 NCs (EC₅₀ = 176 µg/mL) (A), ZnOGer2 NCs (EC₅₀ = 150 µg/mL) (B), and ZnO NCs (EC₅₀ > 500 µg/mL) (C). Each point represents the mean of ten replicates per NCs concentration (two experiments, five replications).