

Supporting information

Alleviation of Cadmium-Induced Oxidative Damage through Application of Zinc Oxide Nanoparticles and Strigolactones in *Solanum lycopersicum* L.

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Table S1. Crystallographic parameters of synthesized ZnO NPs.

S/N	2Θ(degree)	FWHM (degree)	Lattice planes	Inter-planner spacing (d)	Crystallite size (D) nm
1.	31.81895	0.50573	100	2.810101033	16.33422
2.	34.48523	0.23702	002	2.598690899	35.09459
3.	36.30731	0.44006	101	2.472346106	18.9984
4.	47.59853	0.38707	102	1.908887087	20.52417
5.	56.60698	0.6468	110	1.624619334	12.28245
6.	62.92766	0.46564	103	1.475783016	17.06101
7.	66.45195	0.50505	200	1.405804406	15.72971
8.	68.00271	0.56582	112	1.377472762	14.04031
9.	69.19232	0.67919	201	1.356666956	11.69671
					D (average)=
					17.97

Table S2. Calculations for the Williamson-Hall plot.

S/N	2 Θ degrees	Theta (radians)	FWHM (degrees)	FWHM (radians)	$\beta_{\tau}\text{Cos}\Theta$	4 Sin Θ
1.	31.81895	0.277672721	0.57606	0.010054144	0.009669	1.096473
2.	34.48523	0.300940403	0.33621	0.005867971	0.005604	1.185674
3.	36.30731	0.316841051	0.53094	0.009266651	0.008805	1.246266
4.	47.59853	0.415375534	0.67867	0.011845026	0.010838	1.614134
5.	56.60698	0.49398909	0.6581	0.011486012	0.010113	1.896567
6.	62.92766	0.549147429	0.7361	0.012847369	0.010958	2.087841
7.	66.45195	0.579902661	1.01356	0.017689959	0.014798	2.19177
8.	68.00271	0.593435595	0.7644	0.013341297	0.01106	2.23685
9.	69.19232	0.603816901	0.74055	0.012925036	0.01064	2.271154

Table S3. Crystallite size of ZnO NPs by modifying Scherrer's equation.

S/N	Peak Position	FWHM	ln (1/Cos Θ)	ln (β)
1.	31.81895	0.50573	0.039056895	-4.7299793
2.	34.48523	0.23702	0.045983041	-5.4878377
3.	36.30731	0.44006	0.051057133	-4.8690712
4.	47.59853	0.38707	0.088869636	-4.9973767
5.	56.60698	0.6468	0.127323872	-4.4839451
6.	62.92766	0.46564	0.159031089	-4.8125694
7.	66.45195	0.50505	0.178509643	-4.7313248
8.	68.00271	0.56582	0.187505754	-4.6177062
9.	69.19232	0.67919	0.194587164	-4.4350813