Supporting Information

Physiological and transcriptomic responses of *Chlorella vulgaris* to novel antibacterial nanoparticles of ethyl cyanoacrylate polymer

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Figure S1. The morphological changes of the cells exposed to ECA-NPs observed by transmission electron microscope (TEM). The cells were exposed to ECA-NPs (100 μg/mL) for 3 days. CW, cell wall; Ch, chloroplast; S, starch; V, vacuole. The red arrows indicate the ECA-NPs. The red arrows indicate the ECA-NPs.

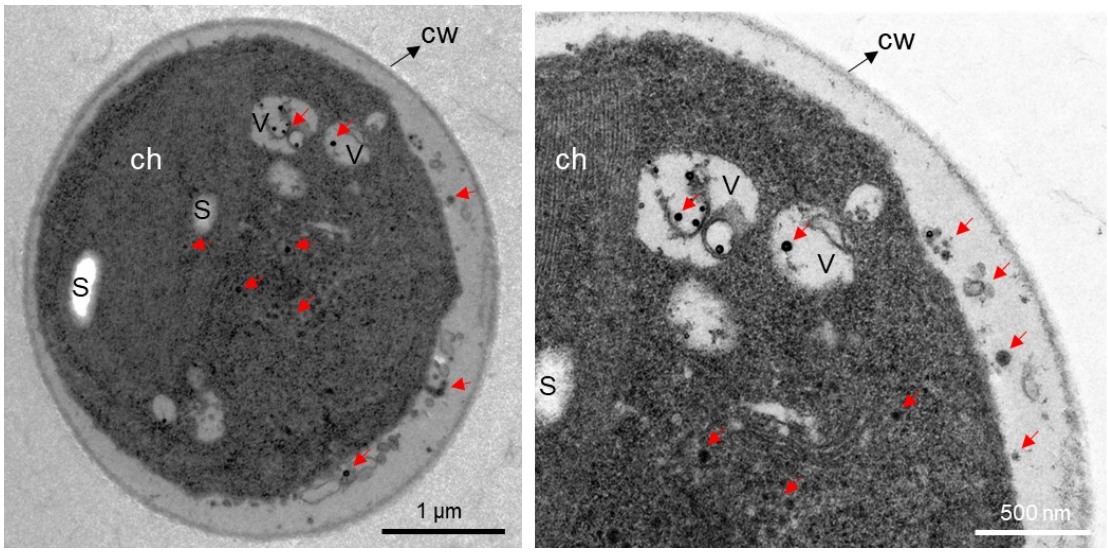
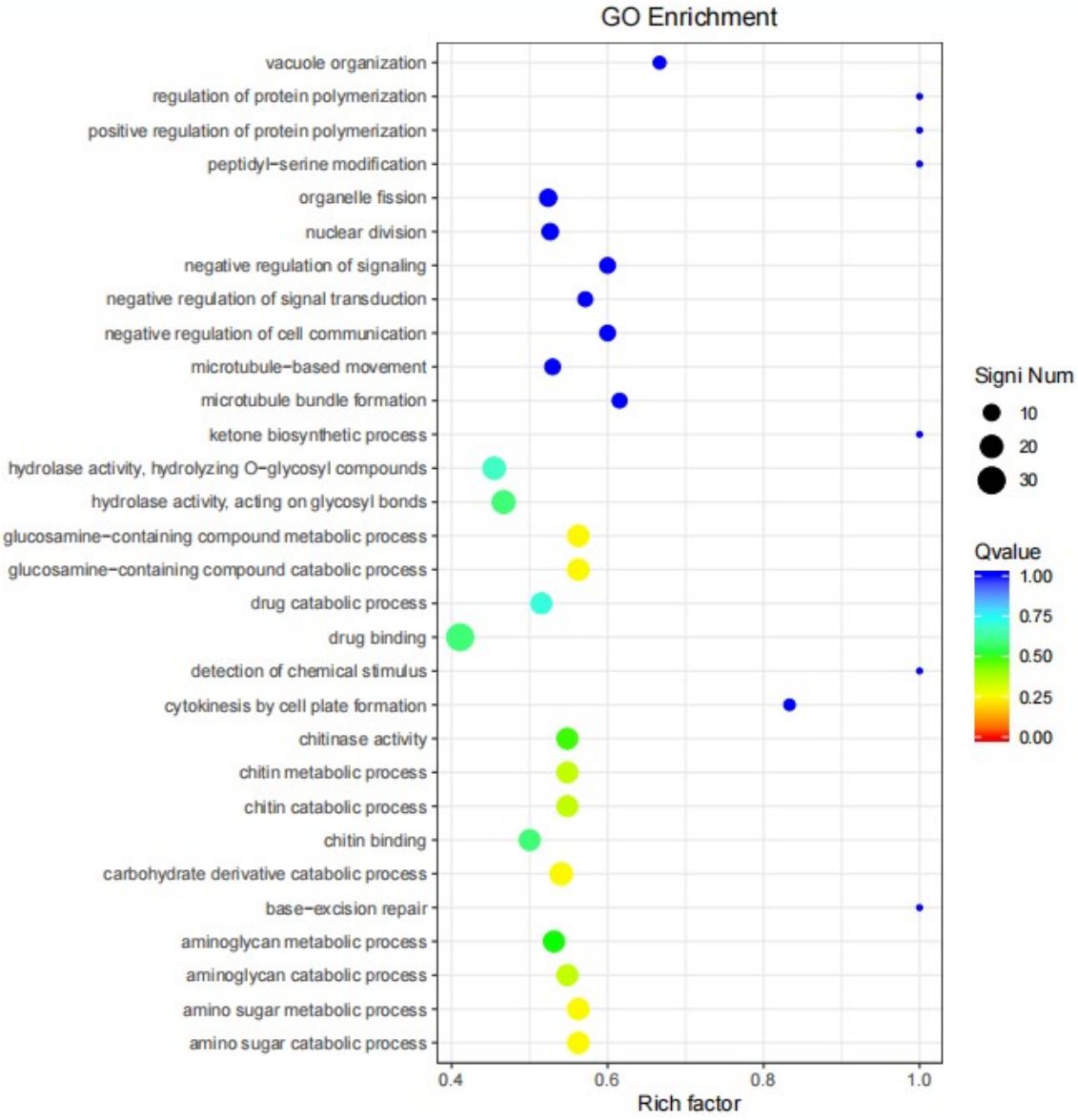
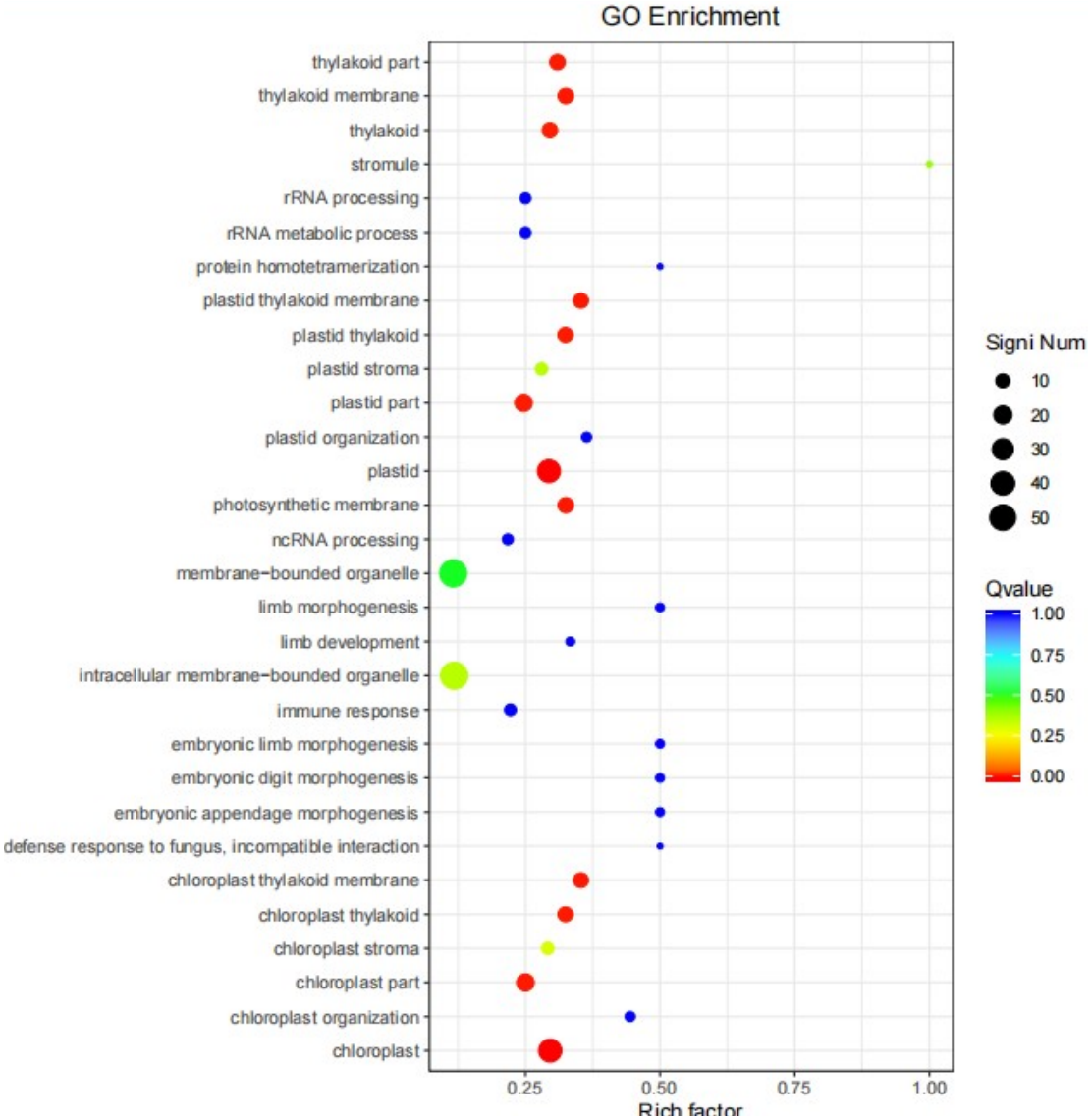


Figure S2. The gene ontology (GO) enrichment analysis showed that differentially expressed genes (DEGs) between ECA-NPs treated cells and control. The downregulated and upregulated DEGs were shown in (A) and (B), respectively.

(A)



(B)


GO Enrichment
thylakoid part
thylakoid membrane
thylakoid
stromule
rRNA processing
rRNA metabolic process
protein homotetramerization
plastid thylakoid membrane
plastid thylakoid
plastid stroma
plastid part
plastid organization
plastid
photosynthetic membrane
ncRNA processing
membrane−bounded organelle
limb morphogenesis
limb development
intracellular membrane−bounded organelle
immune response
embryonic limb morphogenesis
embryonic digit morphogenesis
embryonic appendage morphogenesis
defense response to fungus, incompatible interaction
chloroplast thylakoid membrane
chloroplast thylakoid
chloroplast stroma
chloroplast part
chloroplast organization
chloroplast
0.25
0.50
0.75
1.00
Rich factor
Signi Num
10
20
30
40
50
Qvalue
1.00
0.75
0.50
0.25
0.00