

## Supplementary Materials

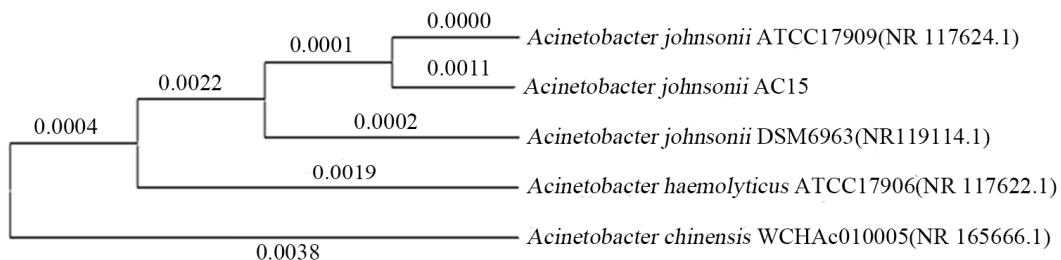
# Exposure to Nanoplastics Particles Enhances *Acinetobacter* Survival, Biofilm Formation, and Serum Resistance

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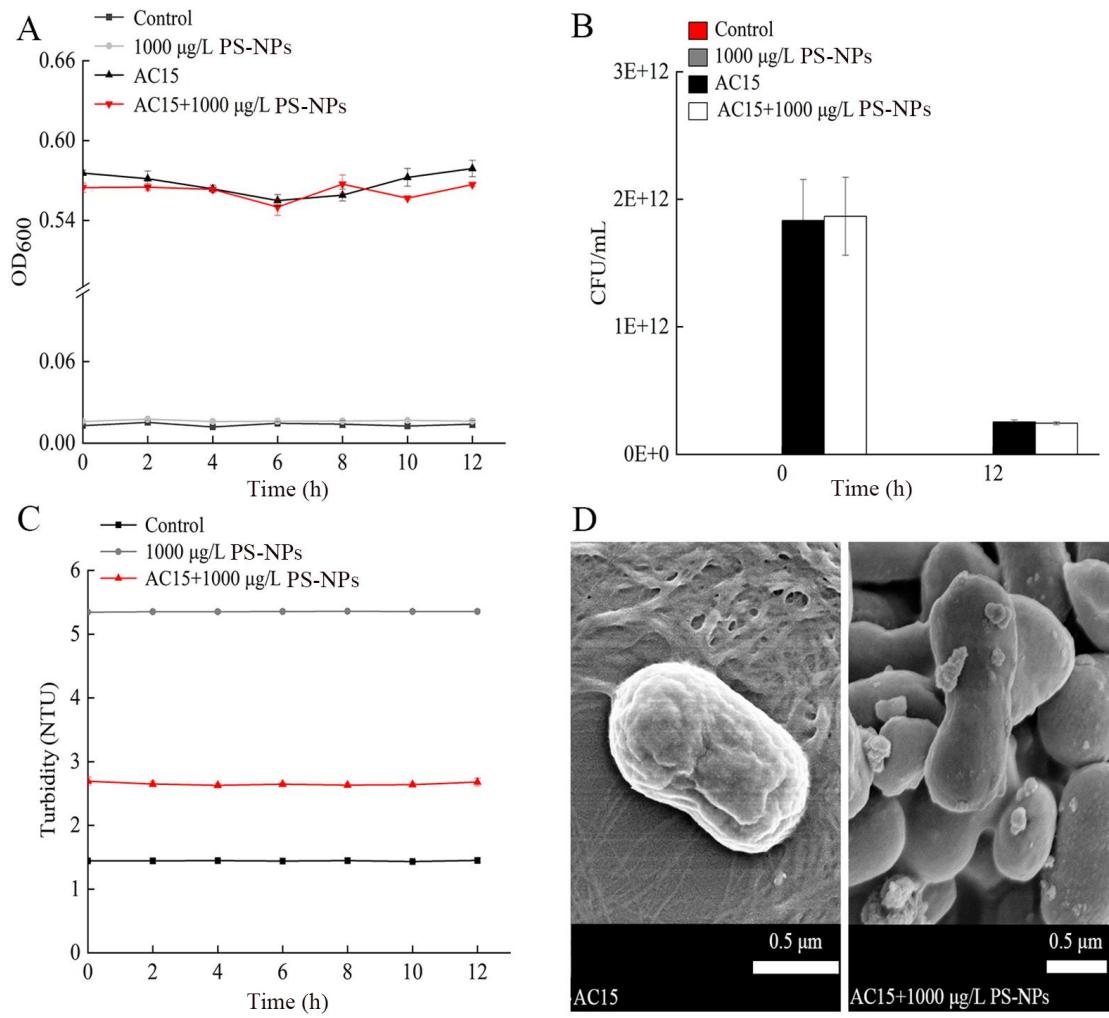
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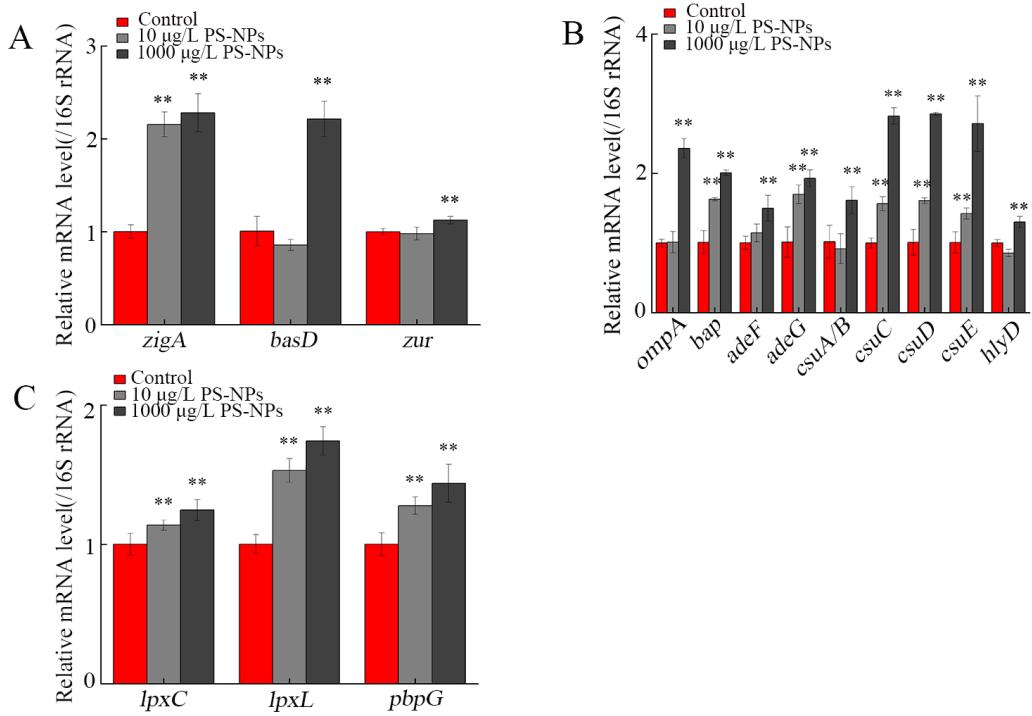
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**Figure S1.** Systematic evolutionary tree including AC15. The form of labeled tree was used. After the sequencing, the data was compared with the published sequences in GeneBank. Using BLAST in NCBI website, the systematic evolutionary tree was constructed. In this evolutionary tree, AC15 was identified as *Acinetobacter Johnson*.



**Figure S2.** Adsorption curve of NPs under the condition of bacterial non-growth. (A) AC15 growth curve after exposure to 1000  $\mu\text{g}/\text{L}$  NP. (B) Effect of 1000  $\mu\text{g}/\text{L}$  NP exposure on AC15 CFU at different times. (C) Turbidity analysis of bacterial solutions after cultivation at 4 °C for 12 h. (D) SEM analysis to show NPs accumulation on surface of AC15 under the condition of 4 °C cultivation.



**Figure S3.** Effect of exposure to NPs on expression of virulence genes in AC15 in NHS. (A) Survival related genes. (B) Biofilm formation related genes. (C) Serum resistance related genes. \*\* $P < 0.01$  vs Control.

**Table S1.** Primer information for qRT-PCR

Gene	Forward primer (5'-3')	Reverse primer (5'-3')
<i>16s rRNA</i>	CCTACCAAGGCGACGATCTGT	AACGCTCGCACCCCTCTGTATT
<i>zigA</i>	GTGAGCATAGCCAGAGACTGAAG	TTTAAGCCTTAGGACGCACGACTC
<i>basD</i>	ACATGGAACCTGAACGTGCTTC	ATACGGTGTATTCCAAGGCGACTG
<i>zur</i>	CAAGCAGCATTCTGATTGTACCG	TGTTGAGCCACGAAGTCATCTGAAG
<i>ompA</i>	TCAGCTTCGAAACCTAACCATGG	CAAGCAGCATTCTGATTGTACCG
<i>bap</i>	AACTGCGGATATGGCGAATGTAGG	AGTGACATCAACATCTGGCGAACCC
<i>adeF</i>	AATAGCGGATTACAAGCGGGTGATC	CGGAACGAGATGGGTGTAACAGG
<i>adeG</i>	GGTTCTGGTACTACCGCGATGC	TTGTACCCGCTGCAACCTGAATG
<i>csuA/B</i>	TAACGTTACCGCGATGCTGCTC	TTCAATTGGTACGGAGTAGCTTGGC
<i>csuC</i>	AGTTACCGATTGCCCTTCTGATGG	CACTGCCAATTCTTCCCATAAGC
<i>csuD</i>	TGACGCGACGCTTATGAGATAGTG	AAGCGAACCAAGATAGACCAAACCAG
<i>csuE</i>	TGGGAATCCGTTGCTCGGTAAATAC	TGACTTCATGGCTCGCTGGTTG
<i>hlyD</i>	CTGCTCGGGTTCTGAGTTTAG	GCCAGGGCGTAGTGTCTATTCC
<i>lpxC</i>	TTCCGCATTGCCGTGAGATGG	ATCTCCCGTTACCAAGTTGGAACAC
<i>lpxL</i>	GCCCCGATCAGACTTGGACTCAAG	AACGACGATGAGCAGTTACTGTGG
<i>pbpG</i>	CTCGTGCCTGGGTATGAGTTAG	ATGGTAAGTCGGTACAACGTGATGG