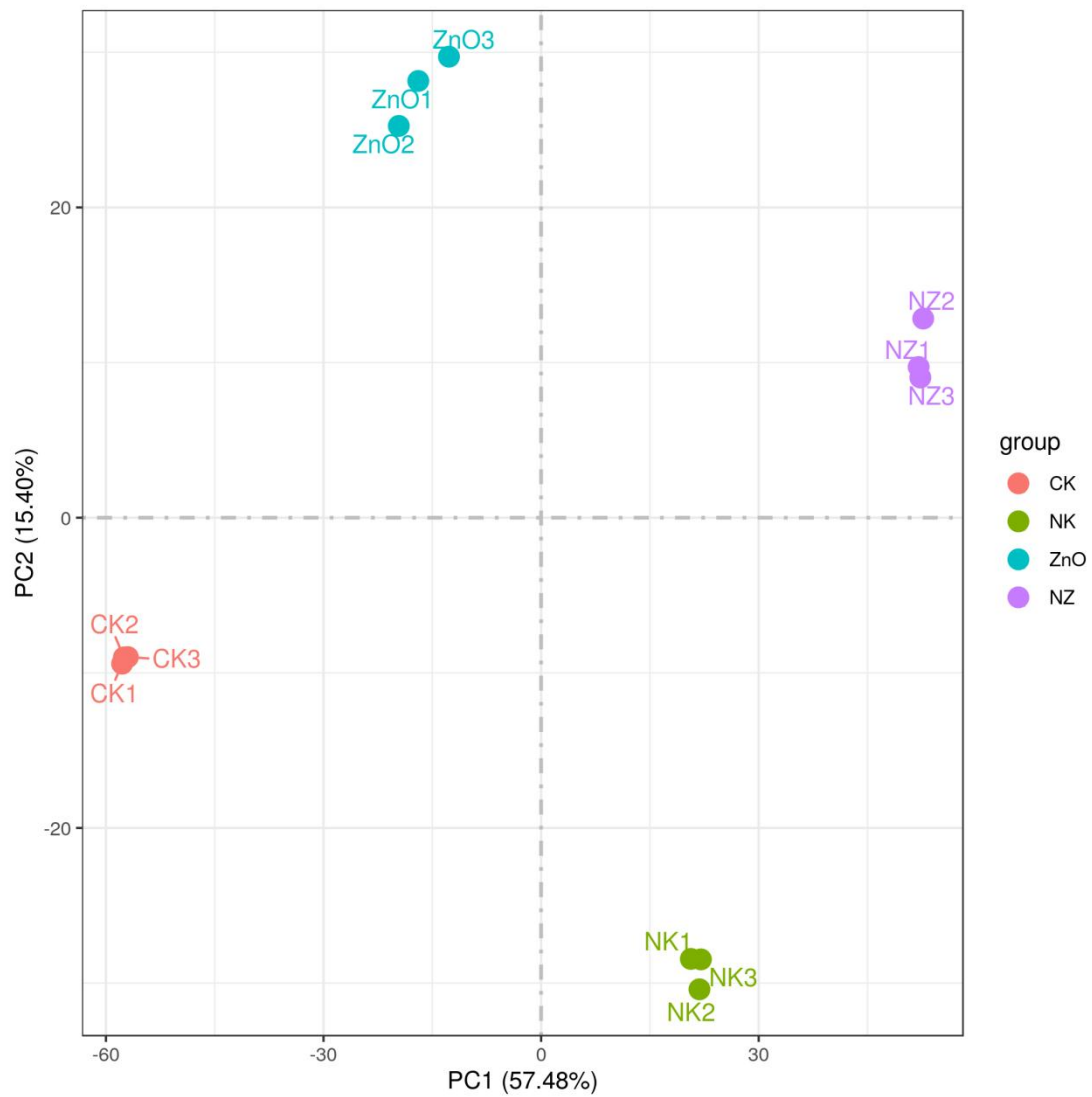
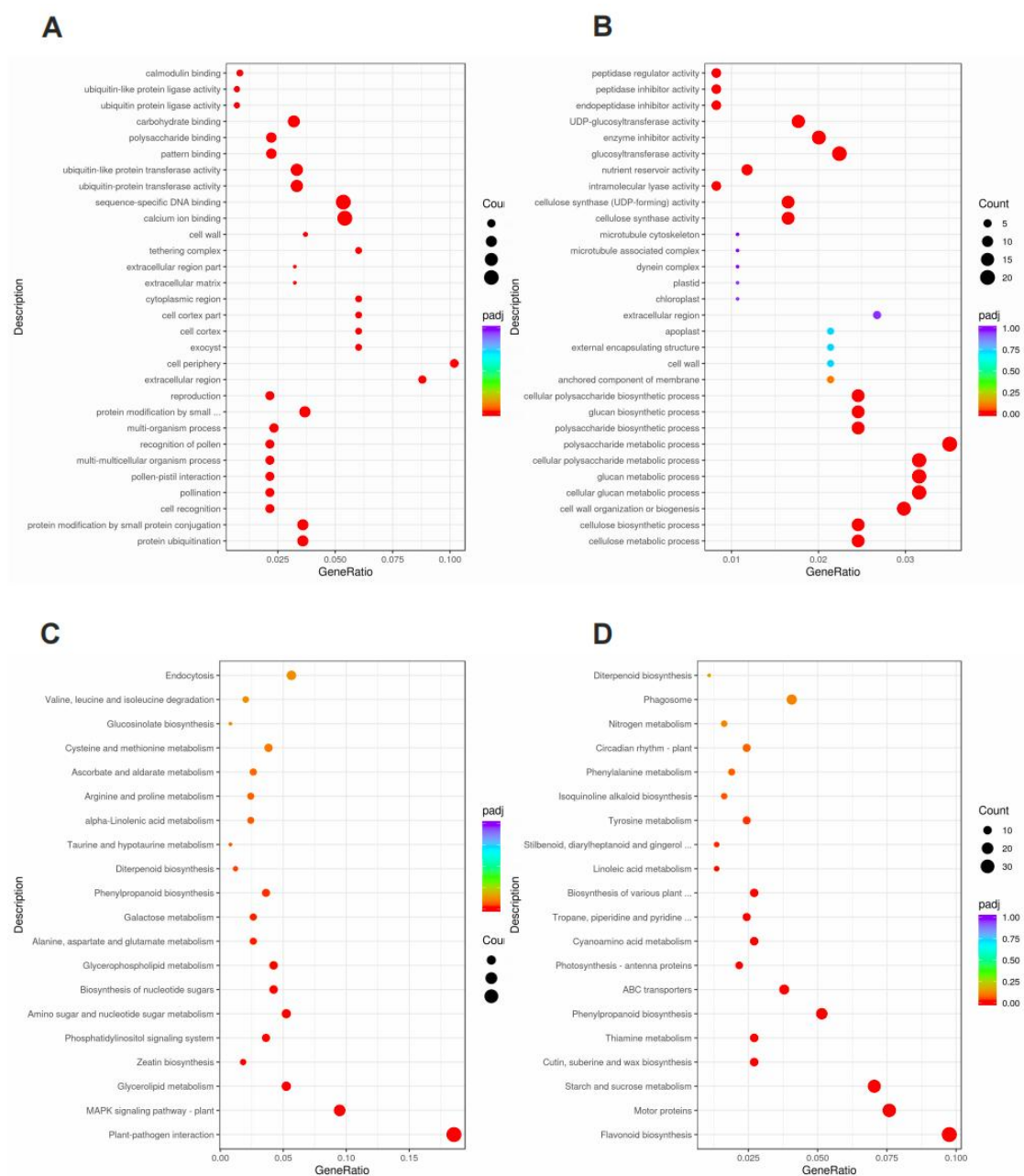


**Fig S1** ZnO NPs alleviate salt stress in cotton. Shoot dry weight (A), root dry weight (B), stem diameter (C) of cotton seedlings subjected to 0, 50, 100, 150 and 200 mg/L of ZnO NPs under salt stress were measured, respectively. The tests were repeated five times. The data given are the averages of three replicates, with the standard deviation (SD) shown by the error bars. Different letters above or below error bars show the differences at  $p < 0.05$ .



**Fig S2** Plot of results of principal component analysis



**Fig S3** Significant up and down-regulated pathway map of GO and KEGG enrichment (NZvsNK). GO enrichment up-regulated gene (A), GO enrichment down-regulated gene (B), KEGG enrichment up-regulated gene (C), KEGG enrichment down-regulated gene (D). NK and NZ represent CK-NaCl, and ZnO (100 mg/L)-NaCl, respectively.

**Table S1** Summary of transcriptome sequencing data

Library	Raw reads (bp)	Clean reads (bp)	Clean reads (%)	Clean bases (Gb)	Error rate (%)	Q20 (%)	Q30 (%)	GC content (%)
CK1	46092874	44364618	96.25	6.65	0.01	98.93	96.89	44.47
CK2	47938760	45975326	95.90	6.9	0.01	98.88	96.77	43.94
CK3	50042226	47752296	95.42	7.16	0.01	98.94	96.87	44.11
ZnO1	46821004	44998716	96.11	6.75	0.01	98.87	96.65	43.83
ZnO2	50721768	48775556	96.16	7.32	0.01	98.92	96.82	44.62
ZnO3	47000548	45324198	96.43	6.8	0.01	98.95	96.96	44.43
NK1	47461958	45727572	96.35	6.86	0.01	98.93	96.83	43.93
NK2	40210746	38179350	94.95	5.73	0.01	98.83	96.67	43.8
NK3	49430364	47908868	96.92	7.19	0.01	98.89	96.77	44.08
NZ1	48930656	46885310	95.82	7.03	0.01	98.86	96.7	43.97
NZ2	51571142	48458764	93.96	7.27	0.01	98.91	96.8	43.78
NZ3	50129572	48675432	97.10	7.3	0.01	98.86	96.65	43.93

Note: CK, ZnO, NK and NZ represent CK, ZnO (100 mg/L), CK-NaCl, and ZnO (100 mg/L)-NaCl, respectively, and 1-3 represent 3 independent biological replicates, respectively.

**Table S2** Summary of mapped reads in transcriptome sequencing data

Sample	Total reads	Mapped reads	Mapped rate (%)	Uniquely mapped	Multiple mapped
CK1	44364618	42068483	94.82	39999300	2069183
CK2	45975326	44020519	95.75	41872141	2148378
CK3	47752296	45351419	94.97	43033396	2318023
ZnO1	44998716	42967376	95.49	41025161	1942215
ZnO2	48775556	46444358	95.22	44327255	2117103
ZnO3	45324198	43067190	95.02	41157771	1909419
NK1	45727572	43740558	95.65	41595994	2144564
NK2	38179350	36323638	95.14	34503821	1819817
NK3	47908868	45406572	94.78	43297677	2108895
NZ1	46885310	45122046	96.24	43144957	1977089
NZ2	48458764	46194735	95.33	44022569	2172166
NZ3	48675432	46449633	95.43	44449272	2000361

Note: CK, ZnO, NK and NZ represent CK, ZnO (100 mg/L), CK-NaCl, and ZnO (100 mg/L)-NaCl, respectively, and 1-3 represent 3 independent biological replicates, respectively.

**Table S3** Statistics of differentially expressed genes in the transcriptome

Compare	No. of DEGs	No. of upregulated genes	No. of downregulated genes
NZvsNK	4653	2985	1668
NKvsCK	10035	4127	5908
ZnOvsCK	5786	3024	2762
NZvsZnO	9389	3999	5390

Note: CK, ZnO, NK and NZ represent CK, ZnO (100 mg/L), CK-NaCl, and ZnO (100 mg/L)-NaCl, respectively.