

Supporting information for

Enhanced resilience of marine fish to extreme environments by nano-ZnO exposure

Shuoli Ma^{1,2}, Wen-Xiong Wang^{1,2*}

¹School of Energy and Environment and State Key Laboratory of Marine Pollution, City University of Hong Kong, Kowloon, Hong Kong, China

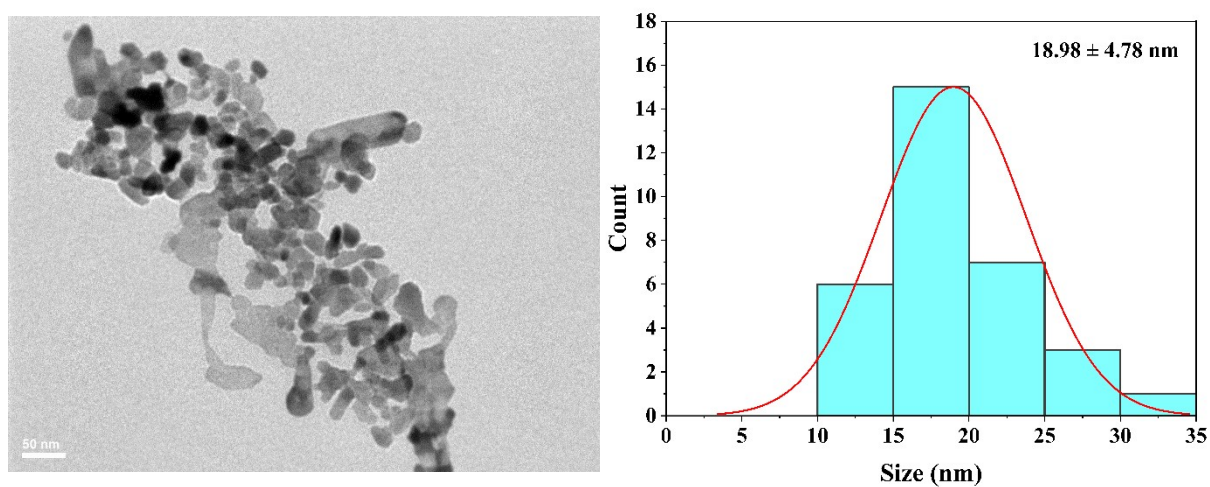
²Research Centre for the Oceans and Human Health, City University of Hong Kong Shenzhen Research Institute, Shenzhen 518057, China

*Corresponding author: wx.wang@cityu.edu.hk

Table S1. Primer sequences of key genes

Gene name	Forward primer (3' to 5')	Reverse primer (5' to 3')
HSP-70	TGGATAAAGGCAAACGAGGAG A	GCTCTCTTGTTTTGGCTGATGTC
HIF-1 α	GTGGTATTCTCCATGAGCTT	CATCACACAGGACAGGTA
NF- κ B	AGCCCAAGGCACTCTAGACA	GTTCTGGGCAGCTGTAGAGG
IL-1 β	CATCTGGAGGCGGTGAA	CGGTTTTGGTGGGAGGA
IL-6	ACCATCTGGCTGCGGGAAC	GAATGAGTCGTGTGGTCTGGAAG
TNF- α	GGAGACAGACGAGGGCAAGA	TCAGCCGCAAGCGTTATCTC
Bcl-2	GCTCCAACGACTGATCAACC	TGACCTGAAGAACCCAGCTT
Bax	AAGTGGATGGACAGAGTGGG	ATGCAATCTGGTGGTGGAGA
Caspase 9	CCATTGTTTCTGCAGTGCCT	GAGTAGTACTGGGTCTGGGC
β -actin	ACCCAGATCATGTTCGAGACC	ATGAGGTAGTCTGTGAGGTCG

a



b

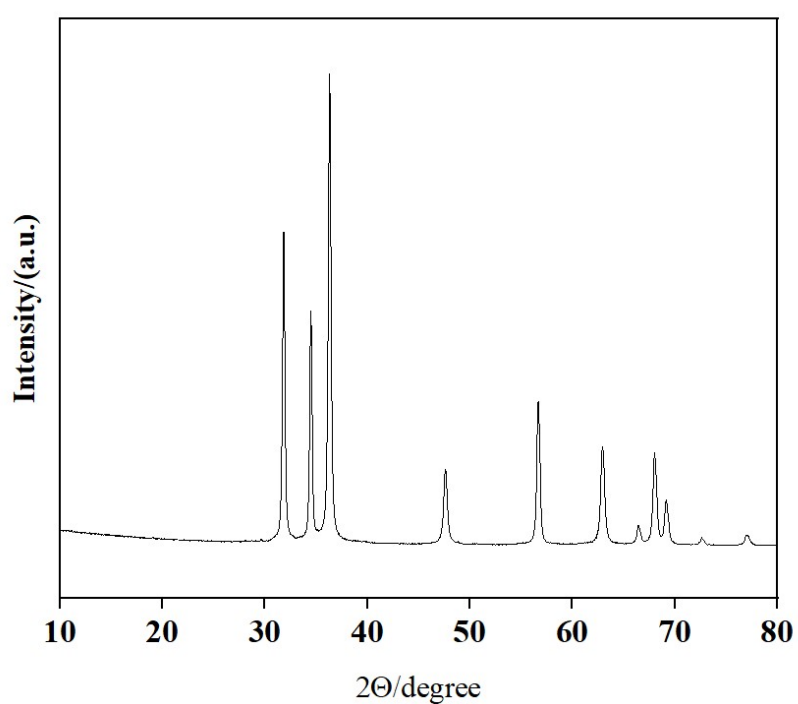


Fig S1. Particle characterization of ZnO NPs.

(a) Representative TEM micrograph in absolute ethyl alcohol of the ZnO NP; (b) XRD spectrum pattern of the ZnO NPs.