

## Supporting Information

### **Different toxicity of cadmium telluride, silicon, and carbon nanomaterials against hemocytes in silkworm, *Bombyx mori***

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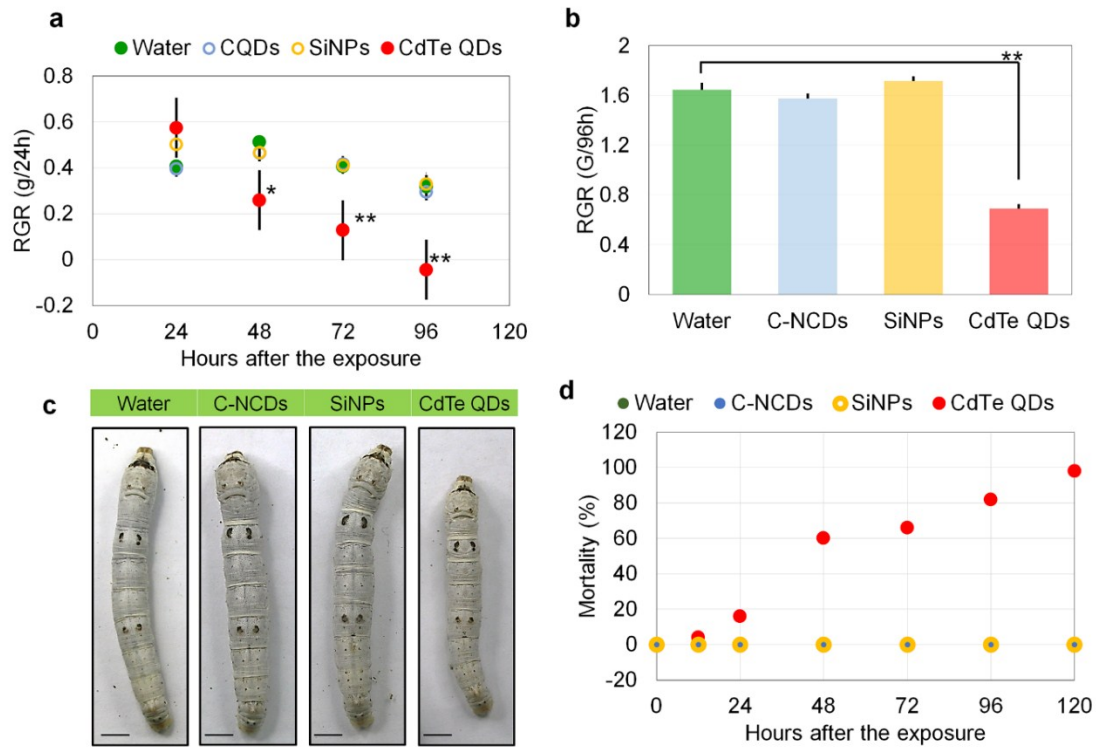
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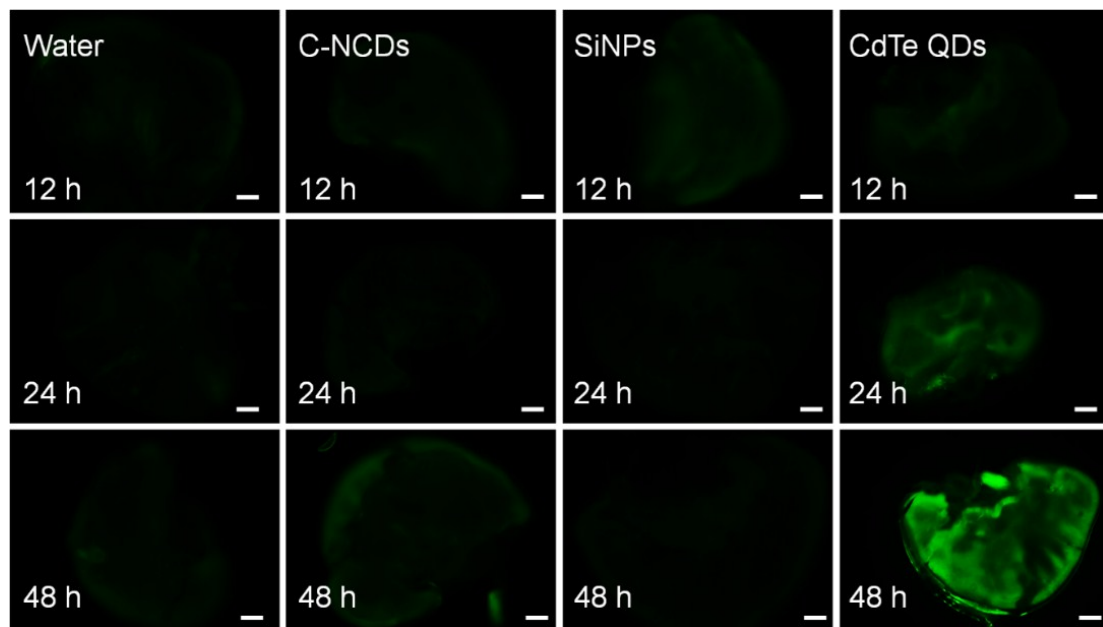
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**Fig. S1** Impact of three kind of nanomaterials on growth of the larvae. (a) The Relative Growing Rate (RGR) every 24 hours and (b) the RGR during 96 hours. (c) The larval size and (d) the mortality 96h after exposure. The five instar larvae were performed dorsal vein-injection at 48-h-old. The drugs were 10  $\mu$ L 32  $\mu$ mol/L CdTe QDs, or 0.39  $\mu$ g/ $\mu$ L SiNPs, or 1  $\mu$ g/ $\mu$ L C-NCDs. The 10  $\mu$ L sterilized purified water was used for control injection. \*,  $P < 0.05$ ; \*\*,  $P < 0.01$  ( $n = 8$  larvae, repeated 3 groups). Bar = 5mm.



**Fig. S2** Exposure of CdTe QDs, C-NCDs and SiNPs induced the ROS generation in hemopoietic organ (HeO). The five instar larvae were performed dorsal vein-injection at 48-h-old. The drugs were 10  $\mu$ L 32  $\mu$ mol/L CdTe QDs, or 0.39  $\mu$ g/ $\mu$ L SiNPs, or 1  $\mu$ g/ $\mu$ L C-NCDs. The 10  $\mu$ L sterilized purified water was used for control injection. The HeOs isolated from larvae and performed ROS measuring at 12h, 24h and 48h after injection. Bar = 100 $\mu$ m.

**Table S1 Primer sequences used in this study**

Genes	Primer sequences (5'→3')	Gene registration number (NCBI No.)
<i>Dronc</i>	F: TGTGGCTGTCTTCCTTC R: ATCTAAGTCTGTGCCCTC	GeneID:100500764
<i>Atg6</i>	F: GTTATACGGTTCGGGTGG R: TGGAGTACGCATGTGGTG	GeneID: 100216352
<i>Atg8</i>	F: AAGGCTAGGCTTGGAGAC R: CAGATGTGGGTGGAATGA	GeneID:692938
<i>Rp49</i>	F: GCATCAATCGGATCGCTATG R: GGACCTTACGGAATCCATTTG	GeneID:6100595
<i>P38</i>	F: GTGGGTTGTATTATGGCTGAG R: GTTCTGCCGTTATGCGTTTAT	GeneID:NP_001036996.1
<i>Moricin</i>	F: CCGCTCCAGCAAAAATACCT R: TTGAAAACATCGTTGGCTGT	GeneID:NM_001043364.1
<i>Cecropin A</i>	F: TTGAGCTTCGTCTTCGCGTT R: TTGCGTCCCACTTTCTCAATT	GeneID:D17394
<i>Ced-6</i>	F: GGACGGTGTTGCCATACAGG R: TTATCGTCCGCGCAGTACG	GeneID:AB531437
<i>Actin A1</i>	F: TCCTCCGTCTGGACTTGGC R: CGATTTCCTCTCAGCGGT	NM_001126252.1
<i>Tetraspanin E</i>	F: CAGCGTCCTCCTCTTCACCT R: CCTCGTCTGCGTTAGCGTC	GeneID:DQ311225