Supplementary Information

Enhanced Mechanical Strength and Electrical Conductivity of Carbon-Nanotube/TiC Hybrid Fibers

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Fig. S1 High resolution SEM images of CNT/TiC fiber (Scale bar: 2 μm).
**Fig. S2** TEM images of pure CNT (Scale bar: 40 nm).

**Fig. S3** The fitting of $\ln \sigma$ vs. $T^{-1/2}$ based on the Mott’s variable range hopping model: $\sigma \propto \exp (-A/T^{(1/(d+1))})$, where $\sigma$ is electrical conductivity, $A$ is constant, $T$ is the temperature, and $d$ is the dimensionality. As this plot, $d = 1$, that is one dimensional hopping mechanism.
**Fig. S4** The fitting of $\ln \sigma$ vs. $T^{-1/3}$ based on the Mott’s variable range hopping model: $\sigma \propto \exp\left(-A/T^{(1/d+1)}\right)$, where $\sigma$ is electrical conductivity, $A$ is constant, $T$ is the temperature, and $d$ is the dimensionality. As this plot, $d = 2$, that is one dimensional hopping mechanism.

**Fig. S5** The fitting of $\ln \sigma$ vs. $T^{-1/4}$ based on the Mott’s variable range hopping model: $\sigma \propto \exp\left(-A/T^{(1/d+1)}\right)$, where $\sigma$ is electrical conductivity, $A$ is constant, $T$ is the temperature, and $d$ is the dimensionality. As this plot, $d = 3$, that is one dimensional hopping mechanism.