Figure S1. Discharge-charge curves of (a) GeTe, (b) GeTe-TiC (20%)-C and (c) GeTe-TiC (30%)-C electrodes.
Table S1. Comparison on the electrochemical performances of electrodes with TiC content. For other data, they are adapted from the cited references.

| Sample                  | 1st Charge Capacity (mAh g$^{-1}$) | Current Density (mA g$^{-1}$) | Charge Capacity (mAh g$^{-1}$) | Ref.                  |
|-------------------------|------------------------------------|-------------------------------|-------------------------------|-----------------------|
| Zn-TiC-C                | 402                                | 100                           | ~380 at 800th cycle           | [1]                   |
| ZnTe@TiC (20%)-C        | 446                                | 100                           | ~530 at 300th cycle           | [2]                   |
| SnSb-TiC-C              | 653                                | 100                           | ~430 at 100th cycle           | [3]                   |
| Sn-TiC-C                | 390                                | 100                           | ~390 at 300th cycle           | [4]                   |
| SnTe-TiC (30%)-C        | 419                                | 100                           | ~420 at 100th cycle           | [5]                   |
| SbTe3-TiC (30%)-C       | 388                                | 100                           | ~330 at 600th cycle           | [6]                   |
| FeSn2-TiC               | 398                                | 100                           | ~380 at 100th cycle           | [7]                   |
| GeTe-TiC (20%)-C        | 588                                | 100                           | 766 at 300th cycle            | Our work             |
| GeTe-TiC (30%)-C        | 508                                | 100                           | 588 at 300th cycle            | Our work             |

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