Supplementary Information

The Advent of Multilayer Antimonene Nanoribbons with Room Temperature Orange Light Emission

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Calculations

In Fig. S1a, the length of the dashed line, which contains a double reciprocal vector, is equal to 8.09 nm\textsuperscript{-1}, so that the length of the reciprocal vector is 4.045 nm\textsuperscript{-1}. The inverse of 4.045 nm\textsuperscript{-1} is equal to 0.247 nm that corresponds to the (211) interplanar distance (0.225 nm) of multilayer antimonene. On the other hand, the length (13.6 nm\textsuperscript{-1}) of the dashed line as shown in Fig. S1b contains a quadruple reciprocal vector. Hence, the length of the reciprocal vector is 3.4 nm\textsuperscript{-1}. The inverse of 3.4 nm\textsuperscript{-1} is equal to 0.294 nm that corresponds to the (110) interplanar distance (0.311 nm) of multilayer antimonene. These calculations, which derived from the experimental results, are in agreement with the theory and the error rate is less than 9%, indicating that the results are believable.
Fig. S1 (a) The distance between (211) reciprocal points of multilayer antimonene, (b) The distance between (110) reciprocal points of multilayer antimonene.
Fig. S2  Energy dispersive spectrum (EDS) of the multilayer antimonene/InN/InSb.