## Accordion-like Mo<sub>x</sub>B<sub>y</sub> (MBene) derived from moltensalts method and its application in advanced LIBs anode

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Figure S1 Optical images of a) MoAlB, the solution of calcined mixture after washing and centrifugation b) for the first time, c) for several time with deionized water and d) being treated by 0.1 mol  $L^{-1}$  APS and d) the final product of MBene (Mo<sub>x</sub>B<sub>y</sub>) powder.



Figure S2 X-ray photoelectron survey spectroscopy of MBene-620

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| Elt. | Line | Intensity (c/s) | Atomic (%) | Conc.   |
|------|------|-----------------|------------|---------|
| В    | Ka   | 29.56           | 26.239     | 4.160   |
| Na   | Ka   | 6.49            | 0.851      | 0.287   |
| Al   | Ka   | 75.19           | 6.394      | 2.530   |
| Cl   | Ka   | 0.00            | 0.000      | 0.000   |
| K    | Ka   | 1.07            | 0.112      | 0.064   |
| Cu   | Ka   | 3.15            | 0.978      | 0.911   |
| Мо   | La   | 851.63          | 65.426     | 92.048  |
|      |      |                 | 100.000    | 100.000 |

Table S1 Analysis report of EDS results for the sample of MBene



Figure S3 SEM images of a~b) MBene-600, b-d) MBene-640 and e~f) MBene-660