**Supplementary Information**

**Composites of In/C hexagonal nanorods and graphene nanosheets for high-performance electromagnetic wave absorption**

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Fig. S1. XRD patterns of (a) In-MOFs and (b) In/C nanorods derived from In-MOFs at 450, 500, and 550°C.

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Fig. S2. Raman spectra of In/C nanorods derived from In-MOF at 450, 500, and 550°C.



Fig. S3. XPS survey spectra of (a) In/C-Gr-4 composite; high resolution spectra of (b) C 1s, (c) In 3d, and (d) O 1s.

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Fig. S4. SEM images of In/C nanorods derived from In-MOFs under (a) 500°C and (b) 550°C.

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Fig. S5. Impedance matching ratio | Zin/Z0 | of (a) In/C, (b) In/C-Gr-6, (c) In/C-Gr-4, and (d) In/C-Gr-2 with various thicknesses.