Electronic Supplementary Information for
Reduced Graphene Oxide Decorated with Octahedral NiS$_2$/NiS Nanocrystals: Facile Synthesis and Tunable High Frequency Attenuation

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| Name  | Atomic % |
|-------|----------|
| Ni 2p | 7.66     |
| S 2p  | 11.67    |
| C 1s  | 80.67    |

Table S1. The atomic percentage of Ni, S and C measured by XPS

**Fig. S1** (a) Raman spectrum of GO and S2-S4; (b) The EDS spectrum of NiS$_2$/NiS nanocrystals.
**Fig. S2** Frequency dependence on dielectric loss for S1-S5 with loading content of (a) 5 wt% and (b) 15 wt%.

**Fig. S3** Attenuation constant of the S1-S5 with loading content of (a) 5 wt% and (b) 15 wt%.