

Fig. S1. Stress-strain curves of CR-3 aerogel under different degree (30%, 40%, 50%) of compress.



Fig. S2. TEM images of CR aerogel at different magnifications.



Figure S3. SEM images of PCR aerogels at different magnifications.

Supporting Information



Figure S4. Real (a) and imaginary (b) permeability of CR-1, CR-2, and CR-3.



Figure S5. Cole-Cole curves of CR-1 (a), CR-2 (b), and CR-3 (c).



Figure S6. Electrical conductivity values of CR-1, CR-2, and CR-3.



Figure S7. Comparison of maximum *RL* values and effective absorption bandwidth between as-prepared aerogels in this work and some repoted rGO-based composite absorbers.



Fig. S8 Thermal imaging of CR aerogels placing at heaters with rising heating temperatures (upper left: CR-3; left bottom: CR-1; right: CR-2).