Supporting Information

Excellent microwave absorption properties based on the composite of one dimensional Mo_2C@C nanorods and PVDF matrix

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As shown in Figure S1, one can see that these Mo_2C@C composites display two weight loss regions due to the removal of physically absorbed water (before 100 °C) and final oxidation of product under high temperature air atmosphere (after 500 °C). It is calculated that the relative contents of Mo_2C and C in Mo_2C@C are 94.4 and 5.6 wt%, respectively.

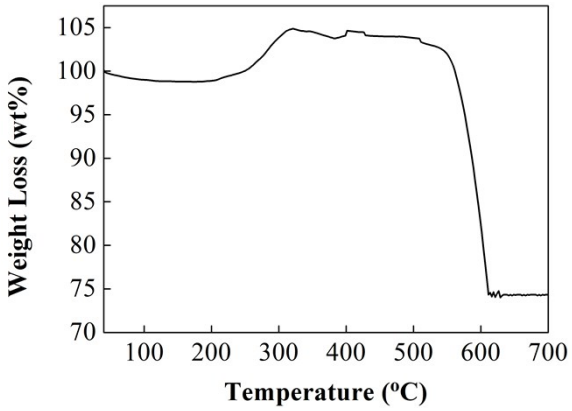

Figure S1. TG curves of Mo2C@C nanorods under air atmosphere

As presented under the yellow line, the effective absorption frequency (RL less than -10 dB) almost covers the half of measured frequency with any filler content.

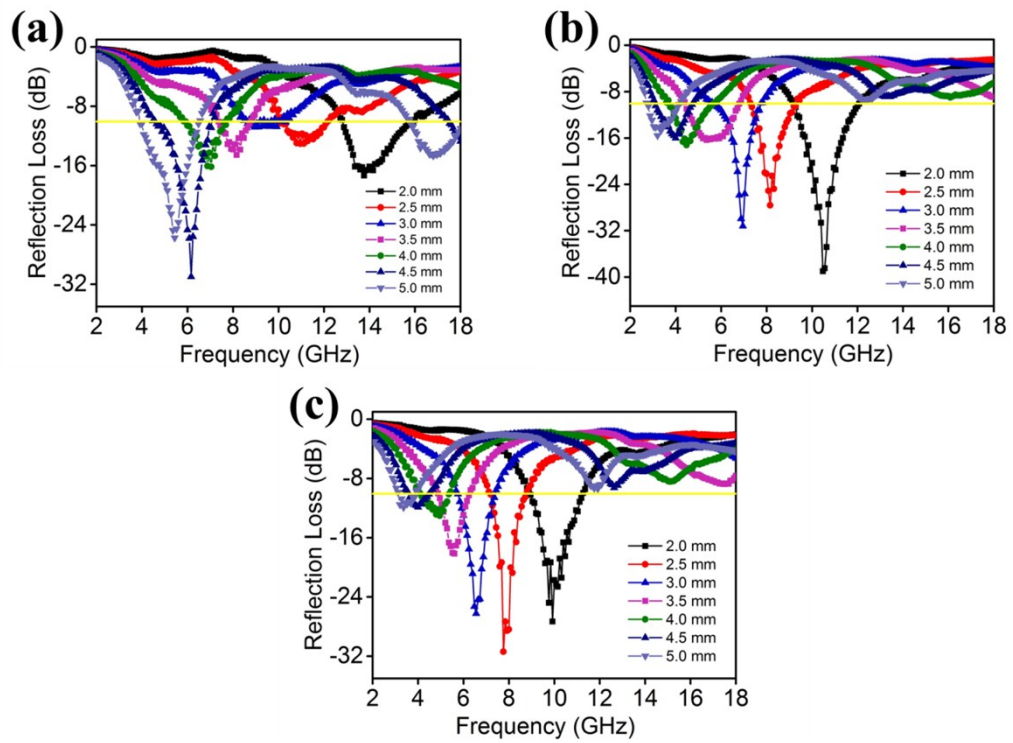

Figure S2. The RL curves of (a) 5 wt%, (b) 10 wt%, (c) 15 wt% Mo_2C@C/PVDF in the thickness of 2.0-5.0 mm.

Two Cole-Cole semicircles are stood out by blue lines as below.

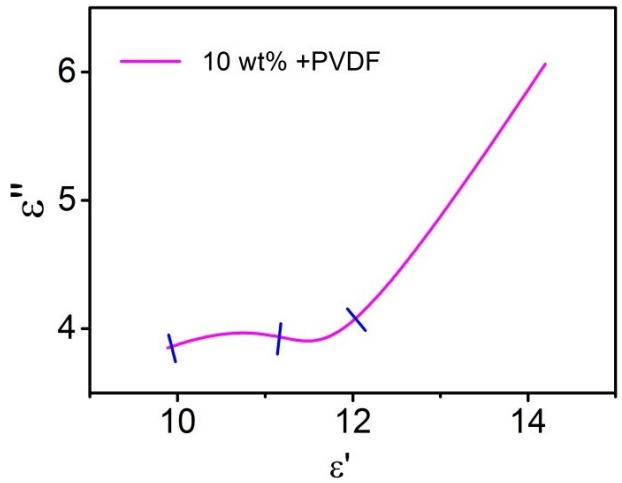

Figure S3. The corresponding plots of ε' versus ε'' for 10 wt% Mo_2C@C/PVDF.