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Large Area DC Plasma Filter for Antenna SHEN SHOU MAX CHUNG, Southern Taiwan University — Antenna often represents the largest radar cross section (RCS) source in many vehicles, and it is challenging to reduce the RCS without affecting the functionality of the antenna. Plasma as an electromagnetic wave absorber provides an interesting option for this application. We design a DC plasma screen with wire electrodes, and calculate the radar signal absorption capability in various frequencies. The results is a combined effect of the wire electrode array that is used to generate the plasma and the plasma dispersion relation.

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