

Abstract

The Solar Probe Shield/Antenna Materials Characterization

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This paper considers the process to select the shield/antenna material that will satisfy the design requirements of the Solar Probe mission to the sun. A joint **Us.** - French testing program was devised that would screen samples of carbon-carbon to determine the fabrication process of the material that would produce the best thermal-optical properties, lowest mass loss, and best RF properties at the high temperatures during the shield operation. From the test results we have selected a fabrication process for the shield materials. In addition, the results will add new information to the high temperature knowledge base of carbon-carbon materials.

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