

# RADIATION PROPERTIES OF A MATRIX WITH THE CERAMIC COATING

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**Abstract:** The experimental studies of radiation properties of metal foam matrix with ceramic coating from alumina and without any coating have been carried out. The intensity of the integral radiation flux from the matrix was measured by pyrometric sensors IRA710ST1 in the spectrum from visible up to 14  $\mu\text{m}$  and by IRA-E420S1 in the spectrum from 5 up to 14  $\mu\text{m}$ . It is shown that the matrix with ceramic coating is not inferior in radiation efficiency to the matrix without any coating and exceeds it noticeably at specific power above 50  $\text{W}/\text{cm}^2$ .

**Keywords:** burning devices; matrix; radiation

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