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Scattering indicatrix for absorbing porous medium with dark modes

Abstract

A mathematical model for calculation of the scattered radiation by a highly absorbing porous medium with dark modes is proposed. The contribution of the scattered light from two areas with the same slope was taken into account. It is shown that the previously discovered anomalous retroreflection phenomenon can be observed only in the case when in the porous material the interface between the medium and the vacuum is maintained.