



2017, Volume 36, Number 16, p. 3227-3229

“Dark” modes backscattering as possible rationale for anomalous retroreflection from strongly absorbing porous nanostructures

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https://doi.org/10.1142/9789813224537_0006

Abstract

The previously discovered anomalous retroreflection in a strongly absorbing nanostructured medium is explained by using “dark” and “bright” modes. The consideration provides rationale not only for the retroreflection itself but explains correlations with absorption and differences for s- and p-polarized radiation retroreflection.