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Multi-Grid Monte Carlo Method for Radiative Transfer in
Multi-Dimensional Graded Index Media with Diffuse-Specular-Gray
Boundaries

S.M. Hosseini Sarvari

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Highlights

- The Monte Carlo method is used to solve the radiation in multi-dimensional graded index media.
- Cell-based discrete ray tracing procedure through a multi-grid approach is used for ray tracing.
- An efficient blocked-off strategy is applied to simulate complex geometries.
- The effects of diffuse and specular reflectivities are considered.
- The present method is verified by comparing its results with benchmark solutions.
- Some examples show the great performance of the method in multi-dimensional geometries.

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