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Modelling mass diffusion for a multi-layer sphere immersed in a semi-infinite medium: application to drug delivery

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Highlights

- Mass diffusion in a composite sphere immersed in a semi-infinite medium is simulated
- The model accounts for a finite mass flux resistance at the outer layer of the sphere
- A closed-form solution in each concentric layer is presented for both desorbing and absorbing spheres
- Effect of pertinent parameters on concentration and drug mass profiles is analyzed

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