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Unsteady non-Newtonian blood flow through a tapered overlapping stenosed catheterized vessel

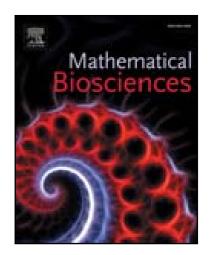
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Highlights

- A mathematical study is presented for unsteady pulsatile flow of blood through a tapered overlapping stenosed catheterized vessel.
- Magnetic field is taken into account.
- The taperness of artery is considered in the present analysis. The rheology of blood is described by the constitutive equation of Carreau model.
- The combined effects of the non-Newtonian rheology of blood, the vessel tapering, the severity of stenosis and catheterization on blood velocity and flow rate are analyzed in detail.
- The flow patterns illustrating the global behavior of blood are also presented.

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