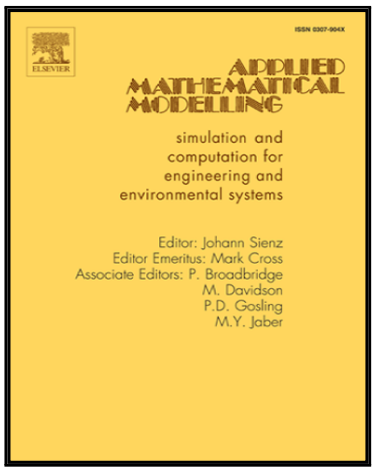

A piecewise model of virus-immune system with effector cell-guided therapy

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Highlights

- We proposed a piecewise model with particular focus on the effector cell-guided therapy.
- The sliding domain and the sliding dynamics of the model have been investigated.
- The global dynamics of the model was discussed using analytical technique of Filippov system.
- Proper combination of threshold and initial values can preclude HIV virus exceptionally growing.
- The controllable region can be extremely enlarged with appropriate conditions.