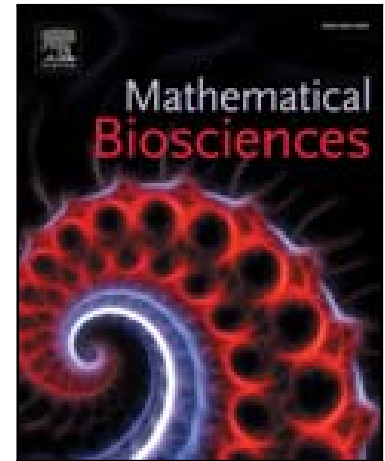


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A differentiable reformulation for E-optimal design of experiments in nonlinear dynamic biosystems

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Highlights

- Reformulation strategy for minimum eigenvalue maximization in optimal experiment design
- Nonlinear matrix inequality is enforced by Sylverster's criterion
- Introduction of nonlinear constraints to ensure positive semidefiniteness
- Strategy can be used in standard solvers for dynamic optimization
- Illustrated with case study from the field of predictive microbiology

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