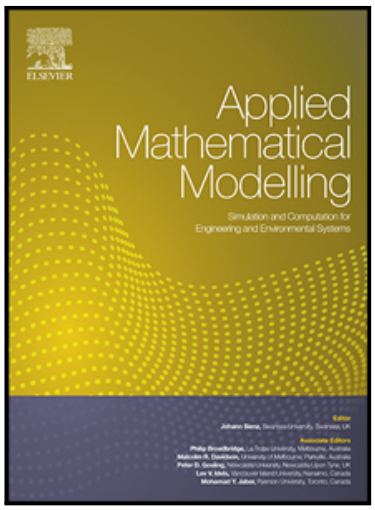

A Krylov subspace method based on multi-moment matching for model order reduction of large-scale second order bilinear systems

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Highlights

- A new second order Krylov subspace method is proposed for model order reduction of large-scale bilinear systems.
- The corresponding multi-moment matching for model order reduction of large-scale second order bilinear systems is derived.
- The main characteristics such as symmetry and positive definiteness of the mass and stiffness matrices are preserved.
- To show the efficacy of the presented method, an electrostatically actuated micro-device is considered as a case study.