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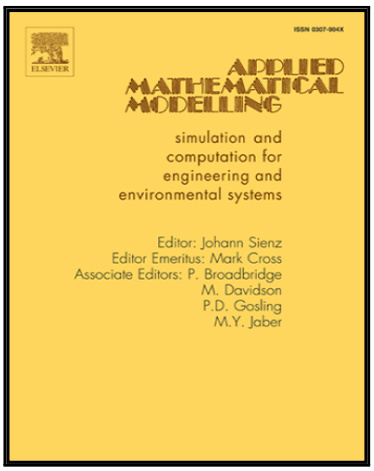

Lattice Boltzmann model for a generalized Gardner equation with time-dependent variable coefficients

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Highlights

- A lattice Boltzmann model for variable-coefficient Gardner equation is derived.
- The effects of the free parameters induced in our model are discussed in detail.
- Different types solutions for vc-Gardner equation have been simulated.
- Numerical solutions agree well with analytical solutions.

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