Blow Up of Solutions for a System of Nonlinear Viscoelastic Equations with Damping Terms in $\mathbb{R}^n$

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We consider a coupled system of nonlinear viscoelastic equations with linear damping and source terms. Under suitable conditions of the initial data and the relaxation functions, we prove a finite-time blow-up result with vanishing initial energy by using the modified energy method and a crucial lemma on differential inequality.