



Some Methods of Numerical Solutions of Singular System of Transistor Circuits

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Abstract:

In this paper, observer design in generalized state space also known as singular system of transistor circuits is solved using the Differential transform method (DTM) and the Picard iterative technique (PIT). The numerical results obtained via these methods converge rapidly to their associated exact solutions upon comparison. It is obvious that these results are in excellent agreement with those already in literature via other numerical methods. However, the DTM reveals the ease of application and fewer computations compared to other numerical methods. Whereas, the PIT requires the Lipschitzian continuity condition to be satisfied.

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