عنوان مقاله:

On differential-integral optimal control problems

محل انتشار:

تعداد صفحات اصل مقاله: 12

نویسنده:

Mohammed Shehata – Department of Basic Science, Bilbeis Higher Institute For Engineering, Sharqia, Egypt

خلاصه مقاله:

In this paper, we will study the optimal control problem of a system containing a differential integral (D-I) operator. We will deduce the necessary optimality conditions and apply it first to the problem of minimum energy to find the lowest energy for an electrical circuit containing a resistor, a coil and a capacitor (RLC circuit), and second to the problem of the minimum time to transfer electrical current in RLC circuit from one state to another in the shortest possible time.

کلمات کلیدی:

optimal control, differential-integral equations, minimum energy problem, minimum time problem

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/2087853