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Fractional-Order Circuits and Systems

Guest Editor:

Dr. Todd Freeborn

Electrical and Computer Engineering, The University of Alabama, 3016 SERC, Tuscaloosa, AL 35487, USA

Deadline for manuscript submissions: closed (31 January 2021)

Message from the Guest Editor

Dear Colleagues,

The field of fractional-order circuits and systems refers to a class of electronics that incorporate concepts from fractional calculus into their modeling and design. These concepts, focused on non-integer order differentiation and integration mathematical operations, are being explored across many fields of science and engineering.

The focus of this Special Issue is to continue to advance research on topics relating to the theory, design, implementation, and application of fractional-order circuits and systems. Topics that are invited for submission include (but are not limited to):

- Fractional-order circuit theory;
- Fractional-order filter and oscillator designs and realizations;
- Fractional-order control systems and implementation;
- Digital and analog approximations for realization of fractional-order systems;
- Active and passive designs of fractional-order elements;
- Applications of fractional-order circuit models for biology and biomedicine;
- Applications of fractional-order circuit models for energy storage elements.



