

Accepted Manuscript

Analytical and numerical solutions of electrical circuits described by fractional derivatives

J.F. Gómez-Aguilar, H. Yépez-Martínez, R.F. Escobar-Jiménez, C.M. Astorga-Zaragoza, J. Reyes-Reyes

PII: S0307-904X(16)30300-6
DOI: [10.1016/j.apm.2016.05.041](https://doi.org/10.1016/j.apm.2016.05.041)
Reference: APM 11194

To appear in: *Applied Mathematical Modelling*

Received date: 22 August 2015
Revised date: 20 May 2016
Accepted date: 25 May 2016

Please cite this article as: J.F. Gómez-Aguilar, H. Yépez-Martínez, R.F. Escobar-Jiménez, C.M. Astorga-Zaragoza, J. Reyes-Reyes, Analytical and numerical solutions of electrical circuits described by fractional derivatives, *Applied Mathematical Modelling* (2016), doi: [10.1016/j.apm.2016.05.041](https://doi.org/10.1016/j.apm.2016.05.041)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Highlights

- Developed new fractional models of electrical circuits RC, RL, RLC, power electronic devices and nonlinear loads.
- Obtained analytical and numerical solutions of fractional models.
- To keep the dimensionality an auxiliary parameter σ is introduced.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/5471460>

Download Persian Version:

<https://daneshyari.com/article/5471460>

[Daneshyari.com](https://daneshyari.com)