



CALL FOR PAPERS
IEEE Latin America Transactions
Special Issue on
Fighting against COVID-19: Scientific and Technological Solutions from
Engineering

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) was first detected worldwide in Wuhan, capital of Hubei province, China on November, 2019, reported officially on December 31, 2019 and recognized as a global pandemic on March 11, 2020. By April 19, 2020, more than 2.24 million infected and more than 152,000 deaths were confirmed in 185 countries. In Latin America, 35 countries have reported confirmed cases and about 4,391 deaths have been detected, being Brazil the most affected country, followed by Ecuador, Chile, Peru and Mexico. Moreover, the death rate in Latin America duplicated during week 12-19 April, 2020, which constitutes the highest amount reached until now. Given this growing situation, it is necessary to promote effective and timely solutions in Latin America to face this global pandemic.

The purpose of this special issue is to provide a forum for interested readers from the areas of **(Electric) Energy, Computing and Electronics**, to share solutions to face the problems related to the COVID-19 pandemic. Accordingly, we encourage to researchers and practitioners to submit their latest unpublished work, particularly those developments from research groups in Latin America. The areas of interest include both theory and applications on the following topics (not limited to):

- Virus life, behavior and dissemination modelling
- Temporal and geographic virus dissemination modeling
- Prediction of number of cases and deaths
- Software development to reach reliable public & government coordination (notification of suspect cases, notification of deaths)
- Logistics applied to supply of medicines, food, water, etc
- Logistics and software development for corpses recollection, cremation and handling.
- Fast diagnosis methodologies
- Ventilator design and improvement
- Software development for hospital coordination for the attention of patients.
- Fast and reliable medical equipment design and construction
- Solution for worst-case scenarios: interrupted energy supply, interrupted or overpassed health care services, etc.
- Artificial Intelligence(AI) applied to policies design and development for worst-case-scenarios
- Medicine/treatment AI- based design
- Other technological solutions for medical treatment and diagnosis
- Computational systems for monitoring, detection, classification, etc.
- Sensor development
- Development of control and AI-based strategies to avoid virus dissemination

Technological solutions regarding software as well as development and construction of medical devices, the authors are advised that they must provide detailed information in order their paper to be published; this has as an end to ensure the technology would be transferred effectively to Latin America (e.g. source code of software, detailed electronic and mechanical design plans). This information should be provided via a link embedded in the text of the manuscript. In these cases, authors must present theoretical and practical evidence that the software/device is working.

Papers that are contributing or potentially providing an immediate or mediate effective solution to combat SARS-CoV-2 and that, therefore, contribute to the reduction of the fatal effects of this disease in Latin America will be accepted for review.

Call for papers: April 21, 2020.
Submissions deadline: **May 15, 2020.**
Notification of acceptance: August 15, 2020.
Final Manuscript Due: August 30, 2020.
Publication date: September 2020.

Authors must submit all their original manuscripts electronically through the <https://www.inaoep.mx/~IEEElat>. Papers submitted should not be considered for publication in other journals or be part of conference proceedings. Authors can find the guidelines for the preparation and submission of their work at <https://www.inaoep.mx/~IEEElat/index.php/transactions/about/submissions>

Guest Editors:

Humberto Sossa, CIC-IPN, Mexico. humbertosossa@gmail.com,
Hiram Ponce, Universidad Panamericana, Ciudad de México, México. hponce@up.edu.mx,
Gabriela Hoff, Clínicas Hospital of Porto Alegre ,Brazil, ghoff.gesic@gmail.com

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