

2nd IEEE International Conference on Emerging Smart Computing and Informatics, ESCI-2020, 12-14 March 2020



Call for Papers

Session Title: Advancements in Quantum dot Cellular Automata Nano-computing

Session Chair: Dr. Suhaib Ahmed, Assistant Professor, Baba Ghulam Shah Badshah University, Rajouri, Jammu & Kashmir, India

Abstract: CMOS-VLSI technology is facing serious challenges such as high power consumption, threshold voltages, thermal runaway and high leakage current. ITRS (International Technology and Roadmap for Semiconductors) has led to significant efforts to find appropriate alternatives to these challenges. Emerging nanotechnologies seems a good competition for future generation digital systems. In this direction, Quantum-Dot Cellular Automata (QCA) is one of the promising technology. Quantum-dot Cellular Automata (QCA) is a newly developed paradigm for digital design and offers a breakthrough required for the fulfilment of certain lacking aspects of CMOS technology in the nano regime. Since the technology is new and in the premature phase a lot of scope lies ahead of researchers to take the designing using QCA to a commercial level. This Special Issue aims to solicit original research papers, as well as review articles, with a focus on theoretical approaches, numerical simulations and experimental studies on QCA devices for various novel applications.

Topics of Interest: Original and unpublished papers are invited in the following topics and not limited to:

- Combinational and Sequential Circuit Designing in QCA
- Fault Tolerant Designing and Testing in QCA
- Reversible Logic in QCA
- Design of Memories etc. in QCA
- Application of QCA in Communication, Image Processing, etc.

Paper Submission Process: Please submit your paper (in word/pdf format) at email: <u>sabatt@ieee.org</u>, with Name of Special Session mentioned in the subject line.

Contact Details:	Mob.:	+91-9018807158
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Important Dates:

- Last Date of Paper Submission: November 30, 2019
- Notification of Acceptance: December 30, 2019
- Registration: January 15, 2020
- Camera Ready Copy January 15, 2020

Publication

All accepted and registered papers of this special session will be published in IEEE Explore.

IEEE Xplore Digital Library. IEEE Conference Record Number: #48226

Submission Guidelines

As per IEEE Guidelines

Registration

Please visit conference webpage for registration and other details: https://aissmsioit.org/esci2020/