

Call for Papers

----- Special Section on Multiple-Valued Logic and VLSI Computing -----

The IEICE Transactions on Information and Systems announces that it will publish a special section entitled "Special Section on Communication Quality" in August 2021.

Recent development of System-on-Chip (SoC) technology has been accelerated by device scaling which drives improved performance and power, high functionality and cost reduction. However, there occur unprecedented serious problems today at very small device feature sizes. To solve the problems, innovative new-concept VLSI computing technology such as multiple-valued VLSI computing is strongly expected to be developed. Also, logic design based on a multiple-valued concept, multiple-valued algebra and soft computing are expected to be effectively employed for the next-generation digital computing and artificial intelligent applications. From this point of view, we have planned Special Section on Multiple-Valued Logic and VLSI Computing to be published in August 2021. To discuss the same frontier area, the 50th IEEE International Symposium on Multiple-Valued Logic (ISMVL2020) was held in May 2020 in Miyazaki, Japan. We solicit for submission of the papers on multiple-valued logic and VLSI computing, not limited to the presented papers in the ISMVL2020. We welcome demonstration of the recent development of novel and new-concept computing technology.

1. Scope

This special section aims at timely dissemination of research in these areas. Possible topics include, but are not limited to:

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|-----------------------------------|--------------------------------------|----------------------------------|
| - Multiple-Valued Algebra & Logic | - Spectrum Technique | - New Memory-Based Architecture |
| - Fuzzy Logic | - Multiple-Valued logic applications | - Soft computing applications to |
| - Soft Computing | to Big data/Data mining | Intelligent Medical and Welfare |
| - Quantum Computing | - New-Concept VLSI Architecture | Engineering |
| - Logic Design & Switching Theory | - Multiple-Valued VLSI Computing | - Applications to Security |
| - Test & Verification | - Nanodevice | |

2. Submission Instructions

- A manuscript should be prepared according to the guideline given in "The Information for Authors" (https://www.ieice.org/eng/shiori/mokuji_iss.html). We encourage the authors to use the IEICE Style File (<https://www.ieice.org/ftp/index-e.html>). The preferred length of the manuscript is 8 pages for a PAPER and 2 pages for a LETTER with the format determined by the IEICE Style File.
- Submit the manuscript through the IEICE Web site (https://review.ieice.org/regist/regist_baseinfo_e.aspx). Choose "[Special-LO] Multiple-Valued Logic and VLSI Computing" in the menu of "Journal/Section" in the submission page. Do not choose "[Regular-ED] Information and Systems" or other special sections.
- Authors must agree to the "Copyright Transfer and Page Charge Agreement" via electronic submission.
- Submission deadline of the manuscript is ~~Aug. 28, 2018~~ **Sep. 11, 2020** (extended!).

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3. Special Section Editorial Committee

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*** Upon accepted for publication, all authors, including authors of invited papers, should pay the page charges covering partial cost of publication around April 2021. If payment is not completed by May 15, 2021 your manuscript will be handled as rejection.**

* The standard period of 60 days between the notification (of conditional accept) and the second submission can be shortened according as the review schedule.

* At least one of the authors must be an IEICE member when the manuscript is submitted for review. Invited papers are an exception. We recommend authors unaffiliated with IEICE to apply for the membership (<https://www.ieice.org/eng/join/member.html>).

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