

Call for Papers

----- Special Section on Brain Communication -----

The IEICE Transactions on Communications announces a forthcoming section on Brain Communication to be published in **July, 2008**.

Recent progress in brain science, especially in non-invasive methods, has enabled quantitative evaluation of human behavior and operation of electronic communication devices by direct brain-derived signals. Neural activities in cerebral cortex and peripheral nerves have been analyzed using imaging techniques, providing us with several models associated with human recognition and action. These advancements have lowered the barrier to realize the seamless communication between human and machine.

In view of these circumstances, an interdisciplinary and comprehensive approach incorporating basic research is important to develop future brain-communication networks and to facilitate human communication effectively. The approach should include biosignal-based communication network technology, novel intelligent device technology, and preference-based neuromarketing technology. This special section on Brain Communication is planned to review and mine for relevant research in the IEICE Transactions on Communications (EB) to be published in **July, 2008**.

We call for papers that contribute to facilitation of present communication and creation of future communication technology. Acceptable topics include, but are not limited to:

- multiunit recording and analysis technology and its applications to interface
- brain-machine interface and neural prosthesis
- brain functional imaging and signal processing techniques
- memory and learning models in cerebral cortex and its application to information communication
- analysis of human behavior and its application to information communication engineering
- neurodecoding and its application to communication
- sensor technology and biomechanics
- network management and control incorporating brain computation
- biofeedback control in biomechanical system
- communication of thoughts and
- sensor network and its fusion technology
- neuroinformatics and retrieval methods

Prospective authors are requested to prepare a manuscript according to the guideline given in the "Information for Authors." Its latest version is available at the web site, http://www.ieice.org/eng/shiori/mokuji_cs.html. It is recommended that the length of a paper and a letter for this special section are within 8 and 2 pages, respectively. The deadline for submission is **November 10, 2007**.

This special section will accept papers only through electronic submission. The prospective authors are requested to follow carefully the submission procedure described below.

1. Submit the paper at the IEICE Web site https://review.ieice.org/regist_e.aspx. The acceptable format of the file is **PDF**. Authors should choose the [Special-EB] **Brain Communication** as a "Type of Issue (Section)/Category of Transactions" on the online screen. **Do not choose [Regular-EB]**.

2. Send "Copyright Transfer and Page Charge Agreement" and "Confirmation Sheet of Manuscript Registration" to the address below by postal mail (**NOT by FAX or E-mail**) no later than November 10, 2007.

Please do not forget to send "Copyright Transfer and Page Charge Agreement" and "Confirmation Sheet of Manuscript Registration". We cannot start the review process without them, even if we have received the manuscript.

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* Please note that if accepted, all authors, including the authors of the invited papers, are required to pay for the page charges covering partial cost of publication. Authors will receive 50 copies of reprints.

* At least one of the authors must be an IEICE member when the manuscript is submitted for review, except for invited papers. We recommend that authors unaffiliated with IEICE apply for membership. For membership applications, please visit the web-page, <http://www.ieice.org/eng/member/OM-appli.html>.