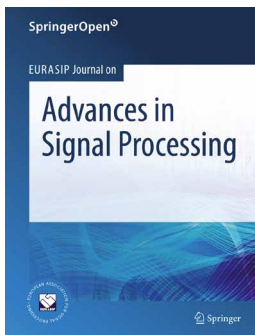


EURASIP Journal on Advances in Signal Processing

Special Issue on
Coding and Signal Processing for
Non-volatile Memories

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As the density of semiconductor memories continues to grow, the applications for the solid state drives (SSDs) with Flash memory keep increasing with an impressive pace thus attracting more attention from academic research and industry. Also, newly emerging memory technologies, such as PRAM, are competing in the non-volatile role with the Flash memory. These high density memories demand different strategies in reading, writing, and erasing data blocks, and they need to incorporate advanced techniques to compensate for low signal to noise ratio and threshold drift in cell sensing.

The main focus of this special issue will be on the new coding, signal processing, and error correcting technologies for reliability improvement and density increase of Flash and other emerging memory technologies. The topics to be covered include, but not limited to:

- ▶ Coding for non-volatile memories - rewriting codes, WOM codes, rank modulation, etc.
- ▶ Signal processing for interference cancellation, noise reduction, and threshold drift compensation in memory cell sensing
- ▶ Wear leveling for reliability improvement
- ▶ Error correction coding techniques and implementation- arithmetic, turbo product, and LDPC codes
- ▶ Memory device modeling to facilitate the evaluation of signal processing and coding techniques
- ▶ Cross-layer memory system design and optimization (e.g., joint optimization of memory devices and signal processing)

Submission Schedule

- ▶ **Manuscript Due:**
April 15, 2012
- ▶ **First Round of Reviews:**
July 1, 2012
- ▶ **Publication Date:**
October 1, 2012

Submission Instructions:

Before submission authors should carefully read over the Instructions for Authors, which are located at <http://asp.eurasipjournals.com/authors/instructions>. Prospective authors should submit an electronic copy of their complete manuscript through the SpringerOpen submission system at <http://asp.eurasipjournals.com/manuscript> according to the submission schedule. They should specify the manuscript as a submission to the “Special Issue on Coding and Signal Processing for Non-volatile Memories” in the cover letter. All submissions will undergo initial screening by the Guest Editors for fit to the theme of the Special Issue and prospects for successfully negotiating the review process.

Lead Guest Editor

Wonyong Sung, Department of Electrical Engineering, Seoul National University, Korea, Email ▶ wysung@snu.ac.kr

Guest Editors

Tong Zhang, Electrical, Computer and Systems Engineering Department, Rensselaer Polytechnic Institute, NY, USA, Email ▶ tzhang@ecse.rpi.edu

Anxiao (Andrew) Jiang, Computer Science and Engineering Department, Texas A&M University, College Station, TX, USA, Email ▶ ajiang@cse.tamu.edu

M. Fatih Erden, Drive Architecture Group, Seagate Technology, Shakopee, MN 55379, USA, Email ▶ Fatih.Erden@Seagate.com