

Special Section on:

Design and Control for Linear Machines, Drives, and MAGLEVs

WITH THE ABILITY to generate direct thrust without any mechanical transmission, the linear machines serve as excellent choice for industrial applications requiring linear motion, such as linear metros, MAGLEVs (see the people transfer system from Longyang Station to Pudong Airport in Shanghai at maximum 400Km/h), servo systems, conveyors, wave-energy generators, series hybrid-electric car generators small compressors, Stirling engine generators, fast action solenoids, loudspeakers, microphones, printers, etc. Due to the special characteristics of linear machines, e.g., the cut-open magnetic circuit, the large air-gap length, the half-filled end slots, the end-effects, engineers face massive challenges in both design techniques and control strategies for high performance linear machines, drives, MAGLEVs, and so on. This special section aims to collect the latest theoretical and technological ideas in the design and control for different kinds of linear machines and drive systems. Advancements in the new linear machine topologies, integrated modelling, multi-objective optimization techniques, and high performance control strategies are of great interest. Manuscripts with both theoretical and practical/experimental results are strongly encouraged.

Editors invite original manuscripts presenting recent advances in these fields with special reference to the following topics:

- ✓ Mathematical modelling of linear machines
- ✓ End-effects and force analysis for linear machines
- ✓ New topologies of linear machines and drive systems with progressive or oscillatory motion
- ✓ New materials and applications for linear machines and drive systems
- ✓ Integrated (multi-physics) modelling and analysis for linear machines, drives, and MAGLEVs
- ✓ Multi-objective optimization techniques for linear machines, drives, and MAGLEVs
- ✓ Advanced control strategies for linear machines, drives, and MAGLEVs
- ✓ Other related topics

Manuscript Preparation and Submission

Check carefully the style of the journal described in the guidelines “Information for Authors” in the IEEE- IES website: <http://www.ieee-ies.org/pubs/transactions-on-industrial-electronics>.

Please submit your manuscript in electronic form through: <https://mc.manuscriptcentral.com/tie-ieee/>.

On the submitting page, in pop-up menu of manuscript type, select: “**Design and Control for Linear Machines, Drives, and MAGLEVs**”, then upload all your manuscript files following the instructions given on the screen.

Corresponding Guest Editor

Dr. Marcello Pucci

Institute on Intelligent Systems for Automation
National Research Council of Italy (CNR-ISSIA)
Palermo, Italy
EMAIL: pucci@pa.issia.cnr.it

Guest Editor

Prof. Wei Xu

School of Electrical and Electronics Engineering
Huazhong University of Science and Technology
Wuhan, China
EMAIL: weixu@hust.edu.cn

Guest Editor

Prof. Ion Boldea

Department of Electrical Machines and Drives
University Politehnica of Timisoara
Timisoara, Romania
EMAIL: ion.boldea@upt.ro

SS Guest Editors email: SSdclmac@ieee-ies.org

Timetable

Deadlines for manuscript submissions:

~~June 30~~, Sep. 11, 2017

Information about manuscript acceptance:

Winter, 2017

Publication Date:

Spring-Summer, 2018