

Special Section on Recent Development of Electro-Mechanical Devices

Recent electronic devices and systems have been making great progress in, for example, digitizing, down-sizing and high signal-rate transmission. For such devices and systems, electro-mechanical devices including electrical contacts as well as electrical and optical signal interconnections are fundamental and critical technical fields and have been continuously improved. Furthermore, in accordance with technical progress from micro-electronics such as MEMS to nano-scale electronics, as well as progress in automotive electronics and DC power distribution, fundamental researches and R&D activities in new aspects for these devices and technologies are being intensively conducted. For environment aspects, developments and researches on Pb-free and Cd-free contact and interconnection materials have been strongly required. Recycle, reuse, and reduce techniques are also important issues for electro-mechanical devices.

Under these circumstances, in order to stimulate R&D activities on the related fields, the International Session on Electro-Mechanical Devices (IS-EMD) has been annually held since 2001, and the Special Section on the IEICE Transactions has been published.

The Special Section on “Recent Development of Electro-Mechanical Devices” will be published on **December 2027**. For this Special Section, all authors in the related fields are prompted to submit their papers.

The topics of interests include the followings, but not limited to:

★Electro-Mechanical Devices & Components

-Micro Electromechanical Systems, Relay & Switch, Electrical & Optical Connector, Human Interface Devices, Electromechanical Transducers and Sensors, Actuator & Small Motor, Arrester & Fuse.

★Materials

-Contact, Spring, Molding, and Other Materials Related to the Electromechanical Devices.

★Technologies

-Electrical Contact, Arc Discharge Phenomena, Tribology, Connection & Inter-connection, Plating, Molding, Metal Machining, Device Mounting & Packaging, Board & Substrate, Optoelectronics, Packaging, and Other Related Technologies.

★Applications

-Compatible Design with Environment, RF-communication and EMC, Pb-Free and Cd-Free Technologies, Recycle Re-use, and Reduce Technologies.

Submission Instructions

The deadline for submission is **January 8, 2027**. This special section will accept only PAPERS and BRIEF PAPERS submitted through electronic submission procedure. Prospective authors are requested to carefully follow the submission process described below.

Submit a paper using the IEICE Web site https://review.ieice.org/regist/regist_baseinfo_e.aspx. Authors should choose the “[*Special-EM*] Recent Development of Electro-Mechanical Devices” as a “Journal / Section” on the online screen. Do not choose “[*Regular-EC*]”.

Inquiries:

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Call for Papers

Important notices:

*Manuscript should be prepared according to the guideline in the “Information for Authors”. The latest version of it is available at the following web site; https://www.ieice.org/eng/shiori/mokuji_es.html.

*A PAPER and a BRIEF PAPER should be within 8 and 4 printed pages, respectively.

* Authors must agree to the "Copyright Transfer and Article Processing Charge Agreement" via electronic submission.

* Upon accepted for publication, all authors, including authors of invited papers, should pay the page charges covering partial the cost of publication around May 2027. If payment is not completed by 15 June 2027, your manuscript will be handled as rejection.

* The accepted papers will be published online soon on the web site of Transactions Online after the payment of page charges has been completed. For detailed information, please visit https://www.ieice.org/eng/shiori/page2_es.html#8

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