SPECIAL CALL FOR STUDENT PAPERS

The best student papers will be considered for possible publication in a special issue of either the IEEE Transactions on Device and Materials Reliability (TDMR), IEEE Transactions on Electron Devices, the Micro-Electronics Reliability Journal, the Journal of Electrostatics, or other appropriate publications.

Students submitting an abstract (first author only) will be eligible for reduced (50% off) Symposium registration fee, and waived fees to all Symposium tutorials.

TRACK 1: EOS/ESD in Manufacturing – Control Materials, Technologies, and Techniques

Parallel TRACK 2: On-Chip ESD Design, including System Level ESD, Testing, and ESD Case Studies

Submission Deadline: March 5, 2018

EOS/ESD in Manufacturing Track

For the second year, “EOS/ESD in Manufacturing” offers a full track of activities dedicated to EOS/ESD in manufacturing - control materials, technologies and techniques. This manufacturing track focuses on a combination of full technical papers, short papers, poster presentations, invited papers, discussion groups and workshops, hands-on demonstration sessions, and practical demonstrations of equipment by current exhibitors.

The Call for Papers describes the new offerings and submission requirements. Each abstract submission selects the track, format, and suggested area using the abstract toolkit available on the EOS/ESD Association, Inc. website www.esda.org.

Parallel Track Options are:

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EOS/ESD Symposium SPECIAL CALL FOR STUDENT PAPERS

Track: 1. EOS/ESD in Manufacturing – Control Materials, Technologies, and Techniques
Parallel Track: 2. On-Chip ESD Design, including System Level ESD, Testing, and ESD Case Studies
Submission Deadline: March 5, 2018

About the EOS/ESD Symposium
EOS/ESD Association, Inc. is sponsoring the 40th Annual Symposium on Electrical Overstress (EOS) and Electrostatic Discharge (ESD) effects. The Symposium is dedicated to the understanding of issues related to electrostatic discharge and electrical transients / overstress, and the application of this knowledge to the solution of problems in consumer, industrial, and automotive applications, including electronic components and manufacturing, as well as in systems, subsystems, and equipment.

Papers/Contributions
The Technical Program Committee solicits symposium contributions, including data and analysis that advance the state-of-the-art knowledge, enhance or review the general knowledge, or discuss new topics related to EOS/ESD.

Electronic Submissions
Abstract submissions shall be made electronically via an emailed PDF file to info@esda.org. One file for each submission is required.

Deadlines
The abstract submission deadline is Monday, March 5, 2018. Abstracts not meeting guidelines may not be accepted. The final submission deadline for the finished papers is Friday, June 8, 2018. ESDA reserves the right to withdraw any paper or presentation that does not meet the guidelines, including deadlines. Your paper MUST be submitted by the deadline. Final full technical papers will be limited to a maximum of 10 pages - guidelines will be provided after acceptance of the paper.

Paper Acceptance
The Technical Program Committee accepts unpublished papers for peer review with the understanding that the author will not publish the work elsewhere prior to presentation at the Symposium. Presentation of your work at the earlier International ESD Workshop (IEW) or the Symposium for Manufacturing Issues will not preclude your Annual Symposium abstract submission. The submission must follow guidelines and be expanded significantly in the abstract submission for the EOS/ESD Symposium. Publication of accepted papers in any form prior to presentation at the Symposium may result in the paper being withdrawn from the Symposium Proceedings. Authors must obtain appropriate company and government clearances prior to submitting their abstracts.

Paper Awards and Recognition
Awards are presented annually for the Symposium Outstanding Paper (selected by Symposium attendees), the Best Paper (selected by the Technical Program Committee), and the Best Student Paper. The Best Paper is considered for presentation at the RCJ EOS/ESD Symposium in Japan. The Outstanding Paper is considered for presentation at the ESD Forum in Germany. Eligible student contributions for the Best Student Paper Award should be marked as such by the authors at the time of abstract submission.

Accepted papers covering selected topics may be considered for review for invited publications in IEEE Transactions on Device and Materials Reliability (TDMR), IEEE Transactions on Electron Devices, the Microelectronics Reliability Journal, the Journal of Electrostatics or other appropriate publications.

Sponsored by EOS/ESD Association, Inc. in cooperation with IEEE. Technically co-sponsored by the Electron Devices Society.
A. Full Technical Paper
Authors must submit a maximum 50 word abstract and 4-page maximum summary of their work. The summary must clearly state the purpose, results (e.g., data, diagrams, photographs, etc.), and conclusions of the work. Summaries must also include references to prior publications and state how the work enhances existing knowledge. Authors suggest the appropriate technical area related to their submission. Authors are required to use the abstract submission toolkit available on the EOS/ESD Association, Inc. website www.esda.org.

B. Short Technical Paper or White Paper with Presentation of Case Studies
Authors must submit a maximum 50 word abstract and 2-page maximum summary of their work. The summary must clearly state the purpose, results (e.g., data, diagrams, photographs, etc.), and conclusions of the work. Summaries must also include references to prior publications and state how the work enhances existing knowledge. Authors suggest the appropriate technical area related to their submission. Authors are required to use the abstract submission toolkit available on the EOS/ESD Association, Inc. website www.esda.org.

C. Poster Session
Authors must submit abstracts in the form of a short PowerPoint presentation. After the title slide, the second slide of the presentation should describe the objective and significance in a maximum 200 word summary. The abstract presentation should not exceed 5 additional slides; with representative data and figures that will be the foundation for the longer poster maximum of 24 slides that you plan to present. A formal five minute presentation is given by each author followed by the poster session. Authors are required to use the abstract submission toolkit available on the EOS/ESD Association, Inc. website www.esda.org.

D. Workshops and Discussion Groups
Proposals for workshops and discussion groups must be submitted with an abstract describing the proposal. The abstract toolkit is used to indicate participation as a workshop moderator or committee participant. Workshops address fundamentals and generally accepted techniques. Topics consider present and future challenges and solutions to problems. Discussion Groups address EOS/ESD novel ideas. Ideas consider new developments or common myths dispelled. The discussion should encompass some provocative points of view.

E. Hands-on Demonstration Sessions
Proposals for hands-on demonstrations of measurement techniques must be submitted with an abstract defining the presentation and measurement. Authors complete a presentation describing the measurement technique followed by a hands-on station for attendees to perform the measurement as described. Application, limitations, and common pitfalls should be discussed. Authors are required to use the abstract submission toolkit available on the EOS/ESD Association, Inc. website www.esda.org. (Note: ESDA does not provide equipment).

Track 1 Suggested Submission Areas:
- ESD Packaging and Handling Procedures
- EOS/ESD Detection and Measurement Techniques
- ESD Facility Design, Mitigation in Test and Manufacturing; Ionization
- Manufacturing EOS/ESD Case Studies, Reviews and Analysis
- EOS/ESD Process Assessment
- ESD Control Materials and Use of Antistatic Materials
- ESD Issues in 2.5D & 3D Stacking and TSV
- Control Program Topics (Cost/Benefit Analysis, training, etc.)
- ESD control in Graphic Arts, Explosives & Pyrotechnics, Oil/Petroleum/Biomedical/Chemical Industry
- Standards – Comparison and Analysis

Contact information for questions or further information:

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EOS/ESD in Manufacturing Chairs: Wolfgang Stadler, Intel Deutschland GmbH; Michelle Lam, IBM
Papers / Presentations for Track 2. On-Chip ESD Design track, including System Level ESD, ESD Testing, ESD Case Studies are solicited in the following areas:

A. Full Technical Paper Submission
Authors must submit a maximum 50 word abstract and 4-page maximum summary of their work. The summary must clearly state the purpose, results (e.g., data, diagrams, photographs, etc.), and conclusions of the work. Summaries must also include references to prior publications and state how the work enhances existing knowledge. Authors suggest the appropriate technical area related to their submission. Authors are required to use the abstract submission toolkit available on the EOS/ESD Association, Inc. website, www.esda.org.

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Track 2 Suggested Submission Areas:

I. Advanced CMOS (Analog/Digital) EOS/ESD and Latch-up
- ESD Issues in Advanced Technologies (Multi-gate, FinFET, SOI, SiGe, Compound, Graphene, nanowire, etc.)
- On-Chip ESD Protection Devices & Techniques in Advanced CMOS Technologies
- IC Design and Layout Issues

II. ESD Protection in Bipolar, RF, High Voltage and BCD Technologies
- ESD Issues in Bipolar, RF, High Voltage and BCD Technologies and power Technologies (SiC, GaN, etc.)
- On-Chip ESD Protection Devices & Techniques in Bipolar, RF, High Voltage and BCD Technologies
- IC Design and Layout Issues

III. Numerical Modeling and Simulation for On-Chip ESD Protection
- ESD Device TCAD Simulation
- Simulation Tool and Methodology

IV. EOS/ESD Failure Analysis, Troubleshooting and Case Studies
- EOS/ESD Case Studies, Reviews and Analysis
- EOS/ESD Phenomena in MEMS (Microelectromechanical Systems)
- Failure Analysis Techniques and Interpretations

V. Device Testing: Testers, Methods and Correlation Issues
- Transmission Line Pulse Testing Systems
- Novel EOS/ESD Test Methods
- Novel TLP Measurement Results

VI. System Level EOS/ESD/EMC, HMM
- System Level EOS/ESD/EMC Test Methods
- System Level EOS/ESD Modeling and Simulation
- EOS/ESD Simulators, Calibration and Correlation

VII. Chip/Module/Package EOS/ESD Electronic Design Automation
- Novel EOS/ESD EDA Tools
- ESD Checking and Verification Methodology

Contact information for questions or further information:

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