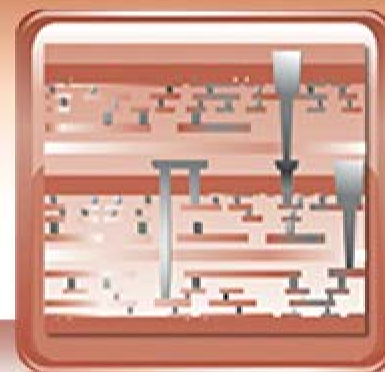
JOURNAL OF ELECTRONIC PACKAGING



Note from the Editor:

Welcome to the September 2016 e-newsletter of The Journal of Electronic Packaging (JEP). The newsletter, issued quarterly, will keep you abreast of the latest research developments in our field. Below you will find an opportunity to publish papers in JEP by March 2017, new review articles, ASE's picks for industry readers, a link to the current issue, a special IMECE issue, information on how to publish IEEE conference papers in JEP, and JEP LinkedIn page. Thank you for taking the time to read this newsletter and please don't hesitate to provide feedback by emailing me at my address below.

Sincerely,

Y.C. Lee

Editor, Journal of Electronic Packaging

y.c.lee@colorado.edu

High quality papers to be reviewed and published in 2016!

There is room for high quality papers to be reviewed and published in **March 2017 JEP issue**. We have established a system that will make sure the initial review of every paper submitted to the journal will be completed in 8 weeks, and excellent papers can be published this year. You are welcome to submit your manuscript.

JEP Review Articles!

Four new review articles are published in the JEP and for a limited time these and other **review articles are available for public access.** The complete list of review articles is posted at http://electronicpackaging.org.

1. Creep Constitutive Models Suitable for Solder Alloys in Electronic Assemblies, Subhasis Mukherjee, Mohammed Nuhi, Abhijit Dasgupta, Mohammad Modarres (University of Maryland), Sept. 2016
2. Recent Advances and New Trends in Flip Chip Technology, John H. Lau (ASM

ASME Electronic and Photonic Division (EPPD)

Events

ASME International Mechanical Engineering Congress & Exposition (IMECE)
November 11-17, 2016
Phoenix Convention Cntr, Phoenix, AZ, USA

Journal of Electronic Packaging - Associate Editors

Mehmet Arik, PhD
Ozyegin University

Mehdi Asheghi, PhD
Stanford University

Satish Chaparala, PhD
Corning Inc.

Pradip Dutta, PhD
Indian Institute of Science

Ashish Gupta, PhD
Intel Corp.

Toru Ikeda, PhD
Kagoshima University

Pacific Technology), Sept. 2016

3. Flow Boiling in Microgaps for Thermal Management of High Heat Flux Micro Systems, Xuefei Han, Andrei Fedorov, Yogendra Joshi (Georgia Institute of Technology), Dec. 2016

4. Measurement Techniques for Thermal Conductivity and Interfacial Thermal Conductance of Bulk and Thin Film Materials, Dongliang Zhao, Xin Qian, Xiaokun Gu, Saad Ayub Jajja, Ronggui Yang (University of Colorado); Dec. 2016

Click here to see the list of review articles published, to be published or to be submitted. Leaders in the field are invited to publish review articles on hot, emerging and fundamental topics. You are welcome to recommend topics and authors through our LinkedIn site.

ASE Picks- Selected Papers

The following are selected articles from recent issues of the *Journal of Electronic Packaging* which is of significant relevance to industry. The JEP Editorial Board extends its appreciation to Dr. Yi-Shao Lai of the ASE Group who selected these papers as a service to our readers. The ASE Group is the world's largest provider of independent semiconductor manufacturing services in assembly and test.

1. Benchmarking Study on the Thermal Management Landscape for Three-Dimensional Integrated Circuits: From Back-Side to Volumetric Heat Removal, Thomas Brunschwiler, Arvind Sridhar, Chin Lee Ong, Gerd Schlottig, J. Electron. Packag. 2016; 138(1):010911. doi:10.1115/1.4032492

2. Identifying the Development State of Sintered Silver (Ag) as a Bonding Material in the Microelectronic Packaging Via a Patent Landscape Study, K. S. Siow, Y. T. Lin, J. Electron. Packag. 2016; 138(2):020804. doi:10.1115/1.4033069

3. Nanothermal Interface Materials: Technology Review and Recent Results, Avram Bar-Cohen, Kaiser Matin, Sreekant Narumanchi, J. Electron. Packag. 2015; 137(4):040803. doi:10.1115/1.4031602

4. Review and Projections of Integrated Cooling Systems for Three-Dimensional Integrated Circuits, Satish G. Kandlikar, J. Electron. Packag. 2014; 136(2):024001. doi:10.1115/1.4027175

5. Experimental Characterization of the Vertical and Lateral Heat Transfer in Three-Dimensional Stacked Die Packages, Herman Oprins, Vladimir Cherman, Geert Van der Plas, Joeri De Vos, Eric Beyne, J. Electron. Packag. 2016; 138(1):010902. doi:10.1115/1.4032346

6. Size-Compatible, Polymer-Based Air-Gap Formation Processes, and Polymer Residue Analysis for Wafer-Level MEMS Packaging Applications, Erdal Uzunlar, Paul A. Kohl, J. Electron. Packag. 2015; 137(4):041001. doi:10.1115/1.4030952

7. Effect of Intermetallic Compounds on the Thermomechanical Fatigue Life of Three-Dimensional Integrated Circuit Package Microsolder Bumps: Finite Element Analysis and Study, Soud Farhan Choudhury, Leila Ladani, J. Electron. Packag. 2015; 137(4):041003. doi:10.1115/1.4031523

Yi-Shao Lai, PhD
Advanced Semiconductor Engineering (ASE), Inc.

Shi-Wei Ricky Lee, PhD
The Hong Kong University of Science and Technology

Xiaobing Luo, PhD
Huazhong University of Science & Technology

Seungbae (SB) Park, PhD
State University of New York at Binghamton

Jeffrey C. Suhling, PhD
Auburn University

Tse Eric Wong, PhD Raytheon Company

Journal of Electronic Packaging - Guest Editors

Felix Chen, PhD
Microsoft Corp.

Tong Cui, PhD
Qualcomm Corp.

Baris Dogruoz, PhD
Cisco Corp

Justin Weibel, PhD
Purdue University

Kaushik Mysore, PhD
AMD Corp

Ravi Annapragada, PhD
United Technologies Research Center

8. Structural Size Effect on Mechanical Behavior of Intermetallic Material in Solder Joints: Experimental Investigation, Leila Ladani, Ousama Abdelhadi, J. Electron. Packag. 2014; 137(1):014501. doi:10.1115/1.4027992

9. Simplifying Reliability Testing of Wire Bonds Using On-Chip Heater and Pad Resistance Method, S. Kim, M. Mayer, J. Persic, J. T. Moon, J. Electron. Packag. 2014; 137(1):011002. doi:10.1115/1.4028281

Special Issue for ASME IMECE Papers

A Special Issue of the Journal of Electronic Packaging will be published next June 2017, and will include outstanding invited IMECE papers of interest to the electronics and photonics packaging community. Papers will be nominated and invited by the Guest Editors Justin A. Weibel, and S. Ravi Annapragada who serve as Chairs of the track sponsored by the Electronic & Photonic Packaging Division (EPPD). Invited papers received prior to the submission deadline of December 16, 2016 will go through the *Journal of Electronics Packaging* (JEP) review process.

IEEE Conference Papers Submitted to JEP

You can you publish a high quality paper presented at an IEEE Conference in the ASME JEP. You have to make sure the scope of the paper is covered by JEP scope and the manuscript submitted has less than 75% of the contents of the original IEEE conference paper. When the manuscript is approved for publication, you can get copyright permission at http://www.ieee.org/publications_standards/publications/rights/reqperm.html.

Current Issue

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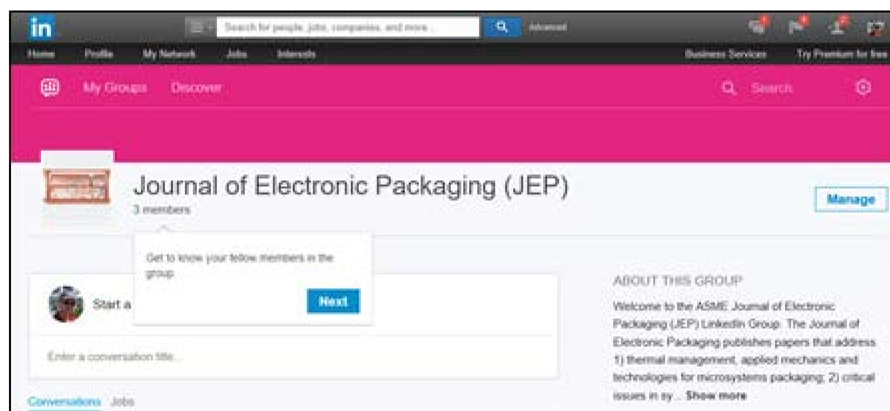
Journal of Electronic Packaging (JEP) LinkedIn Page

Yes, 131 members have joined our LinkedIn page. We are developing a new companion web site to serve the JEP community. You will get to know the progress in real time. You are invited to join our **JEP LinkedIn community** (click on hyperlink) to join a network to serve electronic packaging researchers and engineers working in academic and industrial settings. This network is for editors, readers, authors, and reviewers to exchange information including calls for participation, new issues and free review articles.



About the Journal of Electronic Packaging

Editor, Y. C. Lee,

University of Colorado Boulder

JEP Home Page, Editorial Board

The Journal of Electronic Packaging publishes papers that address: 1) thermal management, applied mechanics and technologies for microsystems packaging; 2) critical issues in systems integration; 3) emerging packaging technologies and materials with micro/nano structures; and 4) general small scale systems. The journal is to serve researchers and engineers working in academic and industrial settings. Originality, scientific merit and high engineering relevance are the major criteria for the acceptance of a submitted paper. In addition, leaders in the field are invited to publish review articles on hot, emerging and fundamental topics. Send an email to y.c.lee@colorado.edu for any feedback or comments.

ASME JOURNALS

SETTING THE STANDARD FOR ENGINEERING KNOWLEDGE SHARING