

Curriculum Vitae
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Xuejun Fan

Professor

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Xuejun Fan is a Regents' Professor of Texas State University System, a University Professor, a Mary Ann and Lawrence E. Faust Endowed Professor, and a Larry Lawson Research Fellow in the Department of Mechanical Engineering at Lamar University, Beaumont, Texas. Dr. Fan received a B.S. degree in Applied Mechanics and an M.S. degree in Solid Mechanics from Tianjin University in 1984 and 1986, respectively. In 1989 he earned a Ph.D. degree in Solid Mechanics from Tsinghua University.

From 1989 to 1997, Dr. Fan was a member of the faculty at Taiyuan University of Technology (TUT) in China. He received an early promotion to full professor at the age of 27 in 1991, and became one of the youngest professors in nation that time. From 1993 to 1994, he was a JSPS Research Fellow at the University of Tokyo in Japan. From 1996 to 1997, he was a visiting professor at the University of British Columbia, Canada. Dr. Fan served as Director of Institute of Applied Mechanics at TUT from 1994 to 1997, and established a PhD program in biomedical engineering.

Between 1997 and 2007, Dr. Fan gained significant experience in the microelectronics industry. From 1997 to 2000, he was a Member of Technical Staff with the Institute of Microelectronics in Singapore; from 2000 to 2004, he was a Senior Member of Research Staff at Philips Research in Briarcliff Manor, New York; and from 2004 to 2007, he was a Senior Staff Engineer with Intel Corporation, Chandler, Arizona. He has been recognized as an expert in the field of packaging reliability and modeling in electronic packaging community, and has made significant contributions in several areas.

Dr. Fan joined Lamar University in 2007 as an associate professor. He became a full professor in 2013 by early promotion.

Dr. Fan's current areas of expertise include characterization, modeling and reliability of materials, components, and systems in micro- and opto-electronics manufacturing and packaging. He has published 4 books, 25 book chapters, and over 250 technical papers in the area of the manufacture, packaging and reliability of microelectronics packaging, biomechanics and solid mechanics. Dr. Fan a named inventor on several patents.

Dr. Fan is an IEEE Fellow. He is an Associate Editor of the IEEE Transactions of Components, Packaging and Manufacturing Technology, and an Associate Editor of Microelectronics Reliability. He is an IEEE Distinguished Lecturer since 2008. Dr. Fan served as a member-at-large of the IEEE Electronics Packaging Society (EPS) Board of Governors from 2017 to 2022. He was also appointed as a member at large of the ECTC Steering Committee. He has organized sessions and served as a chair or co-chair at various EPS conferences. He has been a Co-Chair and Program Chair of the International Conference on Electronic Packaging Technology (ICEPT) since 2009.

Dr. Fan has been recognized through various awards and honors. He is a Regents' Professor of Texas State University System, and a Mary Ann and Lawrence E. Faust Endowed Professor at Lamar University. He received University Professor Award in 2018, the highest honor at Lamar University.

He received University Scholar Award in 2017. He is Larry Lawson Research Fellow (2017-2020), Distinguished Faculty Research Fellow (2015-2018, 2018-2021), and Presidential Faculty Fellow (2014-2016). He was also selected as Inaugural Faculty Mentor Award in 2015.

Dr. Fan received the Outstanding Sustained Technical Contribution Award in 2017, and Exceptional Technical Achievement Award in 2011, from the IEEE Electronic Packaging Society.

In his early academia career in China, Dr. Fan was the recipient of a Young Faculty Award from the Fok Ying-Tung Education Foundation, Hong Kong in 1994. He received the nominee for the title of “Ten Outstanding Youth of China” in 1991.

Education

12/1989	Ph.D. in Solid Mechanics	Tsinghua University, Beijing, China
11/1986	M.S. in Applied Mechanics	Tianjin University, Tianjin, China
07/1984	B.S. in Applied Mechanics	Tianjin University, Tianjin, China

Appointments

09/2019-present	Visiting/Guest Professor, Delft University of Technology, Delft, the Netherlands
09/2013-present	Professor, Lamar University, Beaumont, Texas
08/2007-08/2013	Associate Professor, Lamar University, Beaumont, Texas
01/2004-08/2007	Senior Staff Engineer, Intel Corporation, Chandler, Arizona
09/2000-12/2003	Senior Member Research Staff, Philips Research, Briarcliff Manor, New York
09/1997-10/2000	Member Technical Staff, Institute of Microelectronics, Singapore
05/1996-09/1997	Visiting Professor, University of British Columbia, Vancouver, Canada
11/1991-09/1997	Professor, Taiyuan University of Technology, Taiyuan, China
04/1994-09/1997	Director, Institute of Applied Mechanics, Taiyuan University of Technology, Taiyuan, China
03/1993-03/1994	Research Fellow, University of Tokyo, Tokyo, Japan
08/1990-04/1994	Associate Chair, Department of Mathematics, Physics and Mechanics, Taiyuan University of Technology, Taiyuan, China
12/1989-11/1991	Assistant Professor, Taiyuan University of Technology, Taiyuan, China

Honors and Awards

1. **Regents' Professor Award**, Texas State University System, 2019.
2. **Mary Ann and Lawrence E. Faust Endowed Professor**, Lamar University, 2019.
3. **IEEE Fellow**, Institute of Electrical and Electronics Engineers (IEEE), 2019.
4. **University Professor Medal**, Lamar University, 2018.
5. **Distinguished Faculty Research Fellow**, Lamar University, 2018-2021.
6. **Outstanding Sustained Technical Contribution Award**, IEEE Electronic Packaging Society, 2017.
7. **Larry Lawson Research Fellow**, Lamar University, 2017-2020.
8. **Best Paper Award**, IEEE Transactions on Component, Packaging and Manufacturing Technology, 2017.
9. **University Scholar**, Lamar University, 2017.

10. **Nominee**, Minnie Stevens Piper Professor Award, Minnie Stevens Piper Professor Award Foundation, 2016.
11. **Faculty Mentor Award**, Lamar University, 2015.
12. **Presidential Faculty Fellow**, Lamar University, 2015-2016.
13. **Distinguished Faculty Research Fellow**, Lamar University, 2015-2018.
14. **Presidential Faculty Fellow**, Lamar University, 2014-2015.
15. **Global SSL Events of the Year 2012-2013**, International Solid State Lighting Association (ISA), 2013.
16. **Full Professorship**, early promotion, Lamar University, 2013.
17. **Exceptional Technical Achievement Award**, IEEE Electronic Packaging Society. 2011.
18. **Nominee of Advisor of the Year**, the Center for Academic Success (CAS), Lamar University, 2011.
19. **Significant Contribution Award**, International Conference on Electronic Packaging Technology (ICEPT), 2009.
20. **Outstanding Contribution Award**, International Conference on Thermal and Thermal-Mechanical Simulation and Experiment in Microelectronics and Microsystems (EuroSimE). 2009.
21. **Best Paper Award**, IEEE Transactions on Components and Packaging Technologies. 2009.
22. **IEEE Distinguished Lecturer**, IEEE Electronic Packaging Society, 2008.
23. **Technical Achievement Award**, Intel Corporation. 2006.
24. **Outstanding Team Contribution Award**, Intel Corporation. 2006.
25. **Best Presentation Award**, Annual Quality and Reliability Symposium, Intel Corporation. 2006.
26. **Technical Achievement Award**, Intel Corporation. 2005.
27. **Outstanding Team Contribution**, Intel Corporation. 2005.
28. **Excellence Award**, Intel Corporation. 2005.
29. **Star Award**, Philips Research. 2002.
30. **Member of Standing Committee**, All-China Youth Federation. 1994~1997.
31. **Member of Standing Committee**, Young Scientist Association of China. 1994~1997.
32. **Young Scientist Award**, Shanxi Province, China. 1995.
33. **Young Faculty Award**, Fok Ying-Tung Education Foundation, Hong Kong. 1994.
34. **Young Scientist Fellowship**, Japan Society for the Promotion of Science (JSPS), Japan. 1993.
35. Title for **"Ten Outstanding Youth of Shanxi"**, Shanxi Province, China. 1991.
36. One of 30 **Nominees** in nation for the Title **"Ten Outstanding Youth of China"**, China. 1991.
37. **Full Professorship**, early promotion, Taiyuan University of Technology, 1991.

Invited Keynotes/Tutorials/Seminars

1. Reliability Mechanics and Modeling in IC Packaging: Theory, Practice and Implementation. Professional Development Course at Electronic Components and Technology Conference (ECTC). San Diego. May 30, 2022. (Tutorial).
2. Overview of the Modelling & Simulation Chapter of the Heterogeneous Integration Roadmap. EDTM Panel, April, 2021.
3. New Results on Electromigration Modeling in Microelectronics. 27th IEEE International Symposium for Design and Technology in Electronic Packaging (SIITME).

4. Making Digital Twin Works. Symposium on Reliability for Electronics and Photonics Packaging (REPP), November, 2021.
5. 2021 Edition: Overview of the Modelling & Simulation Chapter of the Heterogeneous Integration Roadmap. Symposium on Reliability for Electronics and Photonics Packaging (REPP), November, 2021.
6. Overview of the Modelling & Simulation Chapter of the Heterogeneous Integration Roadmap. IEEE Electronic Packaging Society Webinar, July 8, 2020. (Invited talk).
7. New Results on Electromigration Modeling in Microelectronics, 21st International Conference on Electronic Packaging Technology (ICEPT), 2020. 12-15 Aug. 2020. (virtual keynote).
8. A Review of Stress/Strain Measurement using Micro-Raman Spectroscopy in Electronic Packaging, 21th International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE), 2019. Hannover, Germany, July 4-6, 2020. (virtual keynote).
9. A Review of Stress/Strain Measurement using Micro-Raman Spectroscopy in Electronic Packaging. IEEE Electronic Packaging Technology Conference (EPTC). December 4, 2020. (virtual keynote).
10. New Results on Electromigration Modeling in Microelectronics. IEEE EPS Reliability Symposium, November 2020 (virtual presentation).
11. New Results on Electromigration Modeling in Microelectronics, Microelectronics Colloquium, Delft University of Technology, Delft, October 24, 2019.
12. New Results on Electromigration Modeling in Microelectronics, Electronic Packaging Society (EPS) Webinar, IEEE EPS, September 25, 2019.
13. A Review of Stress/Strain Measurement using Micro-Raman Spectroscopy in Electronic Packaging, 20th International Conference on Electronic Packaging Technology (ICEPT), 2019. Hong Kong, China, 12-15 Aug. 2019. (Session keynote).
14. Vacancy Transport, Mechanical Stress, and Self-Diffusion in Electromigration, 20th International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE), 2019. Hannover, Germany, March 24 - 27, 2019. (IEEE Distinguished Lecturer Presentation, keynote).
15. Reliability Mechanics and Modeling in IC Packaging: Theory, Practice and Implementation. Professional Development Course at Electronic Components and Technology Conference (ECTC). Las Vegas, NV. May 28, 2019. (Tutorial).
16. Non-uniqueness and Sensitivity Study of Nanoindentation Testing for Determining Properties of Lead Free Solder, Electronic Materials and Packaging Conference (EMAP), Hong Kong University of Science and Technology, Hong Kong, December 17, 2018. (Invited Talk).
17. Multi-Physics and Multi-Scale Modeling: Panel Session on IC/Package Co-Design for Heterogeneous Integrated Systems, Electronic Components and Technology Conference (ECTC). San Diego, CA. May 29, 2018. (Panel Speaker).
18. Reliability Mechanics and Modeling in IC Packaging: Theory, Practice and Implementation. Professional Development Course at Electronic Components and Technology Conference (ECTC). San Diego, CA, May 29, 2018. (Tutorial).
19. Review on Moisture Diffusion Modeling in Electronic Packaging. 2018 19th International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE), 2018. Toulouse, France, April 17, 2018. (Keynote).
20. Modeling of Electromigration in Microelectronics. CPMT Benelux Chapter, January 21, 2017, Delft, the Netherlands. (IEEE Distinguished Lecturer Presentation, invited seminar).

21. Electronics Packaging Community Readiness for Heterogeneous Integration Challenges in 2020 and beyond, Panel Forum, International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE), Dresden, Germany. 2-5 April 2017. (Invited Talk).
22. In-Situ Characterization of Moisture Absorption and Hygroscopic Swelling of Silicone/Phosphor Composite Film and Epoxy Mold Compound in LED Packaging. 2017 18th International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE), Dresden, Germany. 2-5 April 2017. (Session keynote).
23. LED Packaging, System and, and Reliability Considerations. Professional Development Course at Electronic Components and Technology Conference (ECTC). Orlando, Florida, May 30, 2017. (Tutorial).
24. Investigation of dimensional and heat source effects in Lock-In thermography applications in semiconductor packages. Fraunhofer Institute for Microstructure of Materials and Systems IMWS, Halle, Germany, April 6, 2017 (Invited Talk).
25. Tailoring material properties for 3D microfabrication: In-situ experimentation and multi-scale modelling. 17th International Conference on Electronic Packaging Technology (ICEPT), 2016. Wuhan, China, 16-19 Aug. 2016. (Plenary keynote).
26. LED Packaging, System and, and Reliability Considerations. Professional Development Course at Electronic Components and Technology Conference (ECTC). Las Vegas, Nevada, May 31, 2016. (Tutorial).
27. Research beyond One Engineering Discipline. Taiyuan University of Technology, Taiyuan, China. July 11, 2016. (Invited Seminar).
28. Recent Advances in Moisture Related Reliability in IC Packaging, Inauguration of CPMT Benelux Chapter, January 21, 2016, Delft, the Netherlands. (IEEE Distinguished Lecturer Presentation, invited keynote)
29. Overview of Mechanism-based LED Component and System Reliability Study. 2016 17th International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE), Montpellier, France, 18-20 April 2016. (Plenary keynote).
30. 3D IC Packaging. Central South University, Changsha, China, December 24, 2016. (Invited Seminar).
31. Recent Advances in Moisture Related Reliability in IC Packaging, IEEE CPMT Oregon Chapter Workshop, December 3, 2015, Portland, Oregon. (IEEE Distinguished Lecturer Presentation, invited tutorial)
32. New Insights into Nanoscale Materials for Microfabrication. Microelectronics Research Center, University of Austin, Texas. November 16, 2015. (invited talk)
33. Research beyond One Engineering Discipline – My Personal Research Experience, Faculty Talk, Lamar University, August 26, 2015 (invited talk)
34. Accelerated Test Method Development in LED Systems, International. Conference on Thermal, Mechanical and Multiphysics Simulation and Experiments in Micro-Electronics and Micro-Systems, April 8, 2015 (session keynote)
35. Advances in IC Packaging: 3D, WLP, Stretchable Electronics and Electromigration. January 2015, Tsinghua University, 2015. (IEEE Distinguished Lecture, invited talk)
36. Accelerated Test Method Development in LED Systems, International. Conference on Thermal, Mechanical and Multiphysics Simulation and Experiments in Micro-Electronics and Micro-Systems, April 8, 2015 (session keynote)

37. Does Current Crowding Induce Vacancy Concentration Singularity in Electromigration? 13th International Workshop on Stress-Induced Phenomena in Microelectronics. The University of Texas at Austin. October 15-17. 2014 (invited talk).
38. Does Current Crowding Induce Vacancy Concentration Singularity in Electromigration? International Conference on Electronic Packaging Technology (ICEPT), Chengdu, China, August 14, 2014 (session keynote).
39. Reliability Challenges in Compound Semiconductor Electronics, Wearable Electronics, and Flexible and Bio- Electronics. International Conference on Electronic Packaging Technology (ICEPT), Chengdu, China, August 13, 2014 (plenary keynote).
40. Some Developments in LED Reliability Research. International. Conference on Thermal, Mechanical and Multiphysics Simulation and Experiments in Micro-Electronics and Micro-Systems (EuroSimE 2014). Gent, Belgium. April 8, 2014 (invited session keynote).
41. Does Current Crowding Induce Electromigration Singularity? Seminar on Seminar on Micro/Nanoelectronics System Integration and Reliability, April 10, 2014. DIMES Colloquium DI01.180, Delft University of Technology. 2014 (invited talk)
42. Development of accelerated testing method for luminous decay of LED products. LED Forum, Dalian High Tech Development Zone. Dalian, 2013.
43. Wafer Level Packaging (WLP): Fan-in, Fan-out and 3D Integration. International Conference on Electronic Packaging Technology (ICEPT). Professional Development Course. Dalian, 2013.
44. Development of accelerated testing method for luminous decay of LED products. Center for Advanced Microsystems Packaging at Foshan, August 2013.
45. Development of accelerated testing method for luminous decay of LED products. China Solid State Lighting Alliance, August 2013.
46. Development of accelerated testing method for luminous decay of LED products. Lab for Microelectronics Systems, Huazhong University of Science and Technology, August 2013.
47. Solid state lighting system reliability: state of the art. International. Conference on Thermal, Mechanical and Multiphysics Simulation and Experiments in Micro-Electronics and Micro-Systems (EuroSimE 2013). Wroclaw, Poland. April 15-17, 2013 (plenary keynote).
48. Multy-physics modeling in IC packaging and microsystems. Electronic Components and Technology Conference (ECTC), Las Vegas, USA, May 28, 2013. (professional development course).
49. Wafer level packaging: fan-in, fan-out and 3-D integration. International Conference on Electronic Packaging Technology and High Density Packaging (ICEPT-HDP), Guilin, China, August 14, 2012 (plenary keynote).
50. Overview of solid state lighting reliability. International Summer School of Solid State Lighting Technologies, Changzhou, China, August 9, 2012 (tutorial).
51. Multy-physics modeling in IC packaging and microsystems. Electronic Components and Technology Conference (ECTC), San Diego, USA, May 29, 2012. (professional development course).
52. Electromigration in solder joints: failure mechanisms and modeling study. Materials Science and Engineering. University of Texas at Austin, Austin, Texas. April 11, 2012 (invited seminar).
53. Wafer level system packaging and integration for solid state lighting (SSL). International. Conference on Thermal, Mechanical and Multiphysics Simulation and Experiments in Micro-Electronics and Micro-Systems (EuroSimE 2012). Lisbon, Portugal, April 16-18, 2012 (session keynote).
54. Update of wafer level packaging. Advanced Packaging Technologies Consortium (APTC) Workshop, Shanghai, China, August 8, 2011 (invited seminar).

55. Reliability study in micro-/nano- electronics systems. Guilin University of Electronics Technology, Guilin, June 28, 2011 (invited talk).
56. Reliability issues in microelectronics packaging. Guilin University of Electronics Technology, Guilin, June 29, 2011 (invited talk).
57. Multiphysics modeling of microelectronics packaging and microsystems. Guilin University of Electronics Technology, Guilin, June 29, 2011 (invited talk).
58. Wafer level integration of solid state lighting system. International Seminar of Solid State Lighting Packaging and Integration. Guilin University of Electronics Technology, Beijing, China. August 16, 2011 (keynote).
59. Multiphysics modeling of microelectronics packaging and microsystems. International Conference on Thermal, Mechanical and Multiphysics Simulation and Experiments in Micro-Electronics and Micro-Systems (EuroSimE 2011). , Linz, Austria, April 17, 2011 (short course).
60. Moisture diffusion and integrated stress analysis in encapsulated microelectronics devices. International Conference on Thermal, Mechanical and Multiphysics Simulation and Experiments in Micro-Electronics and Micro-Systems (EuroSimE 2011). Linz, Austria, April 19, 2011 (session keynote).
61. Moisture related reliability in electronic packaging. 61st Electronic Components and Technology Conference (61st ECTC), Orlando, Florida. May 31, 2011 (professional development course).
62. Reliability study in micro-/nano- electronics systems. China Petroleum University, Qingdao, Shandong, China, May 17, 2011 (invited talk).
63. Reliability study in micro-/nano- electronics systems. Shandong University, Weihai, China, May 17, 2011 (invited talk).
64. Wafer level packaging (WLP): fan-in, fan-out and three-dimensional integration. 11th. Int. Conf. on Thermal, Mechanical and Multiphysics Simulation and Experiments in Micro-Electronics and Micro-Systems (EuroSimE 2010). Bordeaux, France, April 25-18, 2010 (plenary keynote).
65. Advances in moisture related reliability in electronic packaging, National Semiconductor Corp., Santa Clara, CA, July 11, 2010 (invited tutorial).
66. Wafer level packaging, past, present and future. Huatian Advanced Packaging Forum, Tianshui, Gansu, China August 14, 2010 (keynote presentation).
67. Moisture related reliability in electronic packaging. Electronic Components and Technology Conference (60th ECTC), Las Vegas, NV, June, 2010 (professional development course).
68. Moisture related reliability in electronic packaging. Cisco Systems, Inc., Santa Clara, CA, September 2010 (invited tutorial).
69. Thin film cohesive rupture due to moisture at soldering reflow. Symposium on Fracture, Damage, and Micro-/Nano- Mechanics, Beijing, China, August 2009 (invited talk).
70. Moisture related reliability in electronic packaging. 2009 IC Packaging Reliability Forum, Hsinchu, Taiwan, July 2009 (invited workshop).
71. IC package reliability considerations: impact of design, material and process. ASE, Taiwan, July, 2009 (invited presentation).
72. Design, reliability and electromigration in chip scale wafer level packaging. Electronic Components and Technology Conference (59th ECTC), San Diego, CA, June 2009 (professional development course).
73. Design, reliability and electromigration in chip scale wafer level packaging. International Conference on Thermal, Mechanical and Multiphysics Simulation and Experiments in Micro-Electronics and Micro-Systems (EuroSimE), Delft, Netherlands, April 2009 (short course).

74. Overview of thermal performance of various power-device packages. International Conference on Thermal and Mechanical Simulation and Experiments in Microelectronics and Microsystems, (EuroSimE), Freiburg, Germany, 2008 (plenary keynote).
75. Moisture related reliability in electronic packaging. International Conference on Thermal and Mechanical Simulation and Experiments in Microelectronics and Microsystems, (EuroSimE), Freiburg, Germany, 2008 (short course).
76. Mechanics of moisture for polymers: fundamental concepts and model study. International Conference on Thermal and Mechanical Simulation and Experiments in Microelectronics and Microsystems (EuroSimE), Freiburg, Germany, 2008 (session keynote).
77. Moisture related reliability in electronic packaging. Electronic Component Technology Conference (ECTC), Orlando, Florida, 2008 (professional development course).
78. Interfacial delamination and cohesive rupture of thin films in microelectronics. South China University of Technology (SCUT), Guangzhou, China, July 2008 (invited seminar).
79. Moisture related reliability in electronic packaging. IEEE CPMT Hong Kong Chapter, Hong Kong, July 2008 (invited workshop).
80. Micro-/nano- electronics and multi-scale analysis. Shanxi University, Taiyuan, China, July 2008 (invited talk).
81. Design consideration and reliability challenges in wafer-level packaging. International Conference on Electronic Packaging Technology and High Density Packaging (ICEPT-HDP). Shanghai, China, August 2008 (session keynote presentation).
82. Recent advances in wafer-level packaging. Nantong Fujitsu Inc., Nantong, China, August 2008 (invited presentation).
83. Lead-free solder joint reliability. Huawei Electronics Inc., Shenzhen, China, August 2008 (invited talk).
84. Moisture sensitivity of plastic packages of IC devices. IEEE 10th Electronics Packaging Technology Conference (EPTC), Singapore, December, 2008 (short-course).
85. Design and reliability in wafer-level packaging. IEEE 10th Electronics Packaging Technology Conference (EPTC), Singapore, December, 2008 (invited talk).
86. Moisture related reliability in electronic packaging. ASM Inc, Singapore, December 2008 (invited tutorial).
87. Interfacial delamination and cohesive rupture of thin films in microelectronics. Tianjin University, China, December 2008 (invited seminar).
88. Interface delamination and cohesive failures of thin films in microelectronics. Delft University of Technology, Delft, the Netherlands, 2007 (distinguished seminar presentation)
89. Reliability and thermal modeling in electronic packaging. MAXIM Inc, Dallas, Texas, 2007 (invited talk).
90. Interface/material failures due to moisture at elevated temperature in microelectronic packaging, Iowa State University, Ames, IA, December, 2007 (invited distinguished lecture).
91. Moisture related reliability in electronic packaging, Electronic Component Technology Conference (ECTC), June 2007 (professional development course).
92. Reliability mechanics issues in electronic packaging. International Conference on Electronic Packaging Technology (ICEPT), August 2007 (short course).
93. Delamination/cracking mechanism study for ultra-thin stacked-die chip scale packages. Intel Conference on Manufacturing Excellence (IMEC), San Diego, CA, 2006 (invited talk).
94. Moisture related reliability in electronic packaging. Electronic Component Technology Conference (ECTC), June 2006 (professional development course).

95. Advances in reliability mechanics in microelectronics and microsystems. International Conference on Electronic Packaging Technology (ICEPT), August 2006 (invited short course).
96. Moisture related reliability in electronic packaging. Electronic Component Technology Conference (ECTC), June 2005 (professional development course).

Major Professional Offices

- Associate Editor, Microelectronics Reliability. Elsevier, 2021.
- IEEE Fellow Evaluation Committee Member, IEEE, 2019.
- Member-At-Large, Board of Governors, IEEE Electronic Packaging Society, 2018-2022.
- Co-Chair, Modeling and Simulation, Heterogeneous Integration Roadmap (HIR), 2017.
- NSF ENG/CMMI Proposal Review Panel, 2016.
- NASA EPSCoR Reviewer, 2016.
- Associate Editor, IEEE Transactions of Components, Packaging and Manufacturing Technology. 2009 ~ present.
- Book Series Editor, ReliabilityBrief, Springer, 2012 ~ present.
- Member, LED Systems Reliability Consortium, Department of Energy (DOE). 2011 ~ present.
- Member, JEDEC Drop Test Standard Modification Working Group. 2011 ~ 2016.
- Editor, Special Issue on 2010 ECTC Best Session Papers, IEEE Transactions of Components and Packaging Technologies. 2010.
- Guest Editor, IEEE Transactions of Components and Packaging Technologies. 2007 -2009.
- IEEE Distinguished Lecturer. 2008 ~ present.
- Guest Editor, Special Issue on Wafer Level Packaging, Microelectronics Reliability. 2010.
- Guest Editor, Special Issue on Cracking and Delamination, IEEE Transactions of Components and Packaging Technologies. 2006.
- Reviewer: Georgia National Science Foundation (GNSF). 2008~2015.
- Reviewer: Louisiana Board of Regents' Research Competitiveness Program. 2007~2010.
- Reviewer: Semiconductor Research Cooperation (SRC). 2004 -2007.
- Reviewer: Intel Research Council – University Program. 2004 – 2007.
- Advisory Member, Tsinghua University Alumni Association of Arizona (TAAA). 2004 -2007.
- Committee Member, Biomechanics WP, Chinese Society of Theoretical and Applied Mechanics. 1995 ~ 1998.
- Standing Committee Member, Young Scientists WG, Chinese Society of Theoretical and Applied Mechanics. 1995 ~ 1998.
- National Natural Science Foundation (NSF) of China: Panel Reviewer, Division of Applied Mechanics 1994-1997.
- Program Review Committee Member, Chinese Society of Biomechanical Engineering. 1995-1998.
- Standing Committee Member, Association of Chinese Young Scientists. 1992 -1997.
- Standing Committee Member, All-China Youth Federation. 1992 -1997.

Major Conference Activities

- Steering Committee, EPS Representative, Electronic Components and Technology Conference (ECTC), 2018 – 2021.
- Panel Member, Electronics Packaging Community Readiness for Heterogeneous Integration Challenges in 2020 and beyond, International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE), Dresden, Germany. 2-5 April 2017.
- Chair, Heterogeneous Integration Roadmap (HIR) Forum, International Conference on Electronic Packaging Technology, Wuhan, China, 2016.
- Conference Co-Chair, International Conference on Electronic Packaging Technology (ICEPT). 2015.
- Committee Chair, Thermal Mechanical Modeling and Characterization, Electronic Packaging and Technology Conference (EPTC). 2015.
- Advisory Committee Member, International Electronics Manufacturing Technology (IEMT), 2014.
- Conference Session Chair, International Conference on Fracture (ICF13). 2013.
- Program Committee Member, Electronic System Technologies Conference (ESTC). 2013.
- Technical Committee Member, International Reliability Physics Symposium (IRPS). 2013.
- Session Organizer, Mechanics in Microelectronics and Energy Systems, ASME International Mechanical Engineering Congress & Exposition. 2012.
- Session Chair, Thermal Management and Reliability. China International Forum on Solid State Lighting. 2012.
- Chair, ITRS Packaging & Assembly Roadmap Workshop at International Conference on Electronic Packaging Technology & High Density Packaging (ICEPT-HDP). 2012.
- Plenary Session Chair, International Conference on Thermal and Mechanical Simulation and Experiments in Microelectronics and Microsystems (EuroSimE). 2012.
- Technical Committee Member, 18th European Microelectronics and Packaging Conference (EMPC). 2011.
- Program Chair, International Conference on Electronic Packaging Technology & High Density Packaging (ICEPT-HDP). 2010.
- International Advisory Board, International Electronics Manufacturing Technology Conference (IEMT). 2010~2015.
- Plenary Session Chairs, International Conference on Electronic Packaging Technology & High Density Packaging (ICEPT-HDP). 2010.
- Short Course Chairs, International Conference on Electronic Packaging Technology & High Density Packaging (ICEPT-HDP). 2008-2009.
- Special Program Chairs, International Conference on Electronic Packaging Technology & High Density Packaging (ICEPT-HDP). 2008 ~2009.
- Technical Co-Chairs, International Conference on Electronic Packaging Technology & High Density Packaging (ICEPT-HDP). 2006-2009.
- Technical Committee Member, Electronic Packaging and Technology Conference (EPTC). 2006~
- Session Chair, Electronic Packaging and Technology Conference (EPTC). 2008.
- Program Committee Member, Electronics System Integration Technology Conference (ESTC). 2009~ present,

- Technical Committee Member, European Conference on Reliability of Electron Devices (ESREF). 2009~present.
- Program Committee Member, International Congress on Reliability in Microelectronics and Nanoelectronics. 2006.
- Program Committee Member, Modeling and Simulation, IEEE Electronic Components and Technology Conference (ECTC). 2005 ~ present.
- Session Chairs, IEEE Electronic Components and Technology Conference (ECTC). 2005 ~ present.
- Session Chairs, International Conference on Thermal and Mechanical Simulation and Experiments in Microelectronics and Microsystems (EuroSimE). 2007 ~ present.
- Technical Committee Member, International Conference on Thermal and Mechanical Simulation and Experiments in Microelectronics and Microsystems (EuroSimE). 2000 ~ present.
- Session Chairs, International Conference on Thermal and Mechanical Simulation and Experiments in Microelectronics and Microsystems (EuroSimE). 2002 -2003.
- Assistant Program Chair, the Fourth China-Japan-USA-Singapore Conference on Biomechanics, Taiyuan, China. 1995.

Publications

See the link: <http://engineering.lamar.edu/mechanical/faculty-staff/xuejun-fan/publications.html>