Curriculum Vitae (June 2025)

Xuejun Fan

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Xuejun Fan is a Regents' Professor of the 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 the nation at that time. From 1993 to 1994, he was a Japan Society for Promotion of Science (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 Associate Chair of the Department of Mathematics, Physics and Mechanics at TUT from 1990 to 1994, and a Director of the Institute of Applied Mechanics at TUT from 1994 to 1997.

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 internationally as an expert in the field of electronic packaging reliability and modeling 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, packaging and heterogeneous integration. He has published 5 books, 33 book chapters, and over 350 technical papers in the area of the manufacture, packaging and reliability of microelectronics packaging, biomechanics and solid mechanics. His recent book, co-authored with Dr. John Lau, is titled "Hybrid Bonding, Advanced Substrates, Failure Mechanisms, and Thermal Management for Chiplets and Heterogeneous Integration". Dr. Fan a named inventor on several patents. Dr. Fan has been on consultancy for several patent litigation cases worldwide. Dr. Fan gives dozens of the tutorials, keynote presentations, workshops and professional development courses each year worldwide to thousands of attendees in the community of semiconductor packaging.

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 the Microelectronics Reliability. He recently serves on co-Editor-in-Chief for Frontiers in Electronics. He is an IEEE Distinguished Lecturer since 2008. Dr. Fan was elected as a member-at-large to the IEEE Electronic 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 serves a co-chair of Modeling and Simulation in Heterogeneous Integration Roadmap committee.

Dr. Fan has been recognized through various awards and honors. He is a Regents' Professor of the 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 2023, he received the EuroSimE Achievement Award. He has been listed in top 2% scientist worldwide by Stanford University composite index score for career and single year publications.

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

Appointments		
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. **Member,** Phi Beta Delta Honor Society for International Scholars, 2024.
- 2. **Recognition Award,** Beta Xi Chapter of Phi Beta Delta Honor Society for International Scholars, 2024.

- 3. Listed in **Top 2% Scientist Worldwide by Stanford University** composite index score for career.
- 4. **Best Associate Editor Award**, IEEE Transactions on Component, Packaging and Manufacturing Technology, 2023.
- 5. **EuroSimE Achievement Award**, 2023.
- 6. **Regents' Professor Award**, Texas State University System, 2019.
- 7. **Mary Ann and Lawrence E. Faust Endowed Professor**, Lamar University, 2019.
- 8. **IEEE Fellow**, Institute of Electrical and Electronics Engineers (IEEE), 2019.
- 9. **University Professor Medal**, Lamar University, 2018.
- 10. **Distinguished Faculty Research Fellow**, Lamar University, 2018-2021.
- 11. **Outstanding Sustained Technical Contribution Award**, IEEE Electronic Packaging Society, 2017.
- 12. Larry Lawson Research Fellow, Lamar University, 2017-2020.
- 13. **Best Paper Award**, IEEE Transactions on Component, Packaging and Manufacturing Technology, 2017.
- 14. **University Scholar**, Lamar University, 2017.
- 15. **Nominee**, Minnie Stevens Piper Professor Award, Minnie Stevens Piper Professor Award Foundation, 2016.
- 16. **Faculty Mentor Award**, Lamar University, 2015.
- 17. **Presidential Faculty Fellow**, Lamar University, 2015-2016.
- 18. **Distinguished Faculty Research Fellow**, Lamar University, 2015-2018.
- 19. **Presidential Faculty Fellow**, Lamar University, 2014-2015.
- 20. **Full Professorship**, early promotion, Lamar University, 2013.
- 21. Exceptional Technical Achievement Award, IEEE Electronic Packaging Society. 2011.
- 22. **Nominee of Advisor of the Year**, the Center for Academic Success (CAS), Lamar University, 2011.
- 23. **Outstanding Contribution Award**, International Conference on Thermal and Thermal-Mechanical Simulation and Experiment in Microelectronics and Microsystems (EuroSimE). 2009.
- 24. **Best Paper Award**, IEEE Transactions on Components and Packaging Technologies. 2009.
- 25. **IEEE Distinguished Lecturer**, IEEE Electronic Packaging Society, 2008.
- 26. **Technical Achievement Award**, Intel Corporation. 2006.
- 27. **Outstanding Team Contribution Award**, Intel Corporation. 2006.
- 28. **Best Presentation Award**, Annual Quality and Reliability Symposium, Intel Corporation. 2006.
- 29. **Technical Achievement Award**, Intel Corporation. 2005.
- 30. **Outstanding Team Contribution**, Intel Corporation. 2005.
- 31. Excellence Award, Intel Corporation. 2005.
- 32. **Star Award**, Philips Research. 2002.
- 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. Full Professorship, early promotion, Taiyuan University of Technology, 1991.

Publications

