

FUQIAN YANG, Ph.D.

Department of Chemical and Materials Engineering

University of Kentucky, Lexington, KY 40506

Phone: (859) 2572994, Fax: (859) 3231929, Email: fyang2@uky.edu

PROFESSIONAL PREPARATION

Tsinghua University	Engineering Physics	B.S., 1986
Chongqing University	Biomechanics	M.S., 1988
University of Rochester	Mechanical Engineering	M.S., 1991
University of Rochester	Materials Science and Engineering	Ph.D., 1995

APPOINTMENTS

July 2011 – present	Professor, University of Kentucky, KY
July 2007 – July 2011	Associate Professor, University of Kentucky, KY
Aug. 2001 – June 2007	Assistant Professor, University of Kentucky, KY
Jan. 1999 – July 2001	Technical Specialist & Project Manager II, Xerox Corporation, NY
July 1998 – Dec. 1998	Sr. Engineer, Dayton T. Brown Inc., Bohemia, NY

PRODUCTS

Over 356 publications (1 edited book, 2 special issues, 4 book chapters, 310 archival refereed journal articles, and 37 conference articles); 2 US patents granted.

FIVE PRODUCTS MOST CLOSELY RELATED TO THE PROPOSED PROJECT

1. **Fuqian Yang** and Yu Shi, Analysis of whisker growth on a surface of revolution, Physics Letters A (2017) 2767-2771
2. **Fuqian Yang**, A nonlinear viscous model for Sn-whisker growth, Metallurgical and Materials Transactions A 47 (2016) 5882-2889
3. Jing Cheng, **Fuqian Yang**, Paul T. Vianco, Bei Zhang, James C.M. Li, Optimum thickness of Sn film for whisker growth, Journal of Electronic Materials 40(2011) 2069-2075
4. Juchuan Li, **Fuqian Yang**, Yang-Tse Cheng, Jia Ye, Whisker formation on tin anode of lithium-ion battery, Journal of Power Sources 196(2011) 1474-147
5. **Fuqian Yang** and Yan Li, Indentation-induced tin whiskers on electroplated tin coatings, Journal of Applied Physics 104(2008) 113512

FIVE OTHER SIGNIFICANT PRODUCTS

6. **Fuqian Yang** and J.C.M. Li, Impression test – a review, Materials Science and Engineering R 74 (2013) 233-253

7. **Fuqian Yang** and James C. M. Li, Micro and Nano Mechanical Testing of Materials and Devices, Springer (2008)
8. **Fuqian Yang**, and J.C.M. Li, Deformation behavior of tin and some tin alloys, special issue of Journal of Materials Science: Materials in Electronics: Lead-Free Electronic Solders 18 (2007) 191-210
9. Wei Song and **Fuqian Yang**, Stress-driven interfacial instability of a bilayer structure - interaction between free surface and interface, International Journal of Solids and Structures 45 (2008) 1071-1086
10. **Fuqian Yang**, Interaction between diffusion and chemical stresses, Materials Science and Engineering A 409 (2005) 153-159

SYNERGISTIC ACTIVITIES

- Advised 10 Ph.D. students (graduated 9 of them); advised and graduated 10 M.S. students. Have involved students from underrepresented groups in research programs (8 female graduate students, one Hispanic graduate student). Have involved high school students in research (seven students, and five of them are female).
- Symposium organizer, international committee member, session chair and technical committee member for numerous national/international conferences.
- Member of editorial board for Materials Science & Engineering A, Annals of Materials Science & Engineering, Smart Grid and Renewable Energy; Associate Editor for Journal of Manufacturing Processes; Key Reader of Materials and Metallurgical Transaction A; Guest Editor for Materials Science & Engineering A. Frequent Reviewer for more than 100 scientific journals.
- Published 308 journal articles. Hold two US Patents. Finalist for Henry Lutes Teaching Award for Undergraduate Engineering Education, College of Engineering, University of Kentucky, 2006, 2013. Outstanding Teacher Award for Materials Engineering, University of Kentucky, 2013. Tau Beta Pi Outstanding Engineering Teacher Award for College of Engineering, University of Kentucky, 2006.
- Scientific and professional societies: TMS – Lifetime Member, ASM – Lifetime Member