

BIOGRAPHICAL SKETCH

NAME Li, Bingyun		POSITION TITLE Assistant Professor, Orthopaedics, School of Medicine Director, Biomater. Bioeng. & Nanotechnology Lab. Participant, WVNano Initiative	
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Central South University, China	BS	1990-94	Materials Science & Engineering
Chinese Academy of Sciences, China	MS	1994-97	Materials Science
Chinese Academy of Sciences, China	PhD	1997-00	Biomaterials Science & Engineering
University of Notre Dame, Notre Dame, IN	Post-doc	2000-02	Advanced Orthopaedic Implant Materials
Louisiana Tech University, Ruston, LA	Post-doc	2002-05	Nanotechnology & Protein Engineering

RESEARCH AND PROFESSIONAL EXPERIENCE

A. Positions and Honors.

Positions and Employment

2006-present	Director, Biomaterials, Bioengineering, and Nanotechnology Laboratory, Department of Orthopaedics, School of Medicine, Morgantown, WV
2006-present	Adjunct Assistant Professor, Department of Chemical Engineering, School of Engineering and Mineral Resources, West Virginia University, Morgantown, WV
2006-present	Participant, Drug Discovery and Therapeutics Group, West Virginia University, Morgantown, WV
2005-present	Participant, WVNano Initiative, WV
2005-present	Approved Graduate Faculty, Department of Basic Pharmaceutical Sciences, School of Pharmacy, West Virginia University, Morgantown, WV
2005-present	Assistant Professor, Department of Orthopaedics, School of Medicine, West Virginia University, Morgantown, WV

Other Experience and Professional Memberships

2006	Organized and chaired a symposium, "Biomimetics and nanoscience: advances in protein/peptide-based biomaterials," for the Society for Biomaterials 2007 Annual Meeting
2006	Invited by Springer to review a proposal of a new journal titled " <i>Journal of Nano/Molecular Medicine and Engineering</i> "
2006	Abstract reviewer, the Society for Biomaterials 2007 Annual Meeting
2005-present	WVNano Combined Faculty Search Committee
Member	Materials Research Society, Orthopaedic Research Society, Society for Biomaterials
Grant proposal reviewer	U.S. Department of Energy, U.S. Civilian Research and Development Foundation, Louisiana Board of Regents, Jeffress Memorial Trust

Archival journal peer reviewer Biomaterials, Acta Biomaterialia, Journal of Biomedical Materials Research (Part B), Journal of Nanoscience and Nanotechnology, Langmuir

Honors (selected)

2007 NSF Fellowship, NSF Summer Institute on Nano Mechanics and Materials
2000 Top Director's Award, Institute of Metal Research (IMR), Chinese Academy of Sciences
1999 Top Presidential Scholarship of Chinese Academy of Sciences (CAS)
1998 Excellent Dissertation Award, the 3rd Youth Academic Annual Meeting, Liaoning Province
1997 Top Director's Award, IMR, CAS
1995 Outstanding Graduate Leadership, IMR, CAS

B. Publications. (Publications have been totally cited for more than **200** times)

Book Chapters and U.S. Patents:

1. Li, B. "Polypeptide multilayer films and microcapsules," (invited book chapter). American Scientific Publisher (in press, 2007).
2. Li, B. (invited author); Haynie, D.T. "Chiral drug separation," ***Encyclopedia of Chemical Processing***, Sungyu Lee, ed. Vol. 1, Taylor & Francis, New York, 449-458 (2005).
3. Varma, A.; Mukasyan, A.; Li, B. "Synthesis of orthopaedic implant materials," ***US Patent 6896846***.
4. Provisional patent filed, WVU, 2007.

Peer-Reviewed Journal Articles:

5. Li, B.; Rozas, J.; Haynie, D.T. "Structural stability of polypeptide nanofilms under extreme conditions," ***Biotechnology Progress***, 22(1), 111-117, (2006).
6. Zhong, Y.; Li, B.; Haynie, D.T. "Control of stability of polypeptide multilayer nanofilms by quantitative control of disulfide bond formation," ***Nanotechnology***, 17, 5726-5734 (2006).
7. Zhong, Y.; Li, B.; Haynie, D.T. "Fine tuning of physical properties of designed polypeptide multilayer films by control of pH," ***Biotechnology Progress***, 22(1), 126-132 (2006).
8. Li, B.; Haynie, D.T.; Palath, N.; Janisch, D. "Nanoscale biomimetics: fabrication and optimization of stability of peptide-based thin films," ***Journal of Nanoscience and Nanotechnology***, 12(5), 2042-2049 (2005).
9. Zhang, L.; Li, B.; Zhi, Z.; Haynie, D.T. "Perturbation of nanoscale structure of polypeptide multilayer thin films," ***Langmuir***, 21(12), 5439-5445 (2005).
10. Haynie, D.T.; Palath, N.; Liu, Y.; Li, B.; Pargaonkar, N. "Biomimetic nanotechnology: inherent reversible stabilization of polypeptide microcapsules," ***Langmuir***, 21(3), 1136-1138 (2005).
11. Li, B.; Haynie, D.T. "Multilayer biomimetics: reversible covalent stabilization of a nanostructured biofilm," ***Biomacromolecules***, 5(5), 1667-1670 (2004).
12. Li, B.; Mukasyan, A.; Varma, A. "Combustion synthesis of CoCrMo (F-75) implant alloy: microstructure and properties," ***Materials Research Innovations***, 7(4), 245-252 (2003).
13. Varma, A.; Li, B.; Mukasyan, A. "Novel Synthesis of Orthopaedic Implant Materials," ***Advanced Engineering Materials***, 4(7), 482-487 (2002).
14. Li, B.; Rong, L.; Li, Y.; Gjunter, V. "Electric resistance phenomena in porous Ni-Ti shape memory alloys produced by SHS," ***Scripta Materialia***, 44(5), 823-827 (2001).
15. Li, B.; Rong, L.; Li, Y.; Gjunter, V. "Development of biomedical porous Ti-Ni shape memory alloys," ***Chinese Journal of Materials Research*** (Chinese edition), 14(6), 561-567 (2000).
16. Li, B.; Rong, L.; Li, Y.; Gjunter, V. "Porous Ni-Ti shape memory alloys produced by two different methods," ***Z. Metallkd***, 91(4), 291-295 (2000).
17. Li, B.; Rong, L.; Li, Y.; Gjunter, V. "An investigation of the synthesis of Ti-50at%Ni alloys through combustion synthesis and conventional powder sintering," ***Metallurgical Transactions A***, 31(7), 1867-1871 (2000).

18. Li, B.; Rong, L.; Li, Y.; Gjunter, V. "A recent development in producing porous Ni-Ti shape memory alloys," *Intermetallics*, 8(8), 881-884 (2000).
19. Li, B.; Rong, L.; Li, Y.; Gjunter, V. "Fabrication of cellular NiTi intermetallic compounds," *Journal of Materials Research*, 15(1) 10-13 (2000).
20. Li, B.; Rong, L.; Li, Y. "The influence of addition of TiH₂ in elemental powder sintering porous Ni-Ti alloys," *Materials Science and Engineering*, A281, 169-175 (2000).
21. Li, B.; Rong, L.; Li, Y. "Stress-strain behavior of Ni-Ti intermetallics synthesized from powder sintering," *Intermetallics*, 8(5-6), 643-646 (2000).
22. Li, B.; Rong, L.; Li, Y.; Gjunter, V. "Synthesis of porous Ni-Ti SMA by SHS: reaction mechanism and anisotropy in pore structure," *Acta Materialia*, 48(15), 3895-3904 (2000).
23. Li, B.; Rong, L.; Li, Y.; Gjunter, V. "Deformation behavior of porous NiTi shape memory alloy and effect of thermal-mechanical cycling on shape memory property," *Acta Metallurgical Sinca* (Chinese edition), 35(4), 362-364 (1999).
24. Li, B.; Rong, L.; Li, Y. "Microstructure and superelasticity of porous NiTi alloy," *Science in China (Series E)*, 42(1), 94-99 (1999).
25. Li, B.; Rong, L.; Luo, X.; Li, Y. "Transformation behavior of sintered porous NiTi alloys," *Metallurgical Transactions A*, 30, 2753-2756 (1999).
26. Li, B.; Rong, L.; Li, Y. "Anisotropy of dimensional change and its corresponding improvement by addition of TiH₂ during elemental powder sintering of porous NiTi alloy," *Materials Science and Engineering*, A255, 70-74 (1998).
27. Li, B.; Rong, L.; Li, Y. "Porous NiTi alloy prepared from elemental powder sintering," *Journal of Materials Research*, 10(13), 2847-2851 (1998).

Presentations:

28. Ogle, H.; Jiang, B.; Thomas, J.; Li, B. *Oral presentation. Polypeptide nanocoatings for potential prevention of biomedical device-associated infections.* Annual Meeting of the Biomedical Engineering Society, Los Angeles, CA, September 2007.
29. Li, B.; Jiang, B.; Lindsey, B.; Boyce, B.; Salihu, S.; Kish, V.; Hubbard, D. *Poster presentation. In vitro and in vivo studies of a novel system for cytokine local delivery.* Annual Meeting of the Society for Biomaterials, Chicago, IL, April 2007.
30. Jiang, B.; Li, B. *Poster presentation. Biomimetic nanocoatings as novel drug delivery systems.* Annual Meeting of the Society for Biomaterials, Chicago, IL, April 2007.
31. Li, B.; Jiang, B. *Poster presentation. A novel nanotechnology-based approach for developing antibiotic-loaded coatings to prevent orthopaedic device-related infections.* 2007 ORS Annual Meeting, San Diego, CA, February 2007.
32. Li, B. *Invited talk. Biomimetic nanotechnology: nano-engineering polypeptide multilayer nanofilms and micro/nano-capsules for biomedical applications.* MBR Cancer Center, West Virginia University, August 2006.
33. Li, B.; Yang Z.; Haynie, D.T. *Poster presentation. Biomimetic nanotechnology: conformational behavior of polypeptide and polypeptide complex.* Annual Meeting of the Society for Biomaterials, Pittsburgh, PA, April 2006.
34. Li, B.; Yang Z.; Haynie, D.T. *Oral presentation. Biomimetic nanotechnology: structural stability of polypeptide nanofilms.* MRS Spring Meeting, San Francisco, CA, April 2006.
35. Li, B. *Invited talk. Biomimetic nanotechnology: nano-engineering polypeptide multilayer nanofilms and microcapsules for biomedical applications.* Department of Chemical Engineering, West Virginia University, February 2006.
36. Haynie, D.T.; Li, B. *Poster Presentation.* 2005 NSF DMII Grantees Workshop, Scottsdale, AZ, January 2005.