



# 师资队伍

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**本科生课程:** 生物机械工程(双语)、生物力学工程(双语)、自然界中的相变(双语)**教育经历:**

1996. 09~2000. 07 北京理工大学应用力学系, 学士  
2000. 09~2003. 01 北京理工大学应用力学系, 硕士  
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**工作经历:**

2006. 09~2007. 12 香港大学医学院 博士后  
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2012. 07~2017. 07 北京科技大学 副教授  
2017. 07~现在 北京科技大学 教授  
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2013. 02~2013. 08 美国西北大学 访问学者  
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**代表性论著:**

1. Xiaoling Wang, Kai Zhao and Hui Zhao. Finite Element Simulation of Biofilm Viscoelastic Behavior Loadings. Accepted by Journal of Mechanics in Medicine and Biology, June 12, 2018.
2. Siddarth Srinivasan, Ioana D. Vladescu, Stephan A. Koehler, Xiaoling Wang, Madhav Mani, and Shr Matrix Production and Sporulation in Bacillus subtilis Biofilms Localize to Propagating Wave Fronts. E 1–9, March 27, 2018. <https://doi.org/10.1016/j.bj.2018.02.002>
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4. Xiaoling Wang, Shuo Meng and Jingshi Han. A Continuum Theoretical Model and Finite Elements S Flagellar Filament Phase Transition. Journal of Biomechanics, accepted on Sep. 7 2017. DOI: <http://dx.doi.org/10.1016/j.jbiomech.2017.09.012>
5. Xiaoling Wang, Shuo Meng and Jingshi Han. Morphologies and phenotypes in Bacillus subtilis biofilm Microbiology (2017) Vol. 55, No. 9, pp. DOI 10.1007/s12275-017-7041-z
6. Xianlong Zhang, Xiaoling Wang, Qingping Sun. Modeling of Biofilm Growth on Ager Substrate Usi Element Method. Procedia IUTAM, 2017 (23), 33-41. doi: 10.1016/j.piutam.2017.06.003

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10. Xiaoling Wang, Stephan A. Koehler, James N. Wilking, Naveen N. Sinha, Matthew T. Cabeen, S Agnese Seminara, Shmuel Rubinstein, Qingping Sun, Michael P. Brenner, David A. Weitz. Probing Ph expanding *Bacillus subtilis* biofilms, to be accepted by *Applied Microbiology and Biotechnology*, Probing Ph expanding *Bacillus subtilis* biofilms, *Applied Microbiology and Biotechnology*, 2016, 100(10), 4607-4614. DOI: 10.1007/s00253-016-7461-4.
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12. Matsushita J, Tsuchiyama T, Hamaguchi K, Iwamoto N, Xiaoling Wang, Yang JF, Sekino, Wu XY. Anatase Type Titanium Dioxide Prepared by Oxidation of Titanium Carbide, *Materials Science Forum*, 2016, DOI: 10.4028/www.scientific.net/MSF.860.92
13. Xiaoling Wang, Hao MD and Wang GQ, Numerical simulation of wrinkle morphology formation in different *Bacillus subtilis* biofilms, *Water Science and Technology*, 2016, 73(3), 527-534. DOI: 10.2166/wst.2015.0363
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15. Dong L, Zhou RH, Xiaoling Wang, Hu GK, Sun QP, On interfacial energy of macroscopic domain NiTi shape memory alloys, *International Journal of Solids and Structures*, 2016, 80, 445-455.
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17. Xiaoling Wang, Hao L and Wang GQ, Effect of the geometric parameters of elastomer substrates on stretchable electronics, *Chinese Journal of Engineering*, 2015, 37 (s1), 24-28
18. Xiaoling Wang, and Q. P. Sun, Modeling of rate-dependent phase transition in bacterial flagellar filaments, *Research Bulletin, Materials Research Bulletin*, 2013, 43, 5019-5025. DOI: 10.1016/j.materresbull.2013.08.013
19. Xiaoling Wang, Sun QingPing. Mechanical Analysis of Phase Transition Experiments of the Bacterium *Acta mechanica Sinica*, 2010, 26 (5), 777-785.
20. Xiaoling Wang, Sun QingPing. The review of phase transition in biological systems. *Advances in Materials Research*, 2010 ,40 (1): 64-80 (in Chinese).
21. Xiaoling Wang, Sun QingPing. Mechanical modeling of the bistable bacterial flagellar filament. *Acta Mechanica Sinica*, 2011, 24(S), 1-16.
22. Xiaoling Wang, Yongjun He, Sun QingPing. Simulation of Bacterial flagellar phase transition by a local continuum modeling. *Theoretical & Applied Mechanics Letters*. 2011, 1 (4): 044001-6.
23. Xiaoling Wang, Hu GengKai. Stress transfer for a SMA fiber pulled out from an elastic matrix and Composites part A - Applied Science and Manufacturing, 2005, 36 (8): 1142-1151.
24. Xiaoling Wang, Zhao H, Virtual Medical Model Modification with Laplacian System, *International Conference on Biomedical Engineering & Informatics*, 2010, 3(1), 1296-1299.
25. Xiaoling Wang, Zhang Q, The Mechanical Property Analysis of Circular Saw Blades under Different Working Conditions, *Advanced Materials Research*, 2010, 145, 365-370.
26. Xiaoling Wang, Zhang Y, The Analysis on Different Circular Saw Structures for Reducing Saw Noise, *Advanced Materials Research*. 2010, 145, 551-556.
27. Xiaoling Wang, Zhao H, Surface Based Virtual Mechanical Equipment Modification, *Advanced Materials Research*, 2010, 149, 693-697.
28. Xiaoling Wang, Zhao H, Virtual Mechanical Equipment Model Smoothing, *Advanced Materials Research*, 2010, 145, 355-359.
29. Xiaoling Wang, Yin ZJ and Li YL, The stress analysis of different circular saw structures during cutting process, *Advanced Materials Research*. 2011, 228, 471-476.
30. Xiaoling Wang, Yin ZJ and Zhang C, The analysis of dynamic characteristics in reduction of the cutting force, *Advanced Materials Research*, 2011, 229, 477-483.
31. Xiaoling Wang, Yin ZJ and Zhang C, The mechanical analysis of the composite reinforced circular saw blade, *Advanced Materials Research*, 2011, 228: 484-489.

#### 成果与荣誉：

先后主持和参与国家自然科学基金委资助的青年项目、青年面上连续项目，面上项目以及重点项目4项，北京市、高校以及其他项目共4项。

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