

## **PProf. Chuanhai Jiang (C. H. Jiang)**

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## **Curriculum Vitae**

### **Personal**

Birthday: September 9, 1963  
Academic Degree: Doctor of Engineering  
Occupation: Professor

### **Education and Employment**

2001-present Professor, School of Materials Science and Engineering, Shanghai Jiao Tong University  
1996-2000 Doctor degree achieved at Harbin Institute of Technology  
1983-1995 Engineer of Harbin Turbine Company  
1979-1983 Bachelor of Material Physics, Lanzhou University

### **Society activity**

Deputy Director of Shot Peening Committee of China  
Secretary General of Residual Stress Committee of China

### **Organizer of national conference**

4 times of National Conference of Shot Peening since 2010, two years span in between.  
7 times of National Conference of Residual Stress since 2005, two years span in between.  
Both conferences are of around 300-350 participates each.

### **Books, publications and patents**

7 books (in Chinese) and 64 papers (55 in English) released and 16 invention patents approved.

### **Papers published in recent 3 years**

[1] Wang C, Jiang C, Chai Z, et al. Estimation of microstructure and corrosion properties of peened nickel aluminum bronze[J]. Surface and Coatings Technology, 2017, 313: 136-142.

- [2] Zhu K, Jiang C, Li Z, et al. Residual stress and microstructure of the CNT/6061 composite after shot peening[J]. *Materials & Design*, 2016, 107: 333-340.
- [3] Wang C, Jiang C, Ji V. Thermal stability of residual stresses and work hardening of shot peened tungsten cemented carbide[J]. *Journal of Materials Processing Technology*, 2017, 240: 98-103.
- [4] Wang C, Jiang C, Cai F, et al. Effect of shot peening on the residual stresses and microstructure of tungsten cemented carbide[J]. *Materials & Design*, 2016, 95: 159-164.
- [5] Peng Fu, Chuanhai Jiang, Xueyan Wu Surface modification of 304 steel using triple-step shot peening, *Materials and Manufacturing Processes*, 2015, 30:693-698.
- [6] Peng Fu, Ke Zhan, Chuanhai Jiang, Micro-structure and surface layer properties of 18CrNiMo7-6 steel after multistep shot peening, *Materials and Design* 2013, 51: 309-314.
- [7] Peng Fu, Chuanhai Jiang, Residual stress relaxation and micro-structural development of the surface layer of 18CrNiMo7-6 steel after shot peening during isothermal annealing, *Materials and Design* 2014, 56: 1034-1038.
- [8] Peng Fu, Chuanhai Jiang, Zhongquan Zhang, Residual stress and micro-structure of GCr15 steel after multistep shot peening, *Surface Engineering* 2014, 30(11): 847-851.
- [9] Qiang Feng, Chuanhai Jiang, Surface layer investigation of duplex stainless steel S32205 after stress peening utilizing X-ray diffraction, *Materials and Design* (2013) 47: 68-73.
- [10] Qiang Feng, Xueyan Wu, Chuanhai Jiang, Zhou Xu, Ke Zhan, Influence of annealing on the shot-peened surface of duplex stainless steel at elevated temperatures, *Nuclear Engineering and Design* (2013) 255: 146-152.
- [11] Q. Feng, C. H. Jiang, Z. Xu and X. Y. Wu, Microstructure thermostability of shot peened duplex stainless steel surface layer, *Surface Engineering* (2013) 29: 351-355.
- [12] Qiang Feng, Chuanhai Jiang, Zhou Xu, Lechun Xie, Effect of shot peening on the residual stress and microstructure of duplex stainless steel, *Surface & Coatings Technology* (2013) 226: 140-144.
- [13] Qiang Feng, Chuanhai Jiang, and Zhou Xu, Residual stress relaxation of shot-peened deformation surface layer on duplex stainless steel under applied loading, *JMEPEG* (2014) 23: 408-412.
- [14] FENG Qiang, JIANG Chuanhai, Investigation on the transformation of sigma phase in shot-peened duplex stainless steel at elevated temperature by Rietveld method. 12th International Conference on Shot Peening (ICSP-12), Goslar, Germany, Sep. 15-18, 2014
- [15] Lechun Xie, Chuanhai Jiang, Weijie Lu. The influence of shot peening on the surface properties of (TiB + TiC)/Ti-6Al-4V. *Applied Surface Science* 280 (2013) 981-988
- [16] Lechun Xie, Liqiang Wang, Chuanhai Jiang, Weijie Lu. The variations of microstructures and hardness of titanium matrix composite (TiB + TiC)/Ti- 6Al- 4V after shot peening. *Surface & Coatings Technology* 244 (2014) 69-77
- [17] Lechun Xie, Qinghua Zhou, Xiaoqing Jin, Zhanjiang Wang, Chuanhai Jiang. Effect of reinforcements on rolling contact fatigue behaviors of titanium matrix composite (TiB + TiC)/Ti-6Al-4V. *International Journal of Fatigue* 66 (2014) 127-137
- [18] K. Zhan, L. C. Xie, C. H. Jiang and V. Ji. Thermostability of S30432 shot peened surface layer. *Surface Engineering*, 2013 VOL 29 NO 1
- [19] K. Zhan, C.H. Jiang, V. Ji. Uniformity of residual stress distribution on the surface of S30432 austenitic stainless steel by different shot peening processes. *Materials Letters* 99 (2013) 61-64
- [20] YanHua Chen and ChuanHai Jiang. Effect of Shot Peening on Surface Characteristics of Ni-Based Single-Crystal Superalloy. *Materials Transactions*, Vol. 54, No. 10 (2013) pp. 1894 to 1897

## **Books**

- [1] Chuanhai Jiang, Ke Zhan, Chuazheng Yang, The Shot-peening Strengthening of Materials and Its Characterization by X-ray Diffraction [M], Beijing, Science Press, 2017, 516 pages (In press).
- [2] Chuanhai Jiang, Chuazheng Yang, Diffraction Analysis of Internal Stress [M], Beijing, Science Press, 2013, 413 pages.
- [3] Yonghua Rong, Chuanhai Jiang, Microstructural Characterization of Materials [M], Shanghai, Shanghai Jiao Tong University Press, 2012, 417 pages.
- [4] Chuanhai Jiang, Chuazheng Yang, Neutron Diffraction Technology and Its Application [M], Beijing, Science Press, 2012, 311 pages.
- [5] Chuanhai Jiang, Chuazheng Yang, X-Ray Diffraction Technology and Its Application [M], Shanghai, East China University of Science and Technology Press, 2010, 262 pages.
- [6] Chuanhai Jiang, Chuazheng Yang, Analysis of Material by Ray-Diffraction and Scattering [M], Beijing, Higher Education Press, 2010, 630 pages.
- [7] Guangpu Wei, Chuanhai Jiang, Wei Zhen, Dengren Jin, Crystal Structure and Defect [M], Beijing, China Water Power Press, 2010, 202 pages.