



## Registration Form for WFC Scientific Committee

### Personal Info.

Name: LI Jinshan

Title: Professor, Dean of School of Materials Science

Affiliation: Northwestern Polytechnical University



### Education Background

Northwestern Polytechnical University 1984.09-1988.07

Major in: Foundry

Degree: Bachelor degree

Northwestern Polytechnical University 1992.09-1995.03

Major in: Foundry

Degree: Master degree

Northwestern Polytechnical University 1995.09-1998.11

Major in: Foundry

Degree: Ph.D degree

### Working Experience

Northwestern Polytechnical University 2016.05-Now

Position: Professor, Dean of School of Materials Science

#### Responsibility:

1. Dean of the School of Materials Science
2. Director of state key laboratory of solidification processing
3. Research and teaching

#### Major Achievements:

1. Published more than 300 peer reviewed journal papers;
2. Granted more than 80 patents;
3. Granted more than 20 projects, including National Key Research and Development Program of China, National Natural Science Foundation of China.

#### Representative Publications (Total journal papers >300)

- (1). H. Zhi, J. Li, W. Li, M. Elkot, S. Antonov, H. Zhang, M. Lai, Simultaneously enhancing strength-



- ductility synergy and strain hardenability via Si-alloying in medium-Al FeMnAlC lightweight steels, *Acta Materialia* 245 (2023) 118611.
- (2). Y. Liu, **J. Li**, B. Tang, L. Song, W.Y. Wang, D. Liu, R. Yang, H. Kou, Decomposition and phase transformation mechanisms of  $\alpha_2$  lamellae in ss-solidified gamma-TiAl alloys, *Acta Materialia* 242 (2023) 118492.
  - (3). G. Zheng, B. Tang, S. Zhao, X. Chen, L. Zhu, **J. Li**, W.Y. Wang, Evading the strength-ductility trade-off at room temperature and achieving ultrahigh plasticity at 800 degrees C in a TiAl alloy, *Acta Materialia* 225 (2022) 117585.
  - (4). R. Yuan, Z. Liu, Y. Xu, R. Yin, J. He, Y. Bai, Y. Zhou, **J. Li**, D. Xue, T. Lookman, Optimizing Electrocaloric Effect in Barium Titanate-based Room Temperature Ferroelectrics: Combining Landau Theory, Machine Learning and Synthesis, *Acta Materialia* 235 (2022) 118054.
  - (5). C. Zou, **J. Li**, W.Y. Wang, Y. Zhang, D. Lin, R. Yuan, X. Wang, B. Tang, J. Wang, X. Gao, H. Kou, X. Hui, X. Zeng, M. Qian, H. Song, Z.-K. Liu, D. Xu, Integrating data mining and machine learning to discover high-strength ductile titanium alloys, *Acta Materialia* 202 (2021) 211-221.
  - (6). W.Y. Wang, B. Tang, S.-L. Shang, J. Wang, S. Li, Y. Wang, J. Zhu, S. Wei, J. Wang, K.A. Darling, S.N. Mathaudhu, Y. Wang, Y. Ren, X.D. Hui, L.J. Kecskes, **J. Li**, Z.-K. Liu, Local lattice distortion mediated formation of stacking faults in Mg alloys, *Acta Materialia* 170 (2019) 231-239.
  - (7). K. Hua, Y. Zhang, W. Gan, H. Kou, **J. Li**, C. Esling, Correlation between imposed deformation and transformation lattice strain on  $\alpha$  variant selection in a metastable  $\beta$ -Ti alloy under isothermal compression, *Acta Materialia* 161 (2018) 150-160.
  - (8). W.Y. Wang, F. Xue, Y. Zhang, S.L. Shang, Y. Wang, K.A. Darling, L.J. Kecskes, **J.S. Li**, X.D. Hui, Q. Feng, Z.K. Liu, Atomic and electronic basis for solutes strengthened (010) anti-phase boundary of L1(2) Co-3(Al, TM): A comprehensive first-principles study, *Acta Materialia* 145 (2018) 30-40.
  - (9). M. Zhang, **J. Li**, B. Tang, W.Y. Wang, K. Li, T. Zhang, D. Wang, H. Kou, Quantification of  $\beta$  phase strengthening in titanium alloys: Crystal plasticity model incorporating  $\beta/\beta'$  heterointerfaces, *International Journal of Plasticity* 158 (2022) 103444.
  - (10). Z. Wu, H. Kou, **J. Li**, S. Hemery, N. Chen, J. Tang, F. Qiang, F. Sun, F. Prima, High-strength and low-dwell-sensitivity titanium alloy showing high tolerance to microcracking under dwell fatigue condition, *International Journal of Plasticity* 159 (2022) 103449.

**Other information:**

- **President** of solidification science and technology society of C-MRS
- **Vice President** of foundry society of C-MES
- **Science and Technology Award** (1nd Class), the Ministry of Industry and Information Technology, P.R.China, 2021
- **Science and Technology Award** (1nd Class), the People's Government of Shaanxi Province, P.R.China, 2019
- **Editor**, *Foundry Technology* (2018), **Associate Editor**, *Foundry* (2019), **Editor board member of more than 10 journals**