

**Associate Prof., PhD      Guo-Bing Ying**

---

**Date of Birth:** *October 6, 1983*

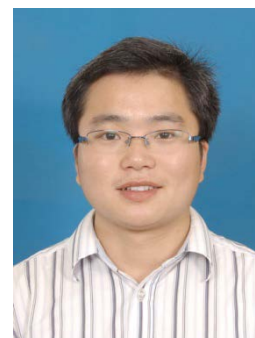
**Place of Birth:** *Poyang, Jiangxi province, China*

**Add.:** *Department of Materials Science and Engineering, College of Mechanics and Materials, Hohai University, No.8 West Focheng Road, Jiangning District, Nanjing 211100, China*

**Email:** yinggb2010@126.com; yinggb001@hhu.edu.cn;

**Phone:** +86. 18705159762    **Websites:** <http://lcy.hhu.edu.cn/s/75/t/100/main.htm>

---



**Research Interests:**

- *Nanolayered  $M_{n+1}AX_n$  ceramics (i.e. MAX:  $Ti_3AlC_2$ ,  $Ti_2AlC$ ,  $Cr_2AlC$ ,  $Ta_2AlC$  and so on) and MAX composites (with metals or other ceramics);*
  - *Layered MXene ceramics;*
  - *Synthesis of materials by SHS (self-propagating high-temperature synthesis), HP (hot pressing) and Spark Plasma Sintering;*
  - *Structural and functional characteristics of nanolayered MAX and MXene ceramics.*
- 

**Education:**

*Nov. 2011, Ph.D., Materials Science, Harbin Institute of Technology*

*Mar. 2008, M.S., Materials Physics and Chemistry, Harbin Engineering University*

*Jul. 2005, B.S., Materials Science and Engineering, Harbin Engineering University*

---

**Professional Activities and Position:**

04/2015-present Associate professor & Research Scientist at the Department of Materials Science and Engineering, College of Mechanics and Materials, **Hohai University**, China.

04/2012-03/2015 Lecturer & Research Scientist at the Department of Materials Science and Engineering, College of Mechanics and Materials, **Hohai University**, China.

**Courses:** Materials Physics, Materials Testing & Analysis Techniques, Materials Testing & Analysis Techniques Experiment, and Solid Transformation & Heat Treatment for undergraduate students; Physical Metallurgy for graduate students.

2012-present, Postdoctoral Researcher in Department of Engineering Mechanics, Hohai University

---

## Professional Activities:

Referee for Journal Manuscripts: Journal of the American Ceramic Society; Journal of Alloys and Compounds; International Journal of Applied Ceramic Technology and so on;

Inviter to appoint candidate to the International Ceramic Prize 2016, World Academy of Ceramics;

Deputy Editor-in-chief: Materials Express.

---

## Honors and Supports:

1. The China Scholarship Council, Grant No. 201506715043, 2015
  2. National Natural Science Foundation of China, Grant No. 11302068, 2013
  3. China Postdoctoral Science Foundation, Grant No. 2014T70465, 2014
  4. China Postdoctoral Science Foundation, Grant No. 2013M531261, 2013
  5. No.1 Award of The 20th Young Teachers Teachers Lecture Contest of HHU, 2013
  6. Six Undergraduate Scholarships, 2001-2005
- 

## Papers:

1. Tian Bao-Na; **Ying Guo-Bing\***; Wang Peng-Ju; Wang Cheng; Wu Yu-Ping. In-situ synthesis mechanism of nano-layered ternary Ta<sub>2</sub>AlC. Journal of Synthetic Crystals. 44 (7): 1773-1777, 2015
2. **Ying Guobing\***, Tian Baona, He Xiaodong, Du Shanyi, Wang Pengju, Wang Cheng, Wu Yuping. Influence of heat treatment on the microstructure and properties of Ti<sub>2</sub>AlC by SHS/PHIP. Rare Metal Materials and Engineering. 44,1: 340-344, 2015
3. Pengju, W., Yuping, W., **Guobing, Y.\***, Baona, T., & Cheng, W.. Influence of Al<sub>2</sub>O<sub>3</sub> Hollow Sphere on the Microstructure and Mechanical Properties of Porous Si<sub>3</sub>N<sub>4</sub> Ceramics. RARE METAL MATERIALS AND ENGINEERING, 44, 615-618, 2015
4. **Guobing Ying\***, Xiaodong He, Shanyi Du, Chuncheng Zhu, Yongting Zheng, Yuping Wu, Cheng Wang. Formation of M<sub>n+1</sub>AX<sub>n</sub> phases in Ti–Cr–Al–C systems by self-propagating high-temperature synthesis. Rare metals. 33,4: 419-426, 2014
5. **Guobing Ying\***, Xiaodong He, Shanyi Du, Yongting Zheng, Chuncheng Zhu, Yuping Wu, Cheng Wang. Kinetics and numerical simulation of self-propagating high-temperature synthesis in Ti–Cr–Al–C systems. Rare metals. 33,5: 527-533, 2014
6. Liu L Z, **Ying G B**, Zhu J, et al. High-temperature compressive properties of TiC–TiB<sub>2</sub>/Cu composites prepared by self-propagating high-temperature synthesis. Rare Metals, 33(1): 95-98, 2014

7. Wang Pengju, Wu Yuping; **Ying Guobing\***; Tian Baona; Wang Cheng; Li Jia; Zhao Haiwei. Preparation of high strength porous silicon nitride ceramics by gel-casting. *Journal of the Chinese Ceramic Society*. 42(12): 1496-1500, 2014
8. Wang Pengju, Wu Yuping; **Ying Guobing\***; Tian Baona; Research progress of preparation methods of porous silicon nitride ceramic. 28 (2): 106-110, 2014
9. Guo, W., Wu, Y., Zhang, J., Hong, S., Li, G., **Ying, G.**, ... & Qin, Y. Fabrication and Characterization of Thermal-Sprayed Fe-Based Amorphous/Nanocrystalline Composite Coatings: An Overview. *Journal of Thermal Spray Technology*, 23(7), 1157-1180, 2014
10. Hong, S., Wu, Y., Zheng, Y., Wang, B., Gao, W., Li, G. **Ying G.**, & Lin, J. (2014). Effect of Spray Parameters on the Corrosion Behavior of HVOF Sprayed WC-Co-Cr Coatings. *Journal of materials engineering and performance*, 23(4), 1434-1439, 2014
11. **Ying Guobing\***, Wu Yuping, He Xiaodong, Zhu Chuncheng, Du Shanyi, Wang Cheng, Li Gaiye. Effect of heat treatment on the microstructure and properties of  $Ti_3AlC_2$ - $Cr_2AlC$ -TiC composite. *Rare Metal Materials and Engineering*. 42,1: 618-622, 2013
12. Sheng Hong, Yuping Wu, Gaiye Li, Bo Wang, Wenwen Gao, **Guobing Ying**. Microstructural characteristics of high-velocity oxygen-fuel (HVOF) sprayed nickel-based alloy coating. *Journal of Alloys and Compounds*. 581:398-403, 2013
13. Sheng Hong, Yuping Wu, Qian Wang, **Guobing Ying**, Gaiye Li, Wenwen Gao, Bo Wang, Wenmin Guo. Microstructure and cavitation-silt erosion behavior of high-velocity oxygen-fuel (HVOF) sprayed  $Cr_3C_2$ -NiCr coating. *Surface and Coatings Technology*. 225:85-91, 2013
14. Hong, S., Wu, Y. P., Wang, Q., Li, G. Y., **Ying, G. B.**, Wang, B., & Gao, W. W. Cavitation silt erosion behaviour of HVOF sprayed nickel based alloy coatings. *Surface Engineering*, 29(8), 588-593, 2013
15. **Guobing Ying**, Xiaodong He, Mingwei Li, Wenbo Han, Fei He, Shanyi Du. Synthesis and mechanical properties of high-purity bulk  $Cr_2AlC$  ceramic. *Materials Science and Engineering A*. 528:2635-2640, 2011
16. **Guobing Ying**, Xiaodong He, Mingwei Li, Shanyi Du, Wenbo Han, Fei He. Effect of  $Cr_7C_3$  on the mechanical, thermal and electrical properties of  $Cr_2AlC$ . *Journal of Alloys and Compounds*; 509:8022-8027, 2011
17. **Guobing Ying**, Xiaodong He, Mingwei Li, Yibin Li, Shanyi Du. Synthesis and mechanical properties of nano-layered composite. *Journal of Alloys and Compounds*. 56:734-738, 2010
18. **G.B. Ying**, X. Wang. Numerical simulation of the SHS temperature fields of Al-Ti-C system based on plane propagating pattern. *International Journal of Modern Physics C* 20:1087, 2009

19. H.L. Zhang, M.F. Zhang, J.C. Han, **G.B. Ying**, H.X. Guo, H.T. Shen, N.N. Song, C.H. Xu. Influence of the temperature and duration of the annealing on the lattice structure and growth of the Mg-Al spinel layer. *Applied Surface Science*.257: 5012-5016, 2011
20. M.F. Zhang, H.L. Zhang, J.C. Han, H.X. Guo, C.H. Xu, **G.B. Ying**, H.T. Shen, N.N. Song. Effect of neutron irradiation and subsequent annealing on the optical characteristics of sapphire. *Physica B*. 406: 494-497, 2011
21. **Guobing Ying\***, et al. Eighteenth Annual Meeting of the National High-tech Ceramics, November Qingyuan, China, 2014
22. Baona Tian, **Guobing Ying\*** et al. Eighteenth Annual Meeting of the National High-tech Ceramics, November Qingyuan, China, 2014
23. Pengju Wang, Yuping Wu, **Guobing Ying\*** et al. Eighteenth Annual Meeting of the National High-tech Ceramics, November Qingyuan, China, 2014
24. **Guobing Ying\***, et al. Synthesis of  $M_{n+1}AX_n$  phases in Ti–Cr–Al–C systems. Open Sino-Russian Workshop on SHS, 24-26 October, Beijing, China, 2012
25. **Guobing Ying\***, et al. Seventeenth Annual Meeting of the National High-tech Ceramics, September, Nanjing, China, 2012
26. **Guobing Ying\*** et al. Numerical simulation and experimental study of self-propagating high-temperature synthesis in Ti–Cr–Al–C systems. SHS-2012 Beijing The Open Sino-Russia Workshop on SHS. Oct. 2012
27. **Guobing Ying\***, Xiaodong He, Shanyi Du, Mingwei Li, Yongting Zheng, Chuncheng Zhu. In situ synthesis and mechanical properties of  $Ti_2AlC$ - $Ti_3AlC_2$  composites by SHS/PHIP. XI International Symposium on Self-Propagating High-Temperature Synthesis, 5-9 September, Attica, Greece, 2011
28. Xiaodong He, **Guobing Ying**, Shanyi Du, Yongting Zheng, Chuncheng Zhu. In situ synthesis and mechanical properties of  $M_{n+1}AX_n$  ceramics by SHS/PHIP. XI International Symposium on Self-Propagating High-Temperature Synthesis, 5-9 September, Attica, Greece, 2011
29. M. Li, **G. Ying**, X. He and S. Du. New  $M_{n+1}AX_n$  compounds by thermal explosion in the Al-Cr-Si-C system. *International Journal of Self-Propagating High-Temperature Synthesis*.18: 273-275 , 2009
30. **Guobing Ying**, Xiaodong He, Mingwei Li, Chuncheng Zhu, Shanyi Du. Synthesis and characterization of  $Cr_2AlC$  compounds prepared by thermal explosion. X International Symposium on Self-Propagating High-Temperature Synthesis, 6-11 July, Tsakhkadzor, Armenia, 2009

31. **Guobing Ying**, Xiaodong He, Shanyi Du. Thermal activation in self-Propagating high-temperature synthesis. X International Symposium on Self-Propagating High-Temperature Synthesis, 6-11 July, Tsakhkadzor, Armenia, 2009
32. Xiang Wang, **Guobing Ying**. Microstructure and Strengthening Mechanism of TiC<sub>p</sub>/ZA-12 Composites. Key Engineering Materials. 221:348-349, 2007
33. **G.B. Ying**, X. Wang . The 6th International Conference on Materials Processing for Properties and Performance. Beijing, China, 2007