

王铀

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主要研究方向

纳米表面工程、材料摩擦学和材料的纳米改性。

社会兼职

全国热处理标准化技术委员会委员、黑龙江省表面工程学会理事长、黑龙江省新材料专家委员会委员、《Journal of Materials Science & Technology》编委、《材料热处理学报》编委、《热处理技术与装备》编委、《Journal of Thermal Spray Technology》嘉宾编委，还担任《Surface and Coatings Technology》、《Wear》、《Corrosion Science》、《Surface Science》、《Thin Solid films》、《Materials Science and Engineering A》、《Tribology letters》等十余家国内外杂志的审稿人。

主要学术成果

王铀教授在材料科学与工程领域有 30 年的研究工作经历，已发表科研论文 190 余篇，并申报获批十几项中国、美国和国际发明专利。数十篇文章为 SCI 收录，被同行在国际杂志引用 300 余次，其中有一篇论文被 SCI 单篇引用近 100 次。

(1) 论文：

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2. **Y. Wang**, W. Tian, Y. Yang C.G. Li and L. Wang, Investigation of stress field and failure mode of plasma sprayed Al₂O₃-13%TiO₂ coatings under thermal shock, **Materials Science and Engineering A**, 2009, 516: 103~110.
3. **Y. Wang**, W. Tian, T. Zhang, Y. Yang. Microstructure, Spallation and Corrosion of Plasma Sprayed Al₂O₃-13%TiO₂ Coatings. **Corrosion Science**. 2009, 51(12): 2924~2931.
4. Y. Yang, **Y. Wang**, W. Tian, Z. Wang, C.G. Li, Y. Zhao and H.M. Bian, In situ porous alumina/aluminum titanate ceramic composite prepared by spark plasma sintering from nanostructured powders, **Scripta Materialia**, 60 (2009) 578-581.
5. **Y. Wang**, W. Tian, and Y. Yang, Preparation and Characterization of RE modified nanocrystalline Al₂O₃/13wt%TiO₂ feedstock for plasma spraying, **Journal of Nanoscience and Nanotechnology**, 8 (2008)1-4.
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7. Y. Yang, **Y. Wang**, Z. Wang, G. Liu, W. Tian, Preparation and sintering behaviour of nanostructured alumina/titania composite powders modified with nano-dopants, **Materials Science and Engineering A**, 490 (2008)457-464.
8. **Y. Wang**, W. Tian, and Y. Yang, Fretting wear behavior of conventional and nanostructured Al₂O₃-13 wt%TiO₂ coatings fabricated by plasma spray, **Wear**, 265 (2008)1700-1707.
9. **Y. Wang**, D.L. Wang, G. Liu, W. Tian and C.H. Wang, The Influence of Powder Types and Plasma Spray Conditions on Abrasive Wear of Nano-structured and Conventional Al₂O₃/TiO₂ Coatings, **Materials Science Forum**, 539-543 (2007) 1294-1299.
10. **Y. Wang**, Y. Yang and M.F. Yan, Microstructures, hardness and erosion behavior of thermal sprayed and heat treated NiAl coatings with different ceria, **Wear**, 263 (2007)371-378.
11. **Y. Wang**, Y. Yang, W. Tian, C.G. Li, Thermal Sprayed WC-Co Coatings and Their Mechanical Properties, **Rare Metals**, 26(2007)1-6.
12. C.G. Li, W. Tian, Y. Yang, **Y. Wang**, Microstructure and properties of Al₂O₃-13wt%TiO₂ coatings fabricated by plasma spraying and laser remelting on titanium alloy, **Transactions of Materials and Heat Treatment**, 28 (2007)228-232.
13. **Y. Wang**, W. Tian, Y. Yang, Thermal shock behavior of nano-structured and conventional Al₂O₃/13 wt%TiO₂ coatings fabricated by plasma spraying, **Surface and Coatings Technology**, 201 (2007) 7746-7754.
14. **Y. Wang** and Z. Xu, Nanostructured Ni-WC-Co Composite Coatings fabricated by electrophoretic deposition, **Surface and Coatings Technology**, 200 (2006) 3896-3902.
15. **Y. Wang** and M.F. Yan, The effect of CeO₂ on the erosion and abrasive wear of thermal sprayed FeAl intermetallic alloy coatings, **Wear**, 261(2006)1201-1207.
16. **Y. Wang** and W. Chen, Microstructures, Properties and High-Temperature Carburization Resistances of HVOF Thermal Sprayed NiAl Intermetallic-Based Alloy Coatings, **Surface and Coatings Technology**, 183 (2004)18-28.
17. **Y. Wang** and W. Chen, Microstructures, Properties and High-Temperature Carburization Resistances of HVOF Thermal Sprayed NiAl Intermetallic-Based Alloy Coatings, **Surface and Coatings Technology**, 183 (2004)18-28.
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21. **Y. Wang**, W. Chen and L. Wang, Microindentation and Erosion Properties of Thermal Sprayed NiAl Intermetallic-Based Alloy-Coatings, **Wear**, 254 (2003)350-355.
22. **Y. Wang**, S. Jiang, D. Wang, S. Wang, T. Xiao, and P.R. Strutt, Abrasive Wear Characteristics of Plasma Sprayed Nanostructured Alumina/Titania Coatings, **Wear**, 237 (2000) 176-186.
23. **Y. Wang**, J.J. Liu and R. Kovacevic, Mechanism of surface modification of CeO₂ in laser remelted alloy spray coatings, **Wear**, 221 (1998)47-53.
24. **Y. Wang**, M. Su, W. Liu and Q.P. Zhong, Microstructure, Wear and Corrosion Resistance of Laser-Alloyed M₈₀S₂₀ Alloy Layers with or without CeO₂, **Surface and Coatings Technology**, 78(1996)274-279.
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28. **Y. Wang**, Z.H. Yu, J.J. Liu, C.S. Wang and Q.A. Li, The Influence of CeO₂ on The Microstructure and Wear Resistance of M₈₀S₂₀ Flame Spray and Flame Spray Welding Coatings, **Journal of Rare Earths**, 10 (1992) 212-216.

(2) 专利：

1. **Y. Wang**, W.X.Chen, Ductile NiAl Intermetallic Compositions, US Patent 6,652,991, Nov. 25, 2003.
2. **Y. Wang**, M. Wang and T.D. Xiao, Multi-component Ceramic Compositions and Method of Manufacture thereof, US Patent Application No. 20030008764; US Patent 6,723,674, April 20, 2004
3. **Y. Wang**, W.X.Chen, Ductile NiAl Intermetallic Compositions, PCT International Patent Application No. PCT/CA03/01414, Nov. 25, 2003.
4. **Y. Wang**, H.Ye, Solid Lubricant Coatings Produced by Thermal Spray Methods, US Patent 6,689,424, Feb. 10, 2004.
5. 王铀, 稀土改性 MCrAlY 涂层提高其抗高温硫化腐蚀性能的方法, 中国专利申请号: 200710072121.7, 2007 年 4 月 27 日.
6. 王铀, 杨勇, 氧化铝/氧化钛复相精细陶瓷材料的改性方法, 中国专利申请号: 200710144894.1, 2007 年 12 月 21 日.
7. 王铀, 周红霞, 彭飞, 碳化钨/钴系涂层材料, 中国专利申请号: 200810064860.6, 2008 年 7 月 4 日.
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