# Xian Ming Meng, Ph.D, Vice-Chief Engineer, Senior Engineer

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Xianming Meng, PH.D, Vice-Chief Engineer, Senior Engineer, worked in China Automotive Technology & Research Center, focus on mechanical property of new material, and application of new materials design in car body structure. Dr. Xianming Meng has a solid theoretical foundation of material mechanics and material microstructure analysis, and he has many experience in mechanical properties of automotive materials, and has many project experience in structure crashworthiness design. The research works to the first author in the domestic and foreign journals which is published more than 35 papers.

#### **PUBLICATIONS**

## 1. Journal articles published

- 1. Meng, X. M.; Zhang, J. B.; etc. [J]. Influence of annealing treatment on cold rolling behaviour of 304SS coating by cold spraying, Materials Research Innovations, 2012, 16(1), 73-78.
- Meng Xianming; Zhang Junbao; etc. [J]. Fracture Behavior of Cold Sprayed 304 Stainless Steel Coating During Cold Rolling, Journal of Iron and Steel Research, International, 2012, 19(11), 57-63.
- 3. Meng Xianming; Liang Yongli; etc. [J]. Influence of Temperature of To-e-Sprayed Gas on the Microstrcture and Properties of Cold Sprayed 304 Stainless Steel Coatings, Journal of Materials Protection, 2011, 44(7), 1-3
- 4. Meng, Xian-Ming; Zhang, etc. [J]. Influence of annealing treatment on the microstructure and mechanical performance of cold sprayed 304 stainless steel coating, Applied Surface Science, 2011, 258(2), 700-704.
- 5. Meng, X. M.; Zhang, J. B.; etc. [J]. Numerical and experimental investigation on effect of impact velocity on particle deposition characteristics in cold spraying, Materials Research Innovations, 2011, 15(4), 283-289.
- Meng, Xianming; Zhang, Junbao; Zhao, Jie; etc. [J]. Influence of Gas Temperature on Microstructure and Properties of Cold Spray 304SS Coating, Journal of Materials Science & Technology, 2011, 27(9), 809-815.
- 7. Meng Xianming; Liang Yongli; etc. [J]. Influence of annealing treatment on microstructure and corrosion behaviour of cold sprayed 304 stainless steel coatings, Transactions of Materials and Heat Treatment, 2011, 32(2), 124-129.
- 8. Meng Xianming; Liang Yongli; etc. [J]. Influence of annealing treatment on microstructure and corrosion behaviour of cold sprayed 304 stainless steel coatings, Transactions of Materials and Heat Treatment, 2011, 32(2), 124-129
- 9. Meng, Xianming; Zhang, Junbao; etc. [J]. Influence of annealing treatment on microstructure and properties of cold sprayed stainless steel coatings, Acta Metallurgica Sinica-English Letters,2010,24(2),92-100.

- 10. Meng, Xian Ming, Zhang, Jun Bao; etc. [J]. Effect of gas temperature on the particle deposition characteristics and coating microstructure by cold spray, Materials Science Forum, 2011, 675-677, 1295-1298.
- 11. Han, Wei; Meng, Xianming; etc. [J]. Fracture behavior of 304 stainless steel coatings by cold gas dynamic spray, Acta Metallurgica Sinica-English Letters, 2011, 24(3), 249-254.
- 12. Han Wei; MENG Xianming; etc. [J]. Effect of vacuum heat treatment on elastic modulus of 304 stainless steel coating by cold gas spraying, Transactions of Materials and Heat Treatment, 2011, 32(8), 147-152.
- 13. Han Wei; Meng Xianming; etc. [J]. Study of Bending Behavior of 304 Stainless Steel Coating by Cold Gas Dynamic Spraying, Journal of Materials Engineering, 2011, 4, 49-53.
- 14. Han, W.; Meng, X. M.; etc. [J]. Effect of heat treatment on microstructure and bending behaviour of 304 stainless steel coating by cold gas dynamic spraying, Materials Research Innovations, 2012, 16(2), 109-114
- 15. Han Wei; Meng Xian-ming; etc. [J]. Elastic Modulus of 304 Stainless Steel Coating by Cold Gas Dynamic Spraying, Journal of iron and Steel Research International, 2012, 19(3), 73-78.
- 16. Liang, Yongli, Meng, Xianming, etc. [J] Microstructure and nano-mechanical property of cold spray Co-base refractory alloy coating, Acta Metallurgica Sinica-English Letters, 2011,24(3),190-194.
- 17. Zhu Chuanlin; Meng Xianming; etc. [J]. Effect of Vacuum Heat Treatment on Microstructure and Properties of Cold Sprayed 304 Stainless Steel Coating, Materials for Mechanical Engineering, 2012, 36(10), 23-26.
- 18."Application of the method Multi-Objective Optimization on Vehicle Lightweight Design" Published in 《Proceedings of the 15th Conference of Automotive Safety Technology》, 2012.8, First author. Invited report
- 19. "Study on dynamic deformation characteristics of B340-590DP-type steel sheets" Published in  $\langle$ Proceedings of the 16th Conference of Automotive Safety Technology $\rangle$ , 2013.8, First author
- 20. "Study on fracture properties of nonmetal materials based on a front bumper" Published in 《Proceedings of The 18th Conference of Automotive Safety Technology》, 2015.7, Second author
- 21. "Automotive Metal Material Database Development and Application in Oasys/Primer" Published in 《Proceedings of the 18th Conference of Automotive Safety Technology》, 2015.7, Third author
- 22. "Research on the dynamic deformation behavior of B250P1 low alloy steel" Published in 《Proceedings of the 18th Conference of Automotive Safety Technology》, 2015.7, Second author
- 23. "Study on the Simulation Method of Automotive Spot-welds Failure Based on the Mechanical Property of Spot-welds" published in 《Proceedings of the 19th Conference of Automotive Safety Technology》 2016.7, Second author
- 24. "Dynamic mechanical properties of two typical kind of nonmetallic materials for vehicle" Published in 《Proceedings of the 19th Conference of Automotive Safety Technology》, 2016.7, Second author
- 25. "Study on the middle-low strain rate mechanical properties of PP+EPDM-TD10 for automobile" Published in «Proceedings of the 19th Conference of Automotive Safety Technology», 2016.7, Second author
- 26. "The research of constitutive modeling for vehicle aluminum magnesium alloy" Published in 《Proceedings of the 19th Conference of Automotive Safety Technology》, 2016.7., Second author

- 27. "Dynamic Tensile Properties and Constitutive Modeling of 6061 Aluminum Alloy" Published in 《Materials for Mechanical Engineering》, 2017.3, vol.41 NO.3, Corresponding author
- 28. "Dynamic deformation behavior of B340-590DP steel sheet" Published in 《Journal of Iron and Steel Research》 2015, 27(6):51-55, First author
- 29. "Research on the dynamic deformation behavior and constitutive model of B250P1 low alloy steel" Published in 《Materials for Mechanical Engineering》, Corresponding author
- 30. "Multi-objective optimization of automobile bumper based on match of materials" Published in 《Journal of Dalian University of Technology》 2014, Vol54, NO.4, Fourth author
- 31. "Study on the Dynamic Mechanical Properties of PP+EPDM-TD10 for Automobile based on DIC" Published in 《China Plastics Industry》, 2016, Corresponding author
- 32. "Dynamic/Static mechanical properties of two typical kinds of nonmetallic materials for vehicle" Published in 《Journal of Experimental Mechanics》 2016, Third author
- 33. "EVI Ability Construction for Materials Enterprises Oriented Body Structure Crashworthiness Design and Development" invited report in 《The 1st International Conference on Automobile Steel》 2016, First author
- 34."Automotive Metal Material Database Development and Application in Vehicle Design" Published in 《Journal of Mechanics Engineering and Automation》, First author.
- 35. "Study on the Simulation Method of Automotive Spot Welds Failure Based on the Mechanical Properties of Spot welds " Published in 《CMSE》, Corresponding author.
- 36. "Cause Analysis of Ruptured Automobile Steering Wheel Frame " Published in 《Materials and Testing》, First author.
- 37." Study on the Application of Material Database System in Material Selection Evaluation ", Published in 《New Technology & New Process》, Corresponding author
- 38." Fracture Failure Analysis of Fastening stud for chassis "Published in 《New Technology & New Process》, Corresponding author
- 39." Fracture Failure Analysis of a Vehicle Subframe " Published in 《New Technology & New Process》, Corresponding author

### **Books published**

《Automotive safety Blue Book of China 2016》 - Cooperative authors

《Automotive safety Blue Book of China 2017》 - Cooperative authors

## Member

World Auto Steel Committee, Expert Group member

CMSE2017 Technical Program Committee member

SAE International (USA) member

SAE China member

CHINESE MATERIALS RESEARCH SOCIETY Senior member

Chinese Society for Composite Materials Senior member

China Mechanical Engineering Society Senior member

Some International Journal Reviewers

#### Conference

The 15th Conference of Automotive Safety Technology(China)-Invited Presentation
The 3rd International Conference on High Manganese Steels(China)-Invited Presentation
The 1st International Conference on Automobile Steel(China)-Invited Presentation

The 13th Conference of material testing forum in Germany(Germany)- Invited Presentation

2016 Automotive Benchmark Analysis and Automotive Performance Development Seminar(China)

- Invited Presentation

2017 Conference of mechanical properties testing and research of automotive materials(China)-Conference Host

# **EDUCATION**

Ph.D., Materials Science and Technology

Dalian University of Technology, Dalian, Liaoning, China

Master of Materials Science and Technology

Dalian University of Technology, Dalian, Liaoning, China

Bachelor of Materials Science and Technology

Dalian University of Technology, Dalian, Liaoning, China