

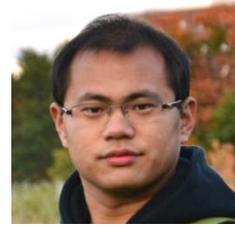
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Research Interests:

- ✧ Numerical simulation of heat transfer, fluid flow, and mass transfer
- ✧ Solidification and microstructure evolution during welding and additive manufacturing
- ✧ Process of laser additive manufacturing of metals and alloys
- ✧ Hybrid laser-arc welding of steels and Ni-based alloys

Academic Background:

Materials Science and Engineering, Penn State University, 2015-2016, Postdoctoral researcher, advised by Professor T. DebRoy

Materials Science and Engineering, Tianjin University, China, 2011-2014, Ph.D. student, advised by Professor Huan Li

Publications:

- ◆ H.L. Wei, S. Pal, V. Manvatkar, T.J. Lienert, T. DebRoy, Asymmetry in steel welds with dissimilar amounts of sulfur, *Scripta Materialia*, 108 (2015) 88-91
- ◆ H.L. Wei, J. Mazumder, T. DebRoy, Evolution of solidification texture during additive manufacturing, *Scientific Reports*, 5 (2015) 16446
- ◆ H.L. Wei, J.J. Blecher, T.A. Palmer, T. Debroy, Fusion Zone Microstructure and Geometry in Complete-Joint-Penetration Laser-Arc Hybrid Welding of Low-Alloy Steel, *Welding Journal*, 94 (2015) 135S-144S
- ◆ H.L. Wei, H. Li, L.J. Yang, Y. Gao, X.P. Ding, Arc characteristics and metal transfer process of hybrid laser double GMA welding, *International Journal of Advanced Manufacturing Technology*, 77 (2015) 1019-1028
- ◆ H.L. Wei, H. Li, Y. Gao, X.P. Ding, L.J. Yang, Welding process of consumable double electrode with a single arc GMAW, *International Journal of Advanced Manufacturing Technology*, 76 (2015) 435-446
- ◆ H.L. Wei, H. Li, L.J. Yang, Y. Gao, Consumable double electrode with a single arc GMAW, *International Journal of Advanced Manufacturing Technology*, 68 (2013) 1539-1550
- ◆ Raghavan, H.L. Wei, T.A. Palmer, T. DebRoy, Heat transfer and fluid flow in additive manufacturing, *Journal Of Laser Applications*, 25 (2013) 052006
- ◆ J. Li, H. Li, H. Wei, Y. Gao, Effect of torch position and angle on welding quality and welding process stability in Pulse on Pulse MIG welding–brazing of aluminum alloy to stainless steel, *The International Journal of Advanced Manufacturing Technology*, (2015)
- ◆ X. Cai, H. Li, H. Wei, L. Yang, Y. Gao, Effect of laser on the welding process of short-circuiting transfer MIG welding of aluminum alloys, *International Journal of Advanced Manufacturing Technology*, 75 (2014) 1829-1836
- ◆ X. Ding, H. Li, L. Yang, Y. Gao, H. Wei, Numerical analysis of arc characteristics in two-electrode GTAW, *International Journal of Advanced Manufacturing Technology*, 70 (2014) 1867-1874