

LIST OF PUBLICATIONS

MADHU VADALI

JOURNAL PUBLICATIONS

- [8] **Vadali, M.**, C. Ma, X. Li, F.E. Pfefferkorn , N.A. Duffie, 2017, “Intelligent Scan Trajectories for Pulsed Laser Polishing”, International Journal of Mechatronics and Manufacturing Systems, Special Issue on: "Advances in Laser-Based Manufacturing, *under review*.
- [7] Tianheng Feng, **Madhu Vadali**, Zheren Ma, Dongmei Chen, and Jason Dykstra; 2017, “A Finite Element Method with Full Bit-Force Modeling to Analyze Drillstring Vibration,” ASME Journal of Dynamic Systems, Measurement and Control 139(9), 091016, 10 pages, paper No: DS-16-1508; doi: <http://dx.doi.org/10.1115/1.4036083>
- [6] Ma, C., **Vadali, M.**, Li, X., Duffie, N.A., Pfefferkorn, F.E.; 2014 “Analytical and Experimental Investigation of Thermocapillary Flow in Pulsed Laser Micro Polishing,” ASME J. of Micro and Nano Mfg., 2(2), 021010 Apr 28, 2014, Paper No: JMN-13-1073, doi: <http://dx.doi.org/10.1115/1.4027433>.
- [5] Ma Chao, **Vadali M.**, Duffie Neil A., F.E. Pfefferkorn, X. Li, 2013 “Melt Pool Flow and Surface Evolution During Pulsed Laser Micro Polishing of Ti6Al4V”, ASME J. Manuf. Sci. Eng. 135(6), 061023; Nov 27, 2013; (8 pages); Paper No: MANU-13-1141; doi: <http://dx.doi.org/10.1115/1.4025819>.
- [4] Pfefferkorn, F.E., N.A. Duffie, X. Li, **M. Vadali**, C. Ma, 2013, “Improving surface finish in pulsed laser micro polishing using thermocapillary flow,” CIRP Annals - Manufacturing Technology, Volume 62, Issue 1, 2013, Pages 203–206, DOI: <http://dx.doi.org/10.1016/j.cirp.2013.03.112>.
- [3] **Vadali, M.**, C. Ma, N.A. Duffie, X. Li, F.E. Pfefferkorn, 2013, “Effects of Pulse Duration on Laser Micro Polishing,” ASME Journal of Micro and Nano-Manufacturing (J. Micro Nano-Manuf. 1(1)), 011006 (Mar 25, 2013) (9 pages); Paper No: JMN-12-1064; doi: <http://dx.doi.org/10.1115/1.4023756>.
- [2] Duffie, N. A, Fenske, J., **Vadali, M.**, 2012, “Coordination of Capacity Adjustment Modes in Work Systems with Autonomous WIP Regulation”, J. Logistics Research, V5, Issue 3-4, p99-104 Date: 05 Oct 2012, Springer-Verlag, DOI: <http://dx.doi.org/10.1007/s12159-012-0088-7>.
- [1] **Vadali, M.**, Ma, C., Duffie, N. A., Li, X., and Pfefferkorn, F. E., 2012, "Pulsed Laser Micro Polishing: Surface Prediction Model," SME Journal of Manufacturing Processes, 14(3), pp. 307-315, 08/2012; DOI: <http://dx.doi.org/10.1016/j.jmapro.2012.03.001>

CONFERENCE PROCEEDINGS

- [12] Tianheng Feng, **Madhu Vadali**, and Dongmei Chen; 2017, “Modelling and Analysis of Directional Drilling Dynamics,” ASME Dynamic Systems and Controls Conference, Paper No. DSCC2017-5358, Oct 11-13, Tysons Corner, Virginia, *accepted for publication*.
- [11] Xingyong Song, **Madhu Vadali**, Yuzhen Xue, and Jason D. Dykstra, 2016, “Tracking Control of Rotary Steerable Toolface in Directional Drilling”, 2016 IEEE International Conference on Advanced Intelligent Mechatronics (AIM), Pg. 1210-1215, 12-15 July, Banff, Canada, doi: [10.1109/AIM.2016.7576935](https://doi.org/10.1109/AIM.2016.7576935)
- [10] **Madhu Vadali**, Yuzhen Xue, Xingyong Song, Jason Dykstra, 2015, “Control of Rotary Steerable Toolface in Directional Drilling”, ASME Dynamic Systems and Controls

- Conference, Paper No. DSCC2015-9857, Oct 28-30, Columbus, OH, USA, doi:[10.1115/DSCC2015-9857](https://doi.org/10.1115/DSCC2015-9857)
- [9] **Madhu Vadali**, Zhijie Sun, Yuzhen Xue, Jason Dykstra, 2014, “Dynamic Modeling of Bottomhole Assembly”, ASME Dynamic Systems and Controls Conference, Paper No. DSCC2014-5927, pp. V003T37A001; 8 pages, doi: <http://dx.doi.org/10.1115/DSCC2014-5927>, Oct 22-24, San Antonio, TX, ISBN: 978-0-7918-4620-9
- [8] Pfefferkorn, F.E., **Madhu Vadali**, C. Ma, N.A. Duffie, X. Li, W. Dinauer, 2013, “Pulsed Laser Micro Polishing of Metals,” SME Micromanufacturing Conference, April 16-17, Minneapolis, MN [abstract only].
- [7] Ma, C., **Madhu Vadali**, N.A. Duffie, F.E. Pfefferkorn, X. Li, 2013, “Melt Pool Flow and Surface Evolution during Pulsed Laser Micro Polishing of Ti6Al4V,” ASME 2013 International Manufacturing Science and Engineering Conference, June 10-14, Madison, WI. MSEC2013-1117
- [6] **Madhu Vadali**, C. Ma, X. Li, F.E. Pfefferkorn, N.A. Duffie, 2013, “Irregular, Adaptive Scan Trajectories for Pulsed Laser Micro Polishing,” The 8th International Conference on MicroManufacturing, March 25-28, Victoria, BC, Canada, ICOMM2013-0033
- [5] Ma, C., **Madhu Vadali**, N.A. Duffie, F.E. Pfefferkorn, X. Li, 2013, “Effect of Thermocapillary Flow on the Surface Profile in Pulsed Laser Micro Polishing,” The 8th International Conference on MicroManufacturing, March 25-28, Victoria, BC, Canada, ICOMM2013-0036
- [4] **Madhu Vadali**, Chao Ma, Neil A. Duffie, Xiaochun Li and Frank E. Pfefferkorn, Effects of Laser Pulse Duration on Pulsed Laser Micro Polishing, The 7th International Conference on Micro Manufacturing - 2012.
- [3] **Madhu Vadali**, Chao Ma, Neil A. Duffie, Xiaochun Li and Frank E. Pfefferkorn, Model Guided Pulsed Laser Micro Polishing of H13 Tool Steel, The 44th CIRP Conference on Manufacturing Systems - 2011.
- [2] **Madhu Vadali**, Chao Ma, Neil A. Duffie, Xiaochun Li and Frank E. Pfefferkorn, Pulsed Laser Micro Polishing: Surface Prediction Model, The 6th International Conference on Micro Manufacturing - 2011.
- [1] **Madhu Vadali**, Chao Ma, Neil A. Duffie, Xiaochun Li and Frank E. Pfefferkorn, Pulsed Laser Micro Polishing: An Analytical Method for Predicting Surface Finish, The ASME 2011 International Manufacturing Science and Engineering Conference.

BOOK CONTRIBUTIONS

- [1] Duffie, N. A, Fenske, J., **Vadali, M.**, “Coordination of Capacity Adjustment Modes in Work Systems with Autonomous WIP Regulation”, Robust Manufacturing Control, Section: Lecture Notes in Production Engineering, p135-145 2013, Editor: Windt, Katja, Springer Berlin Heidelberg ISBN: 978-3-642-30748-5, http://dx.doi.org/10.1007/978-3-642-30749-2_10.