

Journal Publications

- Yu Wu, Li Yang. The effect of unit cell size and topology on tensile failure behavior of 2D lattice structures. *International Journal of Mechanical Sciences*. 170(2020): 105342.
- H. Miyanaji, N. Momenzadeh, L. Yang. Effect of powder characteristics on parts fabricated via binder jetting process. *Rapid Prototyping Journal*. 25(2019), 2: 332-342.
- Y. Zhang, S. Jedeck, L. Yang, L. Bai. Modeling and analysis of the on-demand spare parts supply using additive manufacturing. *Rapid Prototyping Journal*. 25(2019), 3: 473-487.
- Hadi Miyanaji, Niknam Momenzadeh, Li Yang. Effect of printing speed on quality of printed parts in binder jetting process. *Additive Manufacturing*. 20(2018): 1-10.
- Hadi Miyanaji, Shanshan Zhang, Li Yang. A physics-based model for equilibrium saturation determination in binder jetting additive manufacturing process. *International Journal of Machine Tools and Manufacture*. 124(2018): 1-11.
- Venkata Karthik Nadimpalli, Li Yang, Peter Nagy. In-situ interfacial quality assessment of ultrasonic additive manufacturing components using ultrasonic NDE. *NDT & E International*. 93(2018): 117-130.
- Amer Beharic, Rafael Rodriguez Egui, Li Yang. Drop-weight impact characteristics of additively manufactured sandwich structures with different cellular designs. *Materials and Design*. 145(2018): 122-134.
- Hadi Miyanaji, Morgan Orth, Junaid Muhammad Akbar, Li Yang. Process development for green part printing using binder jetting additive manufacturing. *Frontiers of Mechanical Engineering*. 13(2018): 504-512.
- C. Han, Y. Li, Q. Wang, D. Cai, Q. Wei, L. Yang, S. Wen, J. Liu, Y. Shi. Titanium/hydroxyapatite (Ti/HA) gradient materials with quasi-continuous ratios fabricated by SLM: material interface and fracture toughness. *Materials and Design*. 141(2018): 256-266.
- Li Yang. A simulation-based study of size effects of 3D periodic cellular structures. *International Journal of Rapid Manufacturing*. In review.
- Hadi Miyanaji, Shanshan Zhang, Austin Lassell, Amirali Zandinejad, Li Yang. Process development of porcelain ceramic material with binder jetting process for dental applications. *Journal of Materials*. 68(2016), 3: 831-841.
- Li Yang, Ola Harrysson, Denis Cormier, Harvey West, Haijun Gong, Brent Stucker. Metal cellular structures with additive manufacturing: Design and fabrication. *Journal of Materials*. 67(2015): 608-615.
- Li Yang. Experimental assisted design development for a 3D reticulate octahedral cellular structure using additive manufacturing. *Rapid Prototyping Journal*. 21(2015), 2:168-176.
- Li Yang, Ola Harrysson, Chun Park, Harvey West, Denis Cormier, Kara Peters. Low-energy drop weight performance of cellular sandwich panels. *Rapid Prototyping Journal*. 21(2015), 4:433-442.

- Li Yang, Ola Harrysson, Harvey West, Denis Cormier. Mechanical properties of 3D re-entrant honeycomb auxetic structures realized via additive manufacturing. *International Journal of Solids and Structures*. 69-10(2015): 475-490.
- Li Yang, Ola Harrysson, Harvey West, Denis Cormier. A Comparison of Bending Properties for Cellular Core Sandwich Panels. *Materials Science and Applications*. 4(2013), 8: 471-477.
- Li Yang, Ola Harrysson, Denis Cormier, Harvey West. Modeling of uniaxial compression of a 3D periodic re-entrant honeycomb structure. *Journal of Materials Science*. 48(2013): 1413-1422.
- Li Yang, Ola Harrysson, Denis Cormier, Harvey West, Kyle Knowlson. Non-stochastic Ti6Al4V foam structure that shows negative Poisson's Ratios. *Materials Science and Engineering A*. 558(2012): 579-585.
- Li Yang, Ola Harrysson, Denis Cormier, Harvey West. Compressive properties of Ti6Al4V auxetic mesh structures made by electron beam melting. *Acta Materialia*. 60(2012): 3370-3379.
- Jiandong Han, Feng Lin, Haibo Qi, Li Yang. Effects of powder preheating in electron beam selective melting process. *Transaction of the China Welding Institution*. 29(2008): 77-80.
- Haibo Qi, Feng Lin, Zhangong Yan, Haoran Zhang, Li Yang. Electron beam selective melting of 316L stainless steel powder. *Journal of Tsinghua University (Science & Technology)*. 47(2007): 1941-1944.
- Wen-tao Li, Hai-bo Qi, Li Yang, Feng Lin. Design of metal powder preheating system in electron beam selective melting. *Machinery Design & Manufacturing*. 11(2007): 113-115.
- Li Yang, Feng Lin, Haibo, Qi, et al. Selective Electron Beam Melting Technology of Metal Powders. *Engineering Plastic Application. Complimentary Volume (2006): 67-70.*

Conference Papers

- T. Do, L. Yang. A detection method for spatter particles and related defects in selective laser melting process using neural network on images produced by in-situ monitoring. *Proceedings of the 2019 Solid Freeform Fabrication Symposium*.
- Y. Wu, L. Yang. Modeling for the tensile fracture characteristic of cellular structures under tensile load with size effect. *Proceedings of the 2019 Solid Freeform Fabrication Symposium*.
- Y. Wu, J. Hermes, L. Verbelen. L. Yang. Impact energy absorption ability of the thermoplastic polyurethane (TPU) cellular structures fabricated via powder bed fusion. *Proceedings of the 2019 Solid Freeform Fabrication Symposium*.
- C. O'Neil, Y. Wu, A. Lassell, S. Dobson, L. Yang. An investigation of the electropolishing of metal parts fabricated by powder bed fusion additive manufacturing. *AiMES 2018*.
- A. Orange, Y. Wu, L. Yang. An Investigation of the Fatigue Strength of Multiple Cellular Structures Fabricated by Electron Beam Powder Bed Fusion Additive Manufacturing Process. *Proceedings of the 2018 Solid Freeform Fabrication Symposium*.
- C. Ewing, Y. Wu, L. Yang. Microstructural and Mechanical Characterization of Ti6Al4V Cellular Struts Fabricated by Electron Beam Powder Bed Fusion Additive Manufacturing. *Proceedings of the 2018 Solid Freeform Fabrication Symposium*.

- L. Yang. Education of Additive Manufacturing - An Attempt to Inspire Research. Proceedings of the 2018 Solid Freeform Fabrication Symposium.
- Y. Wu, L. Yang. Size and Topology Effects on Fracture Behavior of Cellular Structures. Proceedings of the 2018 Solid Freeform Fabrication Symposium.
- S. Dobson, Y. Wu, L. Yang. Material characterization for lightweight thin wall structures using laser powder bed fusion additive manufacturing. Proceedings of the 2018 Solid Freeform Fabrication Symposium.
- Li Yang. An investigation of property anisotropy of 3D periodic cellular structure designs. Proceedings of the 2017 Solid Freeform Fabrication Symposium.
- Li Yang, Hadi Miyanaji. Ceramic additive manufacturing: a review of current status and challenges. Proceedings of the 2017 Solid Freeform Fabrication Symposium.
- Li Yang, Chris O'Neil, Yan Wu. The use of electropolishing surface treatment on IN718 parts fabricated by laser powder bed fusion process. Proceedings of the 2017 Solid Freeform Fabrication Symposium.
- Yan Wu, Li Yang. A study of size effect on the fracture pattern of 2D lattice structures. Proceedings of the 2017 Solid Freeform Fabrication Symposium.
- Hadi Miyanaji, Niknam Momenzadeh, Li Yang. Effect of printing speed on quality of printed parts in binder jetting process. Proceedings of the 2017 Solid Freeform Fabrication Symposium.
- Li Yang, Junaid Muhammad Akbar, Li Yang. Fabrication and characterization of graphite/nylon 12 composite via binder jetting additive manufacturing process. Proceedings of the 2017 Solid Freeform Fabrication Symposium.
- Li Yang. A study about size effects of 3D periodic cellular structures. Proceedings of the 2016 Solid Freeform Fabrication Symposium.
- Li Yang, Ola Harrysson, Denis Cormier, Harvey West, Shanshan Zhang, Haijun Gong, Brent Stucker. Design for Additively Manufactured Lightweight Structure- A Perspective. Proceedings of the 2016 Solid Freeform Fabrication Symposium.
- Li Yang, Yan Wu, Austin Lassell, Bin Zhou. Electropolishing of Ti6Al4V parts fabricated by electron beam melting. Proceedings of the 2016 Solid Freeform Fabrication Symposium.
- Venkata Karthik Nadimpalli, Jeong K. Na, Darren Bruner, Breena A. King, Li Yang, Brent E. Stucker. In-situ non-destructive evaluation of ultrasonic additive manufactured components. Proceedings of the 2016 Solid Freeform Fabrication Symposium.
- Hadi Miyanaji, Li Yang. Equilibrium saturation in binder jetting 3D printing process: theoretical model vs. experimental observations. Proceedings of the 2016 Solid Freeform Fabrication Symposium.
- Xiaodong Xing, Li Yang. A glance at the recent additive manufacturing research and development in China. Proceedings of the 2015 Solid Freeform Fabrication Symposium.
- Li Yang, Austin Lassell, Gustavo Perez Vilhena Paiva. Further study of the electropolishing of Ti6Al4V parts made via electron beam melting. Proceedings of the 2015 Solid Freeform Fabrication Symposium.

- Li Yang, Ola Harrysson, Harvey West, Denis Cormier. Shear properties of the re-entrant auxetic structure made via electron beam melting. Proceedings of the 2015 Solid Freeform Fabrication Symposium.
- Shanshan Zhang, Samuel Dilip, Li Yang, Hadi Miyajani, Brent Stucker. Property evaluation of metal cellular strut structures via powder bed fusion AM. Proceedings of the 2015 Solid Freeform Fabrication Symposium.
- Hadi Miyajani, Shanshan Zhang, Austin Lassell, Amirali Zandinejad, Li Yang. Optimal process parameters for 3D printing of dental porcelain structures. Proceedings of the 2015 Solid Freeform Fabrication Symposium.
- Li Yang. Experimental assisted design development for an octahedral cellular structure using additive manufacturing. Proceedings of the 2014 Solid Freeform Fabrication Symposium.
- Li Yang, Haijun Gong, Samuel Dilip, Brent Stucker. An investigation of the thin feature generation in direct metal laser sintering system. Proceedings of the 2014 Solid Freeform Fabrication Symposium.
- Li Yang, Nd Ashabul Anam. An investigation of standard test part design for additive manufacturing. Proceedings of the 2014 Solid Freeform Fabrication Symposium.
- Li Yang, Hengfeng Gu, Austin Lassell. Surface treatment of Ti6Al4V parts made by powder bed fusion additive manufacturing processes using electropolishing. Proceedings of the 2014 Solid Freeform Fabrication Symposium.
- Shanshan Zhang, Hadi Miyajani, Li Yang, Amir Ali Zandinejad, J. J. S. Dilip, Brent Stucker. An Experimental Study of Ceramic Dental Porcelain Materials Using A 3D Print (3DP) Process. Proceedings of the 2014 Solid Freeform Fabrication Symposium.
- Hadi Miyajani, Li Yang, Shanshan Zhang, Amirali Zandinejad. A preliminary study of the graded dental porcelain ceramic structures fabricated via binder jetting 3D printing. Proceedings of the 2014 Solid Freeform Fabrication Symposium.
- Li Yang, Shanshan Zhang, Gustavo Oliveira, Brent Stucker. Development of a 3D Printing Method for Production of Dental Application. Proceedings of the 2013 Solid Freeform Fabrication Symposium.
- Li Yang, Ola Harrysson, Denis Cormier, Harvey West, Chun Park, Kara Peters. Design of auxetic sandwich panels for structural applications. Proceedings of the 2013 Solid Freeform Fabrication Symposium.
- Li Yang, Ola L. A. Harrysson, Harvey A. West II, Denis R. Cormier. Characterization of Ti6Al4V 3D auxetic structures fabricated via the electron beam melting process. Proceedings of the 2011 International Conference on Material Sciences and Technology. 2011.
- Li Yang, Ola Harrysson, Harvey West, Denis Cormier. Design and characterization of orthotropic re-entrant auxetic structures made via the electron beam melting (EBM) process using Ti6Al4V and pure copper. Proceedings of the 2011 Solid Freeform Fabrication Symposium. 2011.
- Haibo Qi, Li Yang. Powder Blowing and Preheating Experiments in Electron Beam Selective Melting. Proceedings of 2nd International Conference on Computer Engineering and Technology. 7(2010): 540-543.

Book and Book Chapters

- Li Yang. Binder Jetting of Ceramics. In ASM Handbook Volume 24. ASM International, 2019.
- Li Yang, Keng Hsu, Brian Baughman, Donald Godfrey, Francisco Medina, Mamballykalathil Menon, Soeren Wiener. Additive Manufacturing of Metals: The Technology, Materials, Design and Production. Springer, 2017.
- Li Yang. Instructing state-of-the-art AM research in education. In Additive Manufacturing-Development in Training and Education, edited by Eujin Pei, Mario Monzo Verona, Alain Bernard. Springer, 2018.