# Liyin Li

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 64 papers | 612 citations | 13 h-index | 22 g-index |
| 68 ext. papers | 698 ext. citations | 3 avg, IF | 3.97 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 64 | Improvement of formability and corrosion resistance of AZ31 magnesium alloy by pulsed current‐assisted laser shock forming. *International Journal of Advanced Manufacturing Technology*, **2022**, 120, 6531 | 3.2 | 0 |
| 63 | Microstructure and mechanical properties of the bonded interface of laser impact welding brass/SS304. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2021**, 43, 1 | 2 | 2 |
| 62 | Investigation on grain size effect and forming mechanism of laser shock hydraulic microforming of copper foil. *International Journal of Advanced Manufacturing Technology*, **2021**, 114, 1049-1064 | 3.2 | 1 |
| 61 | Formability and mechanism of pulsed current pretreatment‐assisted laser impact microforming. *International Journal of Advanced Manufacturing Technology*, **2021**, 114, 1011-1029 | 3.2 | 0 |
| 60 | Experimental and Numerical Research on the Laser Impact Welding of Ti/SS. *International Journal of Precision Engineering and Manufacturing*, **2021**, 22, 759-775 | 1.7 | 1 |
| 59 | Investigation on formability improvement in laser shock hydroforming. *International Journal of Material Forming*, **2021**, 14, 855-869 | 2 | 0 |
| 58 | Numerical studies on laser impact welding: Smooth particle hydrodynamics (SPH), Eulerian, and SPH-Lagrange. *Journal of Manufacturing Processes*, **2021**, 68, 43-56 | 5 | 4 |
| 57 | Experimental and Numerical Investigations on the Interface Characteristics of Laser Impact-Welded Ti/Brass Joints. *Journal of Materials Engineering and Performance*, **2021**, 30, 1245-1258 | 1.6 | 3 |
| 56 | Microstructure and mechanical properties of laser high-velocity impact welded Ta/Cu joints. *Journal of Adhesion Science and Technology*, **2020**, 34, 2333-2351 | 2 | 0 |
| 55 | Atomic Diffusion Behavior and Interface Waveform on the Laser Shock Welding of Aluminum to Nickel. *Journal of Materials Engineering and Performance*, **2020**, 29, 1336-1345 | 1.6 | 2 |
| 54 | Microhole Forming and Creep Behavior of Fe-Based Nanocrystalline Alloys under Laser Dynamic Impact. *Advanced Engineering Materials*, **2020**, 22, 1901361 | 3.5 | |
| 53 | Interface Kinematics of Laser Impact Welding of Ni and SS304 Based on Jet Indentation Mechanism. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2020**, 51, 2893-2904 | 2.3 | 6 |
| 52 | Interface and Strength of Laser Impact Welding of Fe-Based Nanocrystalline Alloys to Aluminum. *Transactions of the Indian Institute of Metals*, **2020**, 73, 1199-1207 | 1.2 | 1 |
| 51 | Dynamic failure mechanism of copper foil in laser dynamic flexible forming. *Materials Science-Poland*, **2020**, 38, 684-692 | 0.6 | 2 |
| 50 | Molecular dynamics simulation of nanostructure formation in copper foil under laser shock forming. *Computational Materials Science*, **2020**, 172, 109352 | 3.2 | 6 |
| 49 | Improving the Forming Quality of Laser Dynamic Flexible Micropunching by Laser Pre-Shocking. *Materials*, **2020**, 13, | 3.5 | 1 |
| 48 | An Experimental Study on Micro-Shear Clinching of Metal Foils by Laser Shock. *Materials*, **2019**, 12, | 3.5 | 6 |

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| 47 | Laser shock hydraulic forming for micro-bowl with miniature concave. *International Journal of Advanced Manufacturing Technology*, **2019**, 105, 441-455 | 3.2 | 1 |
| 46 | Investigation on Interface Morphology and Mechanical Properties of Three-Layer Laser Impact Welding of Cu/Al/Cu. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 1273-1282 | 2.3 | 10 |
| 45 | Experimental and numerical study on the laser shock welding of aluminum to stainless steel. *Optics and Lasers in Engineering*, **2019**, 115, 74-85 | 4.6 | 22 |
| 44 | Finite element simulation on investigations, modeling, and multiobjective optimization for clinch joining process design accounting for process parameters and design constraints. *International Journal of Advanced Manufacturing Technology*, **2018**, 96, 3481-3501 | 3.2 | 12 |
| 43 | Microscale laser flexible dynamic forming of Cu/Ni laminated composite metal sheets. *Journal of Manufacturing Processes*, **2018**, 35, 51-60 | 5 | 11 |
| 42 | Investigation of a novel laser shock liquid flexible microforming process applied to embossing three-dimensional large area microarrays on metallic foils. *International Journal of Advanced Manufacturing Technology*, **2018**, 99, 419-435 | 3.2 | 7 |
| 41 | Experimental Study on the Laser Transmission Joining of Polystyrene and Titanium. *Materials*, **2018** , 11, | 3.5 | 4 |
| 40 | Improvement of Laser Transmission Welding of Glass with Titanium Alloy by Laser Surface Treatment. *Materials*, **2018**, 11, | 3.5 | 2 |
| 39 | Numerical simulation of laser impact spot welding. *Journal of Manufacturing Processes*, **2018**, 35, 396-406 | 5 | 15 |
| 38 | Experimental and Numerical Investigations of a Novel Laser Impact Liquid Flexible Microforming Process. *Metals*, **2018**, 8, 599 | 2.3 | 5 |
| 37 | Investigation on the Mechanism and Failure Mode of Laser Transmission Spot Welding Using PMMA Material for the Automotive Industry. *Materials*, **2017**, 10, | 3.5 | 15 |
| 36 | Experimental and Numerical Simulation Investigation on Laser Flexible Shock Micro-Bulging. *Metals* , **2017**, 7, 93 | 2.3 | 13 |
| 35 | Enhancement of the Laser Transmission Weldability between Polyethylene and Polyoxymethylene by Plasma Surface Treatment. *Materials*, **2017**, 11, | 3.5 | 15 |
| 34 | Experimental investigation on the formation behavior for three-layer metal sheets under laser high speed flexible micro-forming. *International Journal of Advanced Manufacturing Technology*, **2017**, 93, 3149-3157 | 3.2 | 6 |
| 33 | Laser Indirect Shock Welding of Fine Wire to Metal Sheet. *Materials*, **2017**, 10, | 3.5 | 7 |
| 32 | Investigation of Micro-Bending of Sheet Metal Laminates by Laser-Driven Soft Punch in Warm Conditions. *Micromachines*, **2017**, 8, | 3.3 | 2 |
| 31 | Experimental Investigation on Laser Impact Welding of Fe-Based Amorphous Alloys to Crystalline Copper. *Materials*, **2017**, 10, | 3.5 | 12 |
| 30 | Feature Size Effect on Formability of Multilayer Metal Composite Sheets under Microscale Laser Flexible Forming. *Metals*, **2017**, 7, 275 | 2.3 | 8 |

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| 29 | Experimental and numerical investigation of laser shock synchronous welding and forming of Copper/Aluminum. *Optics and Lasers in Engineering*, **2016**, 86, 291-302 | 4.6 | 14 |
| 28 | Performance and mechanism of laser transmission joining between glass fiber-reinforced PA66 and PC. *Journal of Applied Polymer Science*, **2016**, 133, n/a-n/a | 2.9 | 10 |
| 27 | Investigation on the laser transmission weldability and mechanism of the graft-modified polyethylene and PA66. *International Journal of Advanced Manufacturing Technology*, **2016**, 86, 809-816 | 3.2 | 4 |
| 26 | An Experimental Study on Micro Clinching of Metal Foils with Cutting by Laser Shock Forming. *Materials*, **2016**, 9, | 3.5 | 13 |
| 25 | Investigation on a Novel Laser Impact Spot Welding. *Metals*, **2016**, 6, 179 | 2.3 | 19 |
| 24 | Fabrication of Dish-Shaped Micro Parts by Laser Indirect Shocking Compound Process. *Micromachines*, **2016**, 7, | 3.3 | 7 |
| 23 | Forming Properties of a Microscale Laser Dynamic Flexible Forming Technique. *Materials and Manufacturing Processes*, **2016**, 31, 745-750 | 4.1 | 13 |
| 22 | Investigation on enhancement of weld strength between PMMA and PBT in laser transmission welding Using intermediate material. *Journal of Applied Polymer Science*, **2016**, 133, | 2.9 | 14 |
| 21 | A mold-free laser shock micro-drawing forming process using Plasticine as the flexible support. *International Journal of Advanced Manufacturing Technology*, **2015**, 79, 265-272 | 3.2 | 8 |
| 20 | Micro-punching of aluminum foil by laser dynamic flexible punching process. *International Journal of Material Forming*, **2015**, 8, 183-196 | 2 | 21 |
| 19 | An experimental and numerical study of laser impact spot welding. *Materials & Design*, **2015**, 65, 1143-1152 | | 35 |
| 18 | Investigation of a combined embossing and blanking process using laser shock wave. *International Journal of Material Forming*, **2015**, 8, 317-325 | 2 | 4 |
| 17 | Study on Welding Mechanism Based on Modification of Polypropylene for Improving the Laser Transmission Weldability to PA66. *Materials*, **2015**, 8, 4961-4977 | 3.5 | 9 |
| 16 | Experimental and Numerical Simulation Research on Micro-Gears Fabrication by Laser Shock Punching Process. *Micromachines*, **2015**, 6, 969-983 | 3.3 | 10 |
| 15 | Laser shock welding of aluminum/aluminum and aluminum/copper plates. *Materials & Design*, **2014**, 56, 26-30 | | 30 |
| 14 | Investigation of the forming pressure and formability of metal foil by laser-driven multi-layered flyer. *Optics and Laser Technology*, **2014**, 58, 151-160 | 4.2 | 10 |
| 13 | Numerical-simulation-driven optimization of a laser transmission welding process under consideration of scattering. *Journal of Applied Polymer Science*, **2014**, 131, n/a-n/a | 2.9 | 2 |
| 12 | Research on the Micro Sheet Stamping Process Using Plasticine as Soft Punch. *Materials*, **2014**, 7, 4118-4131 | 3.3 | 6 |

# List of Publications

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| 11 | Numerical Simulation of the Influence of the Bulges around Laser Surface Textures on the Tribological Performance. *Tribology Transactions*, **2013**, 56, 1011-1018 | 1.8 | 12 |
| 10 | Numerical study of the mechanism of explosive/impact welding using Smoothed Particle Hydrodynamics method. *Materials & Design*, **2012**, 35, 210-219 | | 80 |
| 9 | Micromold-Based Laser Shock Embossing of Metallic Foil: Fabrication of Large-Area Three-Dimensional Microchannel Networks. *Materials and Manufacturing Processes*, **2011**, 26, 1126-1129 | 4.1 | 18 |
| 8 | Numerical simulation and experimentation of a novel micro scale laser high speed punching. *International Journal of Machine Tools and Manufacture*, **2010**, 50, 491-494 | 9.4 | 52 |
| 7 | Numerical simulation and experimentation of a novel laser indirect shock forming. *Journal of Applied Physics*, **2009**, 106, 063107 | 2.5 | 13 |
| 6 | DEVELOPMENT OF A KNOWLEDGE-BASED INTELLIGENT CAD SYSTEM FOR AUTOMOTIVE PANEL DIE. *Journal of Advanced Manufacturing Systems*, **2008**, 07, 51-54 | 1.8 | 3 |
| 5 | FULL NUMERICAL SIMULATION TO THE PERFORMANCE OF MICRO-TEXTURED MECHANICAL FACE SEALS. *Journal of Advanced Manufacturing Systems*, **2008**, 07, 267-270 | 1.8 | 1 |
| 4 | Numerical simulation and experiment study on pulsed laser surface micro-texturing in carbon tool steel **2008**, | | 1 |
| 3 | Warm laser shock micro-heading forming (T2 copper): numerical simulation and experimental research. *International Journal of Advanced Manufacturing Technology*,1 | 3.2 | 0 |
| 2 | Construction of High Strain Rate Loading Constitutive Model and Failure Model and Prediction of Forming Limit for LA103Z Magnesium Alloy. *Metals and Materials International*,1 | 2.4 | 0 |
| 1 | Fabrication of Metallic Micro-Parts Reinforced with Nano- and Micro-Sized TiN Particles via Laser Shock Processing. *Journal of Materials Engineering and Performance*,1 | 1.6 | 1 |