

Yung C Shin

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8692711/yung-c-shin-publications-by-citations.pdf>

Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

307 papers	11,920 citations	56 h-index	97 g-index
329 ext. papers	13,904 ext. citations	4.3 avg, IF	7.23 L-index

#	Paper	IF	Citations
307	The status, challenges, and future of additive manufacturing in engineering. <i>CAD Computer Aided Design</i> , 2015 , 69, 65-89	2.9	1187
306	Additive manufacturing of Ti6Al4V alloy: A review. <i>Materials and Design</i> , 2019 , 164, 107552	8.1	750
305	Modeling of machining of composite materials: A review. <i>International Journal of Machine Tools and Manufacture</i> , 2012 , 57, 102-121	9.4	286
304	Laser-assisted machining of Inconel 718 with an economic analysis. <i>International Journal of Machine Tools and Manufacture</i> , 2006 , 46, 1879-1891	9.4	257
303	Remanufacturing of turbine blades by laser direct deposition with its energy and environmental impact analysis. <i>Journal of Cleaner Production</i> , 2014 , 80, 170-178	10.3	249
302	Radial basis function neural network for approximation and estimation of nonlinear stochastic dynamic systems. <i>IEEE Transactions on Neural Networks</i> , 1994 , 5, 594-603		240
301	Machinability improvement of titanium alloy (Ti6Al4V) via LAM and hybrid machining. <i>International Journal of Machine Tools and Manufacture</i> , 2010 , 50, 174-182	9.4	238
300	Optimization of machining conditions with practical constraints. <i>International Journal of Production Research</i> , 1992 , 30, 2907-2919	7.8	156
299	Prospects of laser welding technology in the automotive industry: A review. <i>Journal of Materials Processing Technology</i> , 2017 , 245, 46-69	5.3	132
298	Transient, three-dimensional heat transfer model for the laser assisted machining of silicon nitride: I. Comparison of predictions with measured surface temperature histories. <i>International Journal of Heat and Mass Transfer</i> , 2000 , 43, 1409-1424	4.9	131
297	Experimental Investigation of Thermo-Mechanical Characteristics in Laser-Assisted Machining of Silicon Nitride Ceramics. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2001 , 123, 639-646	3.3	128
296	Laser-assisted machining of hardened steel parts with surface integrity analysis. <i>International Journal of Machine Tools and Manufacture</i> , 2010 , 50, 106-114	9.4	127
295	Molecular dynamics based cohesive zone law for describing AlSiC interface mechanics. <i>Composites Part A: Applied Science and Manufacturing</i> , 2011 , 42, 355-363	8.4	126
294	Modeling of coaxial powder flow for the laser direct deposition process. <i>International Journal of Heat and Mass Transfer</i> , 2009 , 52, 5867-5877	4.9	124
293	Analysis of bearing configuration effects on high speed spindles using an integrated dynamic thermo-mechanical spindle model. <i>International Journal of Machine Tools and Manufacture</i> , 2004 , 44, 347-364	9.4	123
292	Hybrid machining of Inconel 718. <i>International Journal of Machine Tools and Manufacture</i> , 2003 , 43, 1391-1396	9.4	122
291	Modeling of grain refinement in aluminum and copper subjected to cutting. <i>Computational Materials Science</i> , 2011 , 50, 3016-3025	3.2	121

290	Modeling of transport phenomena during the coaxial laser direct deposition process. <i>Journal of Applied Physics</i> , 2010 , 108, 044908	2.5	116
289	Plasma enhanced machining of Inconel 718: modeling of workpiece temperature with plasma heating and experimental results. <i>International Journal of Machine Tools and Manufacture</i> , 2001 , 41, 877-897	9.4	111
288	Analysis on high-speed face-milling of 7075-T6 aluminum using carbide and diamond cutters. <i>International Journal of Machine Tools and Manufacture</i> , 2001 , 41, 1763-1781	9.4	108
287	Laser-Assisted Machining of Magnesia-Partially-Stabilized Zirconia. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2004 , 126, 42-51	3.3	106
286	Predictive modeling of multi-track laser hardening of AISI 4140 steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 480, 209-217	5.3	102
285	Integrated Dynamic Thermo-Mechanical Modeling of High Speed Spindles, Part 1: Model Development. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2004 , 126, 148-158	3.3	100
284	Thermal and mechanical modeling analysis of laser-assisted micro-milling of difficult-to-machine alloys. <i>Journal of Materials Processing Technology</i> , 2012 , 212, 601-613	5.3	99
283	Experimental Evaluation of the Laser Assisted Machining of Silicon Nitride Ceramics. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2000 , 122, 666-670	3.3	99
282	Investigation of keyhole plume and molten pool based on a three-dimensional dynamic model with sharp interface formulation. <i>Journal Physics D: Applied Physics</i> , 2013 , 46, 055501	3	95
281	Laser direct deposition of AISI H13 tool steel powder with numerical modeling of solid phase transformation, hardness, and residual stresses. <i>Journal of Materials Processing Technology</i> , 2017 , 247, 223-233	5.3	91
280	A comprehensive chatter prediction model for face turning operation including tool wear effect. <i>International Journal of Machine Tools and Manufacture</i> , 2002 , 42, 1035-1044	9.4	89
279	Multi-step 3-D finite element modeling of subsurface damage in machining particulate reinforced metal matrix composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2009 , 40, 1231-1239	8.4	88
278	Multi-scale modeling of solidification and microstructure development in laser keyhole welding process for austenitic stainless steel. <i>Computational Materials Science</i> , 2015 , 98, 446-458	3.2	87
277	A comprehensive dynamic cutting force model for chatter prediction in turning. <i>International Journal of Machine Tools and Manufacture</i> , 1999 , 39, 1631-1654	9.4	86
276	Microstructure and wear properties of laser-deposited functionally graded Inconel 690 reinforced with TiC. <i>Surface and Coatings Technology</i> , 2012 , 207, 517-522	4.4	85
275	Laser-assisted machining of compacted graphite iron. <i>International Journal of Machine Tools and Manufacture</i> , 2006 , 46, 7-17	9.4	84
274	Predictive modeling and experimental results for residual stresses in laser hardening of AISI 4140 steel by a high power diode laser. <i>Surface and Coatings Technology</i> , 2009 , 203, 2003-2012	4.4	83
273	An experimental and numerical study on the face milling of TiBAl ₃ V alloy: Tool performance and surface integrity. <i>Journal of Materials Processing Technology</i> , 2011 , 211, 294-304	5.3	83

272	Thermal Modeling for Laser-Assisted Machining of Silicon Nitride Ceramics with Complex Features. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2006 , 128, 425-434	3.3	79
271	Deformation mechanisms and constitutive modeling for silicon nitride undergoing laser-assisted machining. <i>International Journal of Machine Tools and Manufacture</i> , 2000 , 40, 2213-2233	9.4	79
270	In-Process monitoring of porosity during laser additive manufacturing process. <i>Additive Manufacturing</i> , 2019 , 28, 497-505	6.1	78
269	Sparse multiple kernel learning for signal processing applications. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2010 , 32, 788-98	13.3	76
268	A self-closed thermal model for laser shock peening under the water confinement regime configuration and comparisons to experiments. <i>Journal of Applied Physics</i> , 2005 , 97, 113517	2.5	72
267	Laser-Assisted Machining of Reaction Sintered Mullite Ceramics. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2002 , 124, 875-885	3.3	72
266	Modeling of multi-burst mode pico-second laser ablation for improved material removal rate. <i>Applied Physics A: Materials Science and Processing</i> , 2010 , 98, 407-415	2.6	71
265	A novel laser-assisted truing and dressing technique for vitrified CBN wheels. <i>International Journal of Machine Tools and Manufacture</i> , 2002 , 42, 825-835	9.4	71
264	Dynamics of Machine Tool Spindle/Bearing Systems Under Thermal Growth. <i>Journal of Tribology</i> , 1997 , 119, 875-882	1.8	70
263	Analysis of multi-phase interaction and its effects on keyhole dynamics with a multi-physics numerical model. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 345501	3	66
262	Transient, three-dimensional heat transfer model for the laser assisted machining of silicon nitride: II. Assessment of parametric effects. <i>International Journal of Heat and Mass Transfer</i> , 2000 , 43, 1425-1437	4.9	66
261	On-Line Chatter Detection Using Wavelet-Based Parameter Estimation. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2003 , 125, 21-28	3.3	64
260	The influences of melting degree of TiC reinforcements on microstructure and mechanical properties of laser direct deposited Ti6Al4V-TiC composites. <i>Materials and Design</i> , 2017 , 136, 185-195	8.1	62
259	Multi-physics modeling and simulations of surface microstructure alteration in hard turning. <i>Journal of Materials Processing Technology</i> , 2013 , 213, 877-886	5.3	62
258	Transient Thermal Response of a Rotating Cylindrical Silicon Nitride Workpiece Subjected to a Translating Laser Heat Source, Part I: Comparison of Surface Temperature Measurements With Theoretical Results. <i>Journal of Heat Transfer</i> , 1998 , 120, 899-906	1.8	62
257	Predictive modeling and experimental results for laser hardening of AISI 1536 steel with complex geometric features by a high power diode laser. <i>Surface and Coatings Technology</i> , 2006 , 201, 2256-2269	4.4	61
256	In-process control of surface roughness due to tool wear using a new ultrasonic system. <i>International Journal of Machine Tools and Manufacture</i> , 1996 , 36, 411-422	9.4	61
255	Vision-based weld pool boundary extraction and width measurement during keyhole fiber laser welding. <i>Optics and Lasers in Engineering</i> , 2015 , 64, 59-70	4.6	60

254	Phase transformation characteristics and mechanical characterization of nitinol synthesized by laser direct deposition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 836-843	5.3	57
253	A novel integrated model combining Cellular Automata and Phase Field methods for microstructure evolution during solidification of multi-component and multi-phase alloys. <i>Computational Materials Science</i> , 2011 , 50, 2573-2585	3.2	57
252	Femtosecond laser drilling of high-aspect ratio microchannels in glass. <i>Applied Physics A: Materials Science and Processing</i> , 2011 , 104, 713-719	2.6	57
251	Design of operating conditions for crackfree laser-assisted machining of mullite. <i>International Journal of Machine Tools and Manufacture</i> , 2004 , 44, 677-694	9.4	56
250	Laser-assisted burnishing of metals. <i>International Journal of Machine Tools and Manufacture</i> , 2007 , 47, 14-22	9.4	55
249	Dynamics of Spindle-Bearing Systems at High Speeds Including Cutting Load Effects. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 1998 , 120, 387-394	3.3	55
248	Improvement of machinability of Waspaloy via laser-assisted machining. <i>International Journal of Advanced Manufacturing Technology</i> , 2013 , 64, 475-486	3.2	53
247	A new procedure to determine instantaneous cutting force coefficients for machining force prediction. <i>International Journal of Machine Tools and Manufacture</i> , 1997 , 37, 1337-1351	9.4	53
246	Thermo-mechanical modeling of orthogonal machining process by finite element analysis. <i>International Journal of Machine Tools and Manufacture</i> , 1999 , 39, 731-750	9.4	53
245	A Digital Robust Controller for Cutting Force Control in the End Milling Process. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1997 , 119, 146-152	1.6	51
244	Laser-Assisted Milling of Silicon Nitride Ceramics and Inconel 718. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2008 , 130,	3.3	51
243	Laser-assisted machining of an austenitic stainless steel: P550. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2006 , 220, 2055-2067	2.4	51
242	Adaptive divided difference filtering for simultaneous state and parameter estimation. <i>Automatica</i> , 2009 , 45, 1686-1693	5.7	50
241	Heat transfer model of semi-transparent ceramics undergoing laser-assisted machining. <i>International Journal of Heat and Mass Transfer</i> , 2005 , 48, 1999-2012	4.9	48
240	Experimental evaluation of laser-assisted machining of silicon carbide particle-reinforced aluminum matrix composites. <i>International Journal of Advanced Manufacturing Technology</i> , 2013 , 66, 1603-1610	3.2	47
239	Dislocation density-based modeling of subsurface grain refinement with laser-induced shock compression. <i>Computational Materials Science</i> , 2012 , 53, 79-88	3.2	47
238	Multiscale Finite Element Modeling of Silicon Nitride Ceramics Undergoing Laser-Assisted Machining. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2007 , 129, 287-295	3.3	47
237	Superhydrophobic contoured surfaces created on metal and polymer using a femtosecond laser. <i>Applied Surface Science</i> , 2017 , 405, 465-475	6.7	46

236	Laser Shock Peening on Zr-based Bulk Metallic Glass and Its Effect on Plasticity: Experiment and Modeling. <i>Scientific Reports</i> , 2015 , 5, 10789	4.9	46
235	In Situ Synthesis and Characterization of Shape Memory Alloy Nitinol by Laser Direct Deposition. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 650-657	2.3	46
234	Multiphase Finite Element Modeling of Machining Unidirectional Composites: Prediction of Debonding and Fiber Damage. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2008 , 130,	3.3	46
233	Modeling of nanosecond laser ablation with vapor plasma formation. <i>Journal of Applied Physics</i> , 2006 , 99, 084310	2.5	45
232	Assessment of Plasma Enhanced Machining for Improved Machinability of Inconel 718. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 1997 , 119, 125-129	3.3	44
231	Stability Analysis in Face Milling Operations, Part 1: Theory of Stability Lobe Prediction. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 1999 , 121, 600-605	3.3	44
230	Material Constitutive Modeling Under High Strain Rates and Temperatures Through Orthogonal Machining Tests. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 1999 , 121, 577-585	3.3	43
229	Modeling and control of cnc machines using a PC-based open architecture controller. <i>Mechatronics</i> , 1995 , 5, 401-420	3	43
228	Effect of porosity on the interface behavior of an Al ₂ O ₃ /aluminum composite: A molecular dynamics study. <i>Composites Science and Technology</i> , 2011 , 71, 350-356	8.6	41
227	Investigation on Cutting Temperature in Turning by a Tool-Work Thermocouple Technique. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 1997 , 119, 502-508	3.3	41
226	Synthesis and characterization of Fe-based amorphous composite by laser direct deposition. <i>Surface and Coatings Technology</i> , 2014 , 239, 34-40	4.4	40
225	Dislocation Density-Based Grain Refinement Modeling of Orthogonal Cutting of Titanium. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2014 , 136,	3.3	40
224	Multi-scale modeling to predict sub-surface damage applied to laser-assisted machining of a particulate reinforced metal matrix composite. <i>Journal of Materials Processing Technology</i> , 2013 , 213, 153-160	5.3	40
223	Generalized practical models of cylindrical plunge grinding processes. <i>International Journal of Machine Tools and Manufacture</i> , 2008 , 48, 61-72	9.4	40
222	A Comprehensive Dynamic End Milling Simulation Model. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2006 , 128, 86-95	3.3	40
221	Surface Roughness Measurement by Ultrasonic Sensing for In-Process Monitoring. <i>Journal of Engineering for Industry</i> , 1995 , 117, 439-447		39
220	Modeling and experimental verification of plasmas induced by high-power nanosecond laser-aluminum interactions in air. <i>Physical Review E</i> , 2007 , 76, 026405	2.4	37
219	Analysis of microstructure and mechanical properties change in laser welding of Ti6Al4V with a multiphysics prediction model. <i>Journal of Materials Processing Technology</i> , 2016 , 237, 420-429	5.3	37

218	Estimation of keyhole geometry and prediction of welding defects during laser welding based on a vision system and a radial basis function neural network. <i>International Journal of Advanced Manufacturing Technology</i> , 2015 , 81, 263-276	3.2	36
217	Comparative evaluation of laser-assisted micro-milling for AISI 316, AISI 422, Ti-6AL-4V and Inconel 718 in a side-cutting configuration. <i>Journal of Micromechanics and Microengineering</i> , 2010 , 20, 075012	2	36
216	A Metallo-Thermomechanically Coupled Analysis of Orthogonal Cutting of AISI 1045 Steel. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2012 , 134,	3.3	36
215	Femtosecond laser ablation of aluminum in vacuum and air at high laser intensity. <i>Applied Surface Science</i> , 2013 , 283, 94-99	6.7	35
214	Multiscale Modeling of Transport Phenomena and Dendritic Growth in Laser Cladding Processes. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2011 , 42, 1306-1318	2.5	35
213	Predictive modeling of laser hardening of AISI5150H steels. <i>International Journal of Machine Tools and Manufacture</i> , 2007 , 47, 307-320	9.4	35
212	Ablation enhancement of silicon by ultrashort double-pulse laser ablation. <i>Applied Physics Letters</i> , 2014 , 105, 111907	3.4	34
211	Early-stage plasma dynamics with air ionization during ultrashort laser ablation of metal. <i>Physics of Plasmas</i> , 2011 , 18, 093302	2.1	34
210	Laser pulse transmission through the water breakdown plasma in laser shock peening. <i>Applied Physics Letters</i> , 2006 , 88, 041116	3.4	34
209	Predictive modeling of grain refinement during multi-pass cold rolling. <i>Journal of Materials Processing Technology</i> , 2012 , 212, 1003-1013	5.3	33
208	Integrated Dynamic Thermo-Mechanical Modeling of High Speed Spindles, Part 2: Solution Procedure and Validations. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2004 , 126, 159-168	3.3	33
207	Construction of fuzzy systems using least-squares method and genetic algorithm. <i>Fuzzy Sets and Systems</i> , 2003 , 137, 297-323	3.7	33
206	Observer-Based Adaptive Robust Control of Friction Stir Welding Axial Force. <i>IEEE/ASME Transactions on Mechatronics</i> , 2011 , 16, 1032-1039	5.5	32
205	Laser-Assisted Machining of a Fiber Reinforced Metal Matrix Composite. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2010 , 132,	3.3	32
204	Modeling of the Off-Axis High Power Diode Laser Cladding Process. <i>Journal of Heat Transfer</i> , 2011 , 133,	1.8	32
203	A simple model for high fluence ultra-short pulsed laser metal ablation. <i>Applied Surface Science</i> , 2007 , 253, 4079-4084	6.7	32
202	Micromachining of Metals, Alloys, and Ceramics by Picosecond Laser Ablation. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2010 , 132,	3.3	31
201	Wear of diamond dresser in laser assisted truing and dressing of vitrified CBN wheels. <i>International Journal of Machine Tools and Manufacture</i> , 2003 , 43, 41-49	9.4	31

200	Comprehensive predictive modeling and parametric analysis of multitrack direct laser deposition processes. <i>Journal of Laser Applications</i> , 2011 , 23, 022003	2.1	30
199	Two dimensional hydrodynamic simulation of high pressures induced by high power nanosecond laser-matter interactions under water. <i>Journal of Applied Physics</i> , 2007 , 101, 103514	2.5	30
198	Laser-Assisted Machining of Damage-Free Silicon Nitride Parts with Complex Geometric Features via In-Process Control of Laser Power. <i>Journal of the American Ceramic Society</i> , 2006 , 89, 3397-3405	3.8	30
197	Control of Cutting Force for End Milling Processes Using an Extended Model Reference Adaptive Control Scheme. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 1996 , 118, 339-347	3.3	29
196	Evolutionary modelling and optimization of grinding processes. <i>International Journal of Production Research</i> , 2000 , 38, 2787-2813	7.8	29
195	Analysis of weld geometry and liquid flow in laser transmission welding between polyethylene terephthalate (PET) and Ti6Al4V based on numerical simulation. <i>Optics and Laser Technology</i> , 2018 , 103, 99-108	4.2	28
194	Experimental Evaluation and Modeling Analysis of Micromilling of Hardened H13 Tool Steels. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2011 , 133,	3.3	28
193	A one-dimensional hydrodynamic model for pressures induced near the coating-water interface during laser shock peening. <i>Journal of Applied Physics</i> , 2007 , 101, 023510	2.5	28
192	A Time-Domain Dynamic Model for Chatter Prediction of Cylindrical Plunge Grinding Processes. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2006 , 128, 404-415	3.3	28
191	From Incident Laser Pulse to Residual Stress: A Complete and Self-Closed Model for Laser Shock Peening. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2007 , 129, 117-125	3.3	28
190	Improved machinability of SiC/SiC ceramic matrix composite via laser-assisted micromachining. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 90, 731-739	3.2	27
189	Numerical Modeling of Transport Phenomena and Dendritic Growth in Laser Spot Conduction Welding of 304 Stainless Steel. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2012 , 134,	3.3	27
188	Automated Sensor Selection and Fusion for Monitoring and Diagnostics of Plunge Grinding. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2008 , 130,	3.3	27
187	Neuro-fuzzy control of complex manufacturing processes. <i>International Journal of Production Research</i> , 1996 , 34, 3291-3309	7.8	27
186	An Integrated Approach Toward the Dynamic Analysis of High-Speed Spindles: Part I System Model. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 1994 , 116, 506-513	1.6	27
185	Simulation and experimental studies on microstructure evolution of resolidified dendritic TiC in laser direct deposited Ti-TiC composite. <i>Materials and Design</i> , 2018 , 159, 212-223	8.1	27
184	MICROSTRUCTURAL ANALYSIS AND MACHINABILITY IMPROVEMENT OF UDIMET 720 VIA CRYOGENIC MILLING. <i>Machining Science and Technology</i> , 2009 , 13, 1-19	2	26
183	Coulomb explosion and early plasma generation during femtosecond laser ablation of silicon at high laser fluence. <i>Journal Physics D: Applied Physics</i> , 2013 , 46, 335501	3	25

182	Modeling of Tool Forces for Worn Tools: Flank Wear Effects. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 1996 , 118, 359-366	3.3	25
181	A study on chatter boundaries of cylindrical plunge grinding with process condition-dependent dynamics. <i>International Journal of Machine Tools and Manufacture</i> , 2007 , 47, 1563-1572	9.4	25
180	Ultrafast Laser Applications in Manufacturing Processes: A State-of-the-Art Review. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2020 , 142,	3.3	25
179	Robust Tool Wear Estimation With Radial Basis Function Neural Networks. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1995 , 117, 459-467	1.6	24
178	A simplified predictive model for high-fluence ultra-short pulsed laser ablation of semiconductors and dielectrics. <i>Applied Surface Science</i> , 2009 , 255, 4996-5002	6.7	23
177	Absorption coefficient of aluminum near the critical point and the consequences on high-power nanosecond laser ablation. <i>Applied Physics Letters</i> , 2006 , 89, 111902	3.4	23
176	Transient Thermal Response of a Rotating Cylindrical Silicon Nitride Workpiece Subjected to a Translating Laser Heat Source, Part II: Parametric Effects and Assessment of a Simplified Model. <i>Journal of Heat Transfer</i> , 1998 , 120, 907-915	1.8	23
175	Comprehensive modeling of transport phenomena in laser hot-wire deposition process. <i>International Journal of Heat and Mass Transfer</i> , 2018 , 125, 1356-1368	4.9	23
174	Molecular dynamics-based cohesive zone representation of Ti6Al4V/TiC composite interface. <i>Materials and Design</i> , 2018 , 155, 161-169	8.1	23
173	Laser-assisted milling of Ti-6Al-4V with the consideration of surface integrity. <i>International Journal of Advanced Manufacturing Technology</i> , 2015 , 79, 1645-1658	3.2	22
172	Analysis of nanosecond laser ablation of aluminum with and without phase explosion in air and water. <i>Journal of Laser Applications</i> , 2013 , 25, 032002	2.1	22
171	Parametric Study on Single Shot and Overlapping Laser Shock Peening on Various Metals via Modeling and Experiments. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2010 , 132,	3.3	22
170	Intelligent Model-based Optimization of the Surface Grinding Process for Heat-Treated 4140 Steel Alloys With Aluminum Oxide Grinding Wheels. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2003 , 125, 65-76	3.3	22
169	Characterization of CNC machining centers. <i>Journal of Manufacturing Systems</i> , 1991 , 10, 407-421	9.1	22
168	Predictive modeling capabilities from incident powder and laser to mechanical properties for laser directed energy deposition. <i>Computational Mechanics</i> , 2018 , 61, 617-636	4	21
167	Vision-based clad height measurement. <i>Machine Vision and Applications</i> , 2011 , 22, 129-136	2.8	21
166	A Bayesian machine learning method for sensor selection and fusion with application to on-board fault diagnostics. <i>Mechanical Systems and Signal Processing</i> , 2010 , 24, 182-192	7.8	21
165	Stability Analysis in Face Milling Operations, Part 2: Experimental Validation and Influencing Factors. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 1999 , 121, 606-614	3.3	21

- 164 Static and Dynamic Characteristics of a Two Stage Pilot Relief Valve. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **1991**, 113, 280-288 1.6 21
- 163 Interaction analysis for MIMO nonlinear systems based on a fuzzy basis function network model. *Fuzzy Sets and Systems*, **2007**, 158, 2013-2025 3.7 20
- 162 Self-Sufficient Modeling of Single Track Deposition of Ti6Al4V With the Prediction of Capture Efficiency. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2019**, 141, 3.3 20
- 161 Two-photon lithography for three-dimensional fabrication in micro/nanoscale regime: A comprehensive review. *Optics and Laser Technology*, **2021**, 142, 107180 4.2 20
- 160 Investigation on the Effects of Process Parameters on Defect Formation in Friction Stir Welded Samples Via Predictive Numerical Modeling and Experiments. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2017**, 139, 3.3 19
- 159 A two-dimensional comprehensive hydrodynamic model for femtosecond laser pulse interaction with metals. *Journal Physics D: Applied Physics*, **2012**, 45, 105201 3 19
- 158 Constructive training of recurrent neural networks using hybrid optimization. *Neurocomputing*, **2010**, 73, 2624-2631 5.4 19
- 157 SURFACE TEMPERATURE MEASUREMENT IN LASER-ASSISTED MACHINING PROCESSES. *Experimental Heat Transfer*, **1997**, 10, 291-313 2.4 19
- 156 Wheel Regenerative Chatter of Surface Grinding. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2006**, 128, 393-403 3.3 19
- 155 Design of a multilevel fuzzy controller for nonlinear systems and stability analysis. *IEEE Transactions on Fuzzy Systems*, **2005**, 13, 761-778 8.3 19
- 154 Mechanical breathing in organic electrochromics. *Nature Communications*, **2020**, 11, 211 17.4 18
- 153 Modeling Particle Spray and Capture Efficiency for Direct Laser Deposition Using a Four Nozzle Powder Injection System. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2018**, 140, 3.3 18
- 152 Wideband anti-reflective silicon surface structures fabricated by femtosecond laser texturing. *Applied Surface Science*, **2018**, 459, 86-91 6.7 18
- 151 Energy transport analysis in ultrashort pulse laser ablation through combined molecular dynamics and Monte Carlo simulation. *Physical Review B*, **2010**, 82, 3.3 18
- 150 Surface Temperature Measurement of Semi-Transparent Ceramics by Long-Wavelength Pyrometry. *Journal of Heat Transfer*, **2003**, 125, 48-56 1.8 18
- 149 Gain estimation of nonlinear dynamic systems modeled by an FBFN and the maximum output scaling factor of a self-tuning PI fuzzy controller. *Engineering Applications of Artificial Intelligence*, **2015**, 42, 1-15 7.2 17
- 148 Laser-plasma interaction and plasma enhancement by ultrashort double-pulse ablation. *Applied Physics B: Lasers and Optics*, **2015**, 120, 81-87 1.9 17
- 147 Laser deposited coatings of Co-Cr-Mo onto Ti-6Al-4V and SS316L substrates for biomedical applications. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2013**, 101, 1124-32 3.5 17

146	Control of Cutting Force for Creep-Feed Grinding Processes Using a Multi-Level Fuzzy Controller. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2007 , 129, 480-492	1.6	17
145	On the Natural Frequencies of High-Speed Spindles with Angular Contact Bearings. <i>Proceedings of the Institution of Mechanical Engineers Part C Mechanical Engineering Science</i> , 1991 , 205, 147-154		17
144	Deep-learning-based porosity monitoring of laser welding process. <i>Manufacturing Letters</i> , 2020 , 23, 62-66	4.5	17
143	A variational Bayesian framework for group feature selection. <i>International Journal of Machine Learning and Cybernetics</i> , 2013 , 4, 609-619	3.8	16
142	Ball end milling mechanistic model based on a voxel-based geometric representation and a ray casting technique. <i>Journal of Manufacturing Processes</i> , 2013 , 15, 338-347	5	16
141	Laser Assisted Milling of Ti-6Al-4V ELI with the Analysis of Surface Integrity and its Economics. <i>Lasers in Manufacturing and Materials Processing</i> , 2015 , 2, 164-185	2.1	16
140	Experimental Evaluation of Laser-Assisted Micromilling in a Slotting Configuration. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2010 , 132,	3.3	16
139	A statistical analysis of positional errors of a multiaxis machine tool. <i>Precision Engineering</i> , 1992 , 14, 139-146	1.6	16
138	Effects of interface gap and shielding gas on the quality of alloy AA6061 fiber laser lap weldings. <i>Journal of Materials Processing Technology</i> , 2019 , 268, 201-212	5.3	16
137	Multiphysics modeling of phase transformation and microhardness evolution in laser direct deposited Ti6Al4V. <i>Journal of Manufacturing Processes</i> , 2019 , 45, 579-587	5	15
136	A data-based framework for fault detection and diagnostics of non-linear systems with partial state measurement. <i>Engineering Applications of Artificial Intelligence</i> , 2013 , 26, 446-455	7.2	15
135	Laser transformation hardening of Ti6Al4V in solid state with accompanying kinetic model. <i>Surface Engineering</i> , 2007 , 23, 78-82	2.6	15
134	Analysis of No. 50 Taper Joint Stiffness Under Axial and Radial Loading. <i>Journal of Manufacturing Processes</i> , 2000 , 2, 167-173	5	15
133	Modeling of unstructured uncertainties and robust controlling of nonlinear dynamic systems based on type-2 fuzzy basis function networks. <i>Engineering Applications of Artificial Intelligence</i> , 2016 , 53, 74-85	7.2	15
132	Robust Tool Wear Monitoring Using Systematic Feature Selection in Turning Processes With Consideration of Uncertainties. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2018 , 140,	3.3	14
131	A Fuzzy Inverse Model Construction Method for General Monotonic Multi-Input-- Single-Output (MISO) Systems. <i>IEEE Transactions on Fuzzy Systems</i> , 2008 , 16, 1216-1231	8.3	14
130	Generalized Intelligent Grinding Advisory System. <i>International Journal of Production Research</i> , 2007 , 45, 1899-1932	7.8	14
129	Surface roughness evaluation via ultrasonic scanning. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 1994 , 41, 863-71	3.2	14

128	Comparative assessment of dendrite growth and microstructure predictions during laser welding of Al 6061 via 2D and 3D phase field models. <i>Computational Materials Science</i> , 2020 , 172, 109291	3.2	14
127	In-situ synthesis of Zr-based bulk metallic glass composites with periodic amorphous-crystalline microstructure for improved ductility via laser direct deposition. <i>Intermetallics</i> , 2019 , 111, 106503	3.5	13
126	Analysis of microstructure and mechanical strength of lap joints of TZM alloy welded by a fiber laser. <i>Journal of Manufacturing Processes</i> , 2019 , 39, 146-159	5	13
125	Multi-scale modeling of phase explosion in high fluence nanosecond laser ablation and clarification of ablation depth prediction criterion. <i>Applied Surface Science</i> , 2015 , 357, 74-85	6.7	13
124	Multiscale Finite Element Modeling of Alumina Ceramics Undergoing Laser-Assisted Machining. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2016 , 138,	3.3	13
123	Effect of air breakdown with a focusing lens on ultrashort laser ablation. <i>Applied Physics Letters</i> , 2011 , 99, 234104	3.4	13
122	Coupled Thermomechanical Multiscale Modeling of Alumina Ceramics to Predict Thermally Induced Fractures Under Laser Heating. <i>Journal of the American Ceramic Society</i> , 2015 , 98, 920-928	3.8	12
121	Precise selective scribing of thin-film solar cells by a picosecond laser. <i>Applied Physics A: Materials Science and Processing</i> , 2014 , 116, 671-681	2.6	12
120	Integration of thermo-dynamic spindle and machining simulation models for a digital machining system. <i>International Journal of Advanced Manufacturing Technology</i> , 2009 , 40, 648-661	3.2	12
119	Framework of an intelligent grinding process advisor. <i>Journal of Intelligent Manufacturing</i> , 1992 , 3, 135-148	3.8	12
118	Experimental Complex Modal Analysis of Machine Tool Structures. <i>Journal of Engineering for Industry</i> , 1989 , 111, 116-124		12
117	A Time Domain Dynamic Simulation Model for Stability Prediction of Infeed Centerless Grinding Processes. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2007 , 129, 539-550	3.3	11
116	Enhancement of weld strength of laser-welded joints of AA6061-T6 and TZM alloys via novel dual-laser warm laser shock peening. <i>International Journal of Advanced Manufacturing Technology</i> , 2019 , 104, 907-919	3.2	10
115	Multi-level fuzzy control of friction stir welding power. <i>International Journal of Advanced Manufacturing Technology</i> , 2012 , 59, 559-567	3.2	10
114	An Adaptive Fuzzy Controller for Constant Cutting Force in End-Milling Processes. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2008 , 130,	3.3	10
113	Overview of Laser Applications in Manufacturing and Materials Processing in Recent Years. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2020 , 142,	3.3	10
112	Low-reflectance laser-induced surface nanostructures created with a picosecond laser. <i>Applied Physics A: Materials Science and Processing</i> , 2016 , 122, 1	2.6	10
111	Effective methods for fabricating trapezoidal shape microchannel of arbitrary dimensions on polymethyl methacrylate (PMMA) substrate by a CO2 laser. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 93, 1079-1094	3.2	9

110	Effects of Composition and Post Heat Treatment on Shape Memory Characteristics and Mechanical Properties for Laser Direct Deposited Nitinol. <i>Lasers in Manufacturing and Materials Processing</i> , 2019 , 6, 41-58	2.1	9
109	A Parametric Study on Laser Welding of Magnesium Alloy AZ31 by a Fiber Laser. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2015 , 137,	3.3	9
108	The effects of interface gap on weld strength during overlapping fiber laser welding of AISI 304 stainless steel and AZ31 magnesium alloys. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 90, 3685-3696	3.2	9
107	Direct pulsed laser crystallization of nanocrystals for absorbent layers in photovoltaics: Multiphysics simulation and experiment. <i>Journal of Applied Physics</i> , 2013 , 113, 193506	2.5	9
106	Framework of a machining advisory system with application to face milling processes. <i>Journal of Intelligent Manufacturing</i> , 1998 , 9, 225-234	6.7	9
105	Thermal modelling and experimental evaluation of laser-assisted dressing of superabrasive grinding wheels. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2007 , 221, 605-616	2.4	9
104	Laser cladding of aluminum alloy 6061 via off-axis powder injection. <i>Surface and Coatings Technology</i> , 2021 , 415, 127099	4.4	9
103	Predictions of thermal conductivity and degradation of irradiated SiC/SiC composites by materials-genome-based multiscale modeling. <i>Journal of Nuclear Materials</i> , 2018 , 512, 268-275	3.3	9
102	Welding deformation of ultra-thin 316 stainless steel plate using pulsed laser welding process. <i>Optics and Laser Technology</i> , 2019 , 119, 105583	4.2	8
101	Adaptive Robust Control of Circular Machining Contour Error Using Global Task Coordinate Frame. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2015 , 137,	3.3	8
100	Multi-scale genome modeling for predicting fracture strength of silicon carbide ceramics. <i>Computational Materials Science</i> , 2018 , 141, 10-18	3.2	8
99	Multiscale Genome Modeling for Predicting the Thermal Conductivity of Silicon Carbide Ceramics. <i>Journal of the American Ceramic Society</i> , 2016 , 99, 4073-4082	3.8	8
98	Machinability improvement of gear hobbing via process simulation and tool wear predictions. <i>International Journal of Advanced Manufacturing Technology</i> , 2016 , 86, 2771-2779	3.2	8
97	IMPROVING MACHINABILITY OF HIGH CHROMIUM WEAR-RESISTANT MATERIALS VIA LASER-ASSISTED MACHINING. <i>Machining Science and Technology</i> , 2013 , 17, 246-269	2	8
96	Dislocation Density-Based Grain Refinement Modeling of Orthogonal Cutting of Commercially Pure Titanium 2011 ,		8
95	A simple two-stage model for the formation and expansion of the plasma induced by high intensity nanosecond laser metal ablation in vacuum. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2007 , 371, 128-134	2.3	8
94	Recrystallization Textures during Laser-Assisted Machining of Zirconia Ceramics. <i>Materials Science Forum</i> , 2002 , 408-412, 1669-1674	0.4	8
93	Assessment of sub-surface damage during machining of additively manufactured Fe-TiC metal matrix composites. <i>Journal of Materials Processing Technology</i> , 2019 , 266, 173-183	5.3	8

92	In Situ Synthesis and Characterization of Zr-Based Amorphous Composite by Laser Direct Deposition. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 4316-4325	2.3	7
91	Investigation on temporal evolution of the grain refinement in copper under high strain rate loading via in-situ synchrotron measurement and predictive modeling. <i>Acta Materialia</i> , 2018 , 143, 43-54	8.4	7
90	Milling contour error control using multilevel fuzzy controller. <i>International Journal of Advanced Manufacturing Technology</i> , 2013 , 66, 1641-1655	3.2	7
89	Ablation Dynamics of Silicon by Femtosecond Laser and the Role of Early Plasma. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2013 , 135,	3.3	7
88	Shock Wave Propagation and Spallation Study in Laser Shock Peening. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2010 , 132,	1.8	7
87	Characteristics of plume plasma and its effects on ablation depth during ultrashort laser ablation of copper in air. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 355204	3	7
86	An In-situ Identification Method for Joint Parameters in Mechanical Structures. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 1999 , 121, 363-372	1.6	7
85	Integrated 2D cellular automata-phase field modeling of solidification and microstructure evolution during additive manufacturing of Ti6Al4V. <i>Computational Materials Science</i> , 2020 , 183, 109889	3.2	7
84	Multiscale Modeling for Predicting the Mechanical Properties of Silicon Carbide Ceramics. <i>Journal of the American Ceramic Society</i> , 2016 , 99, 1006-1014	3.8	7
83	A multimodal intelligent monitoring system for turning processes. <i>Journal of Manufacturing Processes</i> , 2018 , 35, 547-558	5	7
82	Multi-scale modeling of thermal conductivity of SiC-reinforced aluminum metal matrix composite. <i>Journal of Composite Materials</i> , 2017 , 51, 3941-3953	2.7	6
81	Thermo-fluid Topology Optimization and Experimental Study of Conformal Cooling Channels for 3D Printed Plastic Injection Molds. <i>Procedia Manufacturing</i> , 2019 , 34, 631-639	1.5	6
80	Investigation of the Machining Behavior of Ti6Al4V/TiC Composites During Conventional and Laser-Assisted Machining. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2019 , 141,	3.3	6
79	Laser keyhole welding of stainless steel thin plate stack for applications in fuel cell manufacturing. <i>Science and Technology of Welding and Joining</i> , 2015 , 20, 313-318	3.7	6
78	Analysis of defect formation mechanisms and their effects on weld strength during friction stir welding of Al 6061-T6 via experiments and finite element modeling. <i>International Journal of Advanced Manufacturing Technology</i> , 2020 , 107, 4621-4635	3.2	6
77	A Multilevel Fuzzy Control Design for a Class of Multiinput Single-Output Systems. <i>IEEE Transactions on Industrial Electronics</i> , 2012 , 59, 3113-3123	8.9	6
76	Fabrication and Characterization of Photonic Crystals in Photopolymer SZ2080 by Two-Photon Polymerization Using a Femtosecond Laser. <i>Journal of Micro and Nano-Manufacturing</i> , 2014 , 2,	1.3	6
75	A self-tuning fuzzy controller for a class of multi-input multi-output nonlinear systems. <i>Engineering Applications of Artificial Intelligence</i> , 2011 , 24, 238-250	7.2	6

74	Robust optimisation of machining conditions with tool life and surface roughness uncertainties. <i>International Journal of Production Research</i> , 2011 , 49, 3963-3978	7.8	6
73	Predictive modeling of microstructure evolution within multi-phase steels during rolling processes. <i>International Journal of Mechanical Sciences</i> , 2019 , 150, 576-583	5.5	6
72	Mechanics and Modeling of Chip Formation in Machining of MMC 2012 , 1-49		6
71	Adaptive robust control of machining force and contour error with tool deflection using global task coordinate frame. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2018 , 232, 40-50	2.4	5
70	Microhole Drilling by Double Laser Pulses With Different Pulse Energies. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2018 , 140,	3.3	5
69	Modeling of transport phenomena in direct laser deposition of metal matrix composite. <i>International Journal of Heat and Mass Transfer</i> , 2011 ,	4.9	5
68	Observer-based adaptive robust control of friction stir welding axial force 2010 ,		5
67	High Speed Machining of Titanium Alloys. <i>Materials Science Forum</i> , 2009 , 618-619, 159-163	0.4	5
66	Laser-Assisted Machining of a Fiber Reinforced Metal Matrix Composite 2009 ,		5
65	Occurrence of Polytype Transformation during Nitrogen Doping of SiC Bulk Wafer. <i>Materials Science Forum</i> , 2008 , 600-603, 39-42	0.4	5
64	An in situ modal-based method for structural dynamic joint parameter identification. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2000 , 214, 641-653	1.3	5
63	Crack formation within ceramics via coupled multiscale genome and XFEM predictions under various loading conditions. <i>Engineering Fracture Mechanics</i> , 2018 , 204, 517-530	4.2	5
62	Crystalline photoactive copper indium diselenide thin films by pulsed laser crystallization of nanoparticle-inks at ambient conditions. <i>RSC Advances</i> , 2015 , 5, 57550-57558	3.7	4
61	Special issue on Additive manufacturing: progress in modeling and simulation with experimental validations in additive manufacturing. <i>Computational Mechanics</i> , 2018 , 61, 519-520	4	4
60	Manufacturing of hourglass-shaped through holes with varying diameters at different depths by dual-pulse laser drilling and laser-induced plasma-hole interaction. <i>Manufacturing Letters</i> , 2018 , 16, 18-22	2.5	4
59	Nonlinear discrete time optimal control based on Fuzzy Models. <i>Journal of Intelligent and Fuzzy Systems</i> , 2015 , 29, 647-658	1.6	4
58	Laser Machining and Laser-Assisted Machining of Ceramics 2014 , 219-234		4
57	Laser and Photonic Systems Integration: Emerging Innovations and Framework for Research and Education. <i>Human Factors and Ergonomics in Manufacturing</i> , 2013 , 23, 483-516	1.4	4

56	Optimization of Laser Hardening Processes for Industrial Parts With Complex Geometry via Predictive Modeling 2009 ,		4
55	Laser Cladding of Two Hardfacing Alloys Onto Cylindrical Low Alloy Steel Substrates With a High Power Direct Diode Laser 2007 , 343		4
54	ANALYSIS OF THREE-DIMENSIONAL MACHINING USING AN EXTENDED OBLIQUE MACHINING THEORY. <i>Machining Science and Technology</i> , 2002 , 6, 187-213	2	4
53	Experimental Identification of Dynamic Parameters of Rolling Element Bearings in Machine Tools. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2000 , 122, 95-101	1.6	4
52	Control of Chips in the Turning of 4150 by Using an Obstruction Type Chip Breaker. <i>Journal of Engineering for Industry</i> , 1993 , 115, 160-163		4
51	Adaptive Control of Nonminimum Phase Processes with Application to the End Milling Process 1993 ,		4
50	Robust Wheel Wear Monitoring System for Cylindrical Traverse Grinding. <i>IEEE/ASME Transactions on Mechatronics</i> , 2020 , 25, 2220-2229	5.5	4
49	Analysis of the effects of microstructure heterogeneity on the mechanical behavior of additively manufactured Ti6Al4V using mechanics of structure genome. <i>Materials and Design</i> , 2021 , 204, 109643	8.1	4
48	Investigation on Weld Pool Dynamics in Laser Welding of AISI 304 Stainless Steel With an Interface Gap Via a Three-Dimensional Dynamic Model and Experiments. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2017 , 139,	3.3	3
47	Prediction of 3D microstructure and phase distributions of Ti6Al4V built by the directed energy deposition process via combined multi-physics models. <i>Additive Manufacturing</i> , 2020 , 34, 101234	6.1	3
46	Etching of long fiber polymeric composite materials by nanosecond laser induced water breakdown plasma. <i>Applied Surface Science</i> , 2013 , 268, 6-10	6.7	3
45	An Experimental Evaluation of Laser-Assisted Micromilling of Two Difficult to Machine Alloys 2008 ,		3
44	Machine Tools 2007 , 243-258		3
43	Modeling of Complex Manufacturing Processes by Hierarchical Fuzzy Basis Function Networks With Application to Grinding Processes. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2004 , 126, 880-890	1.6	3
42	Design and implementation of tool wear monitoring with radial basis function neural networks		3
41	A novel 3D cellular automata-phase field model for computationally efficient dendrite evolution during bulk solidification. <i>Computational Materials Science</i> , 2021 , 192, 110405	3.2	3
40	Modeling and robust controlling of laser welding process on high strength titanium alloy using fuzzy basis function networks and robust Takagi-Sugeno fuzzy controller. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 89, 1089-1102	3.2	2
39	Modeling of picosecond laser-induced plasma amplification inside a microhole and an implied novel technology to drill microholes with varying diameters with depth. <i>Manufacturing Letters</i> , 2016 , 7, 1-5	4.5	2

38	Control of Ablation Depth and Surface Structure in P3 Scribing of Thin-Film Solar Cells by a Picosecond Laser. <i>Journal of Micro and Nano-Manufacturing</i> , 2014 , 2,	1.3	2
37	Investigation on the Effects of Process Parameters on Defect Formation in Friction Stir Welded Samples via Predictive Numerical Modeling and Experiments 2017 ,		2
36	Modeling of the Off-Axis High Power Diode Laser (HPDL) Cladding Process 2009 ,		2
35	Construction of fuzzy basis function networks using adaptive least squares method		2
34	Design of an optimal damper to minimize the vibration of machine tool structures subject to random excitation. <i>Engineering With Computers</i> , 1991 , 7, 199-208	4.5	2
33	Thermodynamically consistent phase-field modeling of competitive polycrystalline growth of beta grains during additive manufacturing of Ti6Al4V. <i>Journal of Crystal Growth</i> , 2021 , 564, 126112	1.6	2
32	An adaptive Gaussian mixture method for nonlinear uncertainty propagation in neural networks. <i>Neurocomputing</i> , 2021 , 458, 170-183	5.4	2
31	A probabilistic neural network for uncertainty prediction with applications to manufacturing process monitoring. <i>Applied Soft Computing Journal</i> , 2022 , 108995	7.5	2
30	High throughput synthesis of CoCrFeNiTi high entropy alloys via directed energy deposition. <i>Journal of Alloys and Compounds</i> , 2022 , 916, 165469	5.7	2
29	Prediction of initial transient behavior with stationary heating during laser powder bed fusion processes. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 153, 119663	4.9	1
28	Modeling Particle Spray and Capture Efficiency for Direct Laser Deposition Using a Four Nozzle Powder Injection System 2017 ,		1
27	Multi-Scale Finite Element Modeling of Alumina Ceramics Undergoing Laser-Assisted Machining 2014 ,		1
26	Adaptive Robust Control of Circular Machining Contour Error Using Global Task Coordinate Frame 2013 ,		1
25	Laser assisted machining: Its potential and future 2010 ,		1
24	A Unified Simple Predictive Model for High Fluence Ultra-Short Pulsed Laser Ablation of Metal, Semiconductor and Dielectric 2009 ,		1
23	Experimental and Modeling Analysis of Micro-Milling of Hardened H13 Tool Steel 2011 ,		1
22	Numerical Modeling of Transport Phenomena and Dendritic Growth in Laser Conduction Welding of 304 Stainless Steel 2011 ,		1
21	A Metallo-Thermo-Mechanically Coupled Analysis of Orthogonal Cutting of AISI 1045 Steel 2012 ,		1

20	A Parametric Study on Overlapping Laser Shock Peening of 4140 Steel via Modeling and Experiments 2008 ,		1
19	Laser-Assisted Milling of Silicon Nitride Ceramics 2006 , 79		1
18	Surface Temperature Measurement of Semi-Transparent Ceramics by Long-Wavelength Pyrometry 2002 , 137		1
17	A Study on the High Speed Face Milling of Ti-6Al-4V Alloy 2002 , 277		1
16	State estimation of continuous-time radial basis function networks. <i>Automatica</i> , 2000 , 36, 399-407	5.7	1
15	System Identification of Multivariate Systems With Feedback. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1990 , 112, 283-291	1.6	1
14	A Data-Driven Approach of Takagi-Sugeno Fuzzy Control of Unknown Nonlinear Systems. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 62	2.6	1
13	A crystal plasticity finite element-based approach to model the constitutive behavior of multi-phase steels. <i>Archives of Civil and Mechanical Engineering</i> , 2021 , 21, 1	3.4	1
12	Comparative Assessment of Physics-Based Computational Models on the NIST Benchmark Study of Molten Pool Dimensions and Microstructure for Selective Laser Melting of Inconel 625. <i>Integrating Materials and Manufacturing Innovation</i> , 2021 , 10, 58-71	2.9	1
11	Laser cladding of Stellite-6 with a coaxial nozzle via modeling and systematic experimental investigations. <i>International Journal of Advanced Manufacturing Technology</i> , 2021 , 113, 837-853	3.2	1
10	Laser cladding of aluminum alloys with concurrent cryogenic quenching for improved microstructure and hardness. <i>Surface and Coatings Technology</i> , 2022 , 439, 128460	4.4	1
9	An Adaptive Fuzzy Controller for Constant Cutting Force in End-Milling Processes 2006 , 683		0
8	Measurement and characterization of milled surface profiles using ultrasonic waves. <i>Measurement: Journal of the International Measurement Confederation</i> , 1996 , 17, 59-72	4.6	0
7	Molecular Dynamics Study of Bulk Properties of Polycrystalline NiTi. <i>Metals</i> , 2021 , 11, 1237	2.3	0
6	Multi-track, multi-layer dendrite growth and solid phase transformation analysis during additive manufacturing of H13 tool steel using a combined hybrid cellular automata/phase field, solid-state phase prediction models. <i>International Journal of Advanced Manufacturing Technology</i> , 2022 , 120, 2089	3.2	0
5	Extended mechanics of structural genome for predicting mechanical properties of additively manufactured Ti6Al4V considering porosity and microstructure. <i>Mechanics of Materials</i> , 2022 , 169, 104300	3.3	0
4	A Framework for Estimating Mold Performance Using Experimental and Numerical Analysis of Injection Mold Tooling Prototypes. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2019 , 71-76	0.3	
3	Multi-Phase Finite Element Modeling of Machining Unidirectional Fiber Reinforced Composites 2007 , 259		

- 2 The Investigation of the Sensitivity and Direction of the Maximum Surface Error in Peripheral Milling. *Journal of the Korean Society for Precision Engineering*, **2021**, 38, 795-806 0.3
- 1 Amplification of Plasma at Different Initial Temperatures inside a Microhole by a Short Laser Pulse and the Effect on the Hole Sidewall. *Procedia Manufacturing*, **2016**, 5, 724-733 1.5