

Bert Lauwers

List of Publications by Year in descending order

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48
papers

1,419
citations

430874

18
h-index

330143

37
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48
all docs

48
docs citations

48
times ranked

1283
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental and numerical investigations of material removal process in electrochemical discharge machining of glass in discharge regime. Precision Engineering, 2021, 72, 706-716.	3.4	13
2	Influence of post-heat treatments on fatigue response of low-alloyed carbon-manganese steel material manufactured by Direct Energy Deposition-Arc technique. Materials Letters, 2021, 302, 130465.	2.6	1
3	Sustainable manufacturing of prototype automotive gear components within a multi-axis machining platform. Procedia Manufacturing, 2020, 43, 103-110.	1.9	2
4	Cement augmentation of metastatic lesions in the proximal femur can improve bone strength. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 104, 103648.	3.1	8
5	Development of low-cost production process for prototype components based on Wire and Arc Additive Manufacturing (WAAM). Procedia CIRP, 2020, 95, 60-65.	1.9	5
6	Hybrid Manufacturing based on the combination of Mechanical and Electro Physical-Chemical Processes. Procedia CIRP, 2020, 95, 649-661.	1.9	2
7	Selective laser hardening of injection mould components on multi-axis machining centers. Procedia CIRP, 2020, 95, 909-914.	1.9	0
8	Prediction of local sintering in laser beam machining of green Y-TZP ceramic. CIRP Annals - Manufacturing Technology, 2020, 69, 225-228.	3.6	2
9	Investigation of working gap phenomena in Mechano-Electrochemical Milling. Procedia CIRP, 2020, 95, 672-677.	1.9	3
10	A life cycle energy analysis integrated process planning approach to foster the sustainability of discrete part manufacturing. Energy, 2018, 153, 604-617.	8.8	10
11	Experimental investigation of the process behaviour in Mechano-Electrochemical Milling. CIRP Annals - Manufacturing Technology, 2018, 67, 217-220.	3.6	10
12	Overview of Hybrid Machining Processes. , 2018, , 21-41.		10
13	Lead Time Reduction by High Precision 5-axis Milling of a Prototype Gear. Procedia CIRP, 2016, 46, 440-443.	1.9	10
14	Shaping of engineering ceramics by electro, chemical and physical processes. CIRP Annals - Manufacturing Technology, 2016, 65, 761-784.	3.6	64
15	An operation-mode based simulation approach to enhance the energy conservation of machine tools. Journal of Cleaner Production, 2015, 101, 348-359.	9.3	42
16	Tool path generation for single point incremental forming using intelligent sequencing and multi-step mesh morphing techniques. International Journal of Material Forming, 2015, 8, 517-532.	2.0	25
17	Productivity Improvement Through the Application of Hybrid Processes. Lecture Notes in Production Engineering, 2015, , 101-116.	0.4	1
18	Energy-based optimization of the material stock allowance for turning-grinding process sequence. International Journal of Advanced Manufacturing Technology, 2014, 75, 503-513.	3.0	10

#	ARTICLE	IF	CITATIONS
19	Development of a Flexible Laser Hardening & Machining Center and Proof of Concept on C-45 Steel. <i>Physics Procedia</i> , 2014, 56, 1083-1093.	1.2	6
20	Tool path generation framework for accurate manufacture of complex 3D sheet metal parts using single point incremental forming. <i>Computers in Industry</i> , 2014, 65, 563-584.	9.9	49
21	Hybrid processes in manufacturing. <i>CIRP Annals - Manufacturing Technology</i> , 2014, 63, 561-583.	3.6	316
22	Graph-based optimization of five-axis machine tool movements by varying tool orientation. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 74, 307-318.	3.0	33
23	Micromilling of Sintered ZrO ₂ Ceramic via cBN and Diamond Coated Tools. <i>Procedia CIRP</i> , 2014, 14, 371-376.	1.9	27
24	Fast Production of Gear Prototypes – A Comparison of Technologies. <i>Procedia CIRP</i> , 2014, 14, 77-82.	1.9	26
25	Tool path compensation strategies for single point incremental sheet forming using multivariate adaptive regression splines. <i>CAD Computer Aided Design</i> , 2013, 45, 575-590.	2.7	98
26	An Integrated Approach to Accurate Part Manufacture in Single Point Incremental Forming Using Feature Based Graph Topology. <i>Key Engineering Materials</i> , 2012, 504-506, 869-876.	0.4	10
27	Advanced feature detection algorithms for incrementally formed sheet metal parts. <i>Transactions of Nonferrous Metals Society of China</i> , 2012, 22, s315-s322.	4.2	15
28	Influence of Material Properties on Accuracy Response Surfaces in Single Point Incremental Forming. <i>Key Engineering Materials</i> , 2012, 504-506, 919-924.	0.4	13
29	Machinability Investigation on High Speed Hard Turning of ZrO ₂ with PCD Tools. <i>Procedia CIRP</i> , 2012, 1, 500-505.	1.9	18
30	Optimization of Energy Consumption and Surface Quality in Finish Turning. <i>Procedia CIRP</i> , 2012, 1, 512-517.	1.9	92
31	Computing of the actual shape of removed material for five-axis flat-end milling. <i>CAD Computer Aided Design</i> , 2012, 44, 1103-1114.	2.7	12
32	Five-axis milling tool path generation with dynamic step-over calculation based on integrated material removal simulation. <i>CIRP Annals - Manufacturing Technology</i> , 2012, 61, 139-142.	3.6	10
33	Carbon nanofillers for machining insulating ceramics. <i>Materials Today</i> , 2011, 14, 496-501.	14.2	65
34	Accuracy Improvement in Single Point Incremental Forming through Systematic Study of Feature Interactions. <i>Key Engineering Materials</i> , 2011, 473, 881-888.	0.4	25
35	Multivariate Adaptive Regression Splines as a Tool to Improve the Accuracy of Parts Produced by FSPIF. <i>Key Engineering Materials</i> , 2011, 473, 841-846.	0.4	21
36	Process capabilities of Micro-EDM and its applications. <i>International Journal of Advanced Manufacturing Technology</i> , 2010, 47, 11-19.	3.0	135

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37	Electrical discharge machining of ZrO ₂ toughened WC composites. Materials Chemistry and Physics, 2010, 123, 114-120.	4.0	19
38	Pulsed Electric Current Sintering of Electrical Discharge Machinable Ceramics. Advances in Science and Technology, 2010, 62, 175-184.	0.2	1
39	Reciprocative sliding friction and wear properties of electrical discharge machined ZrO ₂ -based composites. Lubrication Science, 2009, 21, 378-396.	2.1	2
40	Processing of ultrafine ZrO ₂ toughened WC composites. Journal of the European Ceramic Society, 2009, 29, 3371-3378.	5.7	78
41	Tribological Characteristics of WC-Ni and WC-Co Cemented Carbide in Dry Reciprocating Sliding Contact. Tribology Transactions, 2009, 52, 481-491.	2.0	26
42	EDM machinability and frictional behaviour of ZrO ₂ -TiCN composites. International Journal of Machining and Machinability of Materials, 2008, 3, 226.	0.1	4
43	Micro-EDM process investigation of Si₃N₄ TiN ceramic composites for the development of micro-fuel-based power units. International Journal of Manufacturing Research, 2008, 3, 27.	0.2	19
44	Feature Based Approach for Increasing the Accuracy of the SPIF Process. Key Engineering Materials, 2007, 344, 527-534.	0.4	46
45	Influence of Secondary Electro-Conductive Phases on Sliding Wear Performance of Zirconia Based Ceramic Composites. Materials Science Forum, 2007, 561-565, 651-654.	0.3	1
46	3D Morphing for Generating Intermediate Roughing Levels in Multi-Axis Machining. Computer-Aided Design and Applications, 2005, 2, 115-123.	0.6	14
47	STL Model Segmentation for Multi-Axis Machining Operations Planning. Computer-Aided Design and Applications, 2004, 1, 277-284.	0.6	13
48	Tool Path Generation for Single Point Incremental Forming Using Intelligent Sequencing and Multi-Step Mesh Morphing Techniques. Key Engineering Materials, 0, 554-557, 1408-1418.	0.4	7