

# Sergej Hloch

## List of Publications by Year in descending order

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118  
papers

2,187  
citations

186265

28  
h-index

302126

39  
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126  
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126  
docs citations

126  
times ranked

1257  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of liquid droplet volume and impact frequency on the integrity of Al alloy AW2014 exposed to subsonic speeds of pulsating water jets. <i>Wear</i> , 2022, 488-489, 204136.	3.1	10
2	Subsurface microtunneling in ductile material caused by multiple droplet impingement at subsonic speeds. <i>Wear</i> , 2022, 490-491, 204176.	3.1	3
3	The quantitative evaluation of the cutting surface quality levels in abrasive water jet cutting by measurement of the representative striation mark displacement. <i>International Journal of Advanced Manufacturing Technology</i> , 2022, 120, 1625.	3.0	1
4	Utilizing the water hammer effect to enhance the mechanical properties of AISI 304 welded joints. <i>International Journal of Advanced Manufacturing Technology</i> , 2022, 119, 2317-2328.	3.0	9
5	Comparison of Maraging Steel Surface Integrity in Hybrid and Conventional Micro-ECDM Processes. <i>Materials</i> , 2022, 15, 4378.	2.9	5
6	Effect of rotation direction, traverse speed, and abrasive type during the hydroabrasive disintegration of a rotating Ti6Al4V workpiece. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2021, 235, 1848-1860.	2.4	3
7	On-Line Monitoring of In-Vitro Application of PWJ for Bone Cement Disintegration. <i>Lecture Notes in Mechanical Engineering</i> , 2021, , 100-110.	0.4	0
8	Combustion characteristics of compression ignition engine fuelled with rapeseed oilâ€“diesel fuelâ€“n-butanol blends. <i>Oil and Gas Science and Technology</i> , 2021, 76, 17.	1.4	3
9	Effect of Periodic Water Clusters on AISI 304 Welded Surfaces. <i>Materials</i> , 2021, 14, 210.	2.9	5
10	Influence of the frequency and flow rate of a pulsating water jet on the wear damage of tantalum. <i>Wear</i> , 2021, 477, 203893.	3.1	17
11	Surface Topography Analysis of Mg-Based Composites with Different Nanoparticle Contents Disintegrated Using Abrasive Water Jet. <i>Materials</i> , 2021, 14, 5471.	2.9	5
12	Surface and Subsurface Analysis of Stainless Steel and Titanium Alloys Exposed to Ultrasonic Pulsating Water Jet. <i>Materials</i> , 2021, 14, 5212.	2.9	14
13	Effect of Water Flow Rate on Operating Frequency and Power During Acoustic Chamber Tuning. <i>Lecture Notes in Mechanical Engineering</i> , 2021, , 142-154.	0.4	5
14	Erosion of Titanium and Aluminium Alloys Using Pulsating Water Jet: Effect of Standoff Distance. <i>Lecture Notes in Mechanical Engineering</i> , 2021, , 56-66.	0.4	1
15	Standoff Distance in Ultrasonic Pulsating Water Jet. <i>Materials</i> , 2021, 14, 88.	2.9	7
16	Ultrasonic Pulsating Water Jet Peening: Influence of Pressure and Pattern Strategy. <i>Materials</i> , 2021, 14, 6019.	2.9	11
17	Mechanical Strengthening of Anti-Corrosive Surface Layers by Water Jet. <i>Lecture Notes in Mechanical Engineering</i> , 2021, , 197-207.	0.4	0
18	Effect of Standoff Distance on the Erosion of Various Materials. <i>Lecture Notes in Mechanical Engineering</i> , 2021, , 164-171.	0.4	1

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19	Influence of frequency change during sandstone erosion by pulsed waterjet. <i>Materials and Manufacturing Processes</i> , 2020, 35, 187-194.	4.7	11
20	Application of the pulsating and continuous water jet for granite erosion. <i>International Journal of Rock Mechanics and Mining Sciences</i> , 2020, 126, 104209.	5.8	25
21	Durability and tool wear investigation of HSSE-PM milling cutters within long-term tests. <i>Engineering Failure Analysis</i> , 2020, 108, 104348.	4.0	8
22	Experimental verification of small diameter rollers utilization in construction of roller test stand in evaluation of energy loss due to rolling resistance. <i>Measurement: Journal of the International Measurement Confederation</i> , 2020, 152, 107287.	5.0	6
23	Effects of acoustically generated pulsed hydro jet during rock surface disintegration. <i>AIP Conference Proceedings</i> , 2020, , .	0.4	0
24	Utilization of ultrasonically forced pulsating water jet decaying for bone cement removal. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 110, 829-840.	3.0	21
25	Effect of pressure of pulsating water jet moving along stair trajectory on erosion depth, surface morphology and microhardness. <i>Wear</i> , 2020, 452-453, 203278.	3.1	26
26	Surface integrity in wire-EDM tangential turning of <i>in situ</i> hybrid metal matrix composite A359/B <sub>4</sub> /C/Al <sub>2</sub> O <sub>3</sub> . <i>Science and Engineering of Composite Materials</i> , 2019, 26, 122-133.	1.4	13
27	Material Utilization of Cotton Post-Harvest Line Residues in Polymeric Composites. <i>Polymers</i> , 2019, 11, 1106.	4.5	16
28	Joint strength evaluation of friction stir welded Al-Cu dissimilar alloys. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 146, 892-902.	5.0	47
29	On-line measurement and monitoring of pulsating saline and water jet disintegration of bone cement with frequency 20 kHz. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 147, 106828.	5.0	20
30	Acoustic chamber length performance analysis in ultrasonic pulsating water jet erosion of ductile material. <i>Journal of Manufacturing Processes</i> , 2019, 47, 347-356.	5.9	31
31	Investigation of sandstone erosion by continuous and pulsed water jets. <i>Journal of Manufacturing Processes</i> , 2019, 42, 121-130.	5.9	34
32	Surface integrity and residual stress analysis of pulsed water jet peened stainless steel surfaces. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 143, 81-92.	5.0	50
33	Hydrodynamic ductile erosion of aluminium by a pulsed water jet moving in an inclined trajectory. <i>Wear</i> , 2019, 428-429, 178-192.	3.1	36
34	Investigation on Pulsating Liquid Jet with Physiological Saline on Aluminium Surface. <i>Lecture Notes in Mechanical Engineering</i> , 2019, , 63-71.	0.4	5
35	Hardness measurement of surfaces on hybrid metal matrix composite created by turning using an abrasive water jet and WED. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 131, 628-639.	5.0	24
36	Evaluation of physical phenomena and surface integrity during hydroabrasive disintegration of the rotating workpiece with feedback loop control. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 134, 586-594.	5.0	7

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37	Effect of Frequency Change During Pulsed Waterjet Interaction with Stainless Steel. Lecture Notes in Mechanical Engineering, 2019, , 85-96.	0.4	4
38	Non-traditional Machining of Inconel 600 Material. Lecture Notes in Mechanical Engineering, 2019, , 173-179.	0.4	1
39	Change of the Substrate Surface After Removal Multiple Plasma Spraying Layers. Lecture Notes in Mechanical Engineering, 2019, , 351-361.	0.4	1
40	Pulsating water jet erosion effect on a brass flat solid surface. International Journal of Advanced Manufacturing Technology, 2018, 97, 1099-1112.	3.0	22
41	Hydroabrasive disintegration of rotating Monel K-500 workpiece. International Journal of Advanced Manufacturing Technology, 2018, 96, 981-1001.	3.0	17
42	Wear Characterization into WC-Co by FESEM. Materials Today: Proceedings, 2018, 5, 3533-3540.	1.8	5
43	Ultrasonically generated pulsed water jet peening of austenitic stainless-steel surfaces. Journal of Manufacturing Processes, 2018, 32, 455-468.	5.9	66
44	Testing of Tight Crimped Joint Made on a Prototype Stand. Lecture Notes in Mechanical Engineering, 2018, , 497-507.	0.4	5
45	Surface Roughness of Graphite and Aluminium Alloy After Hydro-abrasive Machining. Lecture Notes in Mechanical Engineering, 2018, , 805-813.	0.4	8
46	Acoustic emission for interlaminar toughness testing of CFRP: Evaluation of the crack growth due to burst analysis. Composites Part B: Engineering, 2018, 136, 55-62.	12.0	40
47	Hybrid aluminium matrix composite AWJ turning using olivine and Barton garnet. International Journal of Advanced Manufacturing Technology, 2018, 94, 2293-2300.	3.0	39
48	Influence of Abrasive Water Jet Turning Parameters on Variation of Diameter of Hybrid Metal Matrix Composite. Lecture Notes in Mechanical Engineering, 2018, , 495-504.	0.4	13
49	Surface Treatment of AISI 304 Using Pulsating Water Jet Peening. Lecture Notes in Mechanical Engineering, 2018, , 535-548.	0.4	8
50	Effect of Water Pressure During Abrasive Waterjet Machining of Mg-Based Nanocomposite. Lecture Notes in Mechanical Engineering, 2018, , 605-612.	0.4	11
51	Investigation on Different Type of Defects, Temperature Variation and Mechanical Properties of Friction Stir Welded Lap joint of Aluminum Alloy 6101-T6. Materials Today: Proceedings, 2018, 5, 24378-24386.	1.8	11
52	Experimental and mathematical evaluation of thermal and tensile properties of friction stir welded joint. International Journal of Materials and Product Technology, 2018, 57, 204.	0.2	8
53	Experimental study on the depth of cut of granite in pulsating water-jet. IOP Conference Series: Materials Science and Engineering, 2018, 377, 012116.	0.6	1
54	Residual stress and surface properties of stainless steel welded joints induced by ultrasonic pulsed water jet peening. Measurement: Journal of the International Measurement Confederation, 2018, 127, 453-462.	5.0	59

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55	PRELIMINARY INVESTIGATION OF STATIC AND DYNAMIC HYSTERESIS OF DMSP-5 FLUIDIC MUSCLE. MM Science Journal, 2018, 2018, 2172-2178.	0.4	5
56	Experimental and mathematical evaluation of thermal and tensile properties of friction stir welded joint. International Journal of Materials and Product Technology, 2018, 57, 204.	0.2	2
57	Surface integrity analysis of abrasive water jet-cut surfaces of friction stir welded joints. International Journal of Advanced Manufacturing Technology, 2017, 88, 1687-1701.	3.0	33
58	Improvement of surface integrity of Nimonic C 263 super alloy produced by WEDM through various post-processing techniques. International Journal of Advanced Manufacturing Technology, 2017, 93, 433-443.	3.0	51
59	Effect of laser power and welding speed on microstructure and mechanical properties of fibre laser-welded Inconel 617 thin sheet. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 4579-4588.	1.6	15
60	Surface integrity in tangential turning of hybrid MMC A359/B4C/Al2O3 by abrasive waterjet. Journal of Manufacturing Processes, 2017, 28, 11-20.	5.9	43
61	Characterization of Failure Behavior in Distorted WC-Co Tip of Coal Mining Picks. Journal of Failure Analysis and Prevention, 2017, 17, 136-143.	0.9	7
62	Dynamic measuring of performance parameters for vehicles engines. Measurement: Journal of the International Measurement Confederation, 2017, 111, 11-17.	5.0	3
63	MICROSTRUCTURAL STUDY OF FAILURE PHENOMENA IN WC 94%-Co 6% HARD METAL ALLOY TIPS OF RADIAL PICKS. Advances in Science and Technology Research Journal, 2017, 11, 36-47.	0.8	11
64	Measurement of thermal emission during cutting of materials using abrasive water jet. Thermal Science, 2017, 21, 2197-2203.	1.1	8
65	Turning of wood plastic composites by water jet and abrasive water jet. International Journal of Advanced Manufacturing Technology, 2016, 84, 1615.	3.0	32
66	Digital image correlation in analysis of stiffness in local zones of welded joints. Tehnicki Vjesnik, 2016, 23, .	0.2	8
67	Numerical Simulation of Fatigue Crack Growth in Hip Implants. Procedia Engineering, 2016, 149, 229-235.	1.2	12
68	Monitoring of Acoustic Emission During the Disintegration of Rock. Procedia Engineering, 2016, 149, 481-488.	1.2	25
69	Online-monitoring for Abrasive Waterjet Cutting of CFRP via Acoustic Emission: Evaluation of Machining Parameters and Work Piece Quality Due to Burst Analysis. Procedia Engineering, 2016, 149, 67-76.	1.2	11
70	Potential of Using Water Jet Peening as a Surface Treatment Process for Welded Joints. Procedia Engineering, 2016, 149, 472-480.	1.2	50
71	Surface Integrity Evaluation of Brass CW614N after Impact of Acoustically Excited Pulsating Water Jet. Procedia Engineering, 2016, 149, 236-244.	1.2	13
72	Tangential turning of Incoloy alloy 925 using abrasive water jet technology. International Journal of Advanced Manufacturing Technology, 2016, 82, 1747-1752.	3.0	25

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73	Design and experimental study of turning tools with linear cutting edges and comparison to commercial tools. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 85, 2325-2343.	3.0	21
74	Analytical fluid film force calculation in the case of short bearing with a fully developed turbulent flow. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2016, 230, 395-401.	1.8	10
75	Wear characteristics and defects analysis of friction stir welded joint of aluminium alloy 6061-T6. <i>Eksplotacja I Niezawodnosc</i> , 2016, 18, 128-135.	2.0	37
76	Simulation Tools Used at the Injection Mould Design. <i>Manufacturing Technology</i> , 2016, 16, 561-569.	1.4	7
77	Heat input effect of friction stir welding on aluminium alloy AA 6061-T6 welded joint. <i>Thermal Science</i> , 2016, 20, 637-641.	1.1	23
78	Recycling of corundum particles - two-body abrasive wear of polymeric composites based on waste. <i>Tehnicki Vjesnik</i> , 2015, 22, 567-572.	0.2	10
79	Critical Damage Analysis of WC-Co Tip of Conical Pick due to Coal Excavation in Mines. <i>Advances in Materials Science and Engineering</i> , 2015, 2015, 1-7.	1.8	22
80	An influence of active additives on the formation of selected indicators of the condition of the X10CrNi18-8 stainless steel surface layer in MQCL conditions. <i>International Journal of Surface Science and Engineering</i> , 2015, 9, 452.	0.4	51
81	Determination of vibration frequency depending on abrasive mass flow rate during abrasive water jet cutting. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 77, 763-774.	3.0	62
82	Sandstone Turning by Abrasive Waterjet. <i>Rock Mechanics and Rock Engineering</i> , 2015, 48, 2489-2493.	5.4	32
83	Investigation of wear and tool life of coated carbide and cubic boron nitride cutting tools in high speed milling. <i>Advances in Mechanical Engineering</i> , 2015, 7, 168781401559021.	1.6	61
84	On-line monitoring of technological process of material abrasive water jet cutting. <i>Tehnicki Vjesnik</i> , 2015, 22, 351-357.	0.2	18
85	Roughness Parameters Calculation By Means Of On-Line Vibration Monitoring Emerging From AWJ Interaction With Material. <i>Metrology and Measurement Systems</i> , 2015, 22, 315-326.	1.4	62
86	Wear Assessment of Conical Pick used in Coal Cutting Operation. <i>Rock Mechanics and Rock Engineering</i> , 2015, 48, 2129-2139.	5.4	66
87	Thermal manifestations and nanoindentation of bone cements for orthopaedic surgery. <i>Thermal Science</i> , 2014, 18, 251-258.	1.1	3
88	Investigation into Coal Fragmentation Analysis by Using Conical Pick., 2014, 5, 2411-2417.		4
89	Inverse Processing of Undefined Complex Shape Parts from Structural High Alloyed Tool Steel. <i>Advances in Mechanical Engineering</i> , 2014, 6, 478748.	1.6	14
90	Determination of layer thickness in direct metal deposition using dimensional analysis. <i>International Journal of Advanced Manufacturing Technology</i> , 2013, 67, 2681-2687.	3.0	37

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91	Analysis of acoustic emission emerging during hydroabrasive cutting and options for indirect quality control. International Journal of Advanced Manufacturing Technology, 2013, 66, 45-58.	3.0	19
92	Critical Investigation of Wear Behaviour of WC Drill Bit Buttons. Rock Mechanics and Rock Engineering, 2013, 46, 169-177.	5.4	21
93	Potential use of vibration for metrology and detection of surface topography created by abrasive waterjet. International Journal of Surface Science and Engineering, 2013, 7, 135.	0.4	12
94	A Study of Thermal Behaviour during Submerged Arc Welding. Strojniski Vestnik/Journal of Mechanical Engineering, 2013, 59, 333-338.	1.1	23
95	Employing the Waves to Measure Longitudinal Residual Stresses in Different Depths of a Stainless Steel Welded Plate. Advances in Materials Science and Engineering, 2013, 2013, 1-8.	1.8	14
96	Online Monitoring and Analysis of Hydroabrasive Cutting by Vibration. Advances in Mechanical Engineering, 2013, 5, 894561.	1.6	20
97	Prediction of Weld Bead Parameters, Transient Temperature Distribution & HAZ Width of Submerged Arc Welded Structural Steel Plates. Defect and Diffusion Forum, 2012, 326-328, 405-409.	0.4	7
98	New way to take control of a structural grain size in the formation of nanomaterials by extrusion. Materialwissenschaft Und Werkstofftechnik, 2012, 43, 405-411.	0.9	13
99	Determination of technologically optimal factors of modulated waterjet. International Journal of Advanced Manufacturing Technology, 2012, 60, 173-179.	3.0	4
100	Vibration emission as a potential source of information for abrasive waterjet quality process control. International Journal of Advanced Manufacturing Technology, 2012, 61, 285-294.	3.0	29
101	Topographical anomaly on surfaces created by abrasive waterjet. International Journal of Advanced Manufacturing Technology, 2012, 59, 593-604.	3.0	61
102	Multi response optimization of process parameters based on Taguchi's Fuzzy model for coal cutting by water jet technology. International Journal of Advanced Manufacturing Technology, 2011, 56, 1019-1025.	3.0	65
103	Prediction of distribution relationship of titanium surface topography created by abrasive waterjet. International Journal of Surface Science and Engineering, 2011, 5, 152.	0.4	27
104	Prediction of Change of Energy Supplied to Materials in Equal Channel Angular Pressing Method Technology. Advanced Science, Engineering and Medicine, 2011, 3, 30-33.	0.3	1
105	Using the acoustic sound pressure level for quality prediction of surfaces created by abrasive waterjet. International Journal of Advanced Manufacturing Technology, 2010, 48, 193-203.	3.0	28
106	Designing Student Affairs Organizational Structures: Perceptions of Senior Student Affairs Officers. Journal of Student Affairs Research and Practice, 2009, 46, .	0.9	6
107	Optical measurement of surface and topographical parameters investigation created by Abrasive Waterjet. International Journal of Surface Science and Engineering, 2009, 3, 360.	0.4	15
108	Surface geometric parameters proposal for the advanced control of abrasive waterjet technology. International Journal of Advanced Manufacturing Technology, 2009, 41, 323-328.	3.0	51

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109	Surface and topographical parameters investigation at abrasive waterjet machining by means of optical measurement. International Journal of Machining and Machinability of Materials, 2009, 5, 268.	0.1	2
110	Estimation of the smooth zone maximal depth at surfaces created by Abrasive Waterjet. International Journal of Surface Science and Engineering, 2009, 3, 347.	0.4	6
111	Solutions of Fuzzy Multiobjective Programming Problems Based on the Concept of Scalarization. Journal of Optimization Theory and Applications, 2008, 139, 361-378.	1.5	8
112	Non-linear modelling and evaluation of pressure and traverse rate influence to acoustic sound pressure level at abrasive waterjet machining. International Journal of Automation and Control, 2007, 1, 195.	0.5	4
113	Experimental analysis of irregularities of metallic surfaces generated by abrasive waterjet. International Journal of Machine Tools and Manufacture, 2007, 47, 1786-1790.	13.4	34
114	Integrating dependability analysis into the real-time system design process. , 0, , .		4
115	Technological Process Design and Simulation. Applied Mechanics and Materials, 0, 440, 188-193.	0.2	3
116	Local Mechanical Properties of Various Bone Cements. Key Engineering Materials, 0, 592-593, 382-385.	0.4	1
117	Investigation into Coal Cutting Operation by Using Conical Pick of Cast Iron with LH710 Coated Tip. Applied Mechanics and Materials, 0, 592-594, 426-431.	0.2	2
118	Wear and Mechanical Properties of Various Bone Cements " Influence of Saline Environment. Key Engineering Materials, 0, 662, 147-150.	0.4	0