

# Simon Barrans

## List of Publications by Year in descending order

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Version: 2024-02-01

46  
papers

897  
citations

471509

17  
h-index

477307

29  
g-index

46  
all docs

46  
docs citations

46  
times ranked

743  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evolution of flow characteristics in a centrifugal compressor with an increase in operating speed. International Journal of Engine Research, 2021, 22, 1592-1604.	2.3	0
2	Microstructure and mechanical properties of aluminium alloy coatings on alumina applied by friction surfacing. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2021, 235, 366-384.	1.1	2
3	The impact of volute aspect ratio and tilt on the performance of a mixed flow turbine. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2021, 235, 1435-1450.	1.4	7
4	Helical retaining sleeve for eddy current loss reduction in high-speed SPM machine. Electrical Engineering, 2021, 103, 2087-2092.	2.0	0
5	Simulating 5-Axis Milling with a Ball Nose Cutting Tool. , 2021, , .		0
6	Effects of ported shroud casing treatment on the acoustic and flow behaviour of a centrifugal compressor. International Journal of Engine Research, 2020, 21, 998-1011.	2.3	5
7	Evaluation of modelling parameters for computing flow-induced noise in a small high-speed centrifugal compressor. Aerospace Science and Technology, 2020, 98, 105697.	4.8	18
8	A Review of the High-speed Permanent Magnet Rotor Stress Analysis used for Automotive Air-handling Machines. European Journal of Engineering Research and Science, 2020, 5, 448-456.	0.3	4
9	Review of the High-speed Permanent Magnet Rotor Stress Analysis used for Automotive Air-handling Machines. European Journal of Education and Pedagogy, 2020, 5, 448-456.	0.3	0
10	Analysis of leading edge flow characteristics in a mixed flow turbine under pulsating flows. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2019, 233, 78-95.	1.4	6
11	Making Improvements to Product Development within an SME. International Journal of Materials Mechanics and Manufacturing, 2019, 7, 86-90.	0.2	4
12	Effect of Cusp Size, Depth and Direction on Stress Concentration. International Journal of Materials Mechanics and Manufacturing, 2018, 6, 88-93.	0.2	0
13	Optimisation of machining parameters during ball end milling of hardened steel with various surface inclinations. Measurement: Journal of the International Measurement Confederation, 2017, 111, 18-28.	5.0	76
14	Mechanical design of rotors for permanent magnet high-speed electric motors for turbocharger applications. IET Electrical Systems in Transportation, 2017, 7, 278-286.	2.4	23
15	The Impact of Volute Aspect Ratio on the Performance of a Mixed Flow Turbine. Aerospace, 2017, 4, 56.	2.2	13
16	Precision surface characterization for finish cylindrical milling with dynamic tool displacements model. Precision Engineering, 2016, 46, 158-165.	3.4	72
17	Simulating Torsional Slip in V-Band Clamp Joints. Applied Mechanics and Materials, 2015, 798, 53-58.	0.2	0
18	Bespoke Part Library for an SME for Enhanced Design Efficiency. Applied Mechanics and Materials, 2015, 798, 500-504.	0.2	0

#	ARTICLE	IF	CITATIONS
19	Influence of argon pollution on the weld surface morphology. Measurement: Journal of the International Measurement Confederation, 2015, 70, 203-213.	5.0	55
20	Classical and numerical approaches to determining V-section band clamp axial stiffness. Open Engineering, 2014, 5, .	1.6	1
21	Determining a Robust, Pareto Optimal Geometry for a Welded Joint. Advanced Materials Research, 2014, 1016, 39-43.	0.3	0
22	Practical energy storage utilising Kinetic Energy Storage Batteries (KESB)., 2012, , .		1
23	The influence of bone cement type on production of fretting wear on the femoral stem surface: A preliminary study. Clinical Biomechanics, 2012, 27, 666-672.	1.2	34
24	The contribution of the micropores in bone cement surface to generation of femoral stem wear in total hip replacement. Tribology International, 2011, 44, 1476-1482.	5.9	21
25	Predicting plastic deformation and work hardening during V-band formation. Journal of Materials Processing Technology, 2011, 211, 627-636.	6.3	22
26	The Significance of the Micropores at the Stemâ€”Cement Interface in Total Hip Replacement. Journal of Biomaterials Science, Polymer Edition, 2011, 22, 845-856.	3.5	27
27	Performance analysis of Pareto optimal bearings subject to surface error variations. Tribology International, 2010, 43, 2240-2249.	5.9	16
28	Finite element prediction of the ultimate axial load capacity of V-section band clamps. Journal of Physics: Conference Series, 2009, 181, 012072.	0.4	9
29	Investigation of relative micromotion at the stemâ€”cement interface in total hip replacement. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2009, 223, 955-964.	1.8	24
30	Understanding initiation and propagation of fretting wear on the femoral stem in total hip replacement. Wear, 2009, 266, 566-569.	3.1	39
31	What results in fretting wear on polished femoral stems. Tribology International, 2009, 42, 1605-1614.	5.9	27
32	Influence of femoral stem surface finish on the apparent static shear strength at the stemâ€”cement interface. Journal of the Mechanical Behavior of Biomedical Materials, 2008, 1, 96-104.	3.1	34
33	Design and test of a Pareto optimal flat pad aerostatic bearing. Tribology International, 2008, 41, 181-188.	5.9	21
34	Femoral stem wear in cemented total hip replacement. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2008, 222, 583-592.	1.8	42
35	Reproduction of fretting wear at the stemâ€”cement interface in total hip replacement. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2007, 221, 963-971.	1.8	22
36	Residual magnetic field sensing for stress measurement. Sensors and Actuators A: Physical, 2007, 135, 381-387.	4.1	164

#	ARTICLE	IF	CITATIONS
37	Axial Load Capacity of V-Section Band Clamp Joints. , 2006, , 273-285.		9
38	Measurement techniques for determining the static stiffness of foundations for machine tools. Journal of Physics: Conference Series, 2005, 13, 410-413.	0.4	2
39	Plastic deformation in flat-section band clamps. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2005, 219, 93-102.	2.1	2
40	Stress in V-section band clamps. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2004, 218, 251-261.	2.1	15
41	Stress in a flat section band clamp. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2003, 217, 821-830.	2.1	9
42	The Development of Multi-axial Creep Damage Constitutive Equations for 0.5Cr0.5Mo0.25V Ferritic Steel at 590.DEG.C... JSME International Journal Series A-Solid Mechanics and Material Engineering, 2003, 46, 51-59.	0.4	14
43	The design of aerostatic bearings for application to nanometre resolution manufacturing machine systems. Tribology International, 2000, 33, 803-809.	5.9	44
44	Contact Pressure Distribution in Joints Formed by V-Band Clamps. Advanced Materials Research, 0, 1016, 34-38.	0.3	8
45	Analysis of the Torsional Load Capacity of V-Section Band Clamps. Advanced Materials Research, 0, 1016, 59-64.	0.3	2
46	Preliminary Review of the Influence of Cavitation Behavior in Creep Damage Constitutive Equations. Advanced Materials Research, 0, 940, 46-51.	0.3	3