

Rob Hewson

List of Publications by Year in descending order

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Version: 2024-02-01

40
papers

629
citations

566801

15
h-index

610482

24
g-index

40
all docs

40
docs citations

40
times ranked

762
citing authors

#	ARTICLE	IF	CITATIONS
1	Finite element investigations of the fluid-solid behaviour in a bio-inspired poroelastic bearing. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2022, 236, 1531-1544.	1.0	1
2	Multiscale optimisation of resonant frequencies for lattice-based additive manufactured structures. Structural and Multidisciplinary Optimization, 2021, 63, 1187-1201.	1.7	7
3	Multiscale structural optimization with concurrent coupling between scales. Structural and Multidisciplinary Optimization, 2021, 63, 1721-1741.	1.7	10
4	Functionally graded optimisation of adsorption systems with phase change materials. Structural and Multidisciplinary Optimization, 2021, 64, 473-503.	1.7	1
5	Transient mixed lubrication model of the human knee implant. Biosurface and Biotribology, 2021, 7, 206-218.	0.6	4
6	In-loop additive manufacturing constraints for open-walled microstructures. Additive Manufacturing, 2021, 48, 102385.	1.7	0
7	Compliant-poroelastic lubrication in cartilage-on-cartilage line contacts. Tribology - Materials, Surfaces and Interfaces, 2020, 14, 151-165.	0.6	4
8	Algorithm 1008. ACM Transactions on Mathematical Software, 2020, 46, 1-26.	1.6	7
9	Multiscale structural optimization towards three-dimensional printable structures. Structural and Multidisciplinary Optimization, 2019, 60, 513-525.	1.7	41
10	Robust and high-performance soft inductive tactile sensors based on the Eddy-current effect. Sensors and Actuators A: Physical, 2018, 271, 44-52.	2.0	42
11	Topology optimisation of biphasic adsorbent beds for gas storage. Structural and Multidisciplinary Optimization, 2018, 58, 2431-2454.	1.7	6
12	Elastohydrodynamic lubrication and wear modelling of the knee joint replacements with surface topography. Biosurface and Biotribology, 2018, 4, 18-23.	0.6	21
13	An investigation into the contact between soft elastic and poroelastic bodies rotating under load. Tribology - Materials, Surfaces and Interfaces, 2017, 11, 193-201.	0.6	7
14	Composite stacking sequence optimization for aeroelastically tailored forward-swept wings. Structural and Multidisciplinary Optimization, 2017, 55, 105-119.	1.7	10
15	Design Optimisation of a Magnetic Field Based Soft Tactile Sensor. Sensors, 2017, 17, 2539.	2.1	22
16	A predictive model for discrete cell gravure roll coating. Physics of Fluids, 2017, 29, .	1.6	6
17	Design Methodology for Magnetic Field-Based Soft Tri-Axis Tactile Sensors. Sensors, 2016, 16, 1356.	2.1	98
18	A Low-cost Soft Tactile Sensing Array Using 3D Hall Sensors. Procedia Engineering, 2016, 168, 650-653.	1.2	16

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19	A multiscale method for optimising surface topography in elastohydrodynamic lubrication (EHL) using metamodels. Structural and Multidisciplinary Optimization, 2016, 54, 483-497.	1.7	12
20	The role of micro-cavitation on EHL: A study using a multiscale mass conserving approach. Tribology International, 2015, 90, 324-331.	3.0	12
21	Influence of material properties and operating conditions on the predicted performance of poroelastic faced bearings. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2014, 228, 131-139.	1.0	3
22	Multidisciplinary multifidelity optimisation of a flexible wing aerofoil with reference to a small UAV. Structural and Multidisciplinary Optimization, 2014, 50, 683-699.	1.7	28
23	Two-scale EHL: Three-dimensional topography in tilted-pad bearings. Tribology International, 2014, 79, 111-125.	3.0	19
24	Effects of shear thinning on forward roll coating. Chemical Engineering Research and Design, 2013, 91, 2427-2436.	2.7	2
25	Development of anti-icing materials by chemical tailoring of hydrophobic textured metallic surfaces. Journal of Colloid and Interface Science, 2013, 394, 539-544.	5.0	40
26	An Investigation of Freezing of Supercooled Water on Anti-Freeze Protein Modified Surfaces. Journal of Bionic Engineering, 2013, 10, 139-147.	2.7	24
27	A semi-analytical model for the combined aeroelastic behaviour and gust response of a flexible aerofoil. Journal of Fluids and Structures, 2013, 38, 3-21.	1.5	29
28	Multidisciplinary Multifidelity Optimisation of a Flexible Wing Aerofoil for Small UAV. , 2012, , .		2
29	Approximate numerical method for lubrication with Generalised Newtonian fluids. Tribology - Materials, Surfaces and Interfaces, 2012, 6, 142-145.	0.6	0
30	A Multiscale Framework for EHL and Micro-EHL. Tribology Transactions, 2012, 55, 713-722.	1.1	13
31	Reviewing the technological challenges associated with the development of a laparoscopic palpation device. International Journal of Medical Robotics and Computer Assisted Surgery, 2012, 8, 146-159.	1.2	25
32	A two-scale model for discrete cell gravure roll coating. Chemical Engineering Science, 2011, 66, 3666-3674.	1.9	14
33	Multifidelity metamodel building as a route to aeroelastic optimization of flexible wings. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2011, 225, 2115-2137.	1.1	20
34	Tri-helical gravure roll coating. Chemical Engineering Science, 2010, 65, 1311-1321.	1.9	9
35	Free Surface Model Derived From the Analytical Solution of Stokes Flow in a Wedge. Journal of Fluids Engineering, Transactions of the ASME, 2009, 131, .	0.8	7
36	The effect of locally induced flow structure on global heat transfer for plane laminar shear flow. International Journal of Heat and Fluid Flow, 2009, 30, 175-185.	1.1	10

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37	A model for film-forming with Newtonian and shear-thinning fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2009, 162, 21-28.	1.0	26
38	Modelling the discrete-cell gravure roll coating process. <i>European Physical Journal: Special Topics</i> , 2009, 166, 99-102.	1.2	3
39	Analytical and numerical solutions of thin lubricating films for differing shear-thinning viscosity models. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2007, 221, 355-366.	1.0	4
40	A theoretical and experimental investigation of tri-helical gravure roll coating. <i>Chemical Engineering Science</i> , 2006, 61, 5487-5499.	1.9	24