# Roger Lewis

List of Publications by Year
in descending order



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|---|---|---|---|
| 188 papers | 5,294 citations | 87723 38 h-index | 128067 60 g-index |
| 190 all docs | 190 docs citations | 190 times ranked | 2723 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A mathematical model to predict railway wheel profile evolution due to wear. Wear, 2006, 261, 1253-1264. | 1.5 | 257 |
| 2 | Mapping rail wear regimes and transitions. Wear, 2004, 257, 721-729. | 1.5 | 200 |
| 3 | Twin disc assessment of wheel/rail adhesion. Wear, 2008, 265, 1309-1316. | 1.5 | 149 |
| 4 | Wheelâ€"rail interface handbook. , 2009, , . | | 117 |
| 5 | Assessment of laser cladding as an option for repairing/enhancing rails. Wear, 2015, 330-331, 581-591. | 1.5 | 113 |
| 6 | In vivo measurement of skin surface strain and sub-surface layer deformation induced by natural tissue stretching. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 62, 556-569. | 1.5 | 111 |
| 7 | Development of a wear prediction tool for steel railway wheels using three alternative wear functions. Wear, 2011, 271, 238-245. | 1.5 | 101 |
| 8 | Understanding the Friction Mechanisms Between the Human Finger and Flat Contacting Surfaces in Moist Conditions. Tribology Letters, 2011, 41, 283-294. | 1.2 | 100 |
| 9 | The effect of normal force and roughness on friction in human finger contact. Wear, 2009, 267, 1311-1318. | 1.5 | 97 |
| 10 | Microstructure evolution of railway pearlitic wheel steels under rolling-sliding contact loading. Tribology International, 2021, 154, 106685. | 3.0 | 93 |
| 11 | The effects of soot-contaminated engine oil on wear and friction: A review. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2008, 222, 1669-1689. | 1.1 | 87 |
| 12 | Rollingâ€"sliding laboratory tests of friction modifiers in dry and wet wheelâ€"rail contacts. Wear, 2010, 268, 543-551. | 1.5 | 85 |
| 13 | Investigation on wear and rolling contact fatigue of wheel-rail materials under various wheel/rail hardness ratio and creepage conditions. Tribology International, 2020, 143, 106091. | 3.0 | 81 |
| 14 | Mapping railway wheel material wear mechanisms and transitions. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2010, 224, 125-137. | 1.3 | 78 |
| 15 | Wheel and rail wearâ€"Understanding the effects of water and grease. Wear, 2014, 314, 198-204. | 1.5 | 78 |
| 16 | Improving rail wear and RCF performance using laser cladding. Wear, 2016, 366-367, 268-278. | 1.5 | 77 |
| 17 | Wear and damage transitions of wheel and rail materials under various contact conditions. Wear, 2016, 362-363, 146-152. | 1.5 | 77 |
| 18 | Wear at the wheel/rail interface when sanding is used to increase adhesion. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2006, 220, 29-41. | 1.3 | 74 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Characterisation of Contact Pressure Distribution in Bolted Joints. Strain, 2006, 42, 31-43. | 1.4 | 73 |
| 20 | Review of the frictional properties of finger-object contact when gripping. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2007, 221, 841-850. | 1.0 | 71 |
| 21 | Rollingâ€“Sliding Laboratory Tests of Friction Modifiers in Leaf Contaminated Wheelâ€“Rail Contacts. Tribology Letters, 2009, 33, 97-109. | 1.2 | 71 |
| 22 | A laboratory investigation on the influence of the particle size and slip during sanding on the adhesion and wear in the wheelâ€“rail contact. Wear, 2011, 271, 14-24. | 1.5 | 71 |
| 23 | Characterising pressure and bruising in apple fruit. Wear, 2008, 264, 37-46. | 1.5 | 66 |
| 24 | The influence of laser hardening on wear in the valve and valve seat contact. Wear, 2009, 267, 797-806. | 1.5 | 65 |
| 25 | Finger friction: Grip and opening packaging. Wear, 2007, 263, 1124-1132. | 1.5 | 63 |
| 26 | A study on wear evaluation of railway wheels based onÂmultibodyÂdynamics and wear computation. Multibody System Dynamics, 2010, 24, 347-366. | 1.7 | 62 |
| 27 | Development of engineering design tools to help reduce apple bruising. Journal of Food Engineering, 2007, 83, 356-365. | 2.7 | 61 |
| 28 | Experimental Characterization of Wheel-Rail Contact Patch Evolution. Journal of Tribology, 2006, 128, 493-504. | 1.0 | 55 |
| 29 | Wear effects and mechanisms of soot-contaminated automotive lubricants. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2006, 220, 159-169. | 1.0 | 54 |
| 30 | Tribology of the wheelâ€“rail contact â€“ aspects of wear, particle emission and adhesion. Vehicle System Dynamics, 2013, 51, 1091-1120. | 2.2 | 52 |
| 31 | The low adhesion problem due to leaf contamination in the wheel/rail contact: Bonding and low adhesion mechanisms. Wear, 2017, 378-379, 183-197. | 1.5 | 51 |
| 32 | Third body layerâ€”experimental results and a model describing its influence on the traction coefficient. Wear, 2014, 314, 148-154. | 1.5 | 47 |
| 33 | Human finger contact with small, triangular ridged surfaces. Wear, 2011, 271, 2346-2353. | 1.5 | 46 |
| 34 | Assessment of railway curve lubricant performance using a twin-disc tester. Wear, 2014, 314, 205-212. | 1.5 | 45 |
| 35 | Effect of oil and water mixtures on adhesion in the wheel/rail contact. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2009, 223, 275-283. | 1.3 | 43 |
| 36 | Material concepts for top of rail friction management â€“ Classification, characterisation and application. Wear, 2016, 366-367, 225-232. | 1.5 | 43 |

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| 37 | Temperature in a twin-disc wheel/rail contact simulation. Tribology International, 2006, 39, 1653-1663. | 3.0 | 42 |
| 38 | Measurement of interface pressure in interference fits. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2005, 219, 127-139. | 1.1 | 41 |
| 39 | Investigating the Lubricity and Electrical Insulation Caused by Sanding in Dry Wheelâ€“Rail Contacts. Tribology Letters, 2010, 37, 623-635. | 1.2 | 40 |
| 40 | Correlations between rail wear rates and operating conditions in a commercial railroad. Tribology International, 2016, 95, 5-12. | 3.0 | 40 |
| 41 | Full-scale testing of laser clad railway track; Case study â€“ Testing for wear, bend fatigue and insulated block joint lipping integrity. Wear, 2017, 376-377, 1930-1937. | 1.5 | 40 |
| 42 | Wear of diesel engine inlet valves and seat inserts. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2002, 216, 205-216. | 1.1 | 39 |
| 43 | Disc machine study of contact isolation during railway track sanding. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2003, 217, 11-24. | 1.3 | 39 |
| 44 | An ultrasonic approach for contact stress mapping in machine joints and concentrated contacts. Journal of Strain Analysis for Engineering Design, 2004, 39, 339-350. | 1.0 | 37 |
| 45 | A numerical model of twin disc test arrangement for the evaluation of railway wheel wear prediction methods. Wear, 2010, 268, 660-667. | 1.5 | 37 |
| 46 | Laboratory investigation of some sanding parameters to improve the adhesion in leaf-contaminated wheelâ€"rail contacts. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2010, 224, 139-157. | 1.3 | 37 |
| 47 | Experimental and numerical modelling of wheelâ€“rail contact and wear. Wear, 2011, 271, 911-924. | 1.5 | 37 |
| 48 | The influence of induction hardening on the impact wear resistance of compacted graphite iron (CGI). Wear, 2011, 270, 302-311. | 1.5 | 36 |
| 49 | Wheel-rail creep force model for predicting water induced low adhesion phenomena. Tribology International, 2017, 109, 409-415. | 3.0 | 36 |
| 50 | Review of top of rail friction modifier tribology. Tribology - Materials, Surfaces and Interfaces, 2016, 10, 150-162. | 0.6 | 35 |
| 51 | Towards a standard approach for the wear testing of wheel and rail materials. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2017, 231, 760-774. | 1.3 | 35 |
| 52 | The role of slip ratio in rolling contact fatigue of rail materials under wet conditions. Wear, 2017, 376-377, 1892-1900. | 1.5 | 34 |
| 53 | Feasibility of using optical coherence tomography to study the influence of skin structure on finger friction. Tribology International, 2013, 63, 34-44. | 3.0 | 33 |
| 54 | Predicting railway wheel wear under uncertainty of wear coefficient, using universal kriging. Reliability Engineering and System Safety, 2016, 154, 49-59. | 5.1 | 33 |

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|---|---|---|---|
| 55 | A modelling technique for predicting compound impact wear. Wear, 2007, 262, 1516-1521. | 1.5 | 31 |
| 56 | Influence of Different Application of Lubricants on Wear and Pre-existing Rolling Contact Fatigue Cracks of Rail Materials. Tribology Letters, 2017, 65, 1. | 1.2 | 31 |
| 57 | A study of cliniciansâ€™ views on medical gloves and their effect on manual performance. American Journal of Infection Control, 2014, 42, 48-54. | 1.1 | 30 |
| 58 | A Review on Wear Between Railway Wheels and Rails Under Environmental Conditions. Journal of Tribology, 2019, 141, . | 1.0 | 30 |
| 59 | Getting to grips with packaging: using ethnography and computer simulation to understand handâ€“pack interaction. Packaging Technology and Science, 2007, 20, 217-229. | 1.3 | 29 |
| 60 | Human finger friction in contacts with ridged surfaces. Wear, 2013, 301, 330-337. | 1.5 | 29 |
| 61 | Understanding the effect of fingerâ€“ball friction on the handling performance of rugby balls. Sports Engineering, 2009, 11, 109-118. | 0.5 | 28 |
| 62 | Application of Fastsim with variable coefficient of friction using twin disc experimental measurements. Wear, 2012, 274-275, 109-126. | 1.5 | 28 |
| 63 | Effects of deep cryogenic treatment on the wear development of H13A tungsten carbide inserts when machining AISI 1045 steel. Production Engineering, 2014, 8, 355-364. | 1.1 | 27 |
| 64 | Morphological parametric mapping of 21 skin sites throughout the body using optical coherence tomography. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 102, 103501. | 1.5 | 27 |
| 65 | Effect of humidity, temperature and railhead contamination on the performance of friction modifiers: Pin-on-disk study. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2013, 227, 115-127. | 1.3 | 26 |
| 66 | Friction and Wear Phenomena of Vegetable Oilâ€“Based Lubricants with Additives at Severe Sliding Wear Conditions. Tribology Transactions, 2018, 61, 207-219. | 1.1 | 26 |
| 67 | Assessing the impact of small amounts of water and iron oxides on adhesion in the wheel/rail interface using High Pressure Torsion testing. Tribology International, 2019, 135, 55-64. | 3.0 | 26 |
| 68 | The influence of cryogenic processing on wear on the impact wear resistance of low carbon steel and lamellar graphite cast iron. Wear, 2011, 271, 1481-1489. | 1.5 | 25 |
| 69 | Full-scale testing of low adhesion effects with small amounts of water in the wheel/rail interface. Tribology International, 2020, 141, 105907. | 3.0 | 25 |
| 70 | Sub-clinical assessment of atopic dermatitis severity using angiographic optical coherence tomography. Biomedical Optics Express, 2018, 9, 2001. | 1.5 | 24 |
| 71 | Controlled peel testing of a model tissue for diseased aorta. Journal of Biomechanics, 2016, 49, 3667-3675. | 0.9 | 23 |
| 72 | Effect of the presence of moisture at the wheelâ€“rail interface during dew and damp conditions. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2018, 232, 979-989. | 1.3 | 23 |

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| 73 | Rubber friction and the effect of shape. Tribology International, 2020, 141, 105911. | 3.0 | 23 |
| 74 | Ultrasonic measurement of railway wheel hubâ€“axle press-fit contact pressures. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2011, 225, 287-298. | 1.3 | 22 |
| 75 | Simulation and understanding the wet-rail phenomenon using twin disc testing. Tribology International, 2019, 136, 475-486. | 3.0 | 22 |
| 76 | Characterization and wear performance of boride phases over tool steel substrates. Advances in Mechanical Engineering, 2016, 8, 168781401663025. | 0.8 | 21 |
| 77 | Measuring contact area in a sliding human fingerâ€pad contact. Skin Research and Technology, 2018, 24, 31-44. | 0.8 | 21 |
| 78 | Solid particle erosion caused by rice grains. Wear, 2009, 267, 223-232. | 1.5 | 20 |
| 79 | An alternative method for the assessment of railhead traction. Wear, 2011, 271, 62-70. | 1.5 | 20 |
| 80 | An ultrasonic sensor for monitoring wheel flange/rail gauge corner contact. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2013, 227, 188-195. | 1.3 | 20 |
| 81 | Rail grinding for the 21st century â€“ taking a lead from the aerospace industry. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2015, 229, 457-465. | 1.3 | 20 |
| 82 | Laser cladding of rail; the effects of depositing material on lower rail grades. Wear, 2019, 438-439, 203045. | 1.5 | 20 |
| 83 | The real-time measurement of wear using ultrasonic reflectometry. Wear, 2015, 332-333, 1129-1133. | 1.5 | 19 |
| 84 | The contributions of skin structural properties to the friction of human finger-pads. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2015, 229, 294-311. | 1.0 | 19 |
| 85 | An analysis of the quality of experimental design and reliability of results in tribology research. Wear, 2019, 426-427, 1712-1718. | 1.5 | 19 |
| 86 | The development of a high pressure torsion test methodology for simulating wheel/rail contacts. Tribology International, 2021, 156, 106842. | 3.0 | 19 |
| 87 | Feasibility Study for Real Time Measurement of Wheel-Rail Contact Using an Ultrasonic Array. Journal of Tribology, 2009, 131, . | 1.0 | 18 |
| 88 | Basic tribology of the wheelâ€“rail contact. , 2009, , 34-57. | | 17 |
| 89 | How wide do you want the jar?: the effect on diameter for ease of opening for wideâ€mouth closures. Packaging Technology and Science, 2010, 23, 11-18. | 1.3 | 17 |
| 90 | Application of grinding to reduce rail side wear in straight track. Wear, 2018, 402-403, 71-79. | 1.5 | 17 |

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| 91 | A review of railway sanding system research: adhesion restoration and leaf layer removal. Tribology - Materials, Surfaces and Interfaces, 2018, 12, 237-251. | 0.6 | 17 |
| 92 | A new approach for modelling mild and severe wear in wheel-rail contacts. Wear, 2021, 476, 203761. | 1.5 | 17 |
| 93 | Effect of Gear Surface and Lubricant Interaction on Mild Wear. Tribology Letters, 2012, 48, 183-200. | 1.2 | 16 |
| 94 | A new method for the assessment of traction enhancers and the generation of organic layers in a twin-disc machine. Wear, 2016, 366-367, 258-267. | 1.5 | 16 |
| 95 | Creating a model of diseased artery damage and failure from healthy porcine aorta. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 60, 378-393. | 1.5 | 16 |
| 96 | An evaluation of ultrasonic arrays for the static and dynamic measurement of wheelâ€“rail contact pressure and area. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2020, 234, 1580-1593. | 1.0 | 16 |
| 97 | Shape analysis of railway ballast stones: curvature-based calculation of particle angularity. Scientific Reports, 2020, 10, 6045. | 1.6 | 16 |
| 98 | A critical review of the assessment of medical gloves. Tribology - Materials, Surfaces and Interfaces, 2021, 15, 10-19. | 0.6 | 16 |
| 99 | A critical review of glove and hand research with regard to medical glove design. Ergonomics, 2014, 57, 116-129. | 1.1 | 15 |
| 100 | Investigation of the isolation and frictional properties of hydrophobic products on the rail head, when used to combat low adhesion. Wear, 2014, 314, 213-219. | 1.5 | 15 |
| 101 | Optimisation of a railway sanding system for optimal grain entrainment into the wheelâ€“rail contact. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2018, 232, 43-62. | 1.3 | 15 |
| 102 | Effects of Jatropha lubricant thermo-oxidation on the tribological behaviour of engine cylinder liners as measured by a reciprocating friction test. Wear, 2019, 426-427, 910-918. | 1.5 | 15 |
| 103 | Static wheel/rail contact isolation due to track contamination. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2006, 220, 43-53. | 1.3 | 14 |
| 104 | Characterising and reducing seizure wear of inconel and incoloy superalloys in a sliding contact. Wear, 2011, 271, 1671-1680. | 1.5 | 14 |
| 105 | Effect of surface texture, moisture and wear on handling of rugby balls. Tribology International, 2013, 63, 196-203. | 3.0 | 14 |
| 106 | New Non-invasive Techniques to Quantify Skin Surface Strain and Sub-surface Layer Deformation of Finger-pad during Sliding. Biotribology, 2017, 12, 52-58. | 0.9 | 14 |
| 107 | Chemistry of black leaf films synthesised using rail steels and their influence on the low friction mechanism. RSC Advances, 2018, 8, 32506-32521. | 1.7 | 14 |
| 108 | A comparison of friction modifier performance using two laboratory test scales. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2019, 233, 201-210. | 1.3 | 14 |

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| 109 | Evaluation of the coefficient of friction of rail in the field and laboratory using several devices. Tribology - Materials, Surfaces and Interfaces, 2020, 14, 119-129. | 0.6 | 14 |
| 110 | Numerical calculation of wear in rolling contact based on the Archard equation: Effect of contact parameters and consideration of uncertainties. Wear, 2022, 490-491, 204188. | 1.5 | 14 |
| 111 | Interactions between toothbrush and toothpaste particles during simulated abrasive cleaning. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2006, 220, 755-765. | 1.0 | 13 |
| 112 | Abrasive and impact wear of stone used to manufacture axes in Neolithic Greece. Wear, 2011, 271, 2549-2560. | 1.5 | 13 |
| 113 | Ultrasonic measurement of self-loosening in bolted joints. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2012, 226, 1869-1884. | 1.1 | 13 |
| 114 | A comparison of friction behaviour for ex vivo human, tissue engineered and synthetic skin. Tribology International, 2016, 103, 487-495. | 3.0 | 13 |
| 115 | Friction and wear testing for a down-hole oil well centraliser. Wear, 2007, 263, 57-64. | 1.5 | 12 |
| 116 | Simulation of arterial dissection by a penetrating external body using cohesive zone modelling. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 71, 95-105. | 1.5 | 12 |
| 117 | Optimisation of grease application to railway tracks. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2018, 232, 1514-1527. | 1.3 | 12 |
| 118 | The wear and fatigue behaviours of hollow head & sodium filled engine valve. Tribology International, 2018, 128, 75-88. | 3.0 | 12 |
| 119 | Morphology of a human finger pad during sliding against a grooved plate: A pilot study. Biotribology, 2020, 21, 100114. | 0.9 | 12 |
| 120 | Comparison of Tack of Pressure-Sensitive Adhesives (PSAs) at Different Temperatures. Journal of Adhesion Science and Technology, 2010, 24, 1949-1957. | 1.4 | 11 |
| 121 | Skin Friction at the Interface between Hands and Sports Equipment. Procedia Engineering, 2014, 72, 611-617. | 1.2 | 11 |
| 122 | Development of Grease Tackiness Test. Tribology Transactions, 2019, 62, 207-217. | 1.1 | 11 |
| 123 | Modelling of Frictional Conditions in the Wheelâ€“Rail Interface Due to Application of Top-of-Rail Products. Lubricants, 2021, 9, 100. | 1.2 | 11 |
| 124 | The modification of a slip resistance meter for measurement of railhead adhesion. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2013, 227, 196-200. | 1.3 | 10 |
| 125 | Low adhesion due to oxide formation in the presence of salt. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2014, 228, 887-897. | 1.3 | 10 |
| 126 | Factors influencing the perception of roughness in manual exploration: Do medical gloves reduce cutaneous sensibility?. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2015, 229, 273-284. | 1.0 | 10 |

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| 127 | Experimental modelling of lipping in insulated rail joints and investigation of rail head material improvements. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2016, 230, 1375-1387. | 1.3 | 10 |
| 128 | Influence of medical gloves on fingerpad friction and feel. Wear, 2017, 376-377, 324-328. | 1.5 | 10 |
| 129 | Comparison of numerical and ultrasonic techniques for quantifying interference fit pressures. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2008, 222, 1125-1130. | 1.1 | 9 |
| 130 | An evaluation of dexterity and cutaneous sensibility tests for use with medical gloves. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2016, 230, 2896-2912. | 1.1 | 9 |
| 131 | Wear of a chute in a rice sorting machine. Wear, 2007, 263, 65-73. | 1.5 | 8 |
| 132 | Friction in a hydraulic motor piston/cam roller contact lined with PTFE impregnated cloth. Wear, 2009, 266, 888-892. | 1.5 | 8 |
| 133 | Wear of stone used to manufacture axes in the Neolithic settlement at Makriyalos in Northern Greece. Wear, 2009, 267, 1325-1332. | 1.5 | 8 |
| 134 | Influence of the Interfacial Pressure Distribution on Loosening of Bolted Joints. Strain, 2011, 47, 65-78. | 1.4 | 8 |
| 135 | Frictional Interaction between Running Sock Fabrics and Plantar Aspect of First Metatarsal Head in Different Moisture Conditions. Procedia Engineering, 2016, 147, 753-758. | 1.2 | 8 |
| 136 | How do gloves affect cutaneous sensibility in medical practice? Two new applied tests. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2017, 231, 28-39. | 1.0 | 8 |
| 137 | Friction and wear in railway ballast stone interfaces. Tribology International, 2020, 151, 106498. | 3.0 | 8 |
| 138 | Towards a Standard Approach for the Twin Disc Testing of Top-Of Rail Friction Management Products. Lubricants, 2022, 10, 124. | 1.2 | 8 |
| 139 | An assessment of the performance of grip enhancing agents used in sports applications. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2012, 226, 616-625. | 1.0 | 7 |
| 140 | Measurement of finger pad forces and friction using finger nail mounted strain gauges. Wear, 2017, 376-377, 295-304. | 1.5 | 7 |
| 141 | Contemporary challenges of soot build-up in IC engine and their tribological implications. Tribology - Materials, Surfaces and Interfaces, 2018, 12, 115-129. | 0.6 | 7 |
| 142 | Case study: Understanding the formation of squat-type defects in a metropolitan railway. Engineering Failure Analysis, 2021, 123, 105325. | 1.8 | 7 |
| 143 | Coating and treatment solutions for rolling/sliding component contacts. Wear, 2009, 267, 1009-1021. | 1.5 | 6 |
| 144 | Field trials of a methodology for locomotive brake testing to assess friction enhancement in the wheel/rail interface using a representative leaf layer. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2021, 235, 1053-1064. | 1.3 | 6 |

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| 145 | Assessing the effectiveness of traction gels using full-scale and field testing. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2021, 235, 690-699. | 1.3 | 6 |
| 146 | The effects of chlorination, thickness, and moisture on glove donning efficiency. Ergonomics, 2021, 64, 1205-1216. | 1.1 | 6 |
| 147 | Iron Oxide and Water Paste Rheology and Its Effect on Low Adhesion in the Wheel/Rail Interface. Tribology Letters, 2022, 70, 1. | 1.2 | 6 |
| 148 | Effects of polarity on the friction and wear of collector shoes deployed in a metro traction system. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2014, 228, 323-330. | 1.3 | 5 |
| 149 | Finite element assessment of the temperature field couple under joule heat and friction heat between a third rail and collector shoe. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2015, 229, 1086-1094. | 1.0 | 5 |
| 150 | Investigating Foot-sock Friction: A Comparison of Two Different Methodologies. Procedia Engineering, 2016, 147, 759-764. | 1.2 | 5 |
| 151 | Skin surface and sub-surface strain and deformation imaging using optical coherence tomography and digital image correlation. Proceedings of SPIE, 2016, , . | 0.8 | 5 |
| 152 | Ultrasonic monitoring of insulated block joints. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2019, 233, 251-261. | 1.3 | 5 |
| 153 | A comparison of wear behaviour of heat-resistant steel engine valves and TiAl engine valves. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2020, 234, 1549-1562. | 1.0 | 5 |
| 154 | Influence of temperature on adhesion coefficient and bonding strength of leaf films: A twin disc study. Wear, 2020, 454-455, 203330. | 1.5 | 5 |
| 155 | Understanding the Friction Measured by Standardised Test Methodologies Used to Assess Shoe-Surface Slip Risk. Journal of Testing and Evaluation, 2015, 43, 723-734. | 0.4 | 5 |
| 156 | A comprehensive characterisation of Laser Sintered Polyamide-12 surfaces. Polymer Testing, 2022, 106, 107450. | 2.3 | 5 |
| 157 | Comparison of the damage and microstructure evolution of eutectoid and hypereutectoid rail steels under a rolling-sliding contact. Wear, 2022, 492-493, 204233. | 1.5 | 5 |
| 158 | DEM modelling of railway ballast using the Conical Damage Model: a comprehensive parametrisation strategy. Granular Matter, 2022, 24, 40. | 1.1 | 5 |
| 159 | Particle characterisation of rail sands for understanding tribological behaviour. Wear, 2019, 432-433, 202960. | 1.5 | 4 |
| 160 | The composition and friction-reducing properties of leaf layers. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200057. | 1.0 | 4 |
| 161 | Two-layer laser clad coating as a replacement for chrome electroplating on forged steel. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2021, 235, 7120-7138. | 1.1 | 4 |
| 162 | Effect of seasonal change on the biomechanical and physical properties of the human skin. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 127, 105058. | 1.5 | 4 |

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| 163 | Transition of the friction behaviour and contact stiffness due to repeated high-pressure contact and slip. Tribology International, 2022, 170, 107487. | 3.0 | 4 |
| 164 | Experimental investigation on ball plate contact using ultrasonic reflectometry: From static to dynamic. Ultrasonics, 2022, 124, 106733. | 2.1 | 4 |
| 165 | Investigating openability of rigid plastic containers with peelable lids: The link between human strength and grip and opening forces. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2013, 227, 1056-1068. | 1.1 | 3 |
| 166 | Verification of the use of Micro-CT scanning to assess the features of entire squat type defects. Wear, 2019, 438-439, 203074. | 1.5 | 3 |
| 167 | Optimization of Friction Welding Process Parameters for 42Cr9Si2 Hollow Head and Sodium Filled Engine Valve and Valve Performance Evaluation. Materials, 2019, 12, 1123. | 1.3 | 3 |
| 168 | Effects of oxide and water on friction of rail steel â€“ new test method and friction mapping. Tribology - Materials, Surfaces and Interfaces, 2021, 15, 80-91. | 0.6 | 3 |
| 169 | Measuring material plastic response to cyclic loading in modern rail steels from a minimal number of twin-disc tests. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2021, 235, 1203-1213. | 1.3 | 3 |
| 170 | Evaluation of thermo-oxidized Jatropha bio-oil in lubrication of actual wet clutch materials. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2021, 235, 2021-2033. | 1.0 | 3 |
| 171 | In situ evaluation of contact stiffness in a slip interface with different roughness conditions using ultrasound reflectometry. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, 20210442. | 1.0 | 3 |
| 172 | Investigating a methodology to measure moisture in skinâ€“textile friction experiments. Footwear Science, 2015, 7, S15-S16. | 0.8 | 2 |
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