

Hugh A Spikes

List of Publications by Year in descending order

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244
papers

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246
times ranked

3167
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | The Measurement and Study of Very Thin Lubricant Films in Concentrated Contacts. Tribology Transactions, 1991, 34, 187-194. | 2.0 | 448 |
| 2 | Friction Modifier Additives. Tribology Letters, 2015, 60, 1. | 2.6 | 388 |
| 3 | Low- and zero-sulphated ash, phosphorus and sulphur antiwear additives for engine oils. Lubrication Science, 2008, 20, 103-136. | 2.1 | 216 |
| 4 | On the Mechanism of ZDDP Antiwear Film Formation. Tribology Letters, 2016, 63, 1. | 2.6 | 206 |
| 5 | The Development of a Spacer Layer Imaging Method (SLIM) for Mapping Elastohydrodynamic Contacts. Tribology Transactions, 1996, 39, 915-921. | 2.0 | 202 |
| 6 | Mechanism of Action of Colloidal Solid Dispersions. Journal of Tribology, 2003, 125, 552-557. | 1.9 | 194 |
| 7 | Entrainment and Inlet Suction: Two Mechanisms of Hydrodynamic Lubrication in Textured Bearings. Journal of Tribology, 2007, 129, 336-347. | 1.9 | 186 |
| 8 | Equation for Slip of Simple Liquids at Smooth Solid Surfaces. Langmuir, 2003, 19, 5065-5071. | 3.5 | 153 |
| 9 | Friction-Enhancing Properties of ZDDP Antiwear Additive: Part I—Friction and Morphology of ZDDP Reaction Films. Tribology Transactions, 2003, 46, 303-309. | 2.0 | 142 |
| 10 | The Influence of Molecular Architecture on the Macroscopic Lubrication Properties of the Brush-Like Co-polyelectrolyte Poly(L-lysine)-g-poly(ethylene glycol) (PLL-g-PEG) Adsorbed on Oxide Surfaces. Tribology Letters, 2003, 15, 395-405. | 2.6 | 139 |
| 11 | The formation of zinc dithiophosphate antiwear films. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2004, 218, 265-278. | 1.8 | 139 |
| 12 | Behaviour of boundary lubricating additives on DLC coatings. Wear, 2008, 265, 1893-1901. | 3.1 | 138 |
| 13 | Title is missing!. Tribology Letters, 2003, 15, 231-239. | 2.6 | 136 |
| 14 | The half-wetted bearing. Part 1: Extended Reynolds equation. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2003, 217, 1-14. | 1.8 | 132 |
| 15 | Friction and Wear Behavior of Zinc Dialkyldithiophosphate Additive. Tribology Transactions, 2000, 43, 469-479. | 2.0 | 122 |
| 16 | Mixed lubrication — an overview. Lubrication Science, 1997, 9, 221-253. | 2.1 | 117 |
| 17 | Sixty years of EHL. Lubrication Science, 2006, 18, 265-291. | 2.1 | 115 |
| 18 | Film thickness and roughness of ZDDP antiwear films. Tribology Letters, 2007, 26, 161-171. | 2.6 | 115 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | The Friction Reducing Properties of Molybdenum Dialkyldithiocarbamate Additives: Part I – Factors Influencing Friction Reduction. Tribology Transactions, 2001, 44, 626-636. | 2.0 | 114 |
| 20 | Tribological properties of tribofilms formed from ZDDP in DLC/DLC and DLC/steel contacts. Tribology International, 2011, 44, 165-174. | 5.9 | 112 |
| 21 | Study of Zinc Dialkyldithiophosphate Antiwear Film Formation and Removal Processes, Part I: Experimental. Tribology Transactions, 2005, 48, 558-566. | 2.0 | 111 |
| 22 | Boundary Film Formation by Viscosity Index Improvers. Tribology Transactions, 1996, 39, 726-734. | 2.0 | 108 |
| 23 | Stress-augmented thermal activation: Tribology feels the force. Friction, 2018, 6, 1-31. | 6.4 | 108 |
| 24 | History, Origins and Prediction of Elastohydrodynamic Friction. Tribology Letters, 2014, 56, 1-25. | 2.6 | 105 |
| 25 | Nonequilibrium Molecular Dynamics Simulations of Organic Friction Modifiers Adsorbed on Iron Oxide Surfaces. Langmuir, 2016, 32, 4450-4463. | 3.5 | 105 |
| 26 | On the Commonality Between Theoretical Models for Fluid and Solid Friction, Wear and Tribochemistry. Tribology Letters, 2015, 59, 1. | 2.6 | 99 |
| 27 | A Low Friction Bearing Based on Liquid Slip at the Wall. Journal of Tribology, 2007, 129, 611-620. | 1.9 | 98 |
| 28 | On the Increase in Boundary Friction with Sliding Speed. Tribology Letters, 2012, 48, 237-248. | 2.6 | 97 |
| 29 | A Comparison of Classical Force-Fields for Molecular Dynamics Simulations of Lubricants. Materials, 2016, 9, 651. | 2.9 | 96 |
| 30 | “Inlet suction”, a load support mechanism in non-convergent, pocketed, hydrodynamic bearings. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2006, 220, 105-108. | 1.8 | 95 |
| 31 | Behaviour of MoDTC in DLC/DLC and DLC/steel contacts. Tribology International, 2012, 54, 68-76. | 5.9 | 92 |
| 32 | The half-wetted bearing. Part 2: Potential application in low load contacts. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2003, 217, 15-26. | 1.8 | 89 |
| 33 | The effect of emulsifier concentration on the lubricating properties of oil-in-water emulsions. Tribology Letters, 2006, 22, 53-65. | 2.6 | 89 |
| 34 | Tribology research in the twenty-first century. Tribology International, 2001, 34, 789-799. | 5.9 | 86 |
| 35 | Boundary Film Formation by Lubricant Base Fluids. Tribology Transactions, 1996, 39, 448-454. | 2.0 | 82 |
| 36 | The Behavior of Suspended Solid Particles in Rolling and Sliding Elastohydrodynamic Contacts. Tribology Transactions, 1988, 31, 12-21. | 2.0 | 80 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | The Behaviour of Lubricants in Contacts: Current Understanding and Future Possibilities. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 1994, 208, 3-15. | 1.8 | 80 |
| 38 | EHD Film Thickness in Non-Steady State Contacts. Journal of Tribology, 1998, 120, 442-452. | 1.9 | 80 |
| 39 | Friction Modifier Additives, Synergies and Antagonisms. Tribology Letters, 2019, 67, 1. | 2.6 | 79 |
| 40 | Study of Zinc Dialkylidithiophosphate Antiwear Film Formation and Removal Processes, Part II: Kinetic Model. Tribology Transactions, 2005, 48, 567-575. | 2.0 | 77 |
| 41 | The Formation of Viscous Surface Films by Polymer Solutions: Boundary or Elastohydrodynamic Lubrication?. Tribology Transactions, 1996, 39, 720-725. | 2.0 | 76 |
| 42 | Film Thickness and Friction of ZDDP Tribofilms. Tribology Letters, 2019, 67, 1. | 2.6 | 75 |
| 43 | The Design of Boundary Film-Forming PMA Viscosity Modifiers. Tribology Transactions, 2006, 49, 225-232. | 2.0 | 74 |
| 44 | In Lubro Studies of Lubricants in EHD Contacts Using FTIR Absorption Spectroscopy. Tribology Transactions, 1991, 34, 248-256. | 2.0 | 73 |
| 45 | Lubricant Film Thickness in Rough Surface, Mixed Elastohydrodynamic Contact. Journal of Tribology, 2000, 122, 65-76. | 1.9 | 72 |
| 46 | Additive-additive and additive-surface interactions in lubrication. Lubrication Science, 1989, 2, 3-23. | 2.1 | 69 |
| 47 | Title is missing!. Tribology Letters, 2001, 11, 71-81. | 2.6 | 69 |
| 48 | Reduction of Friction by Functionalised Viscosity Index Improvers. Tribology Letters, 2007, 28, 287-298. | 2.6 | 68 |
| 49 | CFD Modeling of a Thermal and Shear-Thinning Elastohydrodynamic Line Contact. Journal of Tribology, 2008, 130, . | 1.9 | 68 |
| 50 | The Elastohydrodynamic Friction and Film Forming Properties of Lubricant Base Oils. Tribology Transactions, 1999, 42, 559-569. | 2.0 | 67 |
| 51 | In Situ Study of Model Organic Friction Modifiers Using Liquid Cell AFM; Saturated and Mono-unsaturated Carboxylic Acids. Tribology Letters, 2015, 57, 1. | 2.6 | 67 |
| 52 | Infrared and Visual Study of the Mechanisms of Scuffing. Tribology Transactions, 1996, 39, 441-447. | 2.0 | 65 |
| 53 | Friction properties of DLC/DLC contacts in base oil. Tribology International, 2011, 44, 922-932. | 5.9 | 65 |
| 54 | Prediction of traction in elastohydrodynamic lubrication. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 1998, 212, 321-332. | 1.8 | 63 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Performance of Friction Modifiers on ZDDP-Generated Surfaces. Tribology Transactions, 2007, 50, 328-335. | 2.0 | 63 |
| 56 | Film-forming additives - direct and indirect ways to reduce friction. Lubrication Science, 2002, 14, 147-167. | 2.1 | 59 |
| 57 | Basics of mixed lubrication. Lubrication Science, 2003, 16, 1-28. | 2.1 | 59 |
| 58 | The development and application of the spacer layer imaging method for measuring lubricant film thickness. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2001, 215, 261-277. | 1.8 | 58 |
| 59 | Mechanochemistry of Zinc Dialkyldithiophosphate on Steel Surfaces under Elastohydrodynamic Lubrication Conditions. ACS Applied Materials & Interfaces, 2020, 12, 6662-6676. | 8.0 | 58 |
| 60 | Elastohydrodynamic film thickness of soft EHL contacts using optical interferometry. Tribology International, 2016, 99, 267-277. | 5.9 | 57 |
| 61 | Friction-Enhancing Properties of ZDDP Antiwear Additive: Part II—Influence of ZDDP Reaction Films on EHD Lubrication. Tribology Transactions, 2003, 46, 310-314. | 2.0 | 56 |
| 62 | Influence of hydrogen and tungsten concentration on the tribological properties of DLC/DLC contacts with ZDDP. Wear, 2013, 298-299, 109-119. | 3.1 | 56 |
| 63 | The Control of Friction by Molecular Fractionation of Base Fluid Mixtures at Metal Surfaces. Tribology Transactions, 1997, 40, 461-469. | 2.0 | 55 |
| 64 | The influence of soot and dispersant on ZDDP film thickness and friction. Lubrication Science, 2004, 17, 25-43. | 2.1 | 55 |
| 65 | Adsorption of Organic Friction Modifier Additives. Langmuir, 2020, 36, 1147-1155. | 3.5 | 54 |
| 66 | The Behavior of Colloidal Solid Particles in Elastohydrodynamic Contacts. Tribology Transactions, 2000, 43, 387-394. | 2.0 | 52 |
| 67 | The Relationship Between Friction and Film Thickness in EHD Point Contacts in the Presence of Longitudinal Roughness. Tribology Letters, 2016, 64, 1. | 2.6 | 52 |
| 68 | The Influence of Electrochemical Potentials on the Friction and Wear of Iron and Iron Oxides in Aqueous Systems. Tribology Transactions, 1994, 37, 811-819. | 2.0 | 51 |
| 69 | On the effect of confined fluid molecular structure on nonequilibrium phase behaviour and friction. Physical Chemistry Chemical Physics, 2017, 19, 17883-17894. | 2.8 | 51 |
| 70 | Additive Interference in Dibenzyl Disulfide Extreme Pressure Lubrication. ASLE Transactions, 1974, 17, 283-289. | 0.6 | 49 |
| 71 | Elastohydrodynamic film formation at the start-up of the motion. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2001, 215, 125-138. | 1.8 | 49 |
| 72 | Thermal Conductivity and Flash Temperature. Tribology Letters, 2019, 67, 1. | 2.6 | 49 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | An Investigation of Lubricant Film Thickness in Sliding Compliant Contacts. Tribology Transactions, 2010, 53, 684-694. | 2.0 | 48 |
| 74 | Optimizing Film Formation by Oil-in-Water Emulsions. Tribology Transactions, 1997, 40, 569-578. | 2.0 | 47 |
| 75 | The Effects of Three-Dimensional Model Surface Roughness Features on Lubricant Film Thickness in EHL Contacts. Journal of Tribology, 2003, 125, 533-542. | 1.9 | 47 |
| 76 | Rolling and sliding friction in compliant, lubricated contact. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2006, 220, 55-63. | 1.8 | 47 |
| 77 | Film Forming and Friction Properties of Overbased Calcium Sulphonate Detergents. Tribology Letters, 2008, 29, 33-44. | 2.6 | 47 |
| 78 | Effect of Base Oil Structure on Elastohydrodynamic Friction. Tribology Letters, 2017, 65, 1. | 2.6 | 47 |
| 79 | Thick Film Formation by Zinc Dialkyldithiophosphates. ASLE Transactions, 1983, 26, 48-52. | 0.6 | 46 |
| 80 | The behaviour of greases in elastohydrodynamic contacts. Journal Physics D: Applied Physics, 1992, 25, A124-A132. | 2.8 | 46 |
| 81 | Elastohydrodynamic Film Collapse During Rapid Deceleration. Part I—Experimental Results. Journal of Tribology, 2001, 123, 254-261. | 1.9 | 46 |
| 82 | Antagonistic Interaction of Antiwear Additives and Carbon Black. Tribology Letters, 2010, 37, 49-58. | 2.6 | 46 |
| 83 | Nonequilibrium Molecular Dynamics Investigation of the Reduction in Friction and Wear by Carbon Nanoparticles Between Iron Surfaces. Tribology Letters, 2016, 63, 1. | 2.6 | 46 |
| 84 | The Behavior of Polymer Solutions in Concentrated Contacts: Immobile Surface Layer Formation. Tribology Transactions, 1994, 37, 580-586. | 2.0 | 45 |
| 85 | The influence of transverse roughness in thin film, mixed elastohydrodynamic lubrication. Tribology International, 2007, 40, 220-232. | 5.9 | 45 |
| 86 | Thin films in elastohydrodynamic lubrication: The contribution of experiment. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 1999, 213, 335-352. | 1.8 | 44 |
| 87 | The Friction Reducing Properties of Molybdenum Dialkyldithiocarbamate Additives: Part II - Durability of Friction Reducing Capability. Tribology Transactions, 2001, 44, 637-647. | 2.0 | 44 |
| 88 | Basics of EHL for practical application. Lubrication Science, 2015, 27, 45-67. | 2.1 | 44 |
| 89 | Fractionation of liquid lubricants at solid surfaces. Wear, 1996, 200, 336-345. | 3.1 | 42 |
| 90 | Frictional Properties of Automatic Transmission Fluids: Part I—Measurement of Friction—Sliding Speed Behavior. Tribology Transactions, 2010, 54, 145-153. | 2.0 | 42 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | The Influence of Slideâ€“Roll Ratio on ZDDP Tribofilm Formation. Tribology Letters, 2016, 64, 1. | 2.6 | 42 |
| 92 | Triboelectrochemistry: Influence of Applied Electrical Potentials on Friction and Wear of Lubricated Contacts. Tribology Letters, 2020, 68, 1. | 2.6 | 42 |
| 93 | EHD Film Formation and Starvation of Oil-in-Water Emulsions. Tribology Transactions, 1993, 36, 565-572. | 2.0 | 41 |
| 94 | Thick-boundary-film formation by friction modifier additives. Lubrication Science, 1999, 11, 313-335. | 2.1 | 41 |
| 95 | The Elastohydrodynamic Traction of Synthetic Base Oil Blends. Tribology Transactions, 2001, 44, 648-656. | 2.0 | 41 |
| 96 | Influence of Organic Friction Modifier on Liquid Slip: A New Mechanism of Organic Friction Modifier Action. Tribology Letters, 2007, 27, 239-244. | 2.6 | 41 |
| 97 | On the Crystallinity and Durability of ZDDP Tribofilm. Tribology Letters, 2019, 67, 1. | 2.6 | 41 |
| 98 | In-Situ Measurement of ZDDP Films in Concentrated Contacts. Tribology Transactions, 1993, 36, 276-282. | 2.0 | 40 |
| 99 | Lubrication and Reflow Properties of Thermally Aged Greases. Tribology Transactions, 2000, 43, 221-228. | 2.0 | 40 |
| 100 | Pressure dependence of confined liquid behavior subjected to boundary-driven shear. Journal of Chemical Physics, 2012, 136, 134705. | 3.0 | 40 |
| 101 | Durability of ZDDP Tribofilms Formed in DLC/DLC Contacts. Tribology Letters, 2013, 51, 469-478. | 2.6 | 39 |
| 102 | Scuffing as a Desorption Processâ€“An Explanation of the Borsoff Effect. ASLE Transactions, 1974, 17, 92-96. | 0.6 | 38 |
| 103 | The Influence of Lubricant Upon EHD Film Behavior During Sudden Halting of Motion. Tribology Transactions, 2000, 43, 731-739. | 2.0 | 38 |
| 104 | Compression of a Single Transverse Ridge in a Circular Elastohydrodynamic Contact. Journal of Tribology, 2003, 125, 275-282. | 1.9 | 38 |
| 105 | The Role of Surface Tension and Disjoining Pressure in Starved and Parched Lubrication. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 1996, 210, 113-124. | 1.8 | 35 |
| 106 | Frictional Properties of Automatic Transmission Fluids: Part IIâ€“Origins of Frictionâ€“Sliding Speed Behavior. Tribology Transactions, 2010, 54, 154-167. | 2.0 | 35 |
| 107 | In-situ observations of the effect of the ZDDP tribofilm growth on micropitting. Tribology International, 2019, 138, 342-352. | 5.9 | 35 |
| 108 | Electrochemical effects on friction between metal oxide surfaces in aqueous solutions. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 267. | 1.7 | 34 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Elastohydrodynamic Film Collapse During Rapid Deceleration. Part II—Theoretical Analysis and Comparison of Theory and Experiment. <i>Journal of Tribology</i> , 2001, 123, 262-267. | 1.9 | 34 |
| 110 | The Tribofilm Formation of ZDDP Under Reciprocating Pure Sliding Conditions. <i>Tribology Letters</i> , 2016, 64, 1. | 2.6 | 34 |
| 111 | A Study of Friction Polymer Formation. <i>ASLE Transactions</i> , 1982, 25, 355-360. | 0.6 | 33 |
| 112 | A Thermodynamic Approach to Viscosity. <i>Tribology Transactions</i> , 1990, 33, 140-148. | 2.0 | 33 |
| 113 | The Antagonism between Succinimide Dispersants and a Secondary Zinc Dialkyl Dithiophosphate. <i>Tribology Transactions</i> , 2014, 57, 57-65. | 2.0 | 33 |
| 114 | Oxidative Wear in Lubricated Contact. <i>Journal of Lubrication Technology</i> , 1980, 102, 539-544. | 0.1 | 32 |
| 115 | Determination of the Shear Stresses of Lubricants in Elastohydrodynamic Contacts. <i>Tribology Transactions</i> , 1989, 32, 414-422. | 2.0 | 32 |
| 116 | Lubricant Flow in an Elastohydrodynamic Contact Using Fluorescence. <i>Tribology Letters</i> , 2010, 38, 207-215. | 2.6 | 32 |
| 117 | Friction Behaviour of ZDDP Films in the Mixed, Boundary/EHD Regime. , 1996, , . | | 31 |
| 118 | Spurious Mild Wear Measurement Using White Light Interference Microscopy in the Presence of Antiwear Films. <i>Tribology Transactions</i> , 2009, 52, 841-846. | 2.0 | 31 |
| 119 | Thermal Behaviour of a Slipping Wet Clutch Contact. <i>Tribology Letters</i> , 2011, 41, 23-32. | 2.6 | 31 |
| 120 | Effect of steel hardness on soot wear. <i>Wear</i> , 2017, 390-391, 236-245. | 3.1 | 31 |
| 121 | Tribofilm Formation, Friction and Wear-Reducing Properties of Some Phosphorus-Containing Antiwear Additives. <i>Tribology Letters</i> , 2020, 68, 1. | 2.6 | 31 |
| 122 | The Lubricity of Gasoline. <i>Tribology Transactions</i> , 1999, 42, 813-823. | 2.0 | 30 |
| 123 | A Study of the Lubrication of EHL Point Contact in the Presence of Longitudinal Roughness. <i>Tribology Letters</i> , 2015, 59, 1. | 2.6 | 30 |
| 124 | Elastohydrodynamic film thickness measurements of perfluoropolyether fluids. <i>Journal of Synthetic Lubrication: Research, Development and Application of Synthetic Lubricants and Functional Fluids</i> , 1984, 1, 73-86. | 0.7 | 29 |
| 125 | Compression Heating and Cooling in Elastohydrodynamic Contacts. <i>Tribology Letters</i> , 2009, 36, 69-80. | 2.6 | 29 |
| 126 | Friction and Wear Reduction by Boundary Film-Forming Viscosity Index Improvers. , 0, , . | | 28 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 127 | Behavior of EHD Films During Reversal of Entrainment in Cyclically Accelerated/Decelerated Motion. Tribology Transactions, 2002, 45, 177-184. | 2.0 | 28 |
| 128 | ZDDP Tribofilm Formation on Non-Ferrous Surfaces. Tribology Online, 2020, 15, 318-331. | 0.9 | 28 |
| 129 | Contributions of Molecular Dynamics Simulations to Elastohydrodynamic Lubrication. Tribology Letters, 2021, 69, 1. | 2.6 | 27 |
| 130 | Measurement and Modelling of Boundary Film Properties of Polymeric Lubricant Additives. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 1996, 210, 1-15. | 1.8 | 26 |
| 131 | Film Formation by Colloidal Overbased Detergents in Lubricated Contacts. Tribology Transactions, 2000, 43, 357-366. | 2.0 | 26 |
| 132 | Influence of surface roughness features on mixed-film lubrication. Lubrication Science, 2003, 15, 219-232. | 2.1 | 26 |
| 133 | Measurement of the Rheology of Lubricant Films Within Elastohydrodynamic Contacts. Tribology Letters, 2004, 17, 593-605. | 2.6 | 25 |
| 134 | Soft Elasto-Hydrodynamic Lubrication. Tribology Letters, 2010, 39, 109-114. | 2.6 | 25 |
| 135 | Hydrodynamic Friction Reduction in a MACâ€“Hexadecane Lubricated MEMS Contact. Tribology Letters, 2013, 49, 217-225. | 2.6 | 25 |
| 136 | Thick Antiwear Films in Elastohydrodynamic Contacts. Part I: Film Growth in Rolling/Sliding EHD Contacts. ASLE Transactions, 1986, 29, 299-305. | 0.6 | 24 |
| 137 | Wear and fatigue problems in connection with water-based hydraulic fluids. Journal of Synthetic Lubrication: Research, Development and Application of Synthetic Lubricants and Functional Fluids, 1987, 4, 115-135. | 0.7 | 24 |
| 138 | An â€“in lubroâ€™ study of viscosity index improvers in end contacts. Lubrication Science, 1990, 3, 45-62. | 2.1 | 24 |
| 139 | Impact of ethanol on the formation of antiwear tribofilms from engine lubricants. Tribology International, 2016, 93, 364-376. | 5.9 | 24 |
| 140 | Predicting Sequence VI and VIA Fuel Economy from Laboratory Bench Tests. , 1996, , . | | 23 |
| 141 | Improved infrared temperature mapping of elastohydrodynamic contacts. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2009, 223, 1165-1177. | 1.8 | 23 |
| 142 | Friction Modifier Behaviour in Lubricated MEMS Devices. Tribology Letters, 2011, 41, 239-246. | 2.6 | 23 |
| 143 | Reply to the Comment by Scott Bair, Philippe Vergne, Punit Kumar, Gerhard Poll, Ivan Krupka, Martin Hartl, Wassim Habchi, Roland Larson on â€œHistory, Origins and Prediction of Elastohydrodynamic Frictionâ€•by Spikes and Jie in Tribology Letters. Tribology Letters, 2015, 58, 1. | 2.6 | 23 |
| 144 | Lubrication of Rough Surfaces by a Boundary Film-Forming Viscosity Modifier Additive. Journal of Tribology, 2005, 127, 223-229. | 1.9 | 22 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | Application of Atomic Force Microscopy to the Study of Lubricant Additive Films. Journal of Tribology, 2005, 127, 405-415. | 1.9 | 22 |
| 146 | The Influence of Longitudinal Roughness in Thin-Film, Mixed Elastohydrodynamic Lubrication. Tribology Transactions, 2006, 49, 248-259. | 2.0 | 22 |
| 147 | The Elastohydrodynamic Lubricating Properties of Water-Polyglycol Fire-Resistant Fluids. ASLE Transactions, 1984, 27, 366-372. | 0.6 | 21 |
| 148 | In Situ Study of Model Organic Friction Modifiers Using Liquid Cell AFM: Self-Assembly of Octadecylamine. Tribology Letters, 2015, 58, 1. | 2.6 | 21 |
| 149 | Mechanochemistry of phosphate esters confined between sliding iron surfaces. Communications Chemistry, 2021, 4, . | 4.5 | 21 |
| 150 | Shear Thinning and Hydrodynamic Friction of Viscosity Modifier-Containing Oils. Part I: Shear Thinning Behaviour. Tribology Letters, 2018, 66, 1. | 2.6 | 20 |
| 151 | Predicting EHD Film Thickness of Lubricant Polymer Solutions. Tribology Transactions, 1998, 41, 1-10. | 2.0 | 19 |
| 152 | Effects of Ethanol Contamination on Friction and Elastohydrodynamic Film Thickness of Engine Oils. Tribology Transactions, 2015, 58, 158-168. | 2.0 | 19 |
| 153 | Study of Permanent Shear Thinning of VM Polymer Solutions. Tribology Letters, 2017, 65, 1. | 2.6 | 19 |
| 154 | The shear stress properties of ester lubricants in elastohydrodynamic contacts. Journal of Synthetic Lubrication: Research, Development and Application of Synthetic Lubricants and Functional Fluids, 1992, 9, 91-114. | 0.7 | 18 |
| 155 | The Study of Lubricant Additive Reactions Using Non-Aqueous Electrochemistry. Tribology Transactions, 2000, 43, 175-186. | 2.0 | 18 |
| 156 | Experimental Investigation of the Effect of Speed and Load on Film Thickness in Elastohydrodynamic Contact. Tribology Transactions, 2005, 48, 328-335. | 2.0 | 18 |
| 157 | Process of Boundary Film Formation from Fatty Acid Solution. Tribology Online, 2012, 7, 1-7. | 0.9 | 18 |
| 158 | The Development and Application of a Scuffing Test Based on Contra-rotation. Tribology Letters, 2019, 67, 1. | 2.6 | 18 |
| 159 | Development of laboratory tests to predict the lubricity properties of diesel fuels and their application to the development of highly refined diesel fuels. TriboTest Journal: Tribology and Lubrication in Practice, 1995, 2, 93-112. | 0.7 | 17 |
| 160 | A new scuffing test using contra-rotation. Wear, 2015, 328-329, 229-240. | 3.1 | 17 |
| 161 | The Influence of Aluminium-Silicon Alloy on ZDDP Tribofilm Formation on the Counter-Surface. Tribology Letters, 2017, 65, 1. | 2.6 | 17 |
| 162 | Influence of Dispersant and ZDDP on Soot Wear. Tribology Letters, 2018, 66, 1. | 2.6 | 17 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Ethoxylated Amine Friction Modifiers and ZDDP. Tribology Letters, 2019, 67, 1. | 2.6 | 17 |
| 164 | Measurement of EHD Friction at Very High Contact Pressures. Tribology Letters, 2020, 68, 1. | 2.6 | 17 |
| 165 | Film-Forming Properties of Zinc-Based and Ashless Antiwear Additives. , 0, , . | | 16 |
| 166 | Lubrication of Microelectromechanical Devices Using Liquids of Different Viscosities. Journal of Tribology, 2012, 134, . | 1.9 | 16 |
| 167 | Hydrodynamic Friction of Viscosity-Modified Oils in a Journal Bearing Machine. Tribology Letters, 2018, 66, 1. | 2.6 | 16 |
| 168 | The Elastohydrodynamic Film Thicknesses of Binary Ester-Ether Mixtures. ASLE Transactions, 1981, 24, 542-548. | 0.6 | 15 |
| 169 | Influence of thermal effects on elastohydrodynamic (EHD) lubrication behavior at high speeds. Science China Technological Sciences, 2015, 58, 551-558. | 4.0 | 14 |
| 170 | Shear Thinning and Hydrodynamic Friction of Viscosity Modifier-Containing Oils. Part II: Impact of Shear Thinning on Journal Bearing Friction. Tribology Letters, 2018, 66, 1. | 2.6 | 14 |
| 171 | Design of Functionalized PAMA Viscosity Modifiers to Reduce Friction and Wear in Lubricating Oils. Journal of ASTM International, 2007, 4, 100956. | 0.2 | 14 |
| 172 | Boundary Friction of ZDDP Tribofilms. Tribology Letters, 2021, 69, 1. | 2.6 | 14 |
| 173 | Thick Antiwear Films in Elastohydrodynamic Contacts. Part II: Chemical Nature of the Deposited Films. ASLE Transactions, 1986, 29, 306-311. | 0.6 | 13 |
| 174 | Mapping Shear Stress in Elastohydrodynamic Contacts. Tribology Transactions, 1995, 38, 932-940. | 2.0 | 13 |
| 175 | New Method of Measuring Permanent Viscosity Loss of Polymer-Containing Lubricants. Tribology Transactions, 2012, 55, 631-639. | 2.0 | 13 |
| 176 | The Influence of Sliding Speed and Lubricant Shear Stress on EHD Contact Temperatures. Tribology Transactions, 1990, 33, 355-362. | 2.0 | 12 |
| 177 | The film-forming properties of polyalkylene glycols. Journal of Synthetic Lubrication: Research, Development and Application of Synthetic Lubricants and Functional Fluids, 1993, 10, 23-45. | 0.7 | 12 |
| 178 | Lubrication and Reflow Properties of Thermally Aged Greases. Tribology Transactions, 2000, 43, 9-14. | 2.0 | 12 |
| 179 | Measurement of Pressure Distribution in EHL—Development of Method and Application to Dry Static Contacts. Tribology Transactions, 2005, 48, 474-483. | 2.0 | 12 |
| 180 | Use of FIB to Study ZDDP Tribofilms. Tribology Letters, 2018, 66, 1. | 2.6 | 12 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 181 | Effects of Dispersant and ZDDP Additives on Fretting Wear. Tribology Letters, 2021, 69, 1. | 2.6 | 12 |
| 182 | Influence of Steel Surface Composition on ZDDP Tribofilm Growth Using Ion Implantation. Tribology Letters, 2021, 69, 1. | 2.6 | 12 |
| 183 | Comparison of the Lubricity of Gasoline and Diesel Fuels. , 1996, , . | | 11 |
| 184 | Langmuir-Blodgett Films in High-Pressure Rolling Contacts. Tribology Transactions, 2003, 46, 24-30. | 2.0 | 11 |
| 185 | Influence of Polyalkylmethacrylate Viscosity Index Improvers on the Efficiency of Lubricants. , 0, , . | | 11 |
| 186 | Friction and film-forming behaviour of five traction fluids. Journal of Synthetic Lubrication: Research, Development and Application of Synthetic Lubricants and Functional Fluids, 2004, 21, 13-32. | 0.7 | 11 |
| 187 | Confining Liquids on Silicon Surfaces to Lubricate MEMS. Tribology Letters, 2015, 59, 1. | 2.6 | 11 |
| 188 | The Influence of Steel Composition on the Formation and Effectiveness of Anti-wear Films in Tribological Contacts. Tribology Letters, 2021, 69, 1. | 2.6 | 11 |
| 189 | Wear of hydrogenated DLC in MoDTC-containing oils. Wear, 2021, 474-475, 203869. | 3.1 | 11 |
| 190 | Film-Forming Properties of Polyol Esters, Polyphenyl Ethers and Their Mixtures Over a Wide Range of Temperature. Tribology Transactions, 2000, 43, 130-136. | 2.0 | 10 |
| 191 | Origins of the friction and wear properties of antiwear additives. Lubrication Science, 2006, 18, 223-230. | 2.1 | 10 |
| 192 | Boundary Film Formation by Low Molecular Weight Polymers. Tribology Series, 1997, 32, 487-500. | 0.1 | 9 |
| 193 | Influence of polymethacrylate viscosity index improvers on friction and wear of lubricant formulations. , 0, , . | | 9 |
| 194 | Interaction of Asperities on Opposing Surfaces in Thin Film, Mixed Elastohydrodynamic Lubrication. Journal of Tribology, 2008, 130, . | 1.9 | 9 |
| 195 | Tribological Properties of Sulphur-Free Antiwear Additives Zinc Dialkylphosphates (ZDPs). SAE International Journal of Fuels and Lubricants, 2011, 5, 504-510. | 0.2 | 9 |
| 196 | Influence of Lubricant Properties on ARKL Temperature Rise and Transmission Efficiency. Tribology Transactions, 2013, 56, 1119-1136. | 2.0 | 9 |
| 197 | Temperature dependence of molybdenum dialkyl dithiocarbamate (MoDTC) tribofilms via time-resolved Raman spectroscopy. Scientific Reports, 2021, 11, 3621. | 3.3 | 9 |
| 198 | Beyond ZDDP. Lubrication Science, 2008, 20, 77-78. | 2.1 | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Oxidational wear in lubricated contacts “ Or is it?. Tribology International, 2022, 165, 107287. | 5.9 | 8 |
| 200 | The half-wetted bearing. Part 1: extended Reynolds equation. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2003, 217, 1-14. | 1.8 | 8 |
| 201 | Triboelectrochemistry on a nanometre scale. Tribology Letters, 1996, 2, 287. | 2.6 | 7 |
| 202 | New Test for Mild Lubricated Wear in Rolling-Sliding Contacts. Tribology Transactions, 2007, 50, 145-153. | 2.0 | 7 |
| 203 | Comparison of Three Laboratory Tests to Quantify Mild Wear Rate. Tribology Transactions, 2013, 56, 919-928. | 2.0 | 7 |
| 204 | Influence of Black Oxide Coating on Micropitting and ZDDP Tribofilm Formation. Tribology Transactions, 2022, 65, 242-259. | 2.0 | 7 |
| 205 | Direct measurement of boundary lubricating films. Tribology Series, 1997, 32, 459-466. | 0.1 | 6 |
| 206 | The Behaviour of Molybdenum Dialkyldithiocarbamate Friction Modifier Additives. Tribology Series, 1999, , 759-766. | 0.1 | 6 |
| 207 | Oscillations induced in EHD film thickness by a step in entrainment speed. Lubrication Science, 2003, 15, 311-320. | 2.1 | 6 |
| 208 | Interactions of Ethanol with Friction Modifiers in Model Engine Lubricants. Lubricants, 2019, 7, 101. | 2.9 | 6 |
| 209 | Measurement of Piston Ring and Land Temperatures in a Firing Engine Using Infrared. Tribology Transactions, 1993, 36, 104-112. | 2.0 | 5 |
| 210 | Behaviour of several lubricants for space applications under transient speed conditions. Journal of Synthetic Lubrication: Research, Development and Application of Synthetic Lubricants and Functional Fluids, 2002, 19, 191-211. | 0.7 | 5 |
| 211 | The influence of soot on lubricating films. Tribology Series, 2003, , 37-43. | 0.1 | 5 |
| 212 | Two Mechanisms of Hydrodynamic Lubrication in Textured Bearings. , 2006, , 511. | | 5 |
| 213 | Effect of Surface Cleaning on Performance of Organic Friction Modifiers. Tribology Transactions, 2020, 63, 305-313. | 2.0 | 5 |
| 214 | Substituent effects on the mechanochemical response of zinc dialkyldithiophosphate. Molecular Systems Design and Engineering, 2022, 7, 1045-1055. | 3.4 | 5 |
| 215 | In-Situ Observation of the Effect of the Tribofilm Growth on Scuffing in Rolling-Sliding Contact. Tribology Letters, 2022, 70, . | 2.6 | 5 |
| 216 | Comment on: Rheology of an Ionic Liquid with Variable Carreau Exponent: A Full Picture by Molecular Simulation with Experimental Contribution, by Nicolas Voeltzel, Philippe Vergne, Nicolas Fillot, Nathalie Bouscharain, Laurent Joly, Tribology Letters (2016) 64:25. Tribology Letters, 2017, 65, 1. | 2.6 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 217 | Influence of PMA on the anti-scurfing properties of AW/EP additives. Tribology International, 2022, 174, 107756. | 5.9 | 4 |
| 218 | Discussion: Prediction of traction in elastohydrodynamic lubrication. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2001, 215, 309-310. | 1.8 | 3 |
| 219 | Influence of NO x and Air on the Ageing Behaviour of MoDTC. Tribology Letters, 2017, 65, 1. | 2.6 | 3 |
| 220 | Correlation of Elastohydrodynamic Friction with Molecular Structure of Highly Refined Hydrocarbon Base Oils. Tribology Letters, 2020, 68, 1. | 2.6 | 3 |
| 221 | Study of zinc dialkyldithiophosphate using electrochemical techniques. Tribology Series, 2002, , 175-181. | 0.1 | 2 |
| 222 | CFD Modelling of Elastohydrodynamic Lubrication. , 2005, , 531. | | 2 |
| 223 | Advances in Tribological Design of Poly(alkyl methacrylate) Viscosity Index Improvers. , 0, , . | | 2 |
| 224 | New Electrolytes for Electrochemical Study in Hydrocarbon Solution. , 2001, , 711-716. | | 2 |
| 225 | The effect of friction on micropitting. Wear, 2022, 488-489, 204130. | 3.1 | 2 |
| 226 | Influence of degradation on the film-forming properties of polyolester oils. Journal of Synthetic Lubrication: Research, Development and Application of Synthetic Lubricants and Functional Fluids, 2000, 17, 7-22. | 0.7 | 1 |
| 227 | CFD Analysis of a Low Friction Pocketed Pad Bearing. , 2004, , 737. | | 1 |
| 228 | A Micro-IRRAS Study of Lubricant Degradation Under Thin Film Conditions. , 2005, , 569. | | 1 |
| 229 | Elastohydrodynamic Lubrication of Multiple Periodic Ridges. , 2005, , 519. | | 1 |
| 230 | New Bench Test to Study Mild Lubricated Wear. , 2005, , 961. | | 1 |
| 231 | Behaviour of Boundary Lubricating Additives on DLC Coatings. , 2007, , 141. | | 1 |
| 232 | Fourth World Tribology Conference. Lubrication Science, 2010, 22, 415-416. | 2.1 | 1 |
| 233 | Temperature measurement of debris particles in EHL contacts. Surface Topography: Metrology and Properties, 2018, 6, 034013. | 1.6 | 1 |
| 234 | Future helicopter transmission oils. Journal of Synthetic Lubrication: Research, Development and Application of Synthetic Lubricants and Functional Fluids, 1986, 3, 181-208. | 0.7 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 235 | Why lubrication science?. Lubrication Science, 1988, 1, 1-2. | 2.1 | 0 |
| 236 | Behavior of Viscosity Index Improver-Containing Oils in Non-Steady State Contacts. , 0, , . | | 0 |
| 237 | Soft EHL Lubrication of Complex Multiphase Fluids. , 2005, , 589. | | 0 |
| 238 | Development of hydrodynamic micro-bearings. Journal of Physics: Conference Series, 2016, 773, 012020. | 0.4 | 0 |
| 239 | Reply to the "Comment on "The Relationship Between Friction and Film Thickness in EHD Point Contacts in the Presence of Longitudinal Roughness" by Guegan, Kadiric, Gabelli, & Spikes" by Scott Bair. Tribology Letters, 2017, 65, 1. | 2.6 | 0 |
| 240 | The Study of Very Thin Lubricant Films in High Pressure Contacts Using Spacer Layer Interferometric Methods. , 2001, , 663-689. | | 0 |
| 241 | A Technique for the Detection of Liquid Slip at a Load-Bearing, High Shear Contact. , 2005, , . | | 0 |
| 242 | Thermal Effects in an Elastohydrodynamic Line Contact Using a CFD Approach. , 2007, , . | | 0 |
| 243 | Film Thickness Study of Lubricated, Compliant Contacts. , 2009, , . | | 0 |
| 244 | EFFECTS OF ETHANOL ON FILM THICKNESS AND FRICTION OF GROUP ONE ENGINE OILS. , 0, , . | | 0 |