

Valentin L Popov

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7423154/publications.pdf>

Version: 2024-02-01

305
papers

4,994
citations

159585

30
h-index

197818

49
g-index

359
all docs

359
docs citations

359
times ranked

2603
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Contact Mechanics and Friction. , 2010, , . | | 626 |
| 2 | Structural Design and Biomechanics of Friction-Based Releasable Attachment Devices in Insects. Integrative and Comparative Biology, 2002, 42, 1127-1139. | 2.0 | 165 |
| 3 | Normal Contact Stiffness of Elastic Solids with Fractal Rough Surfaces. Physical Review Letters, 2012, 108, 104301. | 7.8 | 137 |
| 4 | Method of Dimensionality Reduction in Contact Mechanics and Friction. , 2015, , . | | 115 |
| 5 | The research works of Coulomb and Amontons and generalized laws of friction. Friction, 2015, 3, 183-190. | 6.4 | 107 |
| 6 | Strength of adhesive contacts: Influence of contact geometry and material gradients. Friction, 2017, 5, 308-325. | 6.4 | 100 |
| 7 | Contact Mechanics and Friction. , 2017, , . | | 99 |
| 8 | Handbook of Contact Mechanics. , 2019, , . | | 93 |
| 9 | Overcoming the limitations of distinct element method for multiscale modeling of materials with multimodal internal structure. Computational Materials Science, 2015, 102, 267-285. | 3.0 | 92 |
| 10 | Prandtl- € Tomlinson model: History and applications in friction, plasticity, and nanotechnologies. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2012, 92, 683-708. | 1.6 | 89 |
| 11 | Influence of Ultrasonic In-Plane Oscillations on Static and Sliding Friction and Intrinsic Length Scale of Dry Friction Processes. Tribology Letters, 2010, 39, 25-30. | 2.6 | 88 |
| 12 | Influence of Ultrasonic Oscillation on Static and Sliding Friction. Tribology Letters, 2012, 48, 51-62. | 2.6 | 75 |
| 13 | Shear induced adhesion: Contact mechanics of biological spatula-like attachment devices. Journal of Theoretical Biology, 2011, 276, 126-131. | 1.7 | 72 |
| 14 | Spring model of biological attachment pads. Journal of Theoretical Biology, 2006, 243, 48-53. | 1.7 | 71 |
| 15 | Numerical simulation methods in tribology. Tribology International, 2007, 40, 916-923. | 5.9 | 68 |
| 16 | Subsurface layer formation during sliding friction. Wear, 2001, 249, 860-867. | 3.1 | 65 |
| 17 | Normal contact stiffness of elastic solids with fractal rough surfaces for one- and three-dimensional systems. Physical Review E, 2012, 86, 026710. | 2.1 | 64 |
| 18 | Kontaktmechanik und Reibung. , 2010, , . | | 63 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Method of reduction of dimensionality in contact and friction mechanics: A linkage between micro and macro scales. <i>Friction</i> , 2013, 1, 41-62. | 6.4 | 56 |
| 20 | Mapping of three-dimensional contact problems into one dimension. <i>Physical Review E</i> , 2007, 76, 036710. | 2.1 | 55 |
| 21 | Multiscale simulation of dry friction in wheel/rail contact. <i>Wear</i> , 2006, 261, 874-884. | 3.1 | 52 |
| 22 | Partial-slip frictional response of rough surfaces. <i>Scientific Reports</i> , 2014, 4, 5178. | 3.3 | 49 |
| 23 | Quasi-fluid nano-layers at the interface between rubbing bodies: simulations by movable cellular automata. <i>Wear</i> , 2003, 254, 901-906. | 3.1 | 44 |
| 24 | Fractal Tomlinson model for mesoscopic friction: From microscopic velocity-dependent damping to macroscopic Coulomb friction. <i>Physical Review E</i> , 2007, 75, 027103. | 2.1 | 43 |
| 25 | Probabilistic fasteners with parabolic elements: biological system, artificial model and theoretical considerations. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2002, 360, 211-225. | 3.4 | 42 |
| 26 | A theory of the transition from static to kinetic friction in boundary lubrication layers. <i>Solid State Communications</i> , 2000, 115, 369-373. | 1.9 | 40 |
| 27 | Adhesion and friction in hard and soft contacts: theory and experiment. <i>Friction</i> , 2021, 9, 1688-1706. | 6.4 | 40 |
| 28 | Friction Between a Viscoelastic Body and a Rigid Surface with Random Self-Affine Roughness. <i>Physical Review Letters</i> , 2013, 111, 034301. | 7.8 | 39 |
| 29 | A multilevel computer simulation of friction and wear by numerical methods of discrete mechanics and a phenomenological theory. <i>Physical Mesomechanics</i> , 2009, 12, 11-19. | 1.9 | 38 |
| 30 | Analytic solution for the limiting shape of profiles due to fretting wear. <i>Scientific Reports</i> , 2015, 4, 3749. | 3.3 | 38 |
| 31 | Adhesive wear and particle emission: Numerical approach based on asperity-free formulation of Rabinowicz criterion. <i>Friction</i> , 2018, 6, 260-273. | 6.4 | 38 |
| 32 | Contact stiffness of randomly rough surfaces. <i>Scientific Reports</i> , 2013, 3, 3293. | 3.3 | 34 |
| 33 | Using acoustic emission for the analysis of wear processes during sliding friction. <i>Technical Physics Letters</i> , 2013, 39, 223-225. | 0.7 | 31 |
| 34 | Fast High-Resolution Simulation of the Gross Slip Wear of Axially Symmetric Contacts. <i>Tribology Transactions</i> , 2016, 59, 189-194. | 2.0 | 31 |
| 35 | Adhesive Strength of Contacts of Rough Spheres. <i>Frontiers in Mechanical Engineering</i> , 2019, 5, . | 1.8 | 31 |
| 36 | Thermodynamics and kinetics of shear-induced melting of a thin layer of lubricant confined between solids. <i>Technical Physics</i> , 2001, 46, 605-615. | 0.7 | 30 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Maximum micro-slip in tangential contact of randomly rough self-affine surfaces. <i>Wear</i> , 2014, 309, 256-258. | 3.1 | 30 |
| 38 | Johnsonâ€Kendallâ€Roberts adhesive contact for a toroidal indenter. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2016, 472, 20160218. | 2.1 | 30 |
| 39 | Simulation of wear in combustion engines. <i>Computational Materials Science</i> , 2000, 19, 285-291. | 3.0 | 29 |
| 40 | Reduction of three-dimensional contact problems to one-dimensional ones. <i>Tribology International</i> , 2007, 40, 924-929. | 5.9 | 29 |
| 41 | Boundary element method for nonadhesive and adhesive contacts of a coated elastic half-space. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2020, 234, 73-83. | 1.8 | 29 |
| 42 | Key role of elastic vortices in the initiation of intersonic shear cracks. <i>Physical Review E</i> , 2015, 91, 063302. | 2.1 | 28 |
| 43 | Computer modeling of local tribological contacts by the example of the automotive brake friction pair. <i>Physical Mesomechanics</i> , 2008, 11, 73-84. | 1.9 | 27 |
| 44 | Methode der Dimensionsreduktion in Kontaktmechanik und Reibung. , 2013, , . | | 27 |
| 45 | Boundary element method for normal non-adhesive and adhesive contacts of power-law graded elastic materials. <i>Computational Mechanics</i> , 2018, 61, 319-329. | 4.0 | 26 |
| 46 | Nanomachines: Methods to induce a directed motion at nanoscale. <i>Physical Review E</i> , 2003, 68, 026608. | 2.1 | 25 |
| 47 | Generalized law of friction between elastomers and differently shaped rough bodies. <i>Scientific Reports</i> , 2014, 4, 3750. | 3.3 | 25 |
| 48 | Reduction of friction by normal oscillations. I. Influence of contact stiffness. <i>Friction</i> , 2017, 5, 45-55. | 6.4 | 25 |
| 49 | Superslipperiness at Low Temperatures: Quantum Mechanical Aspects of Solid State Friction. <i>Physical Review Letters</i> , 1999, 83, 1632-1635. | 7.8 | 24 |
| 50 | Simulation of surface topography with the method of movable cellular automata. <i>Tribology International</i> , 2006, 39, 444-449. | 5.9 | 24 |
| 51 | Spectral analysis of the behavior and properties of solid surface layers. <i>Nanotribospectroscopy. Physical Mesomechanics</i> , 2009, 12, 221-234. | 1.9 | 24 |
| 52 | Rapid simulation procedure for fretting wear on the basis of the method of dimensionality reduction. <i>International Journal of Solids and Structures</i> , 2014, 51, 4215-4220. | 2.7 | 24 |
| 53 | On the role of scales in contact mechanics and friction between elastomers and randomly rough self-affine surfaces. <i>Scientific Reports</i> , 2015, 5, 11139. | 3.3 | 24 |
| 54 | JKR adhesive contact for a transversely isotropic layer of finite thickness. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 045307. | 2.8 | 24 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | A new way to manage displacements in zones of active faults. Tribology International, 2007, 40, 995-1003. | 5.9 | 23 |
| 56 | Kontaktmechanik und Reibung. , 2015, , . | | 23 |
| 57 | METHOD OF DIMENSIONALITY REDUCTION IN CONTACT MECHANICS AND FRICTION: A USER'S HANDBOOK. II. POWER-LAW GRADED MATERIALS. Facta Universitatis, Series: Mechanical Engineering, 2016, 14, 251. | 4.6 | 23 |
| 58 | Reconstruction of potential from dynamic experiments. Physical Review E, 2007, 75, 066104. | 2.1 | 22 |
| 59 | Asymptotic modelling of the JKR adhesion contact for a thin elastic layer. Quarterly Journal of Mechanics and Applied Mathematics, 2016, 69, 161-179. | 1.3 | 22 |
| 60 | Force of friction between fractal rough surface and elastomer. Technical Physics Letters, 2010, 36, 525-527. | 0.7 | 21 |
| 61 | Adhesive Contribution to the Coefficient of Friction Between Rough Surfaces. Tribology Letters, 2010, 39, 247-250. | 2.6 | 21 |
| 62 | Basic ideas and applications of the method of reduction of dimensionality in contact mechanics. Physical Mesomechanics, 2012, 15, 254-263. | 1.9 | 21 |
| 63 | Rate and state dependent friction laws and the prediction of earthquakes: What can we learn from laboratory models?. Tectonophysics, 2012, 532-535, 291-300. | 2.2 | 21 |
| 64 | Reduction of friction by normal oscillations. II. In-plane system dynamics. Friction, 2017, 5, 194-206. | 6.4 | 21 |
| 65 | Using hierarchical memory to calculate friction force between fractal rough solid surface and elastomer with arbitrary linear rheological properties. Technical Physics Letters, 2011, 37, 8-11. | 0.7 | 20 |
| 66 | Modeling and waveform optimization of stick-slip micro-drives using the method of dimensionality reduction. Archive of Applied Mechanics, 2016, 86, 1771-1785. | 2.2 | 20 |
| 67 | Friction in an adhesive tangential contact in the Coulomb-Dugdale approximation. Journal of Adhesion, 2017, 93, 1131-1145. | 3.0 | 20 |
| 68 | Is Tribology Approaching Its Golden Age? Grand Challenges in Engineering Education and Tribological Research. Frontiers in Mechanical Engineering, 2018, 4, . | 1.8 | 20 |
| 69 | Synovial Joints. Tribology, Regeneration, Regenerative Rehabilitation and Arthroplasty. Lubricants, 2021, 9, 15. | 2.9 | 20 |
| 70 | GENERALIZED ARCHARD LAW OF WEAR BASED ON RABINOWICZ CRITERION OF WEAR PARTICLE FORMATION. Facta Universitatis, Series: Mechanical Engineering, 2019, 17, 39. | 4.6 | 20 |
| 71 | Relaxation damping in oscillating contacts. Scientific Reports, 2015, 5, 16189. | 3.3 | 19 |
| 72 | Note on the History of Contact Mechanics and Friction: Interplay of Electrostatics, Theory of Gravitation and Elasticity from Coulomb to Johnson-Kendall-Roberts Theory of Adhesion. Physical Mesomechanics, 2018, 21, 1-5. | 1.9 | 19 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Role of Adhesion Stress in Controlling Transition between Plastic, Grinding and Breakaway Regimes of Adhesive Wear. Scientific Reports, 2020, 10, 1585. | 3.3 | 18 |
| 74 | On the origin of the transition from slip to stick. Solid State Communications, 2000, 114, 261-266. | 1.9 | 17 |
| 75 | Flexible tissue with fibres interacting with an adhesive surface. Journal of Physics Condensed Matter, 2007, 19, 096012. | 1.8 | 17 |
| 76 | A Bubble Dynamics Based Approach to the Simulation of Cavitation in Lubricated Contacts. Journal of Tribology, 2009, 131, . | 1.9 | 17 |
| 77 | Contact Mechanics of Rough Spheres: Crossover from Fractal to Hertzian Behavior. Advances in Tribology, 2013, 2013, 1-4. | 2.1 | 17 |
| 78 | Rebound indentation problem for a viscoelastic half-space and axisymmetric indenter – Solution by the method of dimensionality reduction. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2016, 96, 956-967. | 1.6 | 17 |
| 79 | Theory of elastoplastic media with mesostructure. Theoretical and Applied Fracture Mechanics, 2001, 37, 299-310. | 4.7 | 16 |
| 80 | Electronic and phononic friction of solids at low temperatures. Tribology International, 2001, 34, 277-286. | 5.9 | 16 |
| 81 | Modeling of the dynamic contact in stick-slip microdrives using the method of reduction of dimensionality. Physical Mesomechanics, 2012, 15, 287-292. | 1.9 | 16 |
| 82 | Generalized master curve procedure for elastomer friction taking into account dependencies on velocity, temperature and normal force. Tribology International, 2018, 120, 376-380. | 5.9 | 16 |
| 83 | Cavitation within the framework of reduced description of mixed lubrication. Tribology International, 2009, 42, 93-98. | 5.9 | 15 |
| 84 | Penetration of self-affine fractal rough rigid bodies into a model elastomer having a linear viscous rheology. Physical Review E, 2013, 87, 042802. | 2.1 | 15 |
| 85 | Kinetics of the coefficient of friction of elastomers. Scientific Reports, 2015, 4, 5795. | 3.3 | 15 |
| 86 | The extension of the method of dimensionality reduction to layered elastic media. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2018, 98, 622-634. | 1.6 | 15 |
| 87 | Current Trends in Improving of Artificial Joints Design and Technologies for Their Arthroplasty. Frontiers in Mechanical Engineering, 2020, 6, . | 1.8 | 15 |
| 88 | Diffusion as a model of formation and development of surface topography. Tribology International, 2006, 39, 431-436. | 5.9 | 14 |
| 89 | Accelerated creep as a precursor of friction instability and earthquake prediction. Physical Mesomechanics, 2010, 13, 283-291. | 1.9 | 14 |
| 90 | Mechanism of Wear and Ripple Formation Induced by the Mechanical Action of an Atomic Force Microscope Tip. Physical Review Letters, 2011, 106, 025502. | 7.8 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Handbuch der Kontaktmechanik. , 2018, , . | | 14 |
| 92 | 60 years of Rabinowiczâ€™ criterion for adhesive wear. Friction, 2018, 6, 341-348. | 6.4 | 14 |
| 93 | Active control of friction by transverse oscillations. Friction, 2019, 7, 74-85. | 6.4 | 14 |
| 94 | The Effect of Contact Duration and Indentation Depth on Adhesion Strength: Experiment and Numerical Simulation. Technical Physics, 2020, 65, 1695-1707. | 0.7 | 14 |
| 95 | Influence of tangential displacement on the adhesion strength of a contact between a parabolic profile and an elastic half-space. Royal Society Open Science, 2017, 4, 161010. | 2.4 | 13 |
| 96 | Identification and Space-Time Evolution of Vortex-Like Motion of Atoms in a Loaded Solid. Physical Mesomechanics, 2018, 21, 419-429. | 1.9 | 13 |
| 97 | Converting displacement dynamics into creep in block media. Technical Physics Letters, 2006, 32, 545-549. | 0.7 | 12 |
| 98 | Ice cover of Lake Baikal as a model for studying tectonic processes in the Earthâ€™s crust. Doklady Earth Sciences, 2007, 413, 155-159. | 0.7 | 12 |
| 99 | Prandtl-Tomlinson Model: A Simple Model Which Made History. Lecture Notes in Applied Mathematics and Mechanics, 2014, , 153-168. | 1.1 | 12 |
| 100 | Biological microstructures with high adhesion and friction. Numerical approach. Physics-Usppekhi, 2016, 59, 829-845. | 2.2 | 12 |
| 101 | Universal limiting shape of worn profile under multiple-mode fretting conditions: theory and experimental evidence. Scientific Reports, 2016, 6, 23231. | 3.3 | 12 |
| 102 | The oblique impact of a rigid sphere on a power-law graded elastic half-space. Mechanics of Materials, 2017, 109, 82-87. | 3.2 | 12 |
| 103 | On the Possibility of Frictional Damping with Reduced Wear: A Note on the Applicability of Archard's Law of Adhesive Wear under Conditions of Fretting. Physical Mesomechanics, 2018, 21, 94-98. | 1.9 | 12 |
| 104 | Adhesive contact between a rigid body of arbitrary shape and a thin elastic coating. Acta Mechanica, 2019, 230, 2447-2453. | 2.1 | 12 |
| 105 | Tribospectroscopic Study of a Steelâ€“Steel Friction Couple. Technical Physics Letters, 2005, 31, 309. | 0.7 | 11 |
| 106 | Influence of the State of Interfaces on the Character of Local Displacements in Fault-Block and Interfacial Media. Technical Physics Letters, 2005, 31, 712. | 0.7 | 11 |
| 107 | Adhesive impact of an elastic sphere with an elastic half space: Numerical analysis based on the method of dimensionality reduction. Mechanics of Materials, 2016, 92, 155-163. | 3.2 | 11 |
| 108 | Onset of detachment in adhesive contact of an elastic half-space and flat-ended punches with non-circular shape: analytic estimates and comparison with numeric analysis. Journal Physics D: Applied Physics, 2018, 51, 145601. | 2.8 | 11 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | Voltage-Induced Friction with Application to Electro vibration. Lubricants, 2019, 7, 102. | 2.9 | 11 |
| 110 | ADHESIVE FORCE OF FLAT INDENTERS WITH BRUSH-STRUCTURE. Facta Universitatis, Series: Mechanical Engineering, 2018, 16, 1. | 4.6 | 11 |
| 111 | ADHESIVE WEAR: GENERALIZED RABINOWICZâ€™ CRITERIA. Facta Universitatis, Series: Mechanical Engineering, 2018, 16, 29. | 4.6 | 11 |
| 112 | Gauge theory of â€œelastically incompressibleâ€•mediumâ€•II. Dispersion relations with dissipation. International Journal of Engineering Science, 1992, 30, 335-340. | 5.0 | 10 |
| 113 | Electronic contribution to sliding friction in normal and superconducting states. JETP Letters, 1999, 69, 558-561. | 1.4 | 10 |
| 114 | Nanomachines: a general approach to inducing a directed motion at the atomic level. International Journal of Non-Linear Mechanics, 2004, 39, 619-633. | 2.6 | 10 |
| 115 | Shakedown limits for an oscillating, elastic rolling contact with Coulomb friction. International Journal of Solids and Structures, 2014, 51, 930-935. | 2.7 | 10 |
| 116 | On the history of elastohydrodynamics: The dramatic destiny of Alexander Mohrensteinâ€™Ertel and his contribution to the theory and practice of lubrication. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2015, 95, 652-663. | 1.6 | 10 |
| 117 | Impact of an elastic sphere with an elastic half space revisited: Numerical analysis based on the method of dimensionality reduction. Scientific Reports, 2015, 5, 8479. | 3.3 | 10 |
| 118 | General procedure for solution of contact problems under dynamic normal and tangential loading based on the known solution of normal contact problem. Journal of Strain Analysis for Engineering Design, 2016, 51, 247-255. | 1.8 | 10 |
| 119 | Cluster of the Kendall-type adhesive microcontacts as a simple model for load sharing in bioinspired fibrillar adhesives. Archive of Applied Mechanics, 2019, 89, 1447-1472. | 2.2 | 10 |
| 120 | Effect of elastic grading on fretting wear. Scientific Reports, 2019, 9, 7791. | 3.3 | 10 |
| 121 | Ludwig FÃ¶ppel and Gerhard Schubert: Unknown classics of contact mechanics. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2020, 100, e202000203. | 1.6 | 10 |
| 122 | Dynamic stiction without static friction: The role of friction vector rotation. Physical Review E, 2020, 102, 063001. | 2.1 | 10 |
| 123 | A new constitutive model of rubber. Tribology International, 2007, 40, 1012-1016. | 5.9 | 9 |
| 124 | Modified Burridgeâ€™Knopoff model with state dependent friction. Tribology International, 2010, 43, 1392-1399. | 5.9 | 9 |
| 125 | Investigation of the dry normal contact between fractal rough surfaces using the reduction method, comparison to 3D simulations. Physical Mesomechanics, 2012, 15, 275-279. | 1.9 | 9 |
| 126 | What does friction really depend on? Robust governing parameters in contact mechanics and friction. Physical Mesomechanics, 2016, 19, 115-122. | 1.9 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Influence of the Tabor parameter on the adhesive normal impact of spheres in Maugis's "Dugdale approximation. Computational Particle Mechanics, 2018, 5, 313-318. | 3.0 | 9 |
| 128 | Adhesive contribution to friction. AIP Conference Proceedings, 2019, , . | 0.4 | 9 |
| 129 | Dissipation of Mechanical Energy in an Oscillating Adhesive Contact between a Hard Indenter and an Elastomer. Technical Physics Letters, 2020, 46, 1092-1095. | 0.7 | 9 |
| 130 | INDENTATION OF FLAT-ENDED AND TAPERED INDENTERS WITH POLYGONAL CROSS-SECTIONS. Facta Universitatis, Series: Mechanical Engineering, 2016, 14, 241. | 4.6 | 9 |
| 131 | Study on cutting performance of SiCp/Al composite using textured YG8 carbide tool. International Journal of Advanced Manufacturing Technology, 2022, 119, 2213-2222. | 3.0 | 9 |
| 132 | Hysteresis in an Adhesive Contact upon a Change in the Indenter Direction of Motion: an Experiment and Phenomenological Model. Technical Physics, 2021, 66, 611-629. | 0.7 | 9 |
| 133 | Gauge theory of "elastically incompressible" medium without dissipation". Dispersion relations and propagation of perturbations without dissipation. International Journal of Engineering Science, 1992, 30, 329-334. | 5.0 | 8 |
| 134 | On the dynamic theory of elastoplastic medium with microstructure. Computational Materials Science, 1999, 16, 218-236. | 3.0 | 8 |
| 135 | To optimal elasticity of adhesives mimicking gecko foot-hairs. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 358, 309-312. | 2.1 | 8 |
| 136 | THE JKR-ADHESIVE NORMAL CONTACT PROBLEM OF AXISYMMETRIC RIGID PUNCHES WITH A FLAT ANNULAR SHAPE OR CONCAVE PROFILES. Facta Universitatis, Series: Mechanical Engineering, 2016, 14, 281. | 4.6 | 8 |
| 137 | A Model of Mechanical Polishing in the Presence of a Lubricant. Technical Physics Letters, 2005, 31, 788. | 0.7 | 7 |
| 138 | Direct modelling of surface topography development in a micro-contact with the movable cellular automata method. Wear, 2010, 268, 877-885. | 3.1 | 7 |
| 139 | Influence of In-Plane and Out-of-Plane Ultrasonic Oscillations on Sliding Friction. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 4, 1387-1393. | 0.4 | 7 |
| 140 | Liet's Reply.. Physical Review Letters, 2013, 111, 189402. | 7.8 | 7 |
| 141 | Simplified simulation of fretting wear using the method of dimensionality reduction. Physical Mesomechanics, 2014, 17, 236-241. | 1.9 | 7 |
| 142 | The extension of the method of dimensionality reduction to non-compact and non-axisymmetric contacts. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2016, 96, 1144-1155. | 1.6 | 7 |
| 143 | Limiting shape of profile due to dual-mode fretting wear in contact with an elastomer. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2016, 230, 1417-1423. | 2.1 | 7 |
| 144 | Influence of Chemical Heterogeneity and Third Body on Adhesive Strength: Experiment and Simulation. Frontiers in Mechanical Engineering, 2021, 7, . | 1.8 | 7 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | THE INFLUENCE OF VISCOELASTICITY ON VELOCITY-DEPENDENT RESTITUTIONS IN THE OBLIQUE IMPACT OF SPHERES. Facta Universitatis, Series: Mechanical Engineering, 2017, 15, 269. | 4.6 | 7 |
| 146 | SOLUTION OF ADHESIVE CONTACT PROBLEM ON THE BASIS OF THE KNOWN SOLUTION FOR NON-ADHESIVE ONE. Facta Universitatis, Series: Mechanical Engineering, 2018, 16, 93. | 4.6 | 7 |
| 147 | An Approximate Solution for the Contact Problem of Profiles Slightly Deviating from Axial Symmetry. Symmetry, 2022, 14, 390. | 2.2 | 7 |
| 148 | Thermomechanical model of crystalline elastoplastic media. Technical Physics Letters, 1999, 25, 815-817. | 0.7 | 6 |
| 149 | Tribospectroscopy of randomly rough surfaces. Tribology International, 2006, 39, 456-460. | 5.9 | 6 |
| 150 | Macroscopic isotropy of two- and three-dimensional elastic lattice models. Tribology International, 2007, 40, 937-941. | 5.9 | 6 |
| 151 | Adhesive properties of contacts between elastic bodies with randomly rough self-affine surfaces: A simulation with the method of reduction of dimensionality. Physical Mesomechanics, 2012, 15, 324-329. | 1.9 | 6 |
| 152 | Method of dimensionality reduction in contact mechanics and tribology. Heterogeneous media. Physical Mesomechanics, 2014, 17, 50-57. | 1.9 | 6 |
| 153 | Nonlinear effect of elastic vortexlike motion on the dynamic stress state of solids. Physical Review E, 2016, 93, 053005. | 2.1 | 6 |
| 154 | Dynamic Model of Elastoplastic Normal Collision of Spherical Particles under Nonlocal Plasticity. Physics of the Solid State, 2018, 60, 566-570. | 0.6 | 6 |
| 155 | Mechanics of adhesive contacts: Experiment and theory. AIP Conference Proceedings, 2019, , . | 0.4 | 6 |
| 156 | Influence of the Adhesion Force and Strain Hardening Coefficient of the Material on the Rate of Adhesive Wear in a Dry Tangential Frictional Contact. Russian Physics Journal, 2019, 62, 1398-1408. | 0.4 | 6 |
| 157 | SIMULATION OF FRACTURE USING A MESH-DEPENDENT FRACTURE CRITERION IN THE DISCRETE ELEMENT METHOD. Facta Universitatis, Series: Mechanical Engineering, 2018, 16, 41. | 4.6 | 6 |
| 158 | METHOD OF DIMENSIONALITY REDUCTION IN CONTACT MECHANICS AND FRICTION: A USER'S HANDBOOK. III. VISCOELASTIC CONTACTS. Facta Universitatis, Series: Mechanical Engineering, 2018, 16, 99. | 4.6 | 6 |
| 159 | DYNAMICAL MODEL OF THE ASYMMETRIC ACTUATOR OF DIRECTIONAL MOTION BASED ON POWER-LAW GRADED MATERIALS. Facta Universitatis, Series: Mechanical Engineering, 2020, 18, 245. | 4.6 | 6 |
| 160 | Reduced description of mixed lubrication. Tribology International, 2008, 41, 542-548. | 5.9 | 5 |
| 161 | Statistics of contacts and the dependence of their total length on the normal force for fractal surfaces with different Hirsch indices. Technical Physics Letters, 2008, 34, 792-794. | 0.7 | 5 |
| 162 | Development of surface topography for the rail-wheel contact. Wear, 2008, 265, 1542-1548. | 3.1 | 5 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 163 | Numerical modeling of processes of mass transfer in tribological contacts by the method of movable cellular automata. <i>Journal of Friction and Wear</i> , 2009, 30, 12-16. | 0.5 | 5 |
| 164 | The method of reduction of dimensionality and its application to simulation of elastomer friction under complex dynamic loads. <i>Physical Mesomechanics</i> , 2012, 15, 319-323. | 1.9 | 5 |
| 165 | Impact of an elastic sphere with an elastic half space with a constant coefficient of friction: Numerical analysis based on the method of dimensionality reduction. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2016, 96, 1089-1095. | 1.6 | 5 |
| 166 | Effect of stress nonhomogeneity on the shear melting of a thin boundary lubrication layer. <i>Physical Review E</i> , 2016, 94, 053002. | 2.1 | 5 |
| 167 | The Influence of System Dynamics on the Frictional Resistance: Insights from a Discrete Model. <i>Tribology Letters</i> , 2016, 61, 1. | 2.6 | 5 |
| 168 | Generalized rabinowiczâ€™ criterion for adhesive wear for elliptic micro contacts. <i>AIP Conference Proceedings</i> , 2017, , . | 0.4 | 5 |
| 169 | Investigation on Dynamic Response of Rubber in Frictional Contact. <i>Frontiers in Mechanical Engineering</i> , 2019, 5, . | 1.8 | 5 |
| 170 | Active bio contact mechanics: Concepts of active control of wear and growth of the cartilage in natural joints. <i>AIP Conference Proceedings</i> , 2019, , . | 0.4 | 5 |
| 171 | Editorial: Contact Mechanics Perspective of Tribology. <i>Frontiers in Mechanical Engineering</i> , 2021, 7, . | 1.8 | 5 |
| 172 | Contact between Rough Surfaces. , 2010, , 81-103. | | 5 |
| 173 | NORMAL LINE CONTACT OF FINITE-LENGTH CYLINDERS. <i>Facta Universitatis, Series: Mechanical Engineering</i> , 2017, 15, 63. | 4.6 | 5 |
| 174 | SHAPE OF A SLIDING CAPILLARY CONTACT DUE TO THE HYSTERESIS OF CONTACT ANGLE: THEORY AND EXPERIMENT. <i>Facta Universitatis, Series: Mechanical Engineering</i> , 2021, 19, 175. | 4.6 | 5 |
| 175 | Effect of vibrations on the laboratory model â€™earthquakeâ€™-statistics. <i>Technical Physics Letters</i> , 2006, 32, 630-633. | 0.7 | 4 |
| 176 | Dynamic tangential contact of rough surfaces in stick-slip microdrives: Modeling and validation using the method of dimensionality Reduction. <i>Physical Mesomechanics</i> , 2014, 17, 304-310. | 1.9 | 4 |
| 177 | Limiting shape due to fretting wear in an adhesive contact in Dugdale approximation. <i>Physical Mesomechanics</i> , 2016, 19, 378-381. | 1.9 | 4 |
| 178 | Adhesive tangential impact without slip of a rigid sphere and a powerâ€™law graded elastic halfâ€™space. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2017, 97, 872-878. | 1.6 | 4 |
| 179 | Wear Analysis of a Heterogeneous Annular Cylinder. <i>Lubricants</i> , 2018, 6, 28. | 2.9 | 4 |
| 180 | Editorial: Friction and Wear: From Elementary Mechanisms to Macroscopic Behavior. <i>Frontiers in Mechanical Engineering</i> , 2019, 5, . | 1.8 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 181 | Transition between Modes of Adhesion and Sliding Friction in Contacts of Axially Symmetric Bodies. Journal of Friction and Wear, 2019, 40, 39-45. | 0.5 | 4 |
| 182 | Normal Contact Without Adhesion. , 2019, , 5-66. | | 4 |
| 183 | Viscoelastic Materials. , 2019, , 213-249. | | 4 |
| 184 | Adhesive contacts of rough elliptical punches. Mechanics Research Communications, 2022, 122, 103880. | 1.8 | 4 |
| 185 | Physical nature and properties of dynamic surface layers in friction. Tribology International, 2006, 39, 426-430. | 5.9 | 3 |
| 186 | Multi-layer models of friction between solids. Tribology International, 2006, 39, 437-443. | 5.9 | 3 |
| 187 | Method of movable lattice particles. Tribology International, 2007, 40, 930-936. | 5.9 | 3 |
| 188 | Directed molecular transport in an oscillating channel with randomness. Physical Review E, 2008, 77, 021114. | 2.1 | 3 |
| 189 | Assessment of nanostructured ceramic coating damage. Nanotribospectroscopy. Russian Physics Journal, 2009, 52, 380-385. | 0.4 | 3 |
| 190 | Mesoscopic nature of friction and numerical simulation methods in tribology. Physical Mesomechanics, 2012, 15, 251-253. | 1.9 | 3 |
| 191 | Experimental investigation of the adhesive contact of an elastomer. Physical Mesomechanics, 2014, 17, 232-235. | 1.9 | 3 |
| 192 | Parametric study of the conditions of supershear crack propagation in brittle materials. AIP Conference Proceedings, 2015, , . | 0.4 | 3 |
| 193 | Plastic properties of polytetrafluoroethylene (PTFE) under conditions of high pressure and shear. Wear, 2015, 326-327, 84-87. | 3.1 | 3 |
| 194 | Coefficient of friction between a rigid conical indenter and a model elastomer: Influence of local frictional heating. Physical Mesomechanics, 2015, 18, 75-80. | 1.9 | 3 |
| 195 | The functional significance of density and distribution of outgrowths on co-opted contact pairs in biological arresting systems. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140032. | 4.0 | 3 |
| 196 | Numerical analysis of the geometrical and material criteria of acceleration of shear crack to supershear velocity in brittle nanoporous solids. Procedia Structural Integrity, 2016, 2, 409-416. | 0.8 | 3 |
| 197 | Oscillation-based methods for actuation and manipulation of nano-objects. AIP Conference Proceedings, 2017, , . | 0.4 | 3 |
| 198 | Contact Properties and Adhesion of Incompressible Power-Law Gradient Media with High Gradients. Physical Mesomechanics, 2018, 21, 76-79. | 1.9 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 199 | Stiff and soft active control of friction by vibrations and their energy efficiency. <i>Forschung Im Ingenieurwesen/Engineering Research</i> , 2018, 82, 331-339. | 1.6 | 3 |
| 200 | Adhesive contact of rough brushes. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 2405-2412. | 2.8 | 3 |
| 201 | Stress tensor and gradient of hydrostatic pressure in the contact plane of axisymmetric bodies under normal and tangential loading. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2020, 100, e201900223. | 1.6 | 3 |
| 202 | A numerical study of JKR-type adhesive contact of ellipsoids. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 335303. | 2.8 | 3 |
| 203 | A Note by K. L. Johnson on the History of the JKR Theory. <i>Tribology Letters</i> , 2021, 69, 1. | 2.6 | 3 |
| 204 | Adhesion Hysteresis Due to Chemical Heterogeneity. <i>Springer Tracts in Mechanical Engineering</i> , 2021, , 473-483. | 0.3 | 3 |
| 205 | Das Prandtl-Tomlinson-Modell für trockene Reibung. , 2009, , 153-172. | | 3 |
| 206 | Avalanche breakdown in narrow gap semiconductors in crossed fields. <i>Solid State Communications</i> , 1985, 53, 947-952. | 1.9 | 2 |
| 207 | Coupling of an elastoplastic continuum and a Cosserat continuum. <i>Russian Physics Journal</i> , 1994, 37, 337-342. | 0.4 | 2 |
| 208 | Formation of a surface-layer substructure due to friction. <i>Russian Physics Journal</i> , 1997, 40, 200-204. | 0.4 | 2 |
| 209 | Solid-liquid transition described by the particle method. <i>Technical Physics Letters</i> , 2000, 26, 250-253. | 0.7 | 2 |
| 210 | Influence of the alignment of load and oscillation on the frictional shakedown of an elastic rolling contact with Coulomb friction. <i>Physical Mesomechanics</i> , 2014, 17, 265-273. | 1.9 | 2 |
| 211 | A model of a breathing crack with relaxation damping. <i>International Journal of Engineering Science</i> , 2015, 93, 46-50. | 5.0 | 2 |
| 212 | An Approximate JKR Model of Elliptical Contact Between Thin Incompressible Elastic Coatings Covering Rigid Cylinders. <i>Tribology Letters</i> , 2016, 64, 1. | 2.6 | 2 |
| 213 | Exact one-dimensional mapping of axially symmetric elastic contacts with superimposed normal and torsional loading. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2017, 97, 173-182. | 1.6 | 2 |
| 214 | Stick-slip boundary friction mode as a second-order phase transition with an inhomogeneous distribution of elastic stress in the contact area. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 1889-1896. | 2.8 | 2 |
| 215 | Mapping of Two-Dimensional Contact Problems on a Problem with a One-Dimensional Parametrization. <i>Physical Mesomechanics</i> , 2018, 21, 80-84. | 1.9 | 2 |
| 216 | Heterogeneity of material structure determines the stationary surface topography and friction. <i>Scientific Reports</i> , 2018, 8, 14168. | 3.3 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 217 | Dynamical model of asymmetric actuator of directional motion. <i>Meccanica</i> , 2019, 54, 1681-1687. | 2.0 | 2 |
| 218 | Contact Problems of Functionally Graded Materials. , 2019, , 251-293. | | 2 |
| 219 | The final NO-WEAR state due to dual-mode fretting: Numerical prediction and experimental validation. <i>Wear</i> , 2020, 458-459, 203402. | 3.1 | 2 |
| 220 | Non-adhesive Contacts With Different Surface Tension Inside and Outside the Contact Area. <i>Frontiers in Mechanical Engineering</i> , 2020, 6, . | 1.8 | 2 |
| 221 | Influence of Surface Energy Inhomogeneity on Contact Adhesion: Simulation and Experiment. <i>Physical Mesomechanics</i> , 2021, 24, 426-440. | 1.9 | 2 |
| 222 | Strength of adhesive contact between a rough fibrillar structure and an elastic body: influence of fibrillar stiffness. <i>Journal of Adhesion</i> , 2022, 98, 1820-1833. | 3.0 | 2 |
| 223 | Thermal Effects in Contacts. , 2010, , 199-205. | | 2 |
| 224 | Improving the Endoprosthesis Design and the Postoperative Therapy as a Means of Reducing Complications Risks after Total Hip Arthroplasty. <i>Lubricants</i> , 2022, 10, 38. | 2.9 | 2 |
| 225 | A hysteretic model of localized frictional contacts with instrumental stiffness. <i>Meccanica</i> , 2022, 57, 1783-1799. | 2.0 | 2 |
| 226 | Excitation spectrum of anisotropic non-dissipative elastic-plastic medium. <i>Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika)</i> , 1990, 33, 515-519. | 0.0 | 1 |
| 227 | Moving of flux lines through a random net of pinning centers. <i>Physica C: Superconductivity and Its Applications</i> , 1991, 174, 81-85. | 1.2 | 1 |
| 228 | Resonances of interband impact ionization in narrow-gap semiconductors in a quantizing magnetic field. Theory and experiment. <i>Semiconductor Science and Technology</i> , 1992, 7, 109-118. | 2.0 | 1 |
| 229 | Electron and phonon mechanisms of friction in crystalline solids in atomically close contact at low temperatures. <i>Technical Physics</i> , 2000, 45, 574-583. | 0.7 | 1 |
| 230 | Quantization of the average velocity of motion in a periodic potential under the action of an ultrasonic perturbation. <i>Technical Physics Letters</i> , 2001, 27, 551-553. | 0.7 | 1 |
| 231 | Nanomachinery: A general approach to inducing directed motion at the atomic level. <i>Technical Physics</i> , 2002, 47, 1397-1407. | 0.7 | 1 |
| 232 | Tribospectroscopy of surfaces with statistically random roughness. <i>Technical Physics Letters</i> , 2004, 30, 148-150. | 0.7 | 1 |
| 233 | Two Universal Regimes of Adhesive Film Peeling. <i>Technical Physics Letters</i> , 2005, 31, 871. | 0.7 | 1 |
| 234 | Experimental determination of the spatial scale governing dry friction force of a steel specimen. <i>Physical Mesomechanics</i> , 2008, 11, 149-152. | 1.9 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 235 | A model of fretting wear in the contact of an axisymmetric indenter and a visco-elastic half-space. AIP Conference Proceedings, 2015, , . | 0.4 | 1 |
| 236 | Comment on "Contact Mechanics for Randomly Rough Surfaces: On the Validity of the Method of Reduction of Dimensionality" by Bo Persson in Tribology Letters. Tribology Letters, 2015, 60, 1. | 2.6 | 1 |
| 237 | A wear-reduced nanodrive based on oscillating rolling. Physical Mesomechanics, 2016, 19, 167-172. | 1.9 | 1 |
| 238 | Relaxation damping in contacts under superimposed normal and torsional oscillation. Physical Mesomechanics, 2016, 19, 178-181. | 1.9 | 1 |
| 239 | Biological Microstructures with Enhanced Adhesion and Friction: A Numerical Approach. Biologically-inspired Systems, 2017, , 141-177. | 0.2 | 1 |
| 240 | Dynamics of the coefficient of friction between a rigid conical indenter and a viscoelastic foundation under step-wise change of sliding velocity. Physical Mesomechanics, 2017, 20, 432-437. | 1.9 | 1 |
| 241 | Short note: Method of Dimensionality Reduction for compressible viscoelastic media. I. Frictionless normal contact of a Kelvin-Voigt solid. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2018, 98, 306-311. | 1.6 | 1 |
| 242 | Force-displacement relation in a tangential frictional contact with adhesion. AIP Conference Proceedings, 2018, , . | 0.4 | 1 |
| 243 | Particle-based modeling of the mechanical behavior of porous fluid-saturated viscoelastic solids. Journal of Physics: Conference Series, 2019, 1391, 012116. | 0.4 | 1 |
| 244 | Theoretical Estimation of The Influence of Plastic Deformation on Average Coefficient of Friction in the Process of Nanostructuring Burnishing of Metal Samples. Journal of Friction and Wear, 2019, 40, 384-391. | 0.5 | 1 |
| 245 | Adhesion between a Rigid Indenter and an Elastic Half-Space for Incompressible Gradient Media with a High Gradientness Index. Technical Physics, 2020, 65, 728-736. | 0.7 | 1 |
| 246 | Simulation of Adhesive Contact of Soft Microfibrils. Lubricants, 2020, 8, 94. | 2.9 | 1 |
| 247 | Contacts With Negative Work of "Adhesion" and Superlubricity. Frontiers in Mechanical Engineering, 2020, 5, . | 1.8 | 1 |
| 248 | The legacy of Coulomb and generalized laws of friction. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000062. | 0.2 | 1 |
| 249 | Wear. , 2010, , 271-284. | | 1 |
| 250 | Kopplung an eine makroskopische Dynamik. , 2013, , 197-206. | | 1 |
| 251 | Kontakt mit Elastomeren. , 2013, , 99-113. | | 1 |
| 252 | Effect of Roughness on Capillary Contact Shapes in Tangential Shear: Experiments. Physical Mesomechanics, 2021, 24, 561-569. | 1.9 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 253 | Qualitative Treatment of Adhesive Contacts. , 2010, , 25-40. | | 1 |
| 254 | Rolling Contact. , 2010, , 119-132. | | 1 |
| 255 | MECHANICS OF COLLISIONS OF SOLIDS: INFLUENCE OF FRICTION AND ADHESION. I. REVIEW OF EXPERIMENTAL AND THEORETICAL WORKS. PNRPU Mechanics Bulletin, 2018, , . | 0.4 | 1 |
| 256 | Transversely Isotropic Problems. , 2019, , 205-212. | | 1 |
| 257 | The History of "Sneddon's" solution in contact mechanics. Proceedings in Applied Mathematics and Mechanics, 2021, 21, . | 0.2 | 1 |
| 258 | Contact Properties of Gradient Materials with a High Gradient Index. Technical Physics, 2022, 67, 28-33. | 0.7 | 1 |
| 259 | Calculations of temperature conditions in a contact spot of friction with seizure. Russian Physics Journal, 1999, 42, 830-836. | 0.4 | 0 |
| 260 | The theory of quasistatic nanomachines. Technical Physics Letters, 2002, 28, 385-390. | 0.7 | 0 |
| 261 | Micro- and nanoscale modelling of dry friction with application to the wheel/rail contact. Proceedings in Applied Mathematics and Mechanics, 2004, 4, 254-255. | 0.2 | 0 |
| 262 | Dynamic tangential contacts: Numerical description of nano-positioning devices. , 2014, , . | | 0 |
| 263 | On the role of scales in elastomer friction. , 2014, , . | | 0 |
| 264 | Plastic and tribological properties of polytetrafluoroethylene (PTFE) under conditions of high pressure and shear. , 2014, , . | | 0 |
| 265 | Guest editorial: Special issue on science of friction. Friction, 2015, 3, 83-84. | 6.4 | 0 |
| 266 | Oscillation-based methods for fixation and manipulation of nano-objects. , 2015, , . | | 0 |
| 267 | An influence of normal stress and pore pressure on the conditions and dynamics of shear crack propagation in brittle solids. AIP Conference Proceedings, 2016, , . | 0.4 | 0 |
| 268 | Dynamics of a coefficient of friction during non-stationary sliding of a parabolic indenter on visco-elastic foundation. AIP Conference Proceedings, 2016, , . | 0.4 | 0 |
| 269 | Model of Nanostructuring Burnishing by a Spherical Indenter Taking into Consideration Plastic Deformations. Technical Physics, 2018, 63, 51-56. | 0.7 | 0 |
| 270 | Guest editorial: Special Issue on Science of Wear. Friction, 2018, 6, 243-244. | 6.4 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 271 | Annular Contacts. , 2019, , 295-318. | | 0 |
| 272 | Gradient Theory of Adhesion and Tabor Parameter. Advanced Structured Materials, 2019, , 403-410. | 0.5 | 0 |
| 273 | Regimes of adhesive wear in dry contact: Conditions of realization and determining parameters. AIP Conference Proceedings, 2019, , . | 0.4 | 0 |
| 274 | Science Thriller: The dramatic destiny of Alexander Mohrensteinâ€Ertel and the history of elasto-hydrodynamics. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900097. | 0.2 | 0 |
| 275 | Dimensional reduction for fast simulations of contact problems. WIT Transactions on Engineering Sciences, 2007, , . | 0.0 | 0 |
| 276 | Capillary Forces. , 2010, , 41-54. | | 0 |
| 277 | Tangential Contact Problems. , 2010, , 105-117. | | 0 |
| 278 | Kopplung an Mikroskala. , 2013, , 215-219. | | 0 |
| 279 | Rollkontakt. , 2013, , 87-98. | | 0 |
| 280 | Was weiter?. , 2013, , 221-226. | | 0 |
| 281 | Anlage 2: Exakte LÃ¶sungen in drei Dimensionen fÃ¼r den Tangentialkontakt rotationssymmetrischer KÃ¶rper. , 2013, , 241-245. | | 0 |
| 282 | Anlage 3: Ersetzung der Materialeigenschaften mit Radoks Methode der Funktionalgleichungen. , 2013, , 247-256. | | 0 |
| 283 | Normalkontakt mit AdhÃ¤sion. , 2013, , 39-65. | | 0 |
| 284 | Reibungs-dÃ¤mpfung. , 2013, , 189-195. | | 0 |
| 285 | Anlage 1: Exakte LÃ¶sungen in drei Dimensionen fÃ¼r den Normalkontakt rotationssymmetrischer KÃ¶rper. , 2013, , 227-239. | | 0 |
| 286 | Tangentialkontakt. , 2013, , 67-85. | | 0 |
| 287 | Separation der elastischen und der TrÃ¤gheitseigenschaften in drei-dimensionalen Systemen. , 2013, , 7-18. | | 0 |
| 288 | CONTACT STIFFNESS OF BODIES WITH FRACTAL ROUGHNESS: COMPARISON OF 3D BEM RESULTS AND REDUCTION METHOD. , 0, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 289 | Appendix 3: Replacing the Material Properties with Radok's Method of Functional Equations. , 2015, , 245-253. | | 0 |
| 290 | Frictional Force. , 2015, , 165-188. | | 0 |
| 291 | Rolling Contact. , 2015, , 87-97. | | 0 |
| 292 | SIMULATION OF FRICTIONAL DISSIPATION UNDER BIAxIAL TANGENTIAL LOADING WITH THE METHOD OF DIMENSIONALITY REDUCTION. Facta Universitatis, Series: Mechanical Engineering, 2017, 15, 295. | 4.6 | 0 |
| 293 | Verschleiß. , 2018, , 185-202. | | 0 |
| 294 | MECHANICS OF COLLISIONS OF SOLIDS: INFLUENCE OF FRICTION AND ADHESION. II NUMERICAL MODELING. PNRPU Mechanics Bulletin, 2018, , . | 0.4 | 0 |
| 295 | Transversal isotrope Probleme. , 2018, , 203-211. | | 0 |
| 296 | Normalkontakt mit Adhäsion. , 2018, , 67-123. | | 0 |
| 297 | Kontakte ohne kompaktes Kontaktgebiet. , 2018, , 293-315. | | 0 |
| 298 | Tangential Contact. , 2019, , 125-173. | | 0 |
| 299 | Normal Contact with Adhesion. , 2019, , 67-124. | | 0 |
| 300 | Wear. , 2019, , 187-204. | | 0 |
| 301 | Principios y aplicaciones de la mecánica de contacto en tribología, fricción y adherencia. , 0, , . | | 0 |
| 302 | Adhesion of a Thin Soft Matter Layer: The Role of Surface Tension. Springer Tracts in Mechanical Engineering, 2021, , 461-472. | 0.3 | 0 |
| 303 | Seeing What Lies in Front of Your Eyes: Understanding and Insight in Teaching and Research. Springer Tracts in Mechanical Engineering, 2021, , 549-560. | 0.3 | 0 |
| 304 | Study of Dynamics of Block-Media in the Framework of Minimalistic Numerical Models. Springer Tracts in Mechanical Engineering, 2021, , 143-168. | 0.3 | 0 |
| 305 | Effect of adhesion on sliding friction force between an elastomer and a cylindrical steel indenter. AIP Conference Proceedings, 2022, , . | 0.4 | 0 |