

S A Khrapak

List of Publications by Year in descending order

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217
papers

8,574
citations

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53230

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222
docs citations

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times ranked

1623
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Complex (dusty) plasmas: Current status, open issues, perspectives. <i>Physics Reports</i> , 2005, 421, 1-103. | 25.6 | 1,013 |
| 2 | Dusty plasmas. <i>Physics-Uspexhi</i> , 2004, 47, 447-492. | 2.2 | 585 |
| 3 | Ion drag force in complex plasmas. <i>Physical Review E</i> , 2002, 66, 046414. | 2.1 | 293 |
| 4 | Particle charge in the bulk of gas discharges. <i>Physical Review E</i> , 2005, 72, 016406. | 2.1 | 287 |
| 5 | Scattering in the Attractive Yukawa Potential in the Limit of Strong Interaction. <i>Physical Review Letters</i> , 2003, 90, 225002. | 7.8 | 173 |
| 6 | Experimental Determination of Dust-Particle Charge in a Discharge Plasma at Elevated Pressures. <i>Physical Review Letters</i> , 2004, 93, 085001. | 7.8 | 170 |
| 7 | Complex plasma laboratory PK-3 Plus on the International Space Station. <i>New Journal of Physics</i> , 2008, 10, 033036. | 2.9 | 155 |
| 8 | Basic Processes in Complex (Dusty) Plasmas: Charging, Interactions, and Ion Drag Force. <i>Contributions To Plasma Physics</i> , 2009, 49, 148-168. | 1.1 | 144 |
| 9 | Weakly dissipative dust-ion-acoustic solitons. <i>Physical Review E</i> , 2003, 67, 056402. | 2.1 | 139 |
| 10 | Mechanism of dust-acoustic instability in a direct current glow discharge plasma. <i>Physics of Plasmas</i> , 2000, 7, 1374-1380. | 1.9 | 138 |
| 11 | Influence of a Polarization Force on Dust Acoustic Waves. <i>Physical Review Letters</i> , 2009, 102, 245004. | 7.8 | 138 |
| 12 | Charge-fluctuation-induced heating of dust particles in a plasma. <i>Physical Review E</i> , 1999, 60, 5959-5964. | 2.1 | 123 |
| 13 | Universal scaling in complex (dusty) plasmas. <i>Physical Review E</i> , 2002, 66, 016404. | 2.1 | 123 |
| 14 | Scaling law for the fluid-solid phase transition in Yukawa systems (dusty plasmas). <i>Journal of Experimental and Theoretical Physics</i> , 2000, 90, 287-289. | 0.9 | 110 |
| 15 | Hybrid approach to the ion drag force. <i>Physics of Plasmas</i> , 2005, 12, 042308. | 1.9 | 110 |
| 16 | Electric Potential Around an Absorbing Body in Plasmas: Effect of Ion-Neutral Collisions. <i>Physical Review Letters</i> , 2008, 100, 225003. | 7.8 | 102 |
| 17 | Momentum transfer in complex plasmas. <i>Physical Review E</i> , 2004, 70, 056405. | 2.1 | 99 |
| 18 | Compressional waves in complex (dusty) plasmas under microgravity conditions. <i>Physics of Plasmas</i> , 2003, 10, 1-4. | 1.9 | 90 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Dynamical properties of random charge fluctuations in a dusty plasma with different charging mechanisms. <i>Physical Review E</i> , 1999, 59, 6017-6022. | 2.1 | 89 |
| 20 | Force on a Charged Test Particle in a Collisional Flowing Plasma. <i>Physical Review Letters</i> , 2004, 92, 205007. | 7.8 | 89 |
| 21 | Superdiffusion and Viscoelastic Vortex Flows in a Two-Dimensional Complex Plasma. <i>Physical Review Letters</i> , 2006, 96, 105010. | 7.8 | 88 |
| 22 | Complex plasma—the plasma state of soft matter. <i>Soft Matter</i> , 2011, 7, 1287-1298. | 2.7 | 86 |
| 23 | Force field inside the void in complex plasmas under microgravity conditions. <i>Physical Review E</i> , 2005, 71, 056401. | 2.1 | 78 |
| 24 | Kinetic approach for the ion drag force in a collisional plasma. <i>Physical Review E</i> , 2005, 71, 016405. | 2.1 | 78 |
| 25 | Ordered structures in a nonideal dusty glow-discharge plasma. <i>Journal of Experimental and Theoretical Physics</i> , 1997, 85, 1110-1118. | 0.9 | 76 |
| 26 | Charging properties of a dust grain in collisional plasmas. <i>Physics of Plasmas</i> , 2006, 13, 052114. | 1.9 | 75 |
| 27 | Transport of Microparticles in Weakly Ionized Gas-Discharge Plasmas under Microgravity Conditions. <i>Physical Review Letters</i> , 2003, 90, 245005. | 7.8 | 69 |
| 28 | Void Closure in Complex Plasmas under Microgravity Conditions. <i>Physical Review Letters</i> , 2007, 98, 265006. | 7.8 | 69 |
| 29 | Freezing and Melting of 3D Complex Plasma Structures under Microgravity Conditions Driven by Neutral Gas Pressure Manipulation. <i>Physical Review Letters</i> , 2011, 106, 205001. | 7.8 | 69 |
| 30 | Effect of polarization force on the propagation of dust acoustic solitary waves. <i>New Journal of Physics</i> , 2010, 12, 073002. | 2.9 | 66 |
| 31 | Model of grain charging in collisional plasmas accounting for collisionless layer. <i>Physics of Plasmas</i> , 2007, 14, 042102. | 1.9 | 63 |
| 32 | Fluid-solid phase transitions in three-dimensional complex plasmas under microgravity conditions. <i>Physical Review E</i> , 2012, 85, 066407. | 2.1 | 62 |
| 33 | Interaction potential of microparticles in a plasma: Role of collisions with plasma particles. <i>Physical Review E</i> , 2001, 64, 046403. | 2.1 | 60 |
| 34 | Scattering in the Attractive Yukawa Potential: Application to the Ion-Drag Force in Complex Plasmas. <i>IEEE Transactions on Plasma Science</i> , 2004, 32, 555-560. | 1.3 | 59 |
| 35 | Structural properties of dense hard sphere packings. <i>Physical Review B</i> , 2011, 83, . | 3.2 | 58 |
| 36 | Dusty plasmas in a constant electric field: Role of the electron drag force. <i>Physical Review E</i> , 2004, 69, 066411. | 2.1 | 55 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Electrostatic modes in collisional complex plasmas under microgravity conditions. <i>Physical Review E</i> , 2004, 69, 066401. | 2.1 | 55 |
| 38 | An interpolation formula for the ion flux to a small particle in collisional plasmas. <i>Physics of Plasmas</i> , 2008, 15, . | 1.9 | 55 |
| 39 | Dynamics of macroparticles in a dusty plasma under microgravity conditions (First experiments on) Tj ETQq1 1 0.784314 rgBT /Overlo | 0.9 | 54 |
| 40 | Critical Point in Complex Plasmas. <i>Physical Review Letters</i> , 2006, 96, 015001. | 7.8 | 54 |
| 41 | Kinetics of Fluid Demixing in Complex Plasmas: Role of Two-Scale Interactions. <i>Physical Review Letters</i> , 2010, 105, 045001. | 7.8 | 49 |
| 42 | Grain surface temperature in noble gas discharges: Refined analytical model. <i>Physics of Plasmas</i> , 2006, 13, 104506. | 1.9 | 48 |
| 43 | Fluid approach to evaluate sound velocity in Yukawa systems and complex plasmas. <i>Physical Review E</i> , 2015, 91, 033110. | 2.1 | 48 |
| 44 | Waves in two component electron-dust plasma. <i>Physics of Plasmas</i> , 2001, 8, 2629-2634. | 1.9 | 46 |
| 45 | Attraction of Positively Charged Particles in Highly Collisional Plasmas. <i>Physical Review Letters</i> , 2007, 99, 055003. | 7.8 | 46 |
| 46 | Practical thermodynamics of Yukawa systems at strong coupling. <i>Journal of Chemical Physics</i> , 2015, 142, 194903. | 3.0 | 46 |
| 47 | Simple estimation of thermodynamic properties of Yukawa systems. <i>Physical Review E</i> , 2014, 89, 023102. | 2.1 | 44 |
| 48 | Drag force on an absorbing body in highly collisional plasmas. <i>Journal of Applied Physics</i> , 2007, 101, 033307. | 2.5 | 43 |
| 49 | Complex-plasma boundaries. <i>Physical Review E</i> , 2002, 66, 056411. | 2.1 | 42 |
| 50 | Thermodynamics of two-dimensional Yukawa systems across coupling regimes. <i>Journal of Chemical Physics</i> , 2017, 146, 134702. | 3.0 | 42 |
| 51 | Practical expressions for the internal energy and pressure of Yukawa fluids. <i>Physical Review E</i> , 2015, 91, 023108. | 2.1 | 41 |
| 52 | Rodlike particles in gas discharge plasmas: Theoretical model. <i>Physical Review E</i> , 2003, 68, 026403. | 2.1 | 40 |
| 53 | Electrostatic interaction between dust particles in weakly ionized complex plasmas. <i>Physics of Plasmas</i> , 2006, 13, 104508. | 1.9 | 39 |
| 54 | Collective modes in simple melts: Transition from soft spheres to the hard sphere limit. <i>Scientific Reports</i> , 2017, 7, 7985. | 3.3 | 39 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Comment on "Measurement of the ion drag force on falling dust particles and its relation to the void formation in complex (dusty) plasmas" [Phys. Plasmas 10, 1278 (2003)]. Physics of Plasmas, 2003, 10, 4579-4581. | 1.9 | 38 |
| 56 | Determination of the ion-drag force in a complex plasma. Physics of Plasmas, 2005, 12, 093503. | 1.9 | 37 |
| 57 | Shielding of a test charge: Role of plasma production and loss balance. Physics of Plasmas, 2010, 17, 042107. | 1.9 | 37 |
| 58 | Ion sphere model for Yukawa systems (dusty plasmas). Physics of Plasmas, 2014, 21, . | 1.9 | 37 |
| 59 | On the long-waves dispersion in Yukawa systems. Physics of Plasmas, 2016, 23, . | 1.9 | 37 |
| 60 | Ion drag force in dusty plasmas. Plasma Physics and Controlled Fusion, 2004, 46, B267-B279. | 2.1 | 36 |
| 61 | Grain charging in an intermediately collisional plasma. Europhysics Letters, 2012, 97, 35001. | 2.0 | 35 |
| 62 | Particle charge in PK-4 dc discharge from ground-based and microgravity experiments. Physics of Plasmas, 2019, 26, . | 1.9 | 35 |
| 63 | Thermodynamics and dynamics of two-dimensional systems with dipolelike repulsive interactions. Physical Review E, 2018, 97, 022616. | 2.1 | 34 |
| 64 | Onset of transverse (shear) waves in strongly-coupled Yukawa fluids. Journal of Chemical Physics, 2019, 150, 104503. | 3.0 | 34 |
| 65 | PK-4: Complex Plasmas in Space "The Next Generation. IEEE Transactions on Plasma Science, 2007, 35, 255-259. | 1.3 | 33 |
| 66 | Shielding of a Small Charged Particle in Weakly Ionized Plasmas. IEEE Transactions on Plasma Science, 2010, 38, 818-825. | 1.3 | 33 |
| 67 | Ten Years of Plasma Crystals - from ICPIG (Bochum) to ICPIG (Greifswald). Contributions To Plasma Physics, 2004, 44, 450-457. | 1.1 | 32 |
| 68 | Predicting Freezing for Some Repulsive Potentials. Physical Review Letters, 2009, 103, 255003. | 7.8 | 32 |
| 69 | Accurate freezing and melting equations for the Lennard-Jones system. Journal of Chemical Physics, 2011, 134, 094108. | 3.0 | 31 |
| 70 | Particle flows in a dc discharge in laboratory and microgravity conditions. Physical Review E, 2013, 87, 063109. | 2.1 | 31 |
| 71 | Thermodynamics of Yukawa systems and sound velocity in dusty plasmas. Plasma Physics and Controlled Fusion, 2016, 58, 014022. | 2.1 | 31 |
| 72 | Dynamics of the ordered structure formation in a thermal dusty plasma. Physical Review E, 1998, 57, 7086-7092. | 2.1 | 30 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Self-diffusion in strongly coupled Yukawa systems (complex plasmas). <i>Physics of Plasmas</i> , 2012, 19, . | 1.9 | 30 |
| 74 | Lindemann melting criterion in two dimensions. <i>Physical Review Research</i> , 2020, 2, . | 3.6 | 30 |
| 75 | Low-frequency waves in collisional complex plasmas with an ion drift. <i>Physics of Plasmas</i> , 2003, 10, 4616-4621. | 1.9 | 29 |
| 76 | From Fluid Flows to Crystallization: New Results from Complex Plasmas. <i>Physica Scripta</i> , 2004, T107, 59. | 2.5 | 29 |
| 77 | Measurement of the ion drag force in a collisionless plasma with strong ion-grain coupling. <i>Physics of Plasmas</i> , 2007, 14, . | 1.9 | 29 |
| 78 | Superfluidlike Motion of an Absorbing Body in a Collisional Plasma. <i>Physical Review Letters</i> , 2008, 100, 055002. | 7.8 | 29 |
| 79 | Communication: Universality of the melting curves for a wide range of interaction potentials. <i>Journal of Chemical Physics</i> , 2011, 134, 241101. | 3.0 | 28 |
| 80 | Internal Energy of the Classical Two- and Three-Dimensional One-Component Plasma. <i>Contributions To Plasma Physics</i> , 2016, 56, 270-280. | 1.1 | 28 |
| 81 | Slowing of acoustic waves in electrorheological and string-fluid complex plasmas. <i>New Journal of Physics</i> , 2020, 22, 083079. | 2.9 | 28 |
| 82 | Role of stochastic fluctuations in the charge on macroscopic particles in dusty plasmas. <i>Journal of Experimental and Theoretical Physics</i> , 1999, 88, 1130-1136. | 0.9 | 27 |
| 83 | Practical formula for the shear viscosity of Yukawa fluids. <i>AIP Advances</i> , 2018, 8, . | 1.3 | 27 |
| 84 | Nonlinear drag force in dusty plasmas. <i>Physics of Plasmas</i> , 2005, 12, 112311. | 1.9 | 26 |
| 85 | Experimental investigation on lane formation in complex plasmas under microgravity conditions. <i>New Journal of Physics</i> , 2012, 14, 073058. | 2.9 | 26 |
| 86 | Complex plasma research on the International Space Station. <i>Plasma Physics and Controlled Fusion</i> , 2019, 61, 014004. | 2.1 | 26 |
| 87 | Simulation of the dynamics of strongly interacting macroparticles in a weakly ionized plasma. <i>Journal of Experimental and Theoretical Physics</i> , 2001, 92, 228-234. | 0.9 | 25 |
| 88 | Dust Mode in Collisionally Dominated Complex Plasmas With Particle Drift. <i>IEEE Transactions on Plasma Science</i> , 2004, 32, 613-616. | 1.3 | 25 |
| 89 | Electrostatic potential behind a macroparticle in a drifting collisional plasma: Effect of plasma absorption. <i>Physics of Plasmas</i> , 2007, 14, 022102. | 1.9 | 25 |
| 90 | Liquid-solid phase transition in the Lennard-Jones system. <i>Physical Review B</i> , 2010, 82, . | 3.2 | 25 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | Excess entropy and Stokes-Einstein relation in simple fluids. <i>Physical Review E</i> , 2021, 104, 044110. | 2.1 | 25 |
| 92 | Ion drag force on a small grain in highly collisional weakly anisotropic plasma: Effect of plasma production and loss mechanisms. <i>Physics of Plasmas</i> , 2008, 15, 053703. | 1.9 | 23 |
| 93 | Relations between the longitudinal and transverse sound velocities in strongly coupled Yukawa fluids. <i>Physics of Plasmas</i> , 2016, 23, . | 1.9 | 23 |
| 94 | Complex Plasma Research under Microgravity Conditions: PK€3 Plus Laboratory on the International Space Station. <i>Contributions To Plasma Physics</i> , 2016, 56, 253-262. | 1.1 | 23 |
| 95 | Effective Coulomb logarithm for one component plasma. <i>Physics of Plasmas</i> , 2013, 20, 054501. | 1.9 | 22 |
| 96 | Collective modes of two-dimensional classical Coulomb fluids. <i>Journal of Chemical Physics</i> , 2018, 149, 134114. | 3.0 | 22 |
| 97 | Stokes–Einstein relation in simple fluids revisited. <i>Molecular Physics</i> , 2020, 118, . | 1.7 | 22 |
| 98 | Simple thermodynamics of strongly coupled one-component-plasma in two and three dimensions. <i>Physics of Plasmas</i> , 2014, 21, . | 1.9 | 21 |
| 99 | Glass-transition properties of Yukawa potentials: From charged point particles to hard spheres. <i>Physical Review E</i> , 2014, 89, 063105. | 2.1 | 21 |
| 100 | On the estimation of sound speed in two-dimensional Yukawa fluids. <i>Physics of Plasmas</i> , 2015, 22, . | 1.9 | 21 |
| 101 | Thermodynamics of Yukawa fluids near the one-component-plasma limit. <i>Physics of Plasmas</i> , 2015, 22, . | 1.9 | 21 |
| 102 | Effect of Stochastic Grain Charge Fluctuation on the Kinetic Energy of the Particles in Dusty Plasma. <i>Physica Scripta</i> , 2000, T84, 229. | 2.5 | 20 |
| 103 | Ionization enhanced ion collection by a small floating grain in plasmas. <i>Physics of Plasmas</i> , 2012, 19, 024510. | 1.9 | 20 |
| 104 | Practical expression for an effective ion-neutral collision frequency in flowing plasmas of some noble gases. <i>Journal of Plasma Physics</i> , 2013, 79, 1123-1124. | 2.1 | 20 |
| 105 | A note on the binary interaction potential in complex (dusty) plasmas. <i>Physics of Plasmas</i> , 2008, 15, 084502. | 1.9 | 18 |
| 106 | Note: Sound velocity of a soft sphere model near the fluid-solid phase transition. <i>Journal of Chemical Physics</i> , 2016, 144, 126101. | 3.0 | 18 |
| 107 | Practical dispersion relations for strongly coupled plasma fluids. <i>AIP Advances</i> , 2017, 7, . | 1.3 | 18 |
| 108 | High-frequency elastic moduli of two-dimensional Yukawa fluids and solids. <i>Physics of Plasmas</i> , 2018, 25, . | 1.9 | 18 |

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|-----|---|-----|-----------|
| 109 | Simple Dispersion Relations for Coulomb and Yukawa Fluids. IEEE Transactions on Plasma Science, 2018, 46, 737-742. | 1.3 | 18 |
| 110 | Statistics of particle transport in a two-dimensional dusty plasma cluster. Physics of Plasmas, 2005, 12, 022302. | 1.9 | 17 |
| 111 | Multiple phase transitions associated with charge cannibalism effect in complex (dusty) plasmas. Europhysics Letters, 2010, 91, 25001. | 2.0 | 17 |
| 112 | Fingerprints of different interaction mechanisms on the collective modes in complex (dusty) plasmas. Physics of Plasmas, 2017, 24, . | 1.9 | 17 |
| 113 | Excitation of low-frequency dust density waves in flowing complex plasmas. Physics of Plasmas, 2019, 26, 053702. | 1.9 | 17 |
| 114 | Approximate expression for the electric potential around an absorbing particle in isotropic collisionless plasma. Physics of Plasmas, 2015, 22, 053704. | 1.9 | 16 |
| 115 | Influence of a charge-gradient force on dust acoustic waves. Physics of Plasmas, 2018, 25, . | 1.9 | 16 |
| 116 | Two-body entropy of two-dimensional fluids. Results in Physics, 2020, 17, 103020. | 4.1 | 16 |
| 117 | Vibrational model of thermal conduction for fluids with soft interactions. Physical Review E, 2021, 103, 013207. | 2.1 | 16 |
| 118 | Excitation of dust density waves in weak electric fields. Physics of Plasmas, 2012, 19, 023702. | 1.9 | 15 |
| 119 | Relationship between the ion drag and electric forces in dense dust clouds. Physics of Plasmas, 2013, 20, 043703. | 1.9 | 15 |
| 120 | Classical scattering in strongly attractive potentials. Physical Review E, 2014, 89, 032145. | 2.1 | 15 |
| 121 | Onset of negative dispersion in one-component-plasma revisited. Physics of Plasmas, 2016, 23, . | 1.9 | 15 |
| 122 | Unified description of sound velocities in strongly coupled Yukawa systems of different spatial dimensionality. Physics of Plasmas, 2019, 26, . | 1.9 | 15 |
| 123 | Transport properties of Lennard-Jones fluids: Freezing density scaling along isotherms. Physical Review E, 2021, 103, 042122. | 2.1 | 15 |
| 124 | Role of effective potential barriers in the nonlinear screening regime: Grain charging and ion drag force. Physics of Plasmas, 2005, 12, 092106. | 1.9 | 14 |
| 125 | Three dimensional complex plasma structures in a combined radio frequency and direct current discharge. Physics of Plasmas, 2013, 20, 043701. | 1.9 | 14 |
| 126 | Accurate transport cross sections for the Lennard-Jones potential. European Physical Journal D, 2014, 68, 1. | 1.3 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Collective modes in two-dimensional one-component-plasma with logarithmic interaction. <i>Physics of Plasmas</i> , 2016, 23, . | 1.9 | 14 |
| 128 | Note: Melting criterion for soft particle systems in two dimensions. <i>Journal of Chemical Physics</i> , 2018, 148, 146101. | 3.0 | 14 |
| 129 | Elastic properties of dense hard-sphere fluids. <i>Physical Review E</i> , 2019, 100, 032138. | 2.1 | 14 |
| 130 | Sound Velocities of Lennard-Jones Systems Near the Liquid-Solid Phase Transition. <i>Molecules</i> , 2020, 25, 3498. | 3.8 | 14 |
| 131 | Freezing of Lennard-Jones-type fluids. <i>Journal of Chemical Physics</i> , 2011, 134, 054120. | 3.0 | 13 |
| 132 | Minima of shear viscosity and thermal conductivity coefficients of classical fluids. <i>Physics of Fluids</i> , 2022, 34, . | 4.0 | 13 |
| 133 | Self-Diffusion in Simple Liquids as a Random Walk Process. <i>Molecules</i> , 2021, 26, 7499. | 3.8 | 13 |
| 134 | Dust diffusion across a magnetic field due to random charge fluctuations. <i>Physics of Plasmas</i> , 2002, 9, 619-623. | 1.9 | 12 |
| 135 | Effective charge of a small absorbing body in highly collisional plasma subject to an external electric field. <i>Physics of Plasmas</i> , 2007, 14, 054503. | 1.9 | 12 |
| 136 | Momentum transfer cross-section for ion scattering on dust particles. <i>Physics of Plasmas</i> , 2017, 24, . | 1.9 | 12 |
| 137 | Electron collection and thermionic emission from a spherical dust grain in the space-charge limited regime. <i>Physics of Plasmas</i> , 2018, 25, 063701. | 1.9 | 12 |
| 138 | Accurate momentum transfer cross section for the attractive Yukawa potential. <i>Physics of Plasmas</i> , 2014, 21, 044506. | 1.9 | 11 |
| 139 | Dispersion relations of Yukawa fluids at weak and moderate coupling. <i>Physical Review E</i> , 2020, 102, 033207. | 2.1 | 11 |
| 140 | Thermal conductivity of strongly coupled Yukawa fluids. <i>Physics of Plasmas</i> , 2021, 28, . | 1.9 | 11 |
| 141 | Correlations between the Shear Viscosity and Thermal Conductivity Coefficients of Dense Simple Liquids. <i>JETP Letters</i> , 2021, 114, 540-544. | 1.4 | 11 |
| 142 | Effect of electron emission on the charge and shielding of a dust grain in a plasma: A continuum theory. <i>Journal of Experimental and Theoretical Physics</i> , 2008, 106, 166-171. | 0.9 | 10 |
| 143 | Improved theoretical approximation for the ion drag force in collisionless plasma with strong ion-grain coupling. <i>Physics of Plasmas</i> , 2009, 16, 044507. | 1.9 | 10 |
| 144 | Application of phenomenological freezing and melting indicators to the exp-6 and Gaussian core potentials. <i>Molecular Physics</i> , 2011, 109, 2417-2421. | 1.7 | 10 |

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|-----|---|-----|-----------|
| 145 | Modified Frost formula for the mobilities of positive ions in their parent gases. AIP Advances, 2019, 9, 095008. | 1.3 | 10 |
| 146 | From soft- to hard-sphere fluids: Crossover evidenced by high-frequency elastic moduli. Physical Review E, 2021, 103, 052117. | 2.1 | 10 |
| 147 | Entropy of simple fluids with repulsive interactions near freezing. Journal of Chemical Physics, 2021, 155, 134501. | 3.0 | 10 |
| 148 | Ion drift instability in a strongly coupled collisional complex plasma. Plasma Physics and Controlled Fusion, 2020, 62, 105006. | 2.1 | 10 |
| 149 | Gasâ€“liquid crossover in the Lennard-Jones system. Journal of Chemical Physics, 2022, 156, 116101. | 3.0 | 10 |
| 150 | Ion collection by a sphere in a flowing highly collisional plasma. Physics of Plasmas, 2007, 14, 034502. | 1.9 | 9 |
| 151 | Non-equilibrium phase transitions in complex plasma. Plasma Physics and Controlled Fusion, 2010, 52, 124042. | 2.1 | 9 |
| 152 | Complex Plasmas With Rodlike Particles. IEEE Transactions on Plasma Science, 2011, 39, 2732-2733. | 1.3 | 9 |
| 153 | Electron and ion thermal forces in complex (dusty) plasmas. Physics of Plasmas, 2013, 20, 013703. | 1.9 | 9 |
| 154 | Self-diffusion in single-component Yukawa fluids. Journal of Physics Communications, 2018, 2, 045013. | 1.2 | 9 |
| 155 | Freezing Temperature and Density Scaling of Transport Coefficients. Journal of Physical Chemistry Letters, 2022, 13, 2674-2678. | 4.6 | 9 |
| 156 | Freezing density scaling of fluid transport properties: Application to liquefied noble gases. Journal of Chemical Physics, 2022, 157, . | 3.0 | 9 |
| 157 | Measurements of the Dust-Ion Momentum Transfer Frequency and Ion Drag Force in Complex Plasmas. Contributions To Plasma Physics, 2005, 45, 223-228. | 1.1 | 8 |
| 158 | Ionization instability of ion-acoustic waves. Physics of Plasmas, 2010, 17, . | 1.9 | 8 |
| 159 | fcc-bcc-fluid triple point for model pair interactions with variable softness. Europhysics Letters, 2012, 100, 66004. | 2.0 | 8 |
| 160 | Theory of a cavity around a large floating sphere in complex (dusty) plasma. Physical Review E, 2019, 99, 053210. | 2.1 | 8 |
| 161 | Thermal conduction in two-dimensional complex plasma layers. Physics of Plasmas, 2021, 28, 010704. | 1.9 | 8 |
| 162 | Magnetized electron emission from a small spherical dust grain in fusion related plasmas. Physics of Plasmas, 2017, 24, . | 1.9 | 8 |

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|-----|--|-----|-----------|
| 163 | Dynamics of formation of ordered structures in a thermal plasma with macroparticles. Journal of Experimental and Theoretical Physics, 1999, 88, 460-464. | 0.9 | 7 |
| 164 | Dynamics and structural properties of dusty plasma liquid in microgravity: experiments onboard the International Space Station. Plasma Physics and Controlled Fusion, 2004, 46, B359-B366. | 2.1 | 7 |
| 165 | Response to "Comment on "Ion collection by a sphere in a flowing collisional plasma" [Phys. Plasmas 14, 074701 (2007)]. Physics of Plasmas, 2007, 14, . | 1.9 | 7 |
| 166 | Effect of ionization/recombination processes on the electrical interactions between positively charged particles in highly collisional plasmas. Physics of Plasmas, 2010, 17, 034503. | 1.9 | 7 |
| 167 | Instantaneous shear modulus of Yukawa fluids across coupling regimes. Physics of Plasmas, 2020, 27, . | 1.9 | 7 |
| 168 | On the conductivity of moderately non-ideal completely ionized plasma. Results in Physics, 2020, 17, 103163. | 4.1 | 7 |
| 169 | Spatial distribution of dust density wave properties in fluid complex plasmas. Physical Review E, 2022, 105, 025202. | 2.1 | 7 |
| 170 | Ion Drag Force in Collisional Plasmas. IEEE Transactions on Plasma Science, 2009, 37, 487-493. | 1.3 | 6 |
| 171 | Floating potential of a small particle in a plasma: Difference between Maxwellian and Druyvesteyn electron velocity distributions. Physics of Plasmas, 2010, 17, 104502. | 1.9 | 6 |
| 172 | Freezing and melting equations for the $n=6$ Lennard-Jones systems. AIP Advances, 2016, 6, . | 1.3 | 6 |
| 173 | On the internal energy of the classical two-dimensional one-component-plasma. AIP Advances, 2015, 5, . | 1.3 | 5 |
| 174 | On the lower bound of the internal energy of the one-component-plasma. Physics of Plasmas, 2015, 22, 044504. | 1.9 | 5 |
| 175 | Ion drag in complex plasmas. AIP Conference Proceedings, 2002, , . | 0.4 | 4 |
| 176 | Grüneisen parameter for strongly coupled Yukawa systems. Physics of Plasmas, 2017, 24, . | 1.9 | 4 |
| 177 | Reduction of the Coulomb logarithm due to electron-neutral collisions. Physical Review E, 2020, 101, 061202. | 2.1 | 4 |
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