

John Elie Sader

List of Publications by Year in descending order

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174
papers

13,530
citations

44444

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25230

113
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180
all docs

180
docs citations

180
times ranked

12339
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Autonomous propulsion of nanorods trapped in an acoustic field – CORRIGENDUM. Journal of Fluid Mechanics, 2022, 935, . | 1.4 | 1 |
| 2 | A layer of yield-stress material on a flat plate that moves suddenly. Journal of Fluid Mechanics, 2022, 942, . | 1.4 | 2 |
| 3 | On the starting vortex generated by a translating and rotating flat plate. Journal of Fluid Mechanics, 2021, 906, . | 1.4 | 4 |
| 4 | Acoustic Vibrations and Energy Dissipation Mechanisms for Lithographically Fabricated Plasmonic Nanostructures Revealed by Single-Particle Transient Extinction Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 1621-1636. | 1.5 | 20 |
| 5 | The impulsive swirl of a gas. Journal of Fluid Mechanics, 2021, 912, . | 1.4 | 0 |
| 6 | Viscoelasticity Enhances Nanometer-Scale Slip in Gigahertz-Frequency Liquid Flows. Journal of Physical Chemistry Letters, 2021, 12, 3449-3455. | 2.1 | 10 |
| 7 | Highly Spherical Nanoparticles Probe Gigahertz Viscoelastic Flows of Simple Liquids Without the No-Slip Condition. Journal of Physical Chemistry Letters, 2021, 12, 4440-4446. | 2.1 | 9 |
| 8 | Measurement of Navier Slip on Individual Nanoparticles in Liquid. Nano Letters, 2021, 21, 4959-4965. | 4.5 | 11 |
| 9 | Squeeze-Film Effect on Atomically Thin Resonators in the High-Pressure Limit. Nano Letters, 2021, 21, 7617-7624. | 4.5 | 5 |
| 10 | Inertial and viscous flywheel sensing of nanoparticles. Nature Communications, 2021, 12, 5099. | 5.8 | 5 |
| 11 | Dynamics of an inverted cantilever plate at moderate angle of attack. Journal of Fluid Mechanics, 2021, 909, . | 1.4 | 7 |
| 12 | The automation of robust interatomic-force measurements. Review of Scientific Instruments, 2020, 91, 103702. | 0.6 | 4 |
| 13 | Acoustic Vibrations of Al Nanocrystals: Size, Shape, and Crystallinity Revealed by Single-Particle Transient Extinction Spectroscopy. Journal of Physical Chemistry A, 2020, 124, 3924-3934. | 1.1 | 21 |
| 14 | Acoustic flows in a slightly rarefied gas. Physical Review Fluids, 2020, 5, . | 1.0 | 2 |
| 15 | Effect of morphology on the large-amplitude flapping dynamics of an inverted flag in a uniform flow. Journal of Fluid Mechanics, 2019, 874, 526-547. | 1.4 | 9 |
| 16 | Mass measurement of graphene using quartz crystal microbalances. Applied Physics Letters, 2019, 115, . | 1.5 | 10 |
| 17 | What is the oscillation amplitude of a vibrating cantilever?. Review of Scientific Instruments, 2019, 90, 086103. | 0.6 | 1 |
| 18 | Large-scale parallelization of nanomechanical mass spectrometry with weakly-coupled resonators. Nature Communications, 2019, 10, 3647. | 5.8 | 24 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Shear-induced buckling of a thin elastic disk undergoing spin-up. <i>International Journal of Solids and Structures</i> , 2019, 166, 75-82. | 1.3 | 4 |
| 20 | Strong vibrational coupling in room temperature plasmonic resonators. <i>Nature Communications</i> , 2019, 10, 1527. | 5.8 | 35 |
| 21 | Large-Area Nanofabrication of Partially Embedded Nanostructures for Enhanced Plasmonic Hot-Carrier Extraction. <i>ACS Applied Nano Materials</i> , 2019, 2, 1164-1169. | 2.4 | 3 |
| 22 | Origin of spurious oscillations in lattice Boltzmann simulations of oscillatory noncontinuum gas flows. <i>Physical Review E</i> , 2019, 100, 053317. | 0.8 | 6 |
| 23 | Viscoelasticity of liquid water investigated using molecular dynamics simulations. <i>Physical Review Fluids</i> , 2019, 4, . | 1.0 | 13 |
| 24 | Wrinkling of transversely loaded spinning membranes. <i>International Journal of Solids and Structures</i> , 2018, 139-140, 163-173. | 1.3 | 14 |
| 25 | Mass Spectrometry Using Nanomechanical Systems: Beyond the Point-Mass Approximation. <i>Nano Letters</i> , 2018, 18, 1608-1614. | 4.5 | 43 |
| 26 | When Can the Elastic Properties of Simple Liquids Be Probed Using High-Frequency Nanoparticle Vibrations?. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13347-13353. | 1.5 | 18 |
| 27 | Polycrystallinity of Lithographically Fabricated Plasmonic Nanostructures Dominates Their Acoustic Vibrational Damping. <i>Nano Letters</i> , 2018, 18, 3494-3501. | 4.5 | 35 |
| 28 | Solvent-Engineered Stress in Nanoscale Materials. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 44183-44189. | 4.0 | 1 |
| 29 | Interatomic force laws that evade dynamic measurement. <i>Nature Nanotechnology</i> , 2018, 13, 1088-1091. | 15.6 | 33 |
| 30 | Global modes and nonlinear analysis of inverted-flag flapping. <i>Journal of Fluid Mechanics</i> , 2018, 857, 312-344. | 1.4 | 51 |
| 31 | On the measurement of relaxation times of acoustic vibrations in metal nanowires. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 17687-17693. | 1.3 | 23 |
| 32 | Variational method enabling simplified solutions to the linearized Boltzmann equation for oscillatory gas flows. <i>Physical Review Fluids</i> , 2018, 3, . | 1.0 | 3 |
| 33 | Modelling apical columnar epithelium mechanics from circumferential contractile fibres. <i>Biomechanics and Modeling in Mechanobiology</i> , 2017, 16, 1555-1568. | 1.4 | 0 |
| 34 | Optomechanics of Single Aluminum Nanodisks. <i>Nano Letters</i> , 2017, 17, 2575-2583. | 4.5 | 50 |
| 35 | Vibrational coupling in plasmonic molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 11621-11626. | 3.3 | 49 |
| 36 | Autonomous propulsion of nanorods trapped in an acoustic field. <i>Journal of Fluid Mechanics</i> , 2017, 825, 29-48. | 1.4 | 36 |

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|----|---|-----|-----------|
| 37 | Material characterisation of nanowires with intrinsic stress. <i>Nanotechnology</i> , 2017, 28, 355706. | 1.3 | 4 |
| 38 | Flow generated by oscillatory uniform heating of a rarefied gas in a channel. <i>Journal of Fluid Mechanics</i> , 2016, 800, 433-483. | 1.4 | 6 |
| 39 | Resonant frequencies of cantilevered sheets under various clamping configurations immersed in fluid. <i>Journal of Applied Physics</i> , 2016, 120, . | 1.1 | 11 |
| 40 | A virtual instrument to standardise the calibration of atomic force microscope cantilevers. <i>Review of Scientific Instruments</i> , 2016, 87, 093711. | 0.6 | 114 |
| 41 | Stability of slender inverted flags and rods in uniform steady flow. <i>Journal of Fluid Mechanics</i> , 2016, 809, 873-894. | 1.4 | 34 |
| 42 | Viscoelasticity of glycerol at ultra-high frequencies investigated via molecular dynamics simulations. <i>Journal of Chemical Physics</i> , 2016, 144, 054502. | 1.2 | 7 |
| 43 | Large-amplitude flapping of an inverted flag in a uniform steady flow â€“ a vortex-induced vibration. <i>Journal of Fluid Mechanics</i> , 2016, 793, 524-555. | 1.4 | 75 |
| 44 | Sphere oscillating in a rarefied gas. <i>Journal of Fluid Mechanics</i> , 2016, 794, 109-153. | 1.4 | 21 |
| 45 | Taming Self-Organization Dynamics to Dramatically Control Porous Architectures. <i>ACS Nano</i> , 2016, 10, 3087-3092. | 7.3 | 17 |
| 46 | Hollow Microtube Resonators via Silicon Self-Assembly toward Subattogram Mass Sensing Applications. <i>Nano Letters</i> , 2016, 16, 1537-1545. | 4.5 | 43 |
| 47 | Photoinduced Electron Transfer in the Strong Coupling Regime: Waveguideâ€™Plasmon Polaritons. <i>Nano Letters</i> , 2016, 16, 2651-2656. | 4.5 | 79 |
| 48 | Linearized lattice Boltzmann method for micro- and nanoscale flow and heat transfer. <i>Physical Review E</i> , 2015, 92, 013307. | 0.8 | 16 |
| 49 | Frequency-domain deviational Monte Carlo method for linear oscillatory gas flows. <i>Physics of Fluids</i> , 2015, 27, 102002. | 1.6 | 7 |
| 50 | Compressible Viscoelastic Liquid Effects Generated by the Breathing Modes of Isolated Metal Nanowires. <i>Nano Letters</i> , 2015, 15, 3964-3970. | 4.5 | 39 |
| 51 | Constitutive models for linear compressible viscoelastic flows of simple liquids at nanometer length scales. <i>Physics of Fluids</i> , 2015, 27, . | 1.6 | 46 |
| 52 | Frequency-domain Monte Carlo method for linear oscillatory gas flows. <i>Journal of Computational Physics</i> , 2015, 284, 351-366. | 1.9 | 10 |
| 53 | Note: Improved calibration of atomic force microscope cantilevers using multiple reference cantilevers. <i>Review of Scientific Instruments</i> , 2015, 86, 056106. | 0.6 | 6 |
| 54 | Tuning the acoustic frequency of a gold nanodisk through its adhesion layer. <i>Nature Communications</i> , 2015, 6, 7022. | 5.8 | 65 |

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|----|---|------|-----------|
| 55 | Inertial imaging with nanomechanical systems. <i>Nature Nanotechnology</i> , 2015, 10, 339-344. | 15.6 | 141 |
| 56 | Note: Calibration of atomic force microscope cantilevers using only their resonant frequency and quality factor. <i>Review of Scientific Instruments</i> , 2014, 85, 116101. | 0.6 | 20 |
| 57 | Effect of cantilever geometry on the optical lever sensitivities and thermal noise method of the atomic force microscope. <i>Review of Scientific Instruments</i> , 2014, 85, 113702. | 0.6 | 36 |
| 58 | Fluid-structure interactions of mechanical sensors at nanometer scales. , 2014, , . | | 0 |
| 59 | Lattice Boltzmann method for linear oscillatory noncontinuum flows. <i>Physical Review E</i> , 2014, 89, 033305. | 0.8 | 12 |
| 60 | Publisher's Note: Lattice Boltzmann method for linear oscillatory noncontinuum flows [Phys. Rev. E89, 033305 (2014)]. <i>Physical Review E</i> , 2014, 90, . | 0.8 | 0 |
| 61 | Dynamic Similarity of Oscillatory Flows Induced by Nanomechanical Resonators. <i>Physical Review Letters</i> , 2014, 112, 015501. | 2.9 | 14 |
| 62 | Poisson's ratio of individual metal nanowires. <i>Nature Communications</i> , 2014, 5, 4336. | 5.8 | 28 |
| 63 | Probing Silver Deposition on Single Gold Nanorods by Their Acoustic Vibrations. <i>Nano Letters</i> , 2014, 14, 915-922. | 4.5 | 43 |
| 64 | Uncertainty in least-squares fits to the thermal noise spectra of nanomechanical resonators with applications to the atomic force microscope. <i>Review of Scientific Instruments</i> , 2014, 85, 025104. | 0.6 | 18 |
| 65 | The Effect of Aspect Ratio and Angle of Attack on the Transition Regions of the Inverted Flag Instability. , 2014, , . | | 6 |
| 66 | Damping of Acoustic Vibrations of Immobilized Single Gold Nanorods in Different Environments. <i>Nano Letters</i> , 2013, 13, 2710-2716. | 4.5 | 92 |
| 67 | Buckling of a cantilever plate uniformly loaded in its plane with applications to surface stress and thermal loads. <i>Journal of Applied Physics</i> , 2013, 113, 024501. | 1.1 | 12 |
| 68 | High frequency oscillatory flows in a slightly rarefied gas according to the Boltzmann-BGK equation. <i>Journal of Fluid Mechanics</i> , 2013, 729, 1-46. | 1.4 | 18 |
| 69 | Viscoelastic Flows in Simple Liquids Generated by Vibrating Nanostructures. <i>Physical Review Letters</i> , 2013, 111, 244502. | 2.9 | 88 |
| 70 | The dominant role of the solvent-water interface in water droplet templating of polymers. <i>Soft Matter</i> , 2013, 9, 7960. | 1.2 | 23 |
| 71 | Nonlinear Mode-Coupling in Nanomechanical Systems. <i>Nano Letters</i> , 2013, 13, 1622-1626. | 4.5 | 110 |
| 72 | Vibration of Nanoparticles in Viscous Fluids. <i>Journal of Physical Chemistry C</i> , 2013, 117, 8536-8544. | 1.5 | 36 |

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|----|--|-----|-----------|
| 73 | Self-Assembled Nanoparticle Drumhead Resonators. Nano Letters, 2013, 13, 2158-2162. | 4.5 | 39 |
| 74 | Nanomechanical Torsional Resonators for Frequency-Shift Infrared Thermal Sensing. Nano Letters, 2013, 13, 1528-1534. | 4.5 | 130 |
| 75 | Asymptotic analysis of the Boltzmann-BGK equation for oscillatory flows. Journal of Fluid Mechanics, 2012, 708, 197-249. | 1.4 | 13 |
| 76 | High accuracy numerical solutions of the Boltzmann Bhatnagar-Gross-Krook equation for steady and oscillatory Couette flows. Physics of Fluids, 2012, 24, 032004. | 1.6 | 29 |
| 77 | Induced flow due to blowing and suction flow control: an analysis of transpiration. Journal of Fluid Mechanics, 2012, 690, 366-398. | 1.4 | 11 |
| 78 | Existence of Micrometer-Scale Water Droplets at Solvent/Air Interfaces. Langmuir, 2012, 28, 13218-13223. | 1.6 | 8 |
| 79 | Effect of multiplicative noise on least-squares parameter estimation with applications to the atomic force microscope. Review of Scientific Instruments, 2012, 83, 055106. | 0.6 | 16 |
| 80 | Effect of surface stress on the stiffness of thin elastic plates and beams. Physical Review B, 2012, 85, . | 1.1 | 37 |
| 81 | Stress-Induced Variations in the Stiffness of Micro- and Nanocantilever Beams. Physical Review Letters, 2012, 108, 236101. | 2.9 | 89 |
| 82 | Spring constant calibration of atomic force microscope cantilevers of arbitrary shape. Review of Scientific Instruments, 2012, 83, 103705. | 0.6 | 228 |
| 83 | Mechanical Damping of Longitudinal Acoustic Oscillations of Metal Nanoparticles in Solution. Journal of Physical Chemistry C, 2011, 115, 23732-23740. | 1.5 | 41 |
| 84 | Accuracy of the lattice Boltzmann method for low-speed noncontinuum flows. Physical Review E, 2011, 83, 045701. | 0.8 | 30 |
| 85 | Energy dissipation in microfluidic beam resonators: Effect of Poisson's ratio. Physical Review E, 2011, 84, 026304. | 0.8 | 12 |
| 86 | Distortion in the thermal noise spectrum and quality factor of nanomechanical devices due to finite frequency resolution with applications to the atomic force microscope. Review of Scientific Instruments, 2011, 82, 095104. | 0.6 | 11 |
| 87 | Water bells formed on the underside of a horizontal plate. Part 1. Experimental investigation. Journal of Fluid Mechanics, 2010, 649, 19-43. | 1.4 | 14 |
| 88 | Water bells formed on the underside of a horizontal plate. Part 2. Theory. Journal of Fluid Mechanics, 2010, 649, 45-68. | 1.4 | 13 |
| 89 | Energy dissipation in microfluidic beam resonators. Journal of Fluid Mechanics, 2010, 650, 215-250. | 1.4 | 42 |
| 90 | Accurate formula for conversion of tunneling current in dynamic atomic force spectroscopy. Applied Physics Letters, 2010, 97, . | 1.5 | 20 |

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| 91 | Oscillation of cylinders of rectangular cross section immersed in fluid. <i>Physics of Fluids</i> , 2010, 22, . | 1.6 | 55 |
| 92 | Energy dissipation in microfluidic beam resonators: Dependence on mode number. <i>Journal of Applied Physics</i> , 2010, 108, 114507. | 1.1 | 21 |
| 93 | Lubrication forces in air and accommodation coefficient measured by a thermal damping method using an atomic force microscope. <i>Physical Review E</i> , 2010, 81, 056305. | 0.8 | 22 |
| 94 | On the maximum drag reduction due to added polymers in Poiseuille flow. <i>Journal of Fluid Mechanics</i> , 2010, 659, 473-483. | 1.4 | 3 |
| 95 | Lattice Boltzmann method for oscillatory Stokes flow with applications to micro- and nanodevices. <i>Physical Review E</i> , 2010, 81, 036706. | 0.8 | 21 |
| 96 | Spectral properties of microcantilevers in viscous fluid. <i>Physical Review E</i> , 2010, 81, 046306. | 0.8 | 25 |
| 97 | Electrodynamic ratchet motor. <i>Physical Review E</i> , 2009, 79, 030105. | 0.8 | 1 |
| 98 | Effect of surface stress on the stiffness of cantilever plates: Influence of cantilever geometry. <i>Applied Physics Letters</i> , 2009, 95, . | 1.5 | 22 |
| 99 | Frequency response of cantilever beams immersed in compressible fluids with applications to the atomic force microscope. <i>Journal of Applied Physics</i> , 2009, 106, . | 1.1 | 49 |
| 100 | Nonmonotonic Energy Dissipation in Microfluidic Resonators. <i>Physical Review Letters</i> , 2009, 102, 228103. | 2.9 | 46 |
| 101 | Blunted-Cone Heat Shields of Atmospheric Entry Vehicles. <i>AIAA Journal</i> , 2009, 47, 1784-1787. | 1.5 | 1 |
| 102 | Compressible viscous flows generated by oscillating flexible cylinders. <i>Physics of Fluids</i> , 2009, 21, . | 1.6 | 15 |
| 103 | Photoacoustic detection of gases using microcantilevers. <i>Journal of Applied Physics</i> , 2009, 106, . | 1.1 | 21 |
| 104 | Damping of acoustic vibrations in gold nanoparticles. <i>Nature Nanotechnology</i> , 2009, 4, 492-495. | 15.6 | 191 |
| 105 | Mechanical properties of individual electrospun polymer-nanotube composite nanofibers. <i>Carbon</i> , 2009, 47, 2253-2258. | 5.4 | 49 |
| 106 | Evolution of Colloidal Nanocrystals: Theory and Modeling of their Nucleation and Growth. <i>Journal of Physical Chemistry C</i> , 2009, 113, 16342-16355. | 1.5 | 92 |
| 107 | Influence of atomic force microscope cantilever tilt and induced torque on force measurements. <i>Journal of Applied Physics</i> , 2008, 103, . | 1.1 | 47 |
| 108 | Mechanical Properties of ZnO Nanowires. <i>Physical Review Letters</i> , 2008, 101, 175502. | 2.9 | 226 |

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| 109 | Measurement of the Optical Properties and Shape of Nanoparticles in Solution Using Couette Flow. ACS Nano, 2008, 2, 334-340. | 7.3 | 7 |
| 110 | Flexural Resonant Frequencies of Thin Rectangular Cantilever Plates. Journal of Applied Mechanics, Transactions ASME, 2008, 75, . | 1.1 | 18 |
| 111 | Velocity profile in the Knudsen layer according to the Boltzmann equation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 2015-2035. | 1.0 | 54 |
| 112 | Frequency Modulation Atomic Force Microscopy in Liquids. , 2008, , 315-350. | | 4 |
| 113 | Time-resolved spectroscopy of silver nanocubes: Observation and assignment of coherently excited vibrational modes. Journal of Chemical Physics, 2007, 126, 094709. | 1.2 | 72 |
| 114 | Effect of Surface Stress on the Stiffness of Cantilever Plates. Physical Review Letters, 2007, 99, 206102. | 2.9 | 156 |
| 115 | Vibrational Response of Au~Ag Nanoboxes and Nanocages to Ultrafast Laser-Induced Heating. Nano Letters, 2007, 7, 1059-1063. | 4.5 | 50 |
| 116 | Frequency response of cantilever beams immersed in viscous fluids with applications to the atomic force microscope: Arbitrary mode order. Journal of Applied Physics, 2007, 101, 044908. | 1.1 | 194 |
| 117 | Velocity gradient singularity and structure of the velocity profile in the Knudsen layer according to the Boltzmann equation. Physical Review E, 2007, 76, 026315. | 0.8 | 38 |
| 118 | Small amplitude oscillations of a flexible thin blade in a viscous fluid: Exact analytical solution. Physics of Fluids, 2006, 18, 123102. | 1.6 | 47 |
| 119 | Frequency Modulation Atomic Force Microscopy Reveals Individual Intermediates Associated with each Unfolded I27 Titin Domain. Biophysical Journal, 2006, 90, 640-647. | 0.2 | 38 |
| 120 | Structured Water Layers Adjacent to Biological Membranes. Biophysical Journal, 2006, 91, 2532-2542. | 0.2 | 145 |
| 121 | Microstructure-Hardened Silver Nanowires. Nano Letters, 2006, 6, 468-472. | 4.5 | 268 |
| 122 | Ultimate-Strength Germanium Nanowires. Nano Letters, 2006, 6, 2964-2968. | 4.5 | 135 |
| 123 | Resonant frequencies of a rectangular cantilever beam immersed in a fluid. Journal of Applied Physics, 2006, 100, 114916. | 1.1 | 117 |
| 124 | Vibrational spectroscopy and energy relaxation of nanocubes, nanoboxes, and nanocages. , 2006, , . | | 0 |
| 125 | A Generalized Description of the Elastic Properties of Nanowires. Nano Letters, 2006, 6, 1101-1106. | 4.5 | 193 |
| 126 | Coupling of conservative and dissipative forces in frequency-modulation atomic force microscopy. Physical Review B, 2006, 74, . | 1.1 | 29 |

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| 127 | Dissipation Imaging with Low Amplitude off-Resonance Atomic Force Microscopy. Japanese Journal of Applied Physics, 2005, 44, 5325-5327. | 0.8 | 7 |
| 128 | Quantitative force measurements using frequency modulation atomic force microscopy?theoretical foundations. Nanotechnology, 2005, 16, S94-S101. | 1.3 | 137 |
| 129 | Frequency modulation atomic force microscopy: a dynamic measurement technique for biological systems. Nanotechnology, 2005, 16, S85-S89. | 1.3 | 38 |
| 130 | General scaling law for stiffness measurement of small bodies with applications to the atomic force microscope. Journal of Applied Physics, 2005, 97, 124903. | 1.1 | 68 |
| 131 | Scaling behavior for gravity induced flow of a yield stress material. Journal of Rheology, 2005, 49, 105-112. | 1.3 | 4 |
| 132 | Small amplitude oscillations of a thin beam immersed in a viscous fluid near a solid surface. Physics of Fluids, 2005, 17, 073102. | 1.6 | 90 |
| 133 | Frequency response of cantilever beams immersed in viscous fluids near a solid surface with applications to the atomic force microscope. Journal of Applied Physics, 2005, 98, 114913. | 1.1 | 126 |
| 134 | Quantitative measurement of solvation shells using frequency modulated atomic force microscopy. Nanotechnology, 2005, 16, S49-S53. | 1.3 | 64 |
| 135 | Accurate formulas for interaction force and energy in frequency modulation force spectroscopy. Applied Physics Letters, 2004, 84, 1801-1803. | 1.5 | 651 |
| 136 | Interpretation of frequency modulation atomic force microscopy in terms of fractional calculus. Physical Review B, 2004, 70, . | 1.1 | 30 |
| 137 | In-plane deformation of cantilever plates with applications to lateral force microscopy. Review of Scientific Instruments, 2004, 75, 878-883. | 0.6 | 57 |
| 138 | Quantitative force measurements in liquid using frequency modulation atomic force microscopy. Applied Physics Letters, 2004, 85, 3575-3577. | 1.5 | 44 |
| 139 | Normal and torsional spring constants of atomic force microscope cantilevers. Review of Scientific Instruments, 2004, 75, 1988-1996. | 0.6 | 455 |
| 140 | PROBING THE SURFACE OF LIVING DIATOMS WITH ATOMIC FORCE MICROSCOPY: THE NANOSTRUCTURE AND NANOMECHANICAL PROPERTIES OF THE MUCILAGE LAYER1. Journal of Phycology, 2003, 39, 722-734. | 1.0 | 81 |
| 141 | Vibrational Response of Nanorods to Ultrafast Laser Induced Heating:Â Theoretical and Experimental Analysis. Journal of the American Chemical Society, 2003, 125, 14925-14933. | 6.6 | 238 |
| 142 | Softening of the Symmetric Breathing Mode in Gold Particles by Laser-Induced Heatingâ€. Journal of Physical Chemistry B, 2003, 107, 7472-7478. | 1.2 | 81 |
| 143 | Susceptibility of atomic force microscope cantilevers to lateral forces. Review of Scientific Instruments, 2003, 74, 2438-2443. | 0.6 | 70 |
| 144 | Susceptibility of atomic force microscope cantilevers to lateral forces: Experimental verification. Applied Physics Letters, 2003, 83, 3195-3197. | 1.5 | 29 |

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| 145 | <title>Coherent excitation of vibrational modes in nanoparticles and nanorods: what do we really measure?</title>. , 2003, , . | | 0 |
| 146 | Surface stress induced deflections of cantilever plates with applications to the atomic force microscope: V-shaped plates. Journal of Applied Physics, 2002, 91, 9354-9361. | 1.1 | 33 |
| 147 | Theory of Acoustic Breathing Modes of Core-Shell Nanoparticles. Journal of Physical Chemistry B, 2002, 106, 1399-1402. | 1.2 | 41 |
| 148 | Torsional frequency response of cantilever beams immersed in viscous fluids with applications to the atomic force microscope. Journal of Applied Physics, 2002, 92, 6262-6274. | 1.1 | 140 |
| 149 | Coherent Excitation of Vibrational Modes in Gold Nanorods. Journal of Physical Chemistry B, 2002, 106, 743-747. | 1.2 | 69 |
| 150 | Incipient failure of a circular cylinder under gravity. International Journal of Mechanical Sciences, 2002, 44, 1779-1800. | 3.6 | 7 |
| 151 | Incipient plane-strain failure of a rectangular block under gravity. International Journal of Mechanical Sciences, 2001, 43, 793-815. | 3.6 | 11 |
| 152 | Surface stress induced deflections of cantilever plates with applications to the atomic force microscope: Rectangular plates. Journal of Applied Physics, 2001, 89, 2911-2921. | 1.1 | 148 |
| 153 | Experimental validation of theoretical models for the frequency response of atomic force microscope cantilever beams immersed in fluids. Journal of Applied Physics, 2000, 87, 3978-3988. | 1.1 | 302 |
| 154 | Long-Range Electrostatic Attractions between Identically Charged Particles in Confined Geometries and the Poisson-Boltzmann Theory. Langmuir, 2000, 16, 324-331. | 1.6 | 82 |
| 155 | Calibration of rectangular atomic force microscope cantilevers. Review of Scientific Instruments, 1999, 70, 3967-3969. | 0.6 | 1,833 |
| 156 | Long-Range Electrostatic Attractions between Identically Charged Particles in Confined Geometries: An Unresolved Problem. Journal of Colloid and Interface Science, 1999, 213, 268-269. | 5.0 | 109 |
| 157 | Electrical Double-Layer Interaction between Charged Particles near Surfaces and in Confined Geometries. Journal of Colloid and Interface Science, 1999, 218, 423-432. | 5.0 | 25 |
| 158 | Electrical Double-Layer Interaction between Heterogeneously Charged Colloidal Particles: A Superposition Formulation. Journal of Colloid and Interface Science, 1998, 201, 233-243. | 5.0 | 26 |
| 159 | Electrostatic Contribution to the Energy and Entropy of Protein Adsorption. Journal of Colloid and Interface Science, 1998, 203, 218-221. | 5.0 | 44 |
| 160 | Frequency response of cantilever beams immersed in viscous fluids with applications to the atomic force microscope. Journal of Applied Physics, 1998, 84, 64-76. | 1.1 | 1,212 |
| 161 | Accurate Analytic Formulae for the Far Field Effective Potential and Surface Charge Density of a Uniformly Charged Sphere. Journal of Colloid and Interface Science, 1997, 188, 508-510. | 5.0 | 57 |
| 162 | Dependence of the Far Field Effective Potential on Surface Inhomogeneities. Journal of Colloid and Interface Science, 1996, 182, 516-525. | 5.0 | 5 |

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| 163 | Accurate Analytic Formulas for the Double-Layer Interaction between Spheres. Journal of Colloid and Interface Science, 1995, 171, 46-54. | 5.0 | 138 |
| 164 | Parallel beam approximation for V-shaped atomic force microscope cantilevers. Review of Scientific Instruments, 1995, 66, 4583-4587. | 0.6 | 242 |
| 165 | Method for the calibration of atomic force microscope cantilevers. Review of Scientific Instruments, 1995, 66, 3789-3798. | 0.6 | 879 |
| 166 | Non-Newtonian effects on immiscible viscous fingering in a radial Hele-Shaw cell. Physical Review E, 1994, 49, 420-432. | 0.8 | 48 |
| 167 | Theoretical analysis of the static deflection of plates for atomic force microscope applications. Journal of Applied Physics, 1993, 74, 1-9. | 1.1 | 641 |
| 168 | First order correction for arbitrary anisotropic profiles by implementation of integral equation analysis. IEEE Journal of Quantum Electronics, 1992, 28, 194-204. | 1.0 | 2 |
| 169 | Theoretical study of the minor field component power in birefringent and nonbirefringent fibers. IEEE Journal of Quantum Electronics, 1992, 28, 1533-1538. | 1.0 | 4 |
| 170 | Integral equation analysis for first order vector correction of arbitrary profiles. IEEE Journal of Quantum Electronics, 1991, 27, 2159-2169. | 1.0 | 4 |
| 171 | Integral equation analysis for higher order modes and cutoff frequencies of arbitrary profiles. IEEE Journal of Quantum Electronics, 1991, 27, 976-984. | 1.0 | 4 |
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