# William D Ristenpart

List of Publications by Year
in descending order



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|---|---|---|---|
| 64 papers | 4,250 citations | 218677 26 h-index | 144013 57 g-index |
| 66 all docs | 66 docs citations | 66 times ranked | 5939 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Aerosol emission and superemission during human speech increase with voice loudness. Scientific Reports, 2019, 9, 2348. | 3.3 | 709 |
| 2 | The coronavirus pandemic and aerosols: Does COVID-19 transmit via expiratory particles?. Aerosol Science and Technology, 2020, 54, 635-638. | 3.1 | 522 |
| 3 | Direct in Situ Determination of the Mechanisms Controlling Nanoparticle Nucleation and Growth. ACS Nano, 2012, 6, 8599-8610. | 14.6 | 378 |
| 4 | Efficacy of masks and face coverings in controlling outward aerosol particle emission from expiratory activities. Scientific Reports, 2020, 10, 15665. | 3.3 | 284 |
| 5 | Dynamics of shear-induced ATP release from red blood cells. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 16432-16437. | 7.1 | 235 |
| 6 | Non-coalescence of oppositely charged drops. Nature, 2009, 461, 377-380. | 27.8 | 235 |
| 7 | Experimental procedures to mitigate electron beam induced artifacts during in situ fluid imaging of nanomaterials. Ultramicroscopy, 2013, 127, 53-63. | 1.9 | 176 |
| 8 | Direct Observation of Aggregative Nanoparticle Growth: Kinetic Modeling of the Size Distribution and Growth Rate. Nano Letters, 2014, 14, 373-378. | 9.1 | 172 |
| 9 | The dynamic behavior of chemically â€œstiffenedâ€•red blood cells in microchannel flows. Microvascular Research, 2010, 80, 37-43. | 2.5 | 143 |
| 10 | Effect of voicing and articulation manner on aerosol particle emission during human speech. PLoS ONE, 2020, 15, e0227699. | 2.5 | 138 |
| 11 | Critical Angle for Electrically Driven Coalescence of Two Conical Droplets. Physical Review Letters, 2009, 103, 164502. | 7.8 | 118 |
| 12 | Direct in Situ Observation of Nanoparticle Synthesis in a Liquid Crystal Surfactant Template. ACS Nano, 2012, 6, 3589-3596. | 14.6 | 93 |
| 13 | Influenza A virus is transmissible via aerosolized fomites. Nature Communications, 2020, 11, 4062. | 12.8 | 83 |
| 14 | Critical Electric Field Strengths of Onion Tissues Treated by Pulsed Electric Fields. Journal of Food Science, 2010, 75, E433-43. | 3.1 | 73 |
| 15 | Enzymatic Reactions in Microfluidic Devices:â€‰Michaelisâ€“Menten Kinetics. Analytical Chemistry, 2008, 80, 3270-3276. | 6.5 | 65 |
| 16 | Permeabilization of Plant Tissues by Monopolar Pulsed Electric Fields: Effect of Frequency. Journal of Food Science, 2011, 76, E98-111. | 3.1 | 65 |
| 17 | Expiratory aerosol particle escape from surgical masks due to imperfect sealing. Scientific Reports, 2021, 11, 12110. | 3.3 | 47 |
| 18 | A Comprehensive Breath Plume Model for Disease Transmission via Expiratory Aerosols. PLoS ONE, 2012, 7, e37088. | 2.5 | 43 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Magnetically Induced Decrease in Droplet Contact Angle on Nanostructured Surfaces. Langmuir, 2011, 27, 11747-11751. | 3.5 | 41 |
| 20 | Oscillating Electric Fields in Liquids Create a Long-Range Steady Field. Physical Review Letters, 2018, 121, 185504. | 7.8 | 40 |
| 21 | Electrolyte-Dependent Aggregation of Colloidal Particles near Electrodes in Oscillatory Electric Fields. Langmuir, 2014, 30, 4887-4894. | 3.5 | 34 |
| 22 | Hexatic-to-Disorder Transition in Colloidal Crystals Near Electrodes: Rapid Annealing of Polycrystalline Domains. Physical Review Letters, 2013, 111, 128302. | 7.8 | 32 |
| 23 | Effects of brew strength, brew yield, and roast on the sensory quality of drip brewed coffee. Journal of Food Science, 2020, 85, 2530-2543. | 3.1 | 31 |
| 24 | Acids in coffee: A review of sensory measurements and meta-analysis of chemical composition. Critical Reviews in Food Science and Nutrition, 2023, 63, 1010-1036. | 10.3 | 31 |
| 25 | Red Blood Cells from Individuals with Abdominal Obesity or Metabolic Abnormalities Exhibit Less Deformability upon Entering a Constriction. PLoS ONE, 2016, 11, e0156070. | 2.5 | 30 |
| 26 | Transient reduction of the drag coefficient of charged droplets via the convective reversal of stagnant caps. Physics of Fluids, 2012, 24, 012101. | 4.0 | 27 |
| 27 | Low-Voltage Electrical Demulsification of Oily Wastewater. Industrial & Engineering Chemistry Research, 2018, 57, 8341-8347. | 3.7 | 26 |
| 28 | Effect of Basket Geometry on the Sensory Quality and Consumer Acceptance of Drip Brewed Coffee. Journal of Food Science, 2019, 84, 2297-2312. | 3.1 | 24 |
| 29 | Mechanical response of red blood cells entering a constriction. Biomicrofluidics, 2014, 8, 064123. | 2.4 | 23 |
| 30 | Sensory and monosaccharide analysis of drip brew coffee fractions versus brewing time. Journal of the Science of Food and Agriculture, 2020, 100, 2953-2962. | 3.5 | 20 |
| 31 | Asymmetric rectified electric fields generate flows that can dominate induced-charge electrokinetics. Physical Review Fluids, 2020, 5, . | 2.5 | 20 |
| 32 | Simultaneous Aggregation and Height Bifurcation of Colloidal Particles near Electrodes in Oscillatory Electric Fields. Langmuir, 2015, 31, 9742-9747. | 3.5 | 19 |
| 33 | Consumer preferences for black coffee are spread over a wide range of brew strengths and extraction yields. Journal of Food Science, 2021, 86, 194-205. | 3.1 | 19 |
| 34 | Quantitative bloodstain analysis: Differentiation of contact transfer patterns versus spatter patterns on fabric via microscopic inspection. Forensic Science International, 2015, 249, 233-240. | 2.2 | 18 |
| 35 | Brew temperature, at fixed brew strength and extraction, has little impact on the sensory profile of drip brew coffee. Scientific Reports, 2020, 10, 16450. | 3.3 | 18 |
| 36 | Influence of Electrolyte Concentration on the Aggregation of Colloidal Particles near Electrodes in Oscillatory Fields. Langmuir, 2016, 32, 4210-4216. | 3.5 | 17 |

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| 37 | Extreme Levitation of Colloidal Particles in Response to Oscillatory Electric Fields. Langmuir, 2019, 35, 6971-6980. | 3.5 | 17 |
| 38 | Enhanced electroporation in plant tissues via low frequency pulsed electric fields: Influence of cytoplasmic streaming. Biotechnology Progress, 2012, 28, 445-453. | 2.6 | 16 |
| 39 | A perturbation solution to the full Poissonâ€“Nernstâ€“Planck equations yields an asymmetric rectified electric field. Soft Matter, 2020, 16, 7052-7062. | 2.7 | 15 |
| 40 | Bubble formation via multidrop impacts. Physics of Fluids, 2010, 22, . | 4.0 | 13 |
| 41 | Quantitative Differentiation of Bloodstain Patterns Resulting from Gunshot and Blunt Force Impacts. Journal of Forensic Sciences, 2017, 62, 1166-1179. | 1.6 | 13 |
| 42 | Asymmetric rectified electric fields between parallel electrodes: Numerical and scaling analyses. Physical Review E, 2019, 99, 062603. | 2.1 | 12 |
| 43 | Roast level and brew temperature significantly affect the color of brewed coffee. Journal of Food Science, 2022, 87, 1837-1850. | 3.1 | 12 |
| 44 | Centrifugation-induced release of ATP from red blood cells. PLoS ONE, 2018, 13, e0203270. | 2.5 | 11 |
| 45 | Titratable Acidity, Perceived Sourness, and Liking of Acidity in Drip Brewed Coffee. ACS Food Science & Technology, 2021, 1, 559-569. | 2.7 | 11 |
| 46 | A comprehensive analysis of operations and mass flows in postharvest processing of washed coffee. Resources, Conservation and Recycling, 2021, 170, 105554. | 10.8 | 11 |
| 47 | Measurement of Charge Transfer to Aqueous Droplets in High Voltage Electric Fields. Langmuir, 2017, 33, 13945-13954. | 3.5 | 10 |
| 48 | A highly efficient cloth facemask design. Aerosol Science and Technology, 2022, 56, 12-28. | 3.1 | 9 |
| 49 | Statistical Analysis of Droplet Charge Acquired during Contact with Electrodes in Strong Electric Fields. Langmuir, 2019, 35, 3937-3948. | 3.5 | 8 |
| 50 | An equilibrium desorption model for the strength and extraction yield of full immersion brewed coffee. Scientific Reports, 2021, 11, 6904. | 3.3 | 7 |
| 51 | Non-respiratory particles emitted by guinea pigs in airborne disease transmission experiments. Scientific Reports, 2021, 11, 17490. | 3.3 | 7 |
| 52 | Dynamic Angular Segregation of Vesicles in Electrohydrodynamic Flows. Langmuir, 2010, 26, 9429-9436. | 3.5 | 6 |
| 53 | Correlating dynamic microstructure to observed color in electrophoretic displays via in situ small-angle x-ray scattering. Physical Review Materials, 2020, 4, . | 2.4 | 6 |
| 54 | Turbulent dispersion via fan-generated flows. Physics of Fluids, 2014, 26, 055114. | 4.0 | 4 |

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|---|---|---|---|
| 55 | A spike in mechanotransductive adenosine triphosphate release from red blood cells in microfluidic constrictions only occurs with rare donors. Microcirculation, 2018, 25, e12439. | 1.8 | 4 |
| 56 | Droplet Conductivity Strongly Influences Bump and Crater Formation on Electrodes during Charge Transfer. Langmuir, 2018, 34, 7284-7293. | 3.5 | 4 |
| 57 | Net motion induced by nonantiperiodic vibratory or electrophoretic excitations with zero time average. Physical Review E, 2022, 105, . | 2.1 | 4 |
| 58 | 10.1063/1.3397851.1. , 2010, , . | | 1 |
| 59 | Direct Observation of Aggregative Nanoparticle Growth: Kinetic Modeling of the Size Distribution and Growth Rate. Microscopy and Microanalysis, 2014, 20, 1612-1613. | 0.4 | 0 |
| 60 | Splashing during impact on heated granular beds. Physical Review Fluids, 2020, 5, . | 2.5 | 0 |
| 61 | Effect of voicing and articulation manner on aerosol particle emission during human speech. , 2020, 15, e0227699. | | 0 |
| 62 | Effect of voicing and articulation manner on aerosol particle emission during human speech. , 2020, 15, e0227699. | | 0 |
| 63 | Effect of voicing and articulation manner on aerosol particle emission during human speech. , 2020, 15, e0227699. | | 0 |
| 64 | Effect of voicing and articulation manner on aerosol particle emission during human speech. , 2020, 15, e0227699. | | 0 |