

Sudip Sengupta

List of Publications by Year in descending order

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47
papers

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times ranked

164
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Deficit irrigation and organic amendments can reduce dietary arsenic risk from rice: Introducing machine learning-based prediction models from field data. <i>Agriculture, Ecosystems and Environment</i> , 2021, 319, 107516. | 5.3 | 42 |
| 2 | Phase mixing of relativistically intense waves in a cold homogeneous plasma. <i>Physical Review E</i> , 2009, 79, 026404. | 2.1 | 34 |
| 3 | Breaking of Longitudinal Akhiezer-Polovin Waves. <i>Physical Review Letters</i> , 2012, 108, 125005. | 7.8 | 33 |
| 4 | Breaking of upper hybrid oscillations in the presence of an inhomogeneous magnetic field. <i>Physical Review E</i> , 2012, 86, 016408. | 2.1 | 26 |
| 5 | Phase mixing/wave breaking studies of large amplitude oscillations in a cold homogeneous unmagnetized plasma. <i>Plasma Physics and Controlled Fusion</i> , 2011, 53, 074014. | 2.1 | 21 |
| 6 | Particle-in-cell simulation of large amplitude ion-acoustic solitons. <i>Physics of Plasmas</i> , 2015, 22, . | 1.9 | 20 |
| 7 | Electron bounce-cyclotron resonance in capacitive discharges at low magnetic fields. <i>Physical Review Research</i> , 2022, 4, . | 3.6 | 20 |
| 8 | Characterization and risk assessment of arsenic contamination in soil-plant (vegetable) system and its mitigation through water harvesting and organic amendment. <i>Environmental Geochemistry and Health</i> , 2021, 43, 2819-2834. | 3.4 | 19 |
| 9 | Propagation dynamics of laterally colliding plasma plumes in laser-blow-off of thin film. <i>Physics of Plasmas</i> , 2014, 21, . | 1.9 | 16 |
| 10 | Nonlinear evolution of an arbitrary density perturbation in a cold homogeneous unmagnetized plasma. <i>Physics of Plasmas</i> , 2011, 18, 012301. | 1.9 | 14 |
| 11 | Investigation of shock-shock interaction and Mach reflection in laterally colliding laser-blow-off plasmas. <i>Physics of Plasmas</i> , 2015, 22, . | 1.9 | 14 |
| 12 | Investigation of arsenic-resistant, arsenite-oxidizing bacteria for plant growth promoting traits isolated from arsenic contaminated soils. <i>Archives of Microbiology</i> , 2021, 203, 4677-4692. | 2.2 | 14 |
| 13 | Investigating the effects of electron bounce-cyclotron resonance on plasma dynamics in capacitive discharges operated in the presence of a weak transverse magnetic field. <i>Physics of Plasmas</i> , 2022, 29, . | 1.9 | 14 |
| 14 | Relativistic electron beam driven longitudinal wake-wave breaking in a cold plasma. <i>Physics of Plasmas</i> , 2016, 23, 083113. | 1.9 | 12 |
| 15 | Phase-mixing of large amplitude electron oscillations in a cold inhomogeneous plasma. <i>Physics of Plasmas</i> , 2018, 25, . | 1.9 | 12 |
| 16 | Fluid simulation of relativistic electron beam driven wakefield in a cold plasma. <i>Physics of Plasmas</i> , 2015, 22, . | 1.9 | 11 |
| 17 | Relativistic effects on nonlinear lower hybrid oscillations in cold plasma. <i>Journal of Mathematical Physics</i> , 2011, 52, . | 1.1 | 10 |
| 18 | Wave breaking phenomenon of lower-hybrid oscillations induced by a background inhomogeneous magnetic field. <i>Physics of Plasmas</i> , 2012, 19, . | 1.9 | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Residual Bernstein-Greene-Kruskal-like waves after one-dimensional electron wave breaking in a cold plasma. <i>Physical Review E</i> , 2012, 86, 016410. | 2.1 | 9 |
| 20 | Relativistic wave-breaking limit of electrostatic waves in cold electron-positron-ion plasmas. <i>European Physical Journal D</i> , 2016, 70, 1. | 1.3 | 9 |
| 21 | Bernstein-Greene-Kruskal waves in relativistic cold plasma. <i>Physics of Plasmas</i> , 2012, 19, . | 1.9 | 8 |
| 22 | Particle-in-cell simulation of Buneman instability beyond quasilinear saturation. <i>Physics of Plasmas</i> , 2017, 24, . | 1.9 | 8 |
| 23 | Analytical estimate of phase mixing time of longitudinal Akhiezer-Polovin waves. <i>Physics of Plasmas</i> , 2014, 21, 112104. | 1.9 | 7 |
| 24 | Investigation of diocotron modes in toroidally trapped electron plasmas using non-destructive method. <i>Physics of Plasmas</i> , 2017, 24, 102132. | 1.9 | 7 |
| 25 | Assessing Methods for Estimating Potentially Mineralisable Nitrogen Under Organic Production System in New Alluvial Soils of Lower Gangetic Plain. <i>Journal of Soil Science and Plant Nutrition</i> , 2021, 21, 1030-1040. | 3.4 | 6 |
| 26 | Effect of gravity-fed drip irrigation and nitrogen management on flowering quality, yield, water and nutrient dynamics of gladiolus in an Indian inceptisol. <i>Journal of Plant Nutrition</i> , 2022, 45, 2049-2067. | 1.9 | 6 |
| 27 | Phase mixing of relativistically intense longitudinal wave packets in a cold plasma. <i>Physics of Plasmas</i> , 2016, 23, 092112. | 1.9 | 5 |
| 28 | Exact analysis of particle dynamics in combined field of finite duration laser pulse and static axial magnetic field. <i>Physics of Plasmas</i> , 2012, 19, . | 1.9 | 4 |
| 29 | Breaking of relativistically intense longitudinal space charge waves: A description using Dawson sheet model. , 2014, , . | | 4 |
| 30 | Radiation reaction effect on laser driven auto-resonant particle acceleration. <i>Physics of Plasmas</i> , 2015, 22, 123102. | 1.9 | 4 |
| 31 | One dimensional PIC simulation of relativistic Buneman instability. <i>Physics of Plasmas</i> , 2016, 23, 102110. | 1.9 | 4 |
| 32 | Effect of transverse beam size on the wakefields and driver beam dynamics in plasma wakefield acceleration schemes. <i>AIP Advances</i> , 2020, 10, . | 1.3 | 4 |
| 33 | Predicting the response of soil potassium to broccoli (<i>Brassica oleracea</i> var. <i>italica</i>) in a Gangetic Inceptisol of West Bengal, India through suitable chemical extractants. <i>Journal of Plant Nutrition</i> , 2021, 44, 931-945. | 1.9 | 4 |
| 34 | Spatio-temporal evolution and breaking of double layers: A description using Lagrangian hydrodynamics. <i>Physics of Plasmas</i> , 2012, 19, . | 1.9 | 3 |
| 35 | Effect of polarization and focusing on laser pulse driven auto-resonant particle acceleration. <i>Physics of Plasmas</i> , 2014, 21, 043102. | 1.9 | 3 |
| 36 | Plasma wakefield excitation in a cold magnetized plasma for particle acceleration. <i>Physics of Plasmas</i> , 2017, 24, 052111. | 1.9 | 3 |

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|----|--|-----|-----------|
| 37 | Exact solution of Hartemannâ€“Luhmann equation of motion for a charged particle interacting with an intense electromagnetic wave/pulse. European Physical Journal: Special Topics, 2021, 230, 4165-4174. | 2.6 | 3 |
| 38 | Assessment of the Potassium Supplying Capacity of Coastal Entisols and Inceptisols under Intensive Cropping and Fertilization. Communications in Soil Science and Plant Analysis, 2022, 53, 2878-2891. | 1.4 | 3 |
| 39 | Rhizobium Leguminosarum: A Model Arsenic Resistant, Arsenite Oxidizing Bacterium Possessing Plant Growth Promoting Attributes. Current World Environment Journal, 2021, 16, 84-93. | 0.5 | 2 |
| 40 | Effect of ion motion on breaking of longitudinal relativistically strong plasma waves: Khachatryan mode revisited. Physics of Plasmas, 2021, 28, . | 1.9 | 2 |
| 41 | Wavebreaking amplitudes in warm, inhomogeneous plasmas revisited. Physics of Plasmas, 2021, 28, 012105. | 1.9 | 2 |
| 42 | Wave breaking limit in arbitrary mass ratio warm plasmas. Contributions To Plasma Physics, 2022, 62, . | 1.1 | 1 |
| 43 | Nonlinear dynamics of relativistically intense cylindrical and spherical plasma waves. Physics of Plasmas, 2018, 25, 092106. | 1.9 | 0 |
| 44 | Stationary Langmuir structures in a relativistic current carrying cold plasma. Physics of Plasmas, 2020, 27, 022118. | 1.9 | 0 |
| 45 | Excitation of plasma wakefields by intense ultraâ€“relativistic proton beam. Contributions To Plasma Physics, 2021, 61, e202000215. | 1.1 | 0 |
| 46 | Excitation of electrostatic standing wave in the superposition of two counter propagating relativistic whistler waves. Physica Scripta, 2021, 96, 125620. | 2.5 | 0 |
| 47 | 10.1063/1.5006463.1. , 2017, , . | | 0 |