



## Ion-acoustic Waves in Nonextensive Electron-positron-ion Plasmas

By Ferdousi, M.

Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | Solitons & Shocks Structures | In this book, a precise theoretical investigation is made on nonlinear propagation of ion-acoustic (IA) waves in electron-positron-ion plasmas (containing nonextensive electrons and positrons, and inertial ions). The Korteweg-de Vries (K-dV), the modified K-dV, the Gardner, the Burgers, and the modified Burgers equations are derived by using the reductive perturbation method. The basic features of nonlinear phenomena (solitons and shocks) are briefly studied. The properties of nonlinear IA waves are significantly modified by the effects of nonplanar geometry, ion kinematic viscosity, and the degree of nonextensivity. The important findings of our results in astrophysical plasmas like stellar polytropes, hadronic matter, quark-gluon plasma, dark-matter halos, and so on are pinpointed in this book. | Format: Paperback | Language/Sprache: english | 150 gr | 220x150x5 mm | 100 pp.

DOWNLOAD



READ ONLINE

[ 5.3 MB ]

### Reviews

*I actually started off looking over this publication. I have read through and so I am certain that I am going to likely to study again yet again later on. I am easily will get a delight of reading a written pdf.*

-- Ross Hermann

*The ebook is straightforward in read better to fully grasp. I could possibly comprehended every little thing out of this composed e pdf. I found out this ebook from my dad and I suggested this pdf to find out.*

-- Prof. Lorine Grimes