

# **Pt. Mohan Lal S.D. College For Women, Gurdaspur**





## **3.3.1**

**Number of research papers published per teacher in the Journals  
as notified on UGC CARE list during the last five years**

***Dr. (Mrs.) Neeru Sharma***  
***Principal***

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3	<p>‘Heavy- and light-nuclei acoustic dressed soliton in white dwarfs’</p>	Dr. Rupinder Kaur	Indian Journal of Physics	 <p><b>Heavy- and light-nuclei acoustic dressed solitons in white dwarfs</b></p> <p>Rupinder Kaur, Rupinder Singh &amp; S. Saini</p> <p><b>Abstract</b></p> <p>A theoretical investigation has been carried out to examine the evolution of heavy- and light-nuclei acoustic (LH) dressed solitons (DS) due to higher-order nonlinearities of nonlinearity and dispersion effects in a degenerate ultra-relativistic degenerate quantum plasma composed of neutral heavy ion as well as light nuclei with inertial ions degenerate electrons. The nonlinear Korteweg-de Vries (KdV) equation is derived using reductive perturbation theory.</p>

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