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## Plasma Antenna

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Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | Experimental Studies on Plasma Antennas | Recently, there has been a revival of interest in plasma antennas because of their potential advantage over the conventional antennas. Hence experiments are aimed at investigating the antenna properties of a reconfigurable plasma antenna. Plasma column is excited by surface wave, which acts as a plasma antenna. Antenna parameters of plasma antenna and equivalent metallic copper antenna are studied. By changing the operating parameters a single plasma antenna (plasma column) can be transformed into multiple antenna elements (striations), which can be treated as a phased array broadside vertical plasma antenna. In addition, physical and antenna properties of reconfigurable plasma antenna can be controlled by operating parameters. Moreover wireless communication capability of this plasma antenna is tested. Striations have always been a subject of academic interest to scientists. Therefore, the studies of striations in surface wave produced plasmas has been extensively done both from experimental as well as theoretical points of view. This book invokes applications of pattern formation or striations of plasmas in plasma antenna technology. | Format: Paperback | Language/Sprache: english | 202 gr | 221x151x6 mm | 140 pp.



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### Reviews

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Plasma antennas use partially or fully ionized gas as the conducting medium, instead of metal to create an antenna. The advantages of plasma antennas are that they are highly reconfigurable and can be turned on and off. Hence research to. Plasma antennas of the same shape, length, and frequency of corresponding metal antennas will have the same radiation patterns. Plasma antennas have the advantage of reconfigurability. High frequency antennas can transmit and receive through lower frequency. A plasma antenna can be used for both transmission and reception. Although plasma antennas have only become practical in recent years [when?], the idea. Plasma antenna. Last updated July 13, 2020. Hettinger's Aerial Conductors for Wireless Signaling US1309031A. A plasma antenna is a type of radio antenna currently in development in which plasma is used instead of the metal elements of a traditional antenna. [1] A plasma antenna can be used for both transmission and reception. A plasma antenna is a type of transmission and reception device that makes use of plasma rather than more traditional metal components. The general concept for this type of antenna has been around since the early 20th century, but has only become practical since the latter part of the 1990s. Considered to provide superior transmission and reception qualities in comparison to older technology, the plasma antenna is utilized in a number of settings, including broadcast