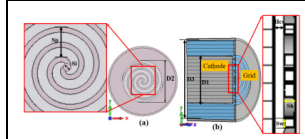


Editor's Highlighted Articles

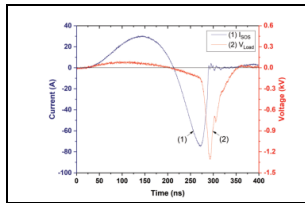
Design of an RF Electron Gun Featuring a Spoof Localized Surface Plasmon Grid



by Shilong Zhu, Yulu Hu, Luanfeng Gao, Haiying Yuan, Zheng Tan, and Xiaofang Zhu

[Read More](#)

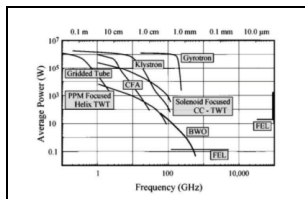
Experimental and Numerical Simulation Study of a Semiconductor Opening Switch



by Ejla Shahriari, Anton I. Gusev, Antoine Silvestre de Ferron, Laurent Pecastaing, Susan Parker, and Simon Bland

[Read More](#)

A Review of Terahertz Traveling Wave Tubes



by Tieyan Zhang, Qipei Ban, Wenxin Liu, Fengying Lu, Zhihao Jin, and Kedong Zhao

[Read More](#)

IEEE TRANSACTIONS ON PLASMA SCIENCE	
A PUBLICATION OF THE IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY	
JULY 2025	VOLUME 53 NUMBER 7 (ITPSBD) (ISSN 0093-3813)
CONTENTS	
Basic Processes in Fully and Partially Ionized Plasmas: Effects of Magnetic-Field-Induced Anisotropy on Transport Properties	1417
Microwave Generation and Microwave-Plasma Interaction	1427
Design of an RF Electron Gun Featuring a Spoof Localized Surface Plasmon Grid	1437
On-Chip Longitudinal Discharge Plasmas with Resonant Surface Modes for Surface-Plasmon-Enhanced Photonic Devices	1447
Design and Development of High-Power Terahertz Compact Coaxial Gap Wave Structures for Surface-Plasmon-Enhanced TWTs	1457
Charged-Particle Beams and Sources	1467
Thermal Instabilities in Heating Gas by VLF Discharge: Analytical and Numerical Studies	1477
Industrial, Commercial, and Biological Non-Invasive Applications of Plasma	1487
Science of the Gap-Grating Coupled to Two-Resonant Plasmas and Its Impact on the Design of Surface-Plasmon-Enhanced Photonic Devices	1497
Resonant Surface-Plasmon-Enhanced Photonic Devices for Surface-Plasmon-Enhanced Photonic Devices	1507
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1517
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1527
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1537
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1547
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1557
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1567
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1577
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1587
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1597
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1607
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1617
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1627
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1637
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1647
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1657
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1667
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1677
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1687
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1697
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1707
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1717
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1727
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1737
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1747
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1757
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1767
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1777
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1787
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1797
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1807
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1817
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1827
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1837
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1847
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1857
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1867
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1877
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1887
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1897
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1907
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1917
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1927
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1937
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1947
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1957
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1967
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1977
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1987
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	1997
Analysis of Carbonaceous Nanoparticle Reduction in the Radio-Frequency Plasma Environment	2007

IEEE Transactions on Plasma Science

A publication of the IEEE Nuclear and Plasma Sciences Society.

[VIEW THE TABLE OF CONTENTS](#)

T-PS Home **T-PS in IEEE *Xplore*** **Early Access** **Manuscript Submission**

[View the full series on IEEE *Xplore*.](#)



[Website](#) | [Privacy Policy](#) | [Unsubscribe](#)

© {{my.copyright year}} IEEE – All rights reserved.

IEEE • 445 Hoes Lane, Piscataway, NJ
08854 USA