



## Advanced Cathodes for Next Generation Electric Propulsion Technology

By Dustin J. Warner

Biblioscholar Nov 2012, 2012. Taschenbuch. Book Condition: Neu. 246x189x11 mm. This item is printed on demand - Print on Demand Neuware - The research presented here investigated the feasibility of a 6.4 mm Lanthanum Hexaboride (LaB6) and Cerium Hexaboride (CeB6) hollow cathode for low power electric propulsion applications (100-300W). Two orifice geometries, one anode configuration, several anode and keeper currents, and a range of flow rates were tested for the LaB6 cathode. The CeB6 cathode underwent the same tests, with the exception of the second orifice geometry due to time constraints. The required instruments include an oscilloscope to monitor the keeper and anode voltages, a Langmuir probe measured electron temperature, plasma densities, and plasma potential for the coupling plasma, infrared imaging studied the thermal characteristics of each cathode, electron microscopy for surface contaminant analysis, and high-speed imaging for coupling plasma observations. The oscilloscope, Langmuir probe, and high-speed camera determined the cathodes' mode of operation and gave information that indicated stable spot mode or unstable, destructive plume mode. 176 pp. Englisch.



## Reviews

Completely one of the best publication I actually have ever study. I really could comprehended almost everything out of this written e publication. Your daily life span will likely be change as soon as you total reading this publication.

-- Prof. Adolph Wisoky

It is fantastic and great. It is writter in easy words and phrases instead of confusing. I am just delighted to explain how this is actually the best book i have got read through during my individual life and might be he finest publication for ever.

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