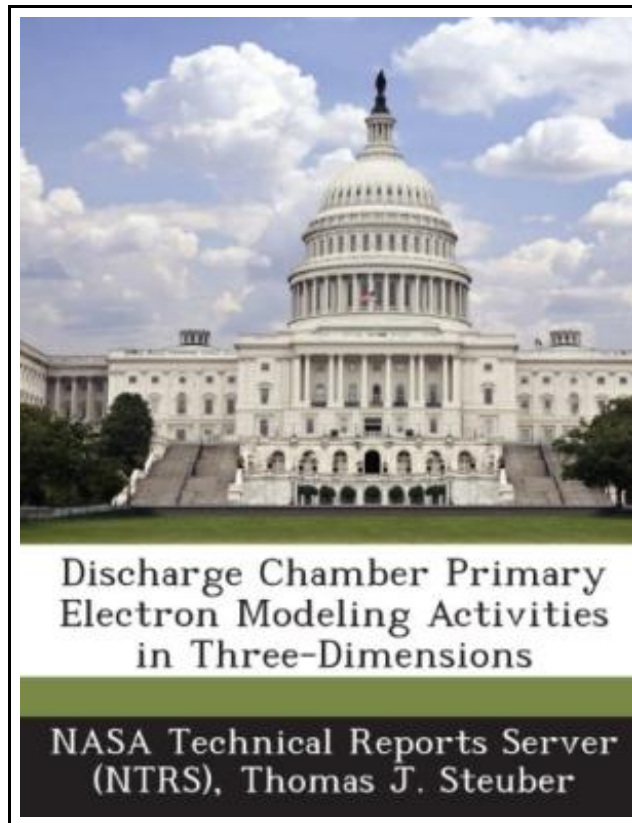


## Discharge Chamber Primary Electron Modeling Activities in Three-Dimensions



Filesize: 6.51 MB

### ***Reviews***

*This is actually the greatest publication i have go through right up until now. I really could comprehended every little thing using this composed e book. I realized this book from my i and dad advised this ebook to learn.*

*(Jimmie Schmidt I)*

## DISCHARGE CHAMBER PRIMARY ELECTRON MODELING ACTIVITIES IN THREE-DIMENSIONS



BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 22 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. Designing discharge chambers for ion thrusters involves many geometric configuration decisions. Various decisions will impact discharge chamber performance with respect to propellant utilization efficiency, ion production costs, and grid lifetime. These hardware design decisions can benefit from the assistance of computational modeling. Computational modeling for discharge chambers has been limited to two-dimensional codes that leveraged symmetry for interpretation into three-dimensional analysis. This paper presents model development activities towards a three-dimensional discharge chamber simulation to aid discharge chamber design decisions. Specifically, of the many geometric configuration decisions toward attainment of a worthy discharge chamber, this paper focuses on addressing magnetic circuit considerations with a three-dimensional discharge chamber simulation as a tool. With this tool, candidate discharge chamber magnetic circuit designs can be analyzed computationally to gain insight into factors that may influence discharge chamber performance such as: primary electron loss width in magnetic cusps, cathode tip position with respect to the low magnetic field volume, definition of a low magnetic field region, and maintenance of a low magnetic field region across the grid span. Corroborating experimental data will be obtained from mockup hardware tests. Initially, simulated candidate magnetic circuit designs will resemble previous successful thruster designs. To provide opportunity to improve beyond previous performance benchmarks, off-design modifications will be simulated and experimentally tested. This item ships from La Vergne, TN. Paperback.



[Read Discharge Chamber Primary Electron Modeling Activities in Three-Dimensions Online](#)



[Download PDF Discharge Chamber Primary Electron Modeling Activities in Three-Dimensions](#)

## Other eBooks



### **Yearbook Volume 15**

RareBooksClub. Paperback. Book Condition: New. This item is printed on demand. Paperback. 58 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. This historic book may have numerous typos and missing text. Purchasers can usually download a free...

[Download Book »](#)



### **The Mystery at Motown Carole Marsh Mysteries**

Carole Marsh Mysteries. Paperback. Book Condition: New. Randolyn Friedlander (illustrator). Paperback. 32 pages. Dimensions: 11.1in. x 8.7in. x 0.0in. When you purchase the Library Bound mystery you will receive FREE online eBook access! Carole Marsh Mystery...

[Download Book »](#)



### **The Whale Tells His Side of the Story Hey God, Ive Got Some Guy Named Jonah in My Stomach and I Think Im Gonna Throw Up**

B&H Kids. Hardcover. Book Condition: New. Cory Jones (illustrator). Hardcover. 32 pages. Dimensions: 9.1in. x 7.2in. x 0.3in. Oh sure, we all heard the story of Jonah and the Whale a hundred times. But have we...

[Download Book »](#)



### **Absolutely Lucy #4 Lucy on the Ball A Stepping Stone Book™**

Random House Books for Young Readers. Paperback. Book Condition: New. David Merrell (illustrator). Paperback. 112 pages. Dimensions: 7.4in. x 5.1in. x 0.4in. Ilene Coopers fourth story of a boy and his beagle takes Bobby and Lucy...

[Download Book »](#)



### **Viking Ships At Sunrise Magic Tree House, No. 15**

Random House Books for Young Readers. Paperback. Book Condition: New. Sal Murdocca (illustrator). Paperback. 96 pages. Dimensions: 7.4in. x 4.9in. x 0.2in. Jack and Annie are ready for their next fantasy adventure in the bestselling middle-grade...

[Download Book »](#)

**Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 4: The Red Coat (Hardback)**

Oxford University Press, United Kingdom, 2011. Hardback. Book Condition: New. 172 x 142 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK s best-selling home reading series. It

[Save ePub »](#)

**Dont Line Their Pockets With Gold Line Your Own A Small How To Book on Living Large**

Madelyn D R Books. Paperback. Book Condition: New. Paperback. 106 pages. Dimensions: 9.0in. x 6.0in. x 0.3in.This book is about my cousin, Billy a guy who taught me a lot over the years and who

[Save ePub »](#)

**Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 6: Ice City (Hardback)**

Oxford University Press, United Kingdom, 2011. Hardback. Book Condition: New. 170 x 145 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK s best-selling home reading series. It

[Save ePub »](#)

**Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 2: The Red Hen (Hardback)**

Oxford University Press, United Kingdom, 2011. Hardback. Book Condition: New. 176 x 152 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK s best-selling home reading series. It

[Save ePub »](#)

**Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 3: The Sing Song (Hardback)**

Oxford University Press, United Kingdom, 2011. Hardback. Book Condition: New. 176 x 150 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK s best-selling home reading series. It

[Save ePub »](#)