

Curriculum Vitae

Name: Shuo Huang
Email: shuoh@umich.edu

Education

08/2014 – present	University of Michigan, Ann Arbor	Advisor: Prof. Mark J. Kushner
	Ph.D., Electrical Engineering	
09/2011 – 03/2014	Shanghai Jiao Tong University, China	Advisor: Prof. Jon T. Gudmundsson
	M.S., Electronics Science & Technology	GPA: 3.7/4.0
08/2007 – 06/2011	Southeast University, China	
	B.S., Electrical Engineering & Its Automation	GPA: 89/100

Publications

- [1] Shuo Huang and J T Gudmundsson. A particle-in-cell/Monte Carlo simulation of a capacitively coupled chlorine discharge. *Plasma Sources Science and Technology*, 22(5):055020, 2013.
- [2] Shuo Huang and J T Gudmundsson. A current driven capacitively coupled chlorine discharge. *Plasma Sources Science and Technology*, 23(2):025015, 2014.
- [3] Shuo Huang and J T Gudmundsson. Ion energy and angular distributions in a dual-frequency capacitively coupled chlorine discharge. *IEEE Transactions on Plasma Science*, 42(10):2854–2855, 2014.
- [4] Shuo Huang and J T Gudmundsson. Dual frequency capacitively coupled chlorine discharge. *Plasma Sources Science and Technology*, accepted, 2014.

Theses

- M.S. Thesis Particle-in-cell/Monte Carlo simulation of single- and dual-frequency capacitively coupled chlorine discharges
- B.S. Thesis Particle swarm optimization applied in state estimation for IEEE 36-bus network

Research experiences

- 08/2014 – present Investigation on NF_3 discharge
- Collect the data for the chemistry of NF_3 discharge
 - Explore NF_3 discharges driven by pulsed power and continuous wave power
- 08/2013 – 07/2014 Investigation on dual-frequency capacitively coupled chlorine discharge
- Explored the effect of adding a low-frequency source on the discharge
 - Explored the coupling between two sources and its influence on the independent control of ion energy and flux
- 09/2012 – 07/2013 Investigation on single-frequency capacitively coupled chlorine discharge
- Explored the effect of driving source, secondary electrons and chamber geometry on the discharge
 - Explored key plasma parameters and properties including electron heating mechanism, ion energy distributions and surface interactions, etc.
- 09/2011 – 08/2012 Code (oopd1) development for simulation of chlorine discharge
- Included 5 species and 44 reactions
 - Developed the package for chlorine discharge on C++ platform

Honors and awards

- 2009 National Scholarship (1%)
- 2011 Outstanding graduate student of Southeast University (3%)