

Yushu Wang

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1207 Noble Creek Drive NW, Atlanta, GA 30327

Objective

To obtain an intern position in corrosion analysis, surface analysis or other related work.

Education

- PhD, Materials Science and Engineering 2011 ~ Present
Georgia Institute of Technology, Atlanta, GA
Specializations: Corrosion, Metallurgy
Thesis title: Corrosion of Stainless Steels in Closed Paper Machine Environments
- Master of Science, Materials Science and Engineering (GPA: 3.6/4.0) 2009 ~ 2011
Georgia Institute of Technology, Atlanta, GA
Specializations: Thin Film Technology, IPD
Thesis title: Thin-film trench capacitors for silicon and organic packages
- B.E. in Materials Science and Engineering (GPA: 3.2/4.0) 2004 ~ 2008
Beihang University (Beijing University of Aeronautics and Astronautics, BUAA), Beijing, China

Related Experience

Corrosion and Materials Chemistry Research Laboratory

Georgia Institute of Technology, Atlanta, Georgia

<http://cmcr1.gatech.edu/index.php>

- Graduate Research Assistant 9/2011 - Present
- Study localized corrosion in Stainless Steel 304L, 316L, Duplex Stainless Steel 2205, 2101 in chloride containing aqueous environments as well as simulated paper machine environments
 - Perform SEM/XPS/AFM and other metallurgical and surface characterization techniques to analyze composition and morphology of the passive film of different kinds of stainless steels in aqueous solutions

Additional Experience

Packaging Research Center

Georgia Institute of Technology, Atlanta, Georgia

<http://www.prc.gatech.edu/>

Graduate Research Assistant

- Low cost, organic substrate compatible solid aluminum electrolytic capacitors – Process development 12/2010 - 4/2011
- Low-cost processing of conformal dielectrics, package-compatible conformal electrodes, organic build-up substrate integration, electrical and structural characterization
- Sol-gel synthesis of thin film ferroelectric PZT for high density capacitors - Process development 1/2010 - 12/2010
- Wafer and substrate-compatible high-k dielectrics, thin film and interfacial characterization, alternative cost-effective high-k processing routes

Beihang University

Beijing, P. R. China

<http://ev.buaa.edu.cn/>

Research Assistant

- Synthesis of SiBCN ceramic powders

2/2008 - 7/2008

Southwest Jiaotong University

Chengdu, P. R. China

<http://english.swjtu.edu.cn/index.aspx>

Research Assistant Fabrication of ceramic composites using Hot Isostatic Pressing (HIP) technique

7/2007 - 8/2007

Publications and Patents

“Low-resistance, self-healing hybrid cathode for solid state electrolytic capacitors”, patent disclosure filed, August 2011

“Solution-Derived Electrodes and Dielectrics for Low-Cost and High-Capacitance Trench and Through-Silicon-Via (TSV) Capacitors”, presented at the 61st ECTC conference in Orlando, FL, June 2011

Patent: “Synthesis method for precursor of amorphous Si-B-C-N quaternary ceramic and its set-up”, Yue Zhang, Yajing Li, Yushu Wang, July 2009

Skills

Laboratory: Familiar with Potentiostat, XPS, SEM. Experience with XRD, SIMS.

Clean room: 18 months of clean room experience. Experience with photo-lithography, e-beam evaporation, sputtering, CVD, RIE/DRIE, RTP, profilometry.

Computer: Familiar with Microsoft Office, experience with COMSOL, C++.

Languages: Fluent in English and Mandarin.

Societies

NACE, Materials Advantage (ASM, TMS, AIST, ACerS)

Honors & Activities

2011 Volunteer, 2011 Publix Georgia Marathon, elected best hydration station
2007 Second prize, University Scholarship for Outstanding Disciplinary Competition Performance
2007 Third prize, “Feng Ru Cup” competition of extracurricular inventions in science and technology
2007 Second prize, National English Competition for College Students
2006 Second place, Table Tennis Competition for all sophomores in department
2005 Outstanding member, Student Union in School of Materials Science and Engineering
2004 First prize, Outstanding Freshman Scholarship