Ian Lin

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EDUCATION

The University of California, Berkeley | GPA: 3.90

MS Materials Science and Engineering — May 2017
BS Materials Science and Engineering — May 2016
BS BioEngineering — May 2016

Programming: *Matlab, Data Structures, Python, Java*
Coursework: *Polymer Thin Films, Electron Microscopy and XRD, Functional Biomaterials, Materials Characterization, Electronic Materials, Biomechanics, Materials Properties, Physical Chemistry*

EXPERIENCE

Berkeley Climate and Energy Institute | Advanced Manufacturing for Energy — Berkeley, CA
R&D Engineer: Printed Batteries and Supercapacitors — 04/2015 – Present

- Characterization of failure mechanisms for Zinc Manganese printed batteries
- Conducted post failure analysis to improve cycle life and identify design weaknesses
- Modified batteries to yield 10-fold increase in capacity and 100-fold increase in cycle life

Sumitomo Electric Industries, Ltd. | Power Systems R&D Group — Osaka, Japan
R&D Engineer: Design of Redox Flow Battery — 06/2016 – 08/2016

- Redesigned flow channels to increase energy efficiency by 11%
- Auditioned different bipolar plate material designs to decrease cell bulk resistance by 6%
- Researched materials interface properties to yield a 13% decrease in cell contact resistance

Department of Materials Science and Engineering | The Wu Group — Berkeley, CA
R&D Engineer: Thin Film Semiconductors — 08/2013 – 04/2015

- Designed fabrication methods for n/p type doping of Indium Selenide
- Applied microscopy techniques on monolayers of indium selenide: Raman, AFM, SEM, MFM
- Constructed InSe-Graphene solar-cell devices to harvest photovoltaic energy

Academia Sinica | Novel Materials and Spin Electronics Lab — Taipei, Taiwan
R&D Engineer: Indium Selenide Semiconductor Properties — 06/2014 – 08/2014

- Analyzed structural properties of Indium Selenide monolayers
- Assembled InSe testing platforms using e-beam lithography and sputtering techniques
- Engineered the AFM to function as a MFM to characterize spin ice properties

PUBLICATIONS & PROJECTS

Bernard Kim, Ian Lin, Paul Wright et al., *Layer-by-Layer Fully Printed Zn-MnO2 Batteries with Improved Internal Resistance and Cycle Life*, accepted PowerMEMS Conference, 2015.

Ian Lin, Amanda Haack, Zian Liu, Ashu Shrestha, *Drug Eluting Contact Lens for Treatment of Corneal Ulcers in the Developing World,* Rice 360 Global Health Technologies Design Competition, 2016.

HONORS

Graduate Student Instructor | Properties of Materials — 2016
Vice President | Tau Beta Pi California Alpha — 2015
Gold Award | The Duke of Edinburgh's Award — 2014
Edward Kraft Award for Academic Excellence and Accomplishment — 2013