# Mohan Li

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## Education

**University of Illinois**                                            Urbana-Champaign, IL
*Ph.D. student, Nuclear, Plasma and Radiological Engineering*, May 2020 (expected)

**University of Illinois**                                            Urbana-Champaign, IL
*MS, Nuclear, Plasma and Radiological Engineering*, July 2018

**Tsinghua University**                                            Beijing, China
*BE, Engineering Physics*, July 2015

## Experience

**Research assistant, University of Illinois at Urbana-Champaign**                      Urbana, IL
Development of a head-and-neck cancer dedicated PET system
- Investigated system performance through Monte Carlo simulation in GATE
- Developing a high-resolution DOI detector module based on SiPM and segmented LYSO

Influence of channel configuration on bandwidth of CZT detector with a cross-strip pattern
- Investigated bandwidth of a cross-strip CZT detector with different readout electrode pattern

**Undergraduate researcher, Tsinghua University**                      Beijing, China
Separation of scintillation and Cherenkov lights in linear alkyl benzene (LAB)
- Implemented trigger logic on a Flash ADC (CAEN VX1751) by FPGA programming
- Built the DAQ system based on Maximum Integrated Data Acquisition System
- Designed a waveform-analysis algorithm and measured LAB time constants and light yield

Assay of low-background stainless steel by smelting for the neutrino experiment at Jinping
- Measured the radioactivity of raw materials of stainless steel with a high-purity germanium detector
- Designed an auto-search algorithm and identified the radionuclide type and activity

**Summer undergraduate researcher, DESY**                      Hamburg, Germany
Adding particle hit errors to EUDET-type beam telescopes
- Implemented particle hit error into the pixel telescope data analysis framework EUTelescope

## Honors and Awards

**University of Illinois at Urbana-Champaign**
- Cancer Scholars for Translational and Applied Research Graduate Fellowship          2018
- Graduate College Conference Travel Award                                          2017

**Tsinghua University**
- National Training Programs of Innovation and Entrepreneurship Award                2015
- Academic Excellence Scholarship                                          2012, 2013, 2014

**Deutsches Elektronen Synchrotron (DESY)**
- Best summer student in DESY ATLAS group (1/15)                                    2014

## Skills

- Programming: C++, Python, Bash, CUDA, Solidworks, Matlab, HTML/CSS
- Hardware: PMT, SiPM, CZT, scintillator, Flash ADC, CMOS camera, HPGe detector

## Selected Publications (2 of 5, total citation 53)

- **Li, M.**, Guo, Z., Yeh, M., Wang, Z., & Chen, S. (2016). "Separation of scintillation and Cherenkov lights in linear alkyl benzene." *Nucl. Instr. Meth. A*, 830, 303-308.
- **Li, M.**, and Abbaszadeh, S. "Influence of channel configuration on bandwidth of cadmium zinc telluride detector with a cross-strip pattern." *Radiat. Phys. Chem.*.