Shilong Yang

Tel: +86 15190090107 Email: yangshilong1997@163.com

EDUCATION BACKGROUND

Kuang Yaming Honors School, Nanjing University Nanjing, China

- Bachelor of Science in Chemistry, expected in Jun. 2019; GPA: 4.0/5.0 Sep. 2015-Present
- Completed Coursework: Introduction to Molecular Simulations of Soft Matter Systems, Advanced Physical Chemistry, Computational Materials Science, Experiments in Physical Chemistry, Experiments in Instrumental Analysis
- Expected Coursework: Organic Synthesis, Foundation in Modern Materials Chemistry, Plasma Chemistry

STANDARDIZED TESTS

TOEFL (101): Reading 27, Listening 27, Speaking 23, Writing 24

GRE (320): Verbal 150, Quantitative 170, Analytical Writing 3.0

RESEARCH EXPERIENCE

Design of Photocatalyst Product Beijing, China

Academy of Opto-electronics, Chinese Academy of Sciences Oct. 2018

- Studied literature and learned the mechanism of photocatalyst
- Worked on photocatalyst that could diminish pollution in air and employed titanium dioxide as catalysts for its safety and durability.
- Designed the product based on existing technologies, and responsible for product position and product reports presentation

Graphene Ceramic Coating for Bone Implant Shanghai, China

Shanghai Institute of Ceramics, Chinese Academy of Sciences Aug. 2018-Sep. 2018

- Aimed to develop the coating for bone implant to reduce the risk of bacterial infection and promote osteoblast development
- Utilized scanning electron microscope (SEM) to observe the structure of surface coating, and analyzed the causes of different structures
- Analyzed element composition with energy-dispersive X-ray spectroscopy (EDXS)
- Performed cell culture and observed bacterial infection and osteoblast growth
- Prepared grapheme by using chemical vapor deposition (CVD) method and transferred it to the surface of material

Simulation on Monolayer Graphene Formation by CVD Method Nanjing, China

Key Laboratory of Mesoscopic Chemistry, MOE, Nanjing University Oct. 2017-Present

Instructor: Associate Professor Lijun Yang

- Defined the research topic based on reference of over 40 articles of CVD method and graphene growth
- Computed and simulated the growth mechanism with Large-scale Atomic/Molecular Massively Parallel Simulator (LAMMPS)
- Visualized the computation result with visual molecular dynamics (VMD) and concluded the motion pattern of carbon atom

Trace Element Analysis in Lentinus Edodes Nanjing, China

Reseach Leader Dec. 2017-Jan. 2018

- Aimed to check that whether trace elements in Lentinus Edodes exceed the standard
- Selected magnesium, iron, zinc and lead as the elements to be tested, measured the elements with inductively coupled plasma atomic emission spectroscopy (ICP-AES) and compared the results with national standard

EXTRA-CURRICULUM ACTIVITY

Member of Tennis Team of Kuang Yaming Honors School, Nanjing University Nanjing, China

- Participated in training and various tennis matches Mar. 2016-Present

PROFESSIONAL SKILLS

Computer Skill: C Language (1 yr), FORTRAN (0.5 yr)

Experiment Equipment and Method: SEM, EDXS, CVD, LAMMPS, VMD, ICP-AES