

In the name of ALLAH

PERSONAL DETAILS

Hessam Shahbazi

Year of birth: 1995

E-mail: Hessam.shahbazi@gmail.com

RESEARCH INTERESTS

- Chemistry, Physics & Specifically Nanoscience
- Synthesis and Fabrication of Nanoparticles and Nanocomposites
- Application of Conductive Materials
- Electronic Properties of Nanomaterials
- Nanostructured Materials for Using Solar Energy

EDUCATIONAL

- **Master's degree:**

M.Sc. in Materials Science and Engineering, Sharif University of Technology
Field: Characterization and Selection of Engineering Materials (2017-present)

- **Bachelor's degree:**

B.Sc. in Materials Science and Engineering, University of Tehran (2014-2017)

- **Diploma in Mathematics and Physics**

Fath High School, Tehran

THESIS AND PROJECTS

- **M.Sc. Thesis:**

"Fabrication and Electrical Properties Evaluation of PA/CNT Conductive Nanocomposite with Low Percolation Threshold"

Academic Supervisors: R. Bagheri (Prof. of Materials Science and Engineering)
(In progress)

- **B.Sc. Thesis:**

"Synthesis of TiO₂-CNT nanocomposite using the sol-gel method and evaluation of its properties",
September, 2017.

Evaluated and approved as EXCELLENT with a grade of 20 out of 20.

Academic Advisor:

Dr. Saeed Sheibani (Assistant Prof. of Materials Science and Engineering).

HONORS

- Ranked 2nd in the National Entrance Exam for graduate studies 2017 in Nanomaterials.
- Ranked 24th in the National Entrance Exam for graduate studies 2017 in Materials Science and Engineering.
- Ranked top 1% in the university entrance exam for B.S. Degree, 2013
- Ranked 1st in Chemistry National Competition (study and research) ,2012

PUBLICATIONS

- **International Conferences:**

Hessam Shahbazi, Alireza Shafei, and Saeed Sheibani. "The effect of carbon nanotubes functionalization on the band-gap energy of TiO₂-CNT nanocomposite." 6th Biennial International Conference on Ultrafine Grained and Nanostructured Materials (UFGNSM2017), Kish, November 12-13, 2017.

- **National Conferences:**

علیرضا شافعی، حسام شهبازی، سعید شیبانی. "سنتز نانوکامپوزیت TiO₂-10wt.%CNT به روش سل-ژل و بررسی نقش آب بر روی مورفولوژی آن." ششمین کنفرانس ملی مهندسی انرژی و نانوفناوری ایران، تهران، اسفند ۳-۴، ۱۳۹۵.

SKILLS & ACTIVITIES

Lab Skills

- Nanomaterials Synthesis Methods
- Material Characterization:
 - UV-Visible Spectroscopy
 - X-Ray Diffraction (XRD)
 - Scanning Electron Microscopy(SEM)
 - Transmission electron microscopy (TEM)
 - Differential thermal analysis (DTA)
 - Optical Microscopy(OM)
 - Diffuse reflectance spectroscopy (DRS)
 - UV-Vis Spectroscopy

Familiar with:

- Fourier-transform infrared spectroscopy (FT-IR)
- Raman Spectroscopy
- Brunauer–Emmett–Teller (BET)

Other Skills

- Team Leadership and Management Skills
- Teamwork
- Searching internet
- Familiar with Standards like ASTM, ASM, DIN and Handbooks

COMPUTER SKILLS

- Programming with MATLAB
- Key to Steel
- AutoCAD
- Microsoft Office Programs
- Adobe Photoshop
- EndNote
- Origin

EXTRA-CURRICULAR ACTIVITIES

An Amateur Football Player

LANGUAGES

- Persian (Native).
- English (Fluent)
- Deutsch (A2 level)

ACADEMIC REFERENCES

Prof. Reza Bagheri

Professor of Materials Science and Engineering, Sharif University of Technology

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Dr. Saeed Sheibani

Assistant Professor of Materials Science and Engineering, University of Tehran

Email Address: ssheibani@ut.ac.ir