Hamed
Tari

CONTACT

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WORK EXPERIENCE

02/2015 – 06/2017

Technical Supervisor of Advanced Electrochemical Laboratory

Tabriz University, Chemistry Faculty

Initiating, directing and executing scientific research, development, and manufacturing process strategies toward the preparation of carbon-ceramic electrodes and modification of them with different graphene-based nanocomposites.

Tabriz, Iran

09/2014 – 07/2015

Chemistry lecturer

Department of Private Education

Teaching Analytical, organic, and inorganic chemistry

Tabriz, Iran

26/04/2015 – 12/09/2016 – Tabriz , Iran

Teaching English course for Highschool students

Shafagh private school

Teaching English language for Highschool students of intermediate stage.

11/10/2014 – 21/05/2016 – Varzeghan, Iran

Teaching Primary school for Deprived areas students

Varzeghan Educational Department

Teaching to the 12 primary stage students of rural area around Varzeghan city which were not able to come to the schools because of economical situation and the fact that their village was far from the city.

EDUCATION AND TRAINING

01/11/2020 – CURRENT – Department of Basic and applied science for Engineering , Via Antonio Scarpa, 16, Roma, Italy

PHD RESEARCHER IN MATHEMATICAL MODELS FOR ENGINEERING, ELECTROMAGNETICS AND NANOSCIENCES

Sapienza university of Roma

https://www.sbai.uniroma1.it/department

15/09/2017 – 23/07/2020 – Rome, Italy

Master of science in Nanotechnology Engineering

Sapienza University of Rome

During my carrier at Sapienza University, I have studied numerical simulation of an integrated photonic circuit based on surface plasmon polariton. The nonlinear activation function obtained from the studied saturable absorber structure implemented as an analogy for the biological neural synapse in neuromorphic network applications.

06/2012 – 03/2015 – Tabriz, Iran

Master of science in Nanochemistry

University of Tabriz

I graduated with Honors in nanochemistry at Tabriz university. Dissertation titled was " Preparation of Sol-gel electrode modified with polypyrrole/reduced graphene oxide nanocomposite and its application in the electrochemical simultaneous determination of dopamine, Ascorbic acid, and uric acid in the blood samples.

01/2009 – 06/2012 – Tabriz, Iran

Bachelor of science in Applied chemistry

Islamic Azad University, Tabriz Branch

Graduated with Honors in applied chemistry with Dissertation title: Elemental Analysis of various copper minerals with Xray fluorescence method.

LANGUAGE SKILLS

MOTHER TONGUE(S): Azerbaijani

OTHER LANGUAGE(S):

Persian

Listening	Reading	Spoken production	Spoken interaction	Writing
C2	C2	C2	C2	C2

English

Listening	Reading	Spoken production	Spoken interaction	Writing
C1	C1	B2	B2	C1

Turkish

Listening	Reading	Spoken production	Spoken interaction	Writing
C1	B2	B1	B1	B2

Arabic

Listening	Reading	Spoken production	Spoken interaction	Writing
B1	C1	B1	B1	B1

Italian

Listening	Reading	Spoken production	Spoken interaction	Writing
A2	B1	A2	A2	A2

PUBLICATIONS

Publications

- H. Tari, A. Bile, F. Moratti, E. Fazio, Nonlinear *neuromorphic activation function based on Surface Plasmon Polariton integrated circuits*, October 2021.
- A. Bile, F. Moratti, H. Tari, E. Fazio, *Photonic implementation of an elementary unit of artificial intelligence based on solitonic waveguides*, 2021.
- H.Tari, A. Bile, E. Fazio, Development of sol-gel based carbon ceramic electrode modified by graphene oxide - polypyrrole nanocomposite for simultaneous determination of uric acid and dopamine in presence of ascorbic acid, International Journal of Scientific Engineering and Applied Science, 2021
- F. Camponeschi, A. Bile, H.Tari, E. Fazio, Plasmonic-Solitonic Coupling Structure, International Journal of Scientific Engineering and Applied Science, 2021

CONFERENCES AND SEMINARS

Conferences

ICOP2020 Italian Optics and Photonics Conference, At University Parma, Italy, September 2020, by presenting a poster entitled with: Implementation of neuromorphic activation function within Surface Plasmon Polariton circuits

Conferences

9TH EPS-QEOD EUROPHOTON CONFERENCE at Czech Technical University of Prague by presenting a project entitled with Surface Plasmon Polariton neuromorphic circuit with sigmoid activation function, AUGUST 2020

Conferences

Participate in the 11th Iranian biennial electrochemistry seminar held by Guilan university in cooperation with Iranian Chemical Society on 9-11 Sep. 2014 by presenting a paper entitled: Application of carbon ceramic electrode modified by polypyrrole/reduced graphene oxide nanocomposite on the sensitive determination of dopamine in the real sample.

ORGANISATIONAL SKILLS

Organisational skills

An accomplished and energetic researcher with a solid experience in independent laboratory work towards synthesizing and characterization of nanomaterials. Motivated leader with strong organizational and prioritization abilities. Areas of expertise include

- Numerical simulation at COMSOL multiphysics, ANSYS, CST studio, Maxwell, Mathcad and etc.
- Microelectronics and Semiconductor Engineering
- Optoelectronic and optical and system design
- Semiconductor Laser Technology
- Photolithography
- Two-photon 3D lithography
- Chemical and electrochemical polymerization methods
- Sol-Gel methods for nanomaterial synthesis
- X-ray Diffraction and X-ray fluorescence spectroscopy
- Surface plasmon spectroscopy
- FTIR spectroscopy
- Electroanalytical method for trace analysis
- Electron microscopy and related technique
- DLS (Dynamic light scattering technique)
- Deep ion-beam lithography

JOB-RELATED SKILLS

Job-related skills

- Self-direction and Entrepreneurial
- Technical information technology
- independent research work
- Written & Oral Communication
- Collaboration
- Analytical thinking
- Education and Training

CERTIFICATIONS

Certifications

1- Noble electrochemical methods (spectroelectrochemistry, photovoltaic cell) Issued by Guilan University, Sep 2014

Certifications

2- Application of nano-electrodes in electrochemistry studies Issued by Guilan university Sep 2014