

Maziar Ahmadi Zeidabadi, PhD

Scientific researcher & Proud Geek



mahmadi.ze@gmail.com



+34-603-504168



www.maziarahmadi.com



EXPERIENCE

System engineer lead

FICOSA



05/2017-Present



Vila de cavalls, Spain

- Execution of >4 European projects
- Developing new micro 3D energy storage
- Formulation of new highly stable ink for battery and supercapacitor electrode
- Fabrication of new 3D dispenser for printing micro-devices

Associate Professor

Universitat Politècnica de Catalunya (UPC)



09/2017-Present



Barcelona, Spain

Senior scientific researcher

LEITAT Technological center



05/2017-Present



Terrassa, Spain

- Execution of >4 European projects
- Developing new micro 3D energy storage
- Formulation of new highly stable ink for battery and supercapacitor electrode
- Fabrication of new 3D dispenser for printing micro-devices

Working group manager of printed electronic group

LEITAT Technological center



01/2015-05/2017



Terrassa, Spain

- Managing the printed electronic transversal group and creating additional value and synergy between different units of the company
- Participation in various international conferences as invited speaker
- Representation of the company at a multitude of international fairs and events

Advanced technician & Researcher

Polytechnic University of Catalonia



02/2012-12/2014



Barcelona, Spain

- Clean room technician
- Research and development on liquid lenses based on EWOD

Projects Manager

Water Research Institute



07/2008 – 09/2010



Tehran, Iran

Technical Manager

Payam Afzar Co.



04/2007 – 02/2009



Tehran, Iran

- Technical Manager of the electronics projects specialized in telecommunications, transportation and remote sensing

EDUCATION

Doctor of Philosophy (Ph.D.) of Electronics

Polytechnic University of Catalonia



09/2010 – 09/2012



Barcelona, Spain.

•Titled with Excellent Cum Laude

- The main objective of the work focused on the scientific and technological challenges of liquid lens, fabrication and optimization of processes.

Master of Science in Information and Communication Technologies

Polytechnic University of Catalonia



09/2010 – 09/2012



Barcelona, Spain.

- Master thesis “ 2D liquid lens based on EWOD” (grade:10/10)

Bachelor degree in Electronic Engineering

Azad University of Kerman



09/2003 – 09/2007



Kerman, Iran

Publications

1. Ahmadi, Maziar, Sandra Bermejo, and Luis Castañer. "EWOD using nonaqueous liquids." *Microelectronic Engineering* 139 (2015): 19-25.
2. Ahmadi, Maziar, Ali Tabibi, and H. Sabaghzadeh. Volumetric Water Flow Measurement System (the 17th IAHR-APD Congress and 7th IUWM Conference 2010 Ref. 2a056)
3. Light with optical liquid actuator controlled by electrical signal , patent registration number: P201232001, M. Ahmadi Zeidabadi, L. Castañer ,S. Bermejo , A. Coll , 21/12/2012
4. National / regional water dispenser, patent registration number: 60506, M. Ahmadi Zeidabadi, H. Sabbaghzadeh, M. Riahi, R. Benvari, M. Ali Tabibi, 15/08/2009
5. Remote telemetry unit for automatic flood warning and drought, patent registration number: 60536, M. Ahmadi Zeidabadi, H. Sabbaghzadeh, R. Benvari, M. Ali Tabibi, 16/08/2009
6. Intelligent system for calculating the water equivalent of snow, patent registration number: 60,530, M. Ahmadi Zeidabadi, H. Sabbaghzadeh, 16/08/2009
7. Reflecting low energy lamp, patent registration number: 44,817, M. Ahmadi Zeidabadi, P. Keshavarzian, M. Yasoubi, 16/12/2007
8. 2016 E-MRS Spring Meeting , SYMPOSIUM W, Materials and systems for micro-energy harvesting and storage , May 2nd to 6th - Lille Grand Palais - France. (Oral)
9. ISFOE-16 , 3-6 July 2016 , Thessaloniki , Greece.(Oral)
10. "High efficient and flexible 3D energy storage devices enabled by a 3D Ink Dispenser" , Productronica 2015 , Messe münchen , Germany (Oral)
11. "3D printed micro-supercapacitor based on functionalization of carbon materials" , ISEECAP 2015 , Montpellier , France. (Oral)
12. “ Ultra-low cost, Flexible and Printable Organic Supercapacitor”, MNE 2014 Conference, Lausanne (Poster)
13. Improving the hydrophobicity and electrowetting reversibility of Teflon layers , MNE 2013 Conference , London , Ref. 51A89DA28EE89 (Poster)
14. Low Voltage 2D capacitive-coupled electrowetting , MNE 2013 Conference , London Ref. 51A7427F51A47 (Poster)

TECHNICAL SKILLS

I have a great experience and knowledge on preparation and execution of scientific research projects in national (spanish) and international levels such as Horizon2020 work program of European Union. With my academic preparation and the extracurricular activities, I have carried out so far enhanced communication skills, making an outgoing and flexible person, always ready to meet new people and new challenges, work in team and adapt to changing circumstances.

Clean room

- Physical deposition: Sputtering, Thermal evaporation
- Chemical deposition: Plasma enhanced CVD (PECVD)
- Electrospray processes
- Lithography and Ebeam lithography processes
- Atomic Force Microscopy (AFM)
- Characterization of layers: Profilometer, Interferometry microscopy, Spectrophotometry UV-VIS_NIR, sessile drop technique, Tensiometer

Electronic : Schematic, Simulation, Programming

Comsol, Matlab, AutoCAD, Quartus II and ModelSim, Cadence and Pspice, Protel DXP, PROTEUS PC, Visual Basic, C++

Energy storage

- Functionalization of particles by diazonium
- Organic and aqueous ink formulation
- Different printing techniques (3D dispenser, screen printer, inkjet, etc)
- Fabrication of battery cell (coin-cell, Pouch cell)
- Electrochemical characterization (CV, Galva, EIS)

Projects

- [PRINT4PACK](#), Organic and Large Area Electronics, 12/2012 - 06/2015
- [NANOCATE](#), FP7-NMP-2013-SMALL-7, 10/2013 - 09/2017
- [BASMATI](#), H2020-NMP-PILOTS-2014, 01/2015 - 12/2018
- [POROUS4APP](#), H2020-NMP-PILOTS-2015, 03/2016 - 02/2020

QUALIFICATION & COURSES

- Specialization Course of "Negotiation", EUNCAT business school, 2016
- Specialization Course of "Management", EUNCAT business school, 2016
- Specialization Course of "Time managing", EUNCAT business school, 2016
- Specialization Course of "Proposal preparation H2020" EUNCAT business school, 2015

PERSONAL HOBBIES

- Sports: Diving, Soccer, Fishing
- Love travelling and knowing new places and cultures
- I take a great interest in every aspect concerning robotics
- Diving License open water CMAS.

LIFE PHILOSOPHY

"All that is valuable in human society depends upon the opportunity for development accorded to the individual."

STRENGTH

- Hard working
- Team working
- Motivator & Leader
- Ambitious
- Problem resolver
- Open to new challenges

LANGUAGE SKILLS

English
Spanish
Catalan
Persian

