

## Hamid Delavari H.

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### Degree

Philosophy of Doctorate in Nanomaterials  
Institute for Nanoscience and Nanotechnology, Sharif University of Technology  
Tehran, Iran  
**2007-2012**

Master of Science in Nanomaterials  
Materials Engineering Department, Tarbiat Modares University  
Tehran, Iran  
**2005-2007**

Bachelor of Science  
Materials Science and Engineering Department, Sharif University of Technology  
Tehran, Iran  
**2001-2005**

### Language Skills

**Persian** (Native language)

**English**

Listening (C1), Reading (C2), Spoken Interaction (C1), Spoken Production (C1),  
Writing (C1)

### Current Position

**2013 – Now** (Professor Stage)  
Assistant Professor, Tarbiat Modares University, Tehran, Iran

### Previous work experience

Vice-Chancellor for Research at Engineering Department  
Tarbiat Modares University, Tehran, Iran  
2019 – Now  
Director and Joint Owner, Teb Sanat Rahyab Co. Tehran, Iran  
**2013 – 2019**

Postdoc, Sharif University of Technology, Tehran, Iran  
**2012 – 2013**

Visitor, Uppsala University, Uppsala, Sweden  
**2011 – 7 months**

## Research Grant

Ministry of Industry, Mine and Trade, Iran, 2016-2018

Total amount: 97000.0\$

Principle investigator: Dr. Delavari

Responsibility: Develop the Idea, write the proposal, work on the synthesis of metal oxide NPs, manage and supervise the team and prepare the reports for the funding agency

Nanotechnology Initiative Council, Iran, 2015-2017

Total amount: 30000.0\$

Co-investigator

Principle investigator: Prof. Madaah Hosseini

Responsibility: Write the proposal; work on the synthesis and surface modification of SPION with CD33

Nanotechnology Initiative Council, Iran, 2013-2015

Total amount: 25000.0\$

Co-investigator

Main investigator: Prof. Oghabian

Responsibility: Synthesis and surface modification of SPIONs for MRI imaging

## Publication

Total number of publications: **45**

<https://scholar.google.com/citations?user=9TH2djUAAAAJ&hl=en>

### Selected Publications

- N. Moradi, S. Muhammadnejad, **H. Delavari H.**, N. Pournoori, M.A. Oghabian, H. Ghafouri, Bio-conjugation of anti-human CD3 monoclonal antibodies to magnetic nanoparticles by using cyanogen bromide: A potential for cell sorting and noninvasive diagnosis, *International Journal of Biological Macromolecules*, 2021:192:72-81
- M. Mohammadi, L. Zaki, A. KarimiPourSaryazdi, P. Tavakoli, A. Tavajjohi, R. Poursalehi, **H. Delavari H.** and F. Ghaffarifar, Efficacy of green synthesized silver nanoparticles via ginger rhizome extract against *Leishmania major* in vitro, *PLOS ONE*, 2021:16: e0255571
- F Ahmadpoor, **H Delavari H.**, SA Shojaosadati, Porous versus Dense - Effect of Silica Coating on Contrast Enhancement of Iron Carbide Nanoparticles in T2-Weighted Magnetic Resonance Imaging, *ChemistrySelect*, 2020:5:1135-1139
- M. Maddah, **H. Delavari H.**, B. Mehravi, Preparation of bio-inspired melanin nanoplatfoms chelated with manganese ions as a potential T1 MRI contrast Agent, *ChemistrySelect*, 2019:4:5860-5865
- S. Nedaei, **H. Delavari H.** Preparation of naturally active melanin nano-platfoms chelated with barium ions as a potential X-ray-computed tomography contrast agent, *ChemistrySelect*, 2018:3:11098-11102.
- F. Ahmadpoor, S.A. Shojaosadati, **H. Delavari H.**, G. Christiansen, R. Saber, Synthesis of Fe<sub>5</sub>C<sub>2</sub>@SiO<sub>2</sub> core@shell nanoparticles as a potential candidate for biomedical application, *Materials Research Express*, 2018:5:055038

- M. Mahvi, **H. Delavari H.**, R. Poursalehi, Rapid microwave-assisted synthesis of Bi<sub>2</sub>Te<sub>3</sub> nanoflakes as an efficient contrast agent for X-ray computed tomography, *Ceramics International*, 44:2018:9679-9683
- M. Salimi, S. Sarkar, S. Fathi, A.M. Alizadeh, R. Saber, F. Moradi, **H. Delavari H.**, Biodistribution, pharmacokinetics, and toxicity of dendrimer-coated iron oxide nanoparticles in BALB/c mice, *International journal of nanomedicine*, 13:2018:1483-1493
- S. Dadashi, R. Poursalehi, **H. Delavari H.**, Optical and structural properties of oxidation resistant colloidal bismuth/gold nanocomposite: An efficient nanoparticle based contrast agent for X-ray computed tomography, *Journal of Molecular Liquids*, 254:2018:12-19
- M. Firouzi, R. Poursalehi, **H. Delavari H.**, F. Saba, M.A. Oghabian, Chitosan coated tungsten trioxide nanoparticles as a contrast agent for X-ray computed tomography, *International Journal of Biological Macromolecules* 98:2017:479-485
- P. Vahdatkhan, H.R. Madaah Hosseini, A. Khodaei, A.R. Montazerabadi, R. Irajirad, M.A. Oghabian, **H. Delavari H.**, Rapid microwave-assisted synthesis of PVP-coated ultrasmall gadolinium oxide nanoparticles for magnetic resonance imaging, *Chemical Physics*, 453:2015:35-41
- **H. Delavari H.**, H.R. Madaah Hosseini and M. Wolff, Modeling of self-controlling hyperthermia based on nickel alloy ferrofluids: Proposition of new nanoparticles, *Journal of Magnetism and Magnetic Materials* 335:2013:59-63
- **H. Delavari H.**, H. R. Madaah Hosseini, A. Simchi, A simple model for the size and shape dependent Curie temperature of freestanding Ni and Fe nanoparticles based on the average coordination number and atomic cohesive energy, *Chemical Physics*, 2011, 383:2011:1-5

### Research supervision

#### Principal Supervisor of Ph.D. students

1. **Fatemeh Ahmadpoor** (Graduation Date: 2019)  
Dissertation Title: Synthesis and surface modification of iron carbide and iron oxide nanoparticles as contrast agents in magnetic resonance imaging
2. **Fahime Khayatan** (Expected Graduation Date: end of 2021)  
Dissertation Title: Develop Mn-polydopamine nanoparticles for cell tracking via MRI imaging

#### Co-supervisor of 2 Ph.D. students

#### Principal Supervisor of Master Students

1. **Seyed Ahmad Ahmadi** (Graduation Date: 2019),  
Thesis Title: Dual-modal contrast agent for MRI/CT imaging based on nano polydopamine,
2. **Salimeh Ahmadi** (Graduation Date: 2019)  
Thesis Title: Synthesis and investigation of bismuth oxyiodide nano photocatalyst activated in visible light for water treatment

3. **Alireza Mohseni Basir** (Graduation Date: 2019)  
Thesis Title: Investigating the Effect of Size and Shape of Nickel and Gadolinium Nanostructures on the Curie temperature of them by Monte Carlo Simulation Method
4. **Banafsheh Esckandariun** (Graduation Date: 2018)  
Thesis Title: Synthesis of tungsten oxide and iron oxide nanocomposites for removal of organic compounds from water
5. **Mahsa Maddah** (Graduation Date: 2017)  
Thesis Title: Melanoprotein Nanoparticles as a carrier for MRI Contrast Agent,
6. **Mohsen Mahvi Khamami** (Graduation Date: 2017)  
Thesis Title: Synthesis of Bismuth Telluride Nanoparticles as a Computed Tomography contrast agent
7. **Sevda Nedaei Toliier** (Graduation Date: 2017)  
Thesis Title: Synthesis of Melanoprotein nanoparticles as a Medical Imaging
8. **Farzane Talae Shoar** (Graduation Date: 2016)  
Thesis Title: Biosynthesis of Quantum Dots within Earthworm,
9. **Mehdi Firouzi** (Graduation Date: 2015)  
Thesis Title: Contrast Agent in Computed Tomography (CT) Imaging-based on Tungsten Oxide Nanoparticles,

#### Co-supervisor of more than 15 Master Students

#### Teaching

Nanomagnetism (For MSc. and Ph.D. Students)  
 Advance Nanomaterials-II (For Ph.D. Students)  
 Instrumental Materials Analysis (For MSc. Students)  
 Nanochemistry (For MSc. Students)  
 Nanomaterials-I (For MSc. Students)

#### Awards and honors

- Excellent Applied Research by Iranian Ministry of Science Innovation and Technology, 2018.
- Third rank in 3<sup>rd</sup> entrepreneurship and business planning festival, Sharif University of Technology, Iran, 2011.
- Research assistant scholarship, Sharif University of Technology, Iran, 2009-2012
- First Rank among M.Sc. Students of Nanomaterials, Tarbiat Modares University, Tehran, Iran, 2007.

#### Other academic merits

An opponent of more than 10 doctoral dissertations  
 Peer review of Ministry of Industry, Mine and Trade (Iran) funding applications  
 Peer review of Iran National Science Foundation (INSF)  
 Member of National Elite Foundation, Iran  
 The referee for scientific publications such as

- ACS Applied Materials & Interfaces
- Nanotechnology
- Journal of Nanoscience and Nanotechnology

- International Nano Letters
- Iranian Journal of Radiology