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- Current Position** 2013 – Now
Assistant Professor, Tarbiat Modares University, Tehran, Iran
- Research Interests** Develop nanoparticles for medical applications
- Colloidal nanoparticles
 - Contrast agents in medical (MRI, CT) imaging
- Experience**
- Lecturer (MSc and PhD students), Tarbiat Modares University, Tehran, Iran
Nanomagnetism, Nanomaterials and Materials analysis
2013 – Now
- Supervisor (5 MSc and 3 PhD students), Tarbiat Modares University, Tehran, Iran
2013 – Now
- Postdoc, Sharif University of Technology, Tehran, Iran
2012 – 2013
- Visitor, Uppsala University, Uppsala, Sweden
2011 – 7 months
- Education**
- 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
- Honor and Awards**
- Excellent applied research project by Iranian Ministry of Science
Innovation and Technology, 2018.
Research Grant from Ministry of Industry, Mine and Trade, Iran, 2016
Research Grant from Microelectronic Research and Development Center, Iran,
2015

Research Grant from Nanotechnology Initiative Council, Iran, 2015
Research Grant from Nanotechnology Initiative Council, Iran, 2013
Member of National Elite Foundation, Iran, 2012
Third rank in 3rd entrepreneurship and business planning festival, Sharif University of Technology, Iran, 2011.
Research assistant scholarship, Sharif University of Technology, Iran, 2009-2012

Skills

Computer Tools

LAMMPS (Molecular Dynamic Software)
StatGraphics (Data analysis and statistical software)
X'Pert software (XRD data analysis)
Mathematica, Origin, Image J, ChemBioDraw, ConceptDraw

Other skills

Leadership, Team worker

Languages

Persian (Mother tongue)
English (Fluent)
German (Elementary)

Publication

- S. Nedaei, **H. Delavari H.**
Preparation of naturally active melanin nano-platforms chelated with barium ions as a potential X-ray-computed tomography contrast agent
ChemistrySelect, 2018, Accepted.
- E. Hashemi, R. Poursalehi, **H. Delavari H.**
Formation mechanisms, structural and optical properties of Bi/Bi₂O₃ One dimensional nanostructures prepared via oriented aggregation of bismuth based nanoparticles synthesized by DC arc discharge in water
Materials Science in Semiconductor Processing, 2019, 89, 51-58
- M. Mohammadi, S. Assadi Shahisaraee, A. Tavajjohi, N. Pournoori, S. Muhammadnejad, S. Roodbar Mohammadi, R. Poursalehi, **H. Delavari H.**
Green synthesis of silver nanoparticles using Zingiber officinale and Thymus vulgaris extracts: characterization, cell cytotoxicity and its antifungal activity against Candida albicans in comparison to Fluconazole
IET Nanobiotechnology, 2018 (DOI: 10.1049/iet-nbt.2018.5146)
- F. Ahmadpoor, S.A. Shojaosadati, **H. Delavari H.**, G. Christiansen, R. Saber
Synthesis of Fe₅C₂@SiO₂ core@shell nanoparticles as a potential candidate for biomedical application
Materials Research Express, 2018, 5, 055038
- F. Talaeshoar, **H. Delavari H.**, R. Poursalehi
Can earthworm bio-synthesize highly luminescent quantum dots?
Luminescence, 2018, 33, 850-854

M. Zargarzadeh, H.R. Madaah Hosseini, **H. Delavari H.**, R. Irajirad, E. Aghaie
Synthesis of Magnetite (Fe_3O_4)-Avastin Nanocomposite as a Potential Drug for
AMD Treatment
Micro & Nano Letters, 2018, 13, 1141 – 1145.

S. Dadashi, R. Poursalehi, **H. Delavari H.**
In situ PEGylation of Bi nanoparticles prepared via pulsed Nd:YAG laser ablation
in low molecular weight PEG: a potential X-ray CT imaging contrast agent
*Computer Methods in Biomechanics and Biomedical Engineering: Imaging &
Visualization*, 2018 (DOI: 10.1080/21681163.2018.1452634)

M. Mahvi, **H. Delavari H.**, R. Poursalehi
Rapid microwave-assisted synthesis of Bi_2Te_3 nanoflakes as an efficient contrast
agent for X-ray computed tomography
Ceramics International, 44:2018: 9679-9683

S. Dadashi, R. Poursalehi, **H. Delavari H.**
Optical and structural properties of Bi-based nanoparticles prepared via pulsed
Nd: YAG laser ablation in organic liquids
Applied Physics A, 124: 2018:406-410

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 nanoparticles based contrast agent for X-ray
computed tomography
Journal of Molecular Liquids, 254:2018:12-19

S. Dadashi, R. Poursalehi, **H. Delavari H.**
Formation, gradual oxidation mechanism and tunable optical properties of
 $\text{Bi}/\text{Bi}_2\text{O}_3$ nanoparticles prepared by Nd:YAG laser ablation in liquid: Dissolved
oxygen as genesis of tractable oxidation
Materials Research Bulletin 97:2018:421-427

M Firouzi, R Poursalehi, **H Delavari H.**, F Saba, MA Oghabian
Chitosan coated tungsten trioxide nanoparticles as a contrast agent for X-ray
computed tomography
International Journal of Biological Macromolecules 98:2017:479-485

M. Hasanpoor, M. Aliofkhazraei, **H. Delavari H.**
In-situ study of mass and current density for electrophoretic deposition of zinc
oxide nanoparticles
Ceramics International, 42:2016:6906–6913

H. Delavari H., H.R. Madaah Hosseini and M.Wolff

Magnetic domain regime-controlled synthesis of nickel nano-particles by applying statistical experimental design in modified polyol process
Materials Chemistry and Physics, 168:2015:117–121

P. Vahdatkhah, 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

A.R. Montazerabadi, M.A. Oghabian, R. Irajirad, S. Muhammadnejad, D. Ahmadvand, **Hamid Delavari H.**, Seyed Rabie Mahdavi

Development of gold-coated magnetic nanoparticles as a potential MRI contrast agent
Nano, 10:2015:1550048

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

Effects of particle size, shape and crystal structure on the formation energy of Schottky vacancies in free-standing metal nanoparticles: A model study
Physica B, 406:2011: 3777-3780

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

H. Omid, **H. Delavari H.**, H. R. Madaah Hosseini

Melting enthalpy and entropy of freestanding metallic nanoparticles based on cohesive energy and average coordination number
The Journal of Physical Chemistry C, 115:2011:17310–17313

H. Delavari H. and M. Kokabi

Silicon Carbide Nanowires from Polyvinyl Alcohol/Silica Electrospun Nanofibers
Nano, 6:2011:41–45

R. Shidpour, **H. Delavari H.**, M. Vossoughi

Analytical Model Based on Cohesive Energy to Indicate the Edge and Corner Effects on Melting Temperature of Metallic Nanoparticles
Chemical Physics, 378:2010:14-18

US Patent

Method of Making Magnetic Separation Device, Application Number: 29615331

References

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