

Curriculum Vitae



Dr. Zahra Shaghghi

Research Assistant Professor of Nuclearpharmacy

Chairman at Farshchian Heart Clinical Research Development Unit, Hamadan University of

Medical Sciences, Iran

Affiliations: Cancer Research Center, Hamadan University of Medical Sciences, Hamadan, Iran

**Clinical Research Development Unit Farshchian Heart Center, Department of Nuclear
Medicine and Molecular Imaging, School of Medicine, Hamadan University of Medical
Sciences, Hamadan, Iran**

Email: z.shaghghi@yahoo.com, z.shaghghi@umsha.ac.ir

EDUCATION

۲۰۱۳ – ۲۰۱۸ PhD in Nuclearpharmacy
Mazandaran University of Medical Science

Research interest

Radiopharmaceuticals, Radiobiology, Molecular Imaging, Cancer Imaging, Cardiology, Cardio oncology

Publications (۵), Hindex: ۱۱)

- **Zahra Shaghghi**, Sahar Nosrati, Ramin Mansouri, Maryam Alvandi. Advances and challenges in the application of radiolabeled magnetic nanoparticles for cancer theranostics. Nuclear Medicine and Molecular Imaging. ۲۰۲۰.

- **Zahra Shaghaghi**, Ramin Mansouri, Sahar Nosrati, Maryam Alvandi. Multimodal imaging in cancer detection: the role of SPIONs and USPIOs as contrast agents for MRI, SPECT, and PET. *Future Oncology*. ۲۰۲۰.
- **Zahra Shaghaghi**, Seyyed Hamid Hashemi, Maryam Alvandi, Zeynab Marzhoseyni, Hamidreza Ghasemi-Basir, Tayeb Mohamadi, Soghra Farzipour. Iron Dysregulation: Unveiling Predictive Biomarkers for Severity in COVID-۱۹ Patients *Current Respiratory Medicine Reviews*. ۲۰۲۰.
- Zeynab Marzhoseyni, **Zahra Shaghaghi**, Maryam Alvandi, Seyyed Hamid Hashemi, Teyeb Mohamadi, Soghra Farzipour. Correlation Between Serum Ferritin Levels and COVID-۱۹ Severity: A Retrospective Cross-Sectional Study. *Journal of Mazandaran University of Medical Sciences*. ۲۰۲۰.
- Cecilia Anza-Ramirez, J. Jaime Miranda, Benedetta Armocida, Jorge César Correia, Harriette Gillian Christine Van Spal, et al. Characterising acute and chronic care needs: insights from the Global Burden of Disease Study ۲۰۱۹. *Nature communications*. ۲۰۲۰
- Roozbeh Narimani-Javid, Mehdi Moradi, Mehrdad Mahalleh, Roya Najafi-Vosough, Alireza Arzhangzadeh, Omar Khalique, Hamid Mojibian, Toshiki Kuno, Amr Mohsen, Mahboob Alam, Sasan Shafiei, Nakisa Khansari, **Zahra Shaghaghi**, Salma Nozhat, Kaveh Hosseini, Seyed Kianoosh Hosseini. Machine learning and computational fluid dynamics derived FFRCT demonstrate comparable diagnostic performance in patients with coronary artery disease; A Systematic Review and ... *Journal of Cardiovascular Computed Tomography*. ۲۰۲۰
- Maryam Alvandi, Seyyed Hamid Hashemi, **Zahra Shaghaghi**, Zeynab Marzhoseyni, Hamid Reza Ghasemi-Basir, Mojdeh Mohammadi, Amirhossein Yazdi, Soghra Farzipour. Role of Ferroptosis in COVID-۱۹ Pathogenesis: Insights from Iron Metabolism and Lipid Peroxidation Markers *Coronaviruses*. ۲۰۲۰.
- **Zahra Shaghaghi**, Roozbeh Narimani Javid, Maryam Alvandi. Advancements in cardiac catheterization safety: novel radiation protection approaches redefining occupational health. *Current Cardiology Reviews*. ۲۰۲۰.
- Maryam Alvandi, **Zahra Shaghaghi**, Zhino Fatehi, Behshad Naghshtabrizi, Tayeb Mohammadi, Safoora Nikzad. Exploring the impact of recent COVID-۱۹ infection on perfusion and functional parameters derived from gated myocardial perfusion imaging in patients undergoing evaluation for *Annals of Nuclear Medicine*. ۲۰۲۴
- **Zahra Shaghaghi**, Seyyed Hamid Hashemi, Maryam Alvandi, Hamid Reza Ghasemibasir, Zeynab Marzhoseyni, Maryam Mohammadian Khoshnood, Soghra Farzipour. Examining the Correlation between Serum Folate Levels and Disease Severity in Hospitalized Patients with COVID-۱۹. *Avicenna Journal of Clinical Medicine*. ۲۰۲۴.
- Maryam Alvandi, Roozbeh N Javid, **Zahra Shaghaghi**, Soghra Farzipour, Sahar Nosrati. An in-depth analysis of the adverse effects of ionizing radiation exposure on cardiac catheterization staffs. *Current Radiopharmaceuticals*. ۲۰۲۴.
- Maryam Alvandi, **Zahra Shaghaghi**, Soghra Farzipour, Zeynab Marzhoseyni. Radioprotective Potency of Nanoceria. *Current Radiopharmaceuticals*. ۲۰۲۴.

- Zeynab Marzhooseyni, **Zahra Shaghaghi**, Maryam Alvandi, Maria Shirvani. Investigating the influence of gut microbiota-related metabolites in gastrointestinal cancer. *Current Cancer Drug Targets*. ۲۰۲۴.
- Soghra Farzipour, Fatemeh Jalali Zefrei, Saeed Bahadorikhalili, Maryam Alvandi, Arsalan Salari, **Zahra Shaghaghi**. Nanotechnology utilizing ferroptosis inducers in cancer treatment. *Anti-Cancer Agents in Medicinal Chemistry-Anti-Cancer Agents*. ۲۰۲۴.
- Maryam Alvandi, Seyyed Hamid Hashemi, **Zahra Shaghaghi**, Hamid Reza Ghasemibasir, Zeynab Marzhooseyni, Maryam Mohammadian Khoshnood, Soghra Farzipour. Relationship between Serum Cobalamin Levels and Disease Severity in COVID-۱۹ Patients. *Avicenna Journal of Clinical Medicine*. ۲۰۲۴.
- Fatemeh-Jalali Zefrei, Mohammad Shormij, Leila Dastranj, Maryam Alvandi, **Zahra Shaghaghi**, Soghra Farzipour, Nasim Zarei-Polgardani. Ferroptosis Inducers as Promising Radiosensitizer Agents in Cancer Radiotherapy. *Current Radiopharmaceuticals*. ۲۰۲۴.
- **Zahra Shaghaghi**, Arsalan Salari, Fatemeh Jalali, Maryam Alvandi, Soghra Farzipour, Nasim Zarei Polgardani. Targeting Ferroptosis as a New Approach for Radiation Protection and Mitigation. *Recent Patents on Anti-Cancer Drug Discovery*. ۲۰۲۴.
- **Zahra Shaghaghi**, Fatemeh Jalali Zefrei, Arsalan Salari, Seyed A Hojjati, Seyed Aboozar Fakhr Mousavi, Soghra Farzipour. Promising radiopharmaceutical tracers for detection of cardiotoxicity in cardio-oncology. *Current Radiopharmaceuticals*. ۲۰۲۳.
- Maryam Alvandi, **Zahra Shaghaghi**, Mohammad Reza Dehbanpour, Soghra Farzipour, Fereshteh Talebpour Amiri. A Review of Effects of Atorvastatin in Radiotherapy. *Recent Patents on Anti-Cancer Drug Discovery*. ۲۰۲۳.
- Soghra Farzipour, Fatemeh Jalali, Maryam Alvandi, **Zahra Shaghaghi**. Ferroptosis inhibitors as new therapeutic insights into radiation-induced heart disease. *Cardiovascular & Hematological Agents in Medicinal Chemistry Formerly*. ۲۰۲۳.
- Soghra Farzipour, **Zahra Shaghaghi**, Marziyeh Raeispour, Maryam Alvandi, Fatemeh Jalali, Amirhossein Yazdi. Evaluation of the Effect of Chelating Arms and Carrier Agents on the Radiotoxicity of TAT Agents. *Current Radiopharmaceuticals*. ۲۰۲۳.
- Amirhossein Yazdi, Maryam Alvandi, **Zahra Shaghaghi**, Seyed Hamid Hashemi, Seyed Omid Inanloo, Sayed Payam Hashemi, Tayeb Mohammadi, Surur Akbari. Coronavirus Disease in Cardiovascular Patients: Clinical Characteristics and Final Prognosis. *Avicenna Journal of Clinical Microbiology and Infection*. ۲۰۲۳.
- **Zahra Shaghaghi**, Maryam Alvandi, Soghra Farzipour, Mohammad Reza Dehbanpour, Sahar Nosrati. A review of effects of atorvastatin in cancer therapy. *Medical Oncology*. ۲۰۲۳.
- Amir Hossein Yazdi, Ali Ghadimi Farah, Maryam Alvandi, **Zahra Shaghaghi**. Survey on ionizing radiation including gamma-ray exposure among the medical staff working in the non-intensive ward of farshchian cardiovascular hospital in Hamadan, Iran. *Avicenna Journal of Clinical Medicine*. ۲۰۲۲.
- **Zahra Shaghaghi**, Maryam Alvandi, Soghra Farzipour, Fereshteh Talebpour Amiri, Mohammadreza Dehbanpour. A review of applications of nanoceria in cancer. *Journal of Mazandaran University of Medical Sciences*. ۲۰۲۲.

- Behshad Naghshtabrizi, Maryam Alvandi , **Zahra Shaghaghi**, et al. Transient Ischemic Dilation or Transient RV Visualization in Patients with Normal SPECT Stress Myocardial Perfusion Imaging: Correlation with CT Coronary Artery Calcium Scoring and Coronary Angiography. Journal nuclear cardiology. ۲۰۲۲.
- **Zahra Shaghaghi**, Nasim Z Polgardani, Sahar Abbasi, Hajar Albooyeh, Leila Dastranj, Soghra Farzipour, Maryam Alvandi. Etodolac enhances the radiosensitivity of irradiated HT-۲۹ human colorectal cancer cells. Current Radiopharmaceuticals. ۲۰۲۲.
- Rajesh Sharma, Mohsen Abbasi-Kangevari, Rami Abd-Rabu, Hassan Abidi, Eman Abu-Gharbieh, **Zahra Shaghaghi**, et al. Global, regional, and national burden of colorectal cancer and its risk factors, ۱۹۹۰–۲۰۱۹: a systematic analysis for the Global Burden of Disease Study ۲۰۱۹. The lancet Gastroenterology & hepatology. ۲۰۲۲
- Soghra Farzipour, **Zahra Shaghaghi**, Sahar Abbasi, et al. Recent Achievements about Targeted Alpha Therapy-Based Targeting Vectors and Chelating Agents. ۲۰۲۲.
- Maryam Alvandi, **Zahra Shaghaghi**, Kasra Nazari, Tayeb Mohammadi. Diagnostic accuracy of gated-SPECT myocardial perfusion imaging and exercise stress test for diagnosis of coronary artery disease. Avicenna Journal of Clinical Medicine. ۲۰۲۲.
- arshad Farzadfar, Mohsen Naghavi, Sadaf G Sepanlou, Sahar Saeedi Moghaddam, **Zahra Shaghaghi**, et al. Health system performance in Iran: a systematic analysis for the Global Burden of Disease Study ۲۰۱۹. The Lancet. ۲۰۲۲
- **Zahra Shaghaghi**, Shokouh Motieian, Maryam Alvandi, Amirhossein Yazdi, Bahareh Asadzadeh, Soghra Farzipour, Sahar Abbasi. Ferroptosis Inhibitors as Potential New Therapeutic Targets for Cardiovascular Disease. Mini reviews in medicinal chemistry. ۲۰۲۲.
- **Zahra Shaghaghi**, Maryam Alvandi, Zahra Ghanbarimasir, et al. Current development of sigma-۲ receptor radioligands as potential tumor imaging agents. Bioorganic Chemistry. ۲۰۲۱.
- Soghra Farzipour, Fereshteh Talebpour Amiri, Maryam Alvandi, **Zahra Shaghaghi**. Ferroptosis in cardiovascular disease: Basic mechanisms and implications for cardiovascular disease. Journal of Mazandaran University of Medical Sciences. ۲۰۲۱
- Seyed Jalal Hosseinimehr, Soghra Farzipour, Maryam Alvandi, **Zahra Shaghaghi**. Effect of using different co-ligands during ^{99m}Tc-labeling of J۱۸ peptide on SK-MES-۱ cell binding and tumor targeting. Iranian Journal of Basic Medical Sciences. ۲۰۲۱.
- **Zahra Shaghaghi**, Maryam Alvandi, Sahar Nosrati, et al. Potential utility of peptides against damage induced by Ionizing radiation. Future Oncology. ۲۰۲۱.
- **Zahra Shaghaghi**, Seyed Jalal Hosseinimehr, Sajad Molavipordanjani. ^{99m}Tc-radiolabeled J۱۸ -modified peptide for ovarian cancer detection. Iranian Journal of Nuclear Medicine. ۲۰۲۰.
- Seyed Kamaledin Hadei, Maryam Alvandi, Mehdi Ramezani, Oldoos Aloosh, **Zahra Shaghaghi**, et al. Applying Wells score to inconclusive perfusion only modified PLOPED II (Prospective Investigation of Pulmonary Embolism Diagnosis II) readings in order to

optimize the lung scintigraphy diagnostic yield in acute pulmonary embolism detection. *Annals of nuclear medicine*. ۲۰۲۰

- Shima Shahsavari, **Zahra Shaghaghi**, Seyed Mohammad Abedi, Seyed Jalal Hosseinimehr. Evaluation of ^{99m}Tc -HYNIC-(ser) -LTVPWY peptide for glioblastoma imaging. *International Journal of Radiation Biology*. ۲۰۲۰
- Maryam Alvandi, **Zahra Shaghaghi**, Vahid Aryafar, et al. The evaluation of left ventricular dyssynchrony in hypertensive patients with a preserved systolic function undergoing gated SPECT myocardial perfusion imaging. *Annals of Nuclear Medicine*. ۲۰۱۹.
- Mohammad Asghari, **Zahra Shaghaghi**, Soghra Farzipour, et al. Radioprotective effect of olanzapine as an anti-psychotic drug against genotoxicity and apoptosis induced by ionizing radiation on human lymphocytes. *Molecular Biology Reports*. ۲۰۱۹.
- Maysa Pouri, **Zahra Shaghaghi**, Arash Ghasemi, et al. Radioprotective effect of gliclazide as an anti-hyperglycemic agent against genotoxicity induced by ionizing radiation on human lymphocytes. *Cardiovascular & Hematological Agents in Medicinal Chemistry*. ۲۰۱۹
- Maryam Alvandi, Seid Kazem Razavi-Ratki, **Zahra Shaghaghi**, et al. Prevalence of Left Ventricular Dyssynchrony in Individuals Undergoing Gated SPECT Myocardial Perfusion Imaging Using Phase Analysis. *Iranian Heart Journal*. ۲۰۱۹.
- **Zahra Shaghaghi**, Seyed Mohammad Abedi, Seyed Jalal Hosseinimehr. Tricine co-ligand improved the efficacy of ^{99m}Tc -HYNIC-(Ser) -J 1A peptide for targeting and imaging of non-small-cell lung cancer. *Biomedicine & Pharmacotherapy*. ۲۰۱۸.
- **Zahra Shaghaghi**, Seyed Mohammad Abedi, Seyed Jalal Hosseinimehr. ^{99m}Tc -HYNIC-(Ser) -J 1A peptide: A radiotracer for non-small-cell lung cancer targeting. *Chemical biology & drug design*. ۲۰۱۸.
- **Zahra Shaghaghi**, Seyed Jalal Hosseinimehr, Synergistic effect of epidermal growth factor receptor inhibitors and ionization radiation in cancer treatment. *Recent Patents on Anti-Cancer Drug Discovery* . ۲۰۱۷
- Ali Ramazani, **Zahra Shaghaghi** , Hamideh Aghahosseini, et al. Silica nanoparticles as a highly efficient catalyst for the one-pot synthesis of sterically congested γ -(dibenzylamino)- γ -aryl acetamide derivatives from by phthaldehyde isomers, isocyanides and dibenzylamine. *Bull. Chem. Soc. Ethiop*. ۲۰۱۷.
- Ali Ramazani , Aram Rezaei, Amir Mahyari, **Zahra Shaghaghi**, et al. Silica gel promotes cascade synthesis of γ -(heteroaryl)acetamide derivatives from isocyanides, dialkylamines and heteroarylcarbaldehydes. *Synthetic Communications*. ۲۰۱۱