

Name Surname

Ali Samie

Doctorate

Ph.D. in Chemistry

Education

Postdoctoral Research Associate, Prof. Kh. Abnous and Prof. S. M. Taghdisi Research Group, Targeted Drug Delivery Research Center, School of Pharmacy, Mashhad University of Medical Sciences (MUMS), Mashhad, Iran, 2020–2025.

Ph.D. in Chemistry, Faculty of Science, Ferdowsi University of Mashhad, Mashhad, Iran, 2012–2019.

Experience

Sabbatical Leave, Prof. G. R. Desiraju's Laboratory, Solid State and Structural Chemistry Unit (SSCU), Indian Institute of Science (IISc), Bangalore, India, 2016–2018.

Research Interests

- Targeted Drug Delivery
- Pharmaceutical Crystal Engineering
- Supramolecular Chemistry
- Nanomedicine and Nanocarriers
- Synthesis, Characterization, and Application of Nanomaterials
- Correlation Between Structure and Properties of Active Pharmaceutical Ingredients (APIs)
- Drug Development and Physicochemical Property Enhancement
- Screening APIs for High-Throughput Polymorphs, Salts, and Cocrystals

Last 5 Publications

Abdollahzadeh, M., Samie, A., Taghdisi, S. M., & Abnous, K. (2025). Hydrogen-bonded organic frameworks (HOFs): Beyond the bond—Crystal engineering concept for designing advanced delivery systems and therapeutic agents. *Chemical Engineering Journal*, 511, 171386. <https://doi.org/10.1016/j.cej.2025.171386>

Khojastehnezhad, A., Samie, A., Bisio, A., El-Kaderi, H. M., & Siaj, M. (2025). Impact of Postsynthetic Modification on the Covalent Organic Framework (COF) Structures. *ACS Applied Materials & Interfaces*, 17(8), 11415–11442. <https://doi.org/10.1021/acsami.4c14030>

Nejabat, M., Samie, A., Khojastehnezhad, A., Hadizadeh, F., Taghdisi, S. M., & Siaj, M. (2024). Stimuli-Responsive Covalent Organic Frameworks for Cancer Therapy. *ACS Applied Materials & Interfaces*, 16(39), 51837–51859. <https://doi.org/10.1021/acsami.4c07040>

Samie, A., & Alavian, H. (2024). A Perspective on the Permeability of Cocrystals/Organic Salts of Oral Drugs. *Molecular Pharmaceutics*, 21(10), 4860–4911. <https://doi.org/10.1021/acs.molpharmaceut.4c00786>

Nejabat, M., Samie, A., Ramezani, M., Alibolandi, M., Abnous, K., & Taghdisi, S. M. (2023). An Overview on Gold Nanorods as Versatile Nanoparticles in Cancer Therapy. *Journal of Controlled Release*, 354, 221–242. <https://doi.org/10.1016/j.jconrel.2023.01.009>

Samie, A., Alavian, H., Vafaei-Pour, Z., Mohammadpour, A. H., Jafarian, A. H., Danesh, N. M., Abnous, K., & Taghdisi, S. M. (2023). Accelerated Wound Healing with a Diminutive Scar through Cocrystal Engineered Curcumin. *Molecular Pharmaceutics*, 20(10), 5090–5107. <https://doi.org/10.1021/acs.molpharmaceut.3c00398>