

## Navid Rabiee, Ph.D.

+61 4 7699 7019

[nrabiee94@gmail.com](mailto:nrabiee94@gmail.com)

[navidrabeer@tsinghua.edu.cn](mailto:navidrabeer@tsinghua.edu.cn)

---

Birthdate: 09.01.1994

Marital Status: Single

Permanent Residence of Australia

Citations (SCOPUS): 60,580

H-Index (SCOPUS): 87

***Keywords:*** *Chemistry; Biomaterials; Nanoparticles; Nanomaterials; Healthcare Technologies*

---

### **RESEARCH EXPERIENCE:**

August 2025-  
Present

**Co-Founder & Chief Scientific Officer**  
**Sensigen BioSystems Ltd., Beijing, China**

December 2024-  
Present

**Research Professor**  
**Department of Basic Medical Science, School of Medicine, Tsinghua University, 100084, Beijing, China**

**Tsinghua-Peking Joint Center for Life Sciences, Tsinghua University, 100084, Beijing, China**

**MOE Key Laboratory of Bioinformatics, Tsinghua University, 100084, Beijing, China**

June 2024-  
Present

**Co-Founder**  
**BioGenX Ltd., Seoul, South Korea**

June 2024-  
Present

**Distinguished Adjunct Faculty**  
**Department of Biomaterials, Saveetha Dental College and Hospitals, SIMATS, Saveetha University, Chennai-600077, India**

Feb 2023- March  
2024

**Honorary Lecturer**  
**School of Engineering, Faculty of Science and Engineering, Macquarie University, Sydney, NSW, 2109, Australia**

November 2022-  
May 2024

**Scientist**  
**Centre for Molecular Medicine and Innovative Therapeutics, Murdoch University, Perth, WA 6150, Australia**

March 2022-  
October 2022

**Research Fellow**  
**Department of Materials Science and Engineering, Pohang University of Science and Technology (POSTECH), Korea**

September 2021-  
September 2022

**Invited Visiting Scholar**

**School of Engineering, Faculty of Science and Engineering, Macquarie University, Sydney, NSW, 2109, Australia**

July 2021- July 2022      **Postdoctoral Research Associate**  
**Department of Physics, Sharif University of Technology, Tehran, Iran**  
Under Supervision of Prof. Omid Akhavan

January 2021- February 2022      **Research Associate**  
**National Cell Bank, Pasteur Institute of Iran, Tehran, Iran**  
In Collaboration with Prof. Shahin Bonakdar

September 2018- July 2021      **Research Assistant**  
**Department of Chemistry, Sharif University of Technology, Tehran, Iran**  
Under Supervision of Prof. Mojtaba Bagherzadeh

September 2016- February 2022      **Research Assistant**  
**Department of Biomedical Engineering, Amirkabir University of Technology, Tehran, Iran**  
Under Supervision of Prof. Mohamad Rabiee

September 2016- September 2018      **Research Assistant**  
**Department of Chemistry, Shahid Beheshti University, Tehran, Iran**  
In Collaboration with Prof. Nasser Safari

September 2016- September 2019      **Research Assistant**  
**Department of Medical Biotechnology, Iran University of Medical Sciences, Tehran, Iran**

## **TEACHING EXPERIENCE:**

Spring 2022- Summer 2022      **Undergraduate Instructor**  
Pohang University of Science and Technology

Fall 2018- Fall 2021      **Undergraduate Instructor**  
Sharif University of Technology

Fall 2019- Fall 2021      **Graduate Instructor**  
Sharif University of Technology

Fall 2018- Fall 2021      **Teaching Assistant for General Chemistry I**  
Sharif University of Technology

Fall 2018- Fall 2021	<b>Teaching Assistant for General Chemistry Laboratory I</b> Sharif University of Technology
Fall 2018- Fall 2021	<b>Teaching Assistant for Inorganic Chemistry I</b> Sharif University of Technology
Fall 2018- Fall 2021	<b>Teaching Assistant for Inorganic Chemistry II</b> Sharif University of Technology
Fall 2018- Fall 2021	<b>Teaching Assistant for Inorganic Chemistry III</b> Sharif University of Technology
Fall 2016- Fall 2017	<b>Teaching Assistant for Inorganic Chemistry II</b> Shahid Beheshti University
Fall 2016- Fall 2017	<b>Teaching Assistant for Inorganic Chemistry I</b> Shahid Beheshti University

## **EDUCATION:**

September 2018- September 2021	<b>Department of Chemistry, Sharif University of Technology, Tehran Iran</b> <b>Ph.D. in Inorganic Chemistry</b>
September 2016- September 2018	<b>Department of Chemistry, Shahid Beheshti University, Tehran Iran</b> <b>M.Sc. in Inorganic Chemistry</b>
September 2012- September 2016	<b>Department of Chemistry, Shahid Beheshti University, Tehran Iran</b> <b>B.Sc. in Pure Chemistry</b>

## **SELECTED PUBLICATIONS:**

### **BOOKS:**

1. **Rabiee, N.** and Makvandi, P., **2025**. *Green Biomaterials in Tissue Engineering*. **American Chemical Society**.
2. **Rabiee, N.** and Makvandi, P., **2024**. *Logic for Metal–Organic Framework Selection: MOFs for Biomedical Applications*. **American Chemical Society**.
3. Paiva-Santos, A.C., **Rabiee, N.**, Makvandi, P., **2024**. *Cell Membrane Surface-Engineered Nanoparticles: Biomimetic Nanomaterials for Biomedical Applications*. **American Chemical Society**.

4. **Rabiee, N.** and Hamblin, M.R., **2020**. Protein and peptide-based microarrays. *Protein and Peptide-based Microarrays for Multiplex Detection*. IOP Science, Morgan & Claypool Publishers.
5. **Rabiee, N.**, Rabiee, M., Bagherzadeh, M. and Hamblin, M.R., **2019**. *Stimuli-responsive polymers: nano-dimension*. IOP Science, Morgan & Claypool Publishers.
6. **Rabiee, N.**, Kiani, M., Bagherzadeh, M., Rabiee, M. and Ahmadi, S., **2019**. *Nanoparticle (NP)-Based Delivery Vehicles*. IOP Science, Morgan & Claypool Publishers.
7. Nasab, S.G., Yazd, M.J., Semnani, A., Kahkesh, H., **Rabiee, N.**, Rabiee, M. and Bagherzadeh, M., **2019**. Natural corrosion inhibitors. *Synthesis Lectures on Mechanical Engineering*, 14(1), pp.1-96.
8. Rabiee, M., **Rabiee, N.**, Salarian, R. and Rabiee, G., **2019**. *Introduction to Nanomaterials in Medicine*. IOP Science, Morgan & Claypool Publishers.
9. Karimi, M., Mansouri, M.R., **Rabiee, N.** and Hamblin, M.R., **2018**. *Advances in Nanomaterials for Drug Delivery*. IOP Science, Morgan & Claypool Publishers.

**JOURNAL ARTICLES:** (\*: as corresponding author)

**2025**

1. **Rabiee, N.\***, **2025**. Comparing Hydrogen-Bonded Organic Frameworks and Metal-Organic Frameworks for Biosensor Applications. **TrAC Trends in Analytical Chemistry**, p.118211.
2. **Rabiee, N.\***, **2025**. Perspective on Multiview Super-Resolution Microscopy: Innovations and Future Directions. **Advanced Engineering Materials**, p.2402559.
3. **Rabiee, N.\***, **2025**. Wearable MOF Biosensors: A New Frontier in Real-Time Health Monitoring. **TrAC Trends in Analytical Chemistry**, p.118156.
4. Daneshgar, H., Safarkhani, M., Sojdeh, S., Bagherzadeh, M. and **Rabiee, N.\***, **2025**. CRISPR-Cas Technology for Rapid Detection of Pathogens. **TrAC Trends in Analytical Chemistry**, p.118174.
5. Sadraei, A., Naghib, S.M. and **Rabiee, N.\***, **2025**. 4D printing biological stimuli-responsive hydrogels for tissue engineering and localized drug delivery applications—part 1. **Expert opinion on drug delivery**, (just-accepted).

6. Arghavani, P., Daneshgar, H., Sojdeh, S., Edrisi, M., Moosavi-Movahedi, A.A. and **Rabiee, N.\***, **2025**. Porous Materials for Early Diagnosis of Neurodegenerative Diseases. **Advanced Healthcare Materials**, p.2404685.
7. **Rabiee, N.\***, **2025**. Super-Resolution Microscopy for Protein Imaging: Unraveling Cellular Architecture and Function. **TrAC Trends in Analytical Chemistry**, p.118140.
8. Mikaeeli Kangarshahi, B., Naghib, S.M., Younesian, D. and **Rabiee, N.\***, **2025**. Unlocking the Rhythmic Power of Bacterial Cellulose: A Comprehensive Review on Green Energy Harvesting and Sustainable Applications. **Advanced Functional Materials**, 35(3), p.2413760.
9. Moradi, A., Maskoukian, S., Bączek, T., **Rabiee, N.**, Saeb, M.R., Farokhi, M. and Mottaghitlab, F., **2025**. Nanoparticulate systems for combination therapies of lung cancer: A review. **Journal of Nanoparticle Research**, 27(3), p.56.
10. Daneshgar, H., Fatahi, Y., Salehi, G., Bagherzadeh, M. and **Rabiee, N.\***, **2025**. Highly sensitive and selective detection of SARS-CoV-2 spike protein S1 using optically-active nanocomposite-coated melt-blown masks. **Analytica Chimica Acta**, 1336, p.343534.

## **2024**

11. Iravani, S., **Rabiee, N.** and Makvandi, P., **2024**. Advancements in MXene-based composites for electronic skins. **Journal of Materials Chemistry B**.
12. Safarkhani, M., Ahmadi, S., Ipakchi, H., Saeb, M.R., Makvandi, P., Ebrahimi Warkiani, M., **Rabiee, N.\*** and Huh, Y., **2024**. Advancements in Aptamer-Driven DNA Nanostructures for Precision Drug Delivery. **Advanced Science**, p.2401617.
13. Far, B.F., Naimi-Jamal, M.R., Daneshgar, H. and **Rabiee, N.\***, **2024**. Bioengineered DNA-decorated UiO-66-based nanocarriers for combined administration of doxorubicin and sorafenib: Hepatocellular carcinoma treatment and chemotherapy. **Alexandria Engineering Journal**, 87, pp.114-125.
14. Koshki, M.S., Zirak, M., Kazemi, M., Alehdaghi, H., Baghayeri, M., Nodehi, M. and **Rabiee, N.\***, **2024**. Molybdenum-doped BiVO<sub>4</sub> thin films: Facile preparation via hot-spin coating method and the relationship between surface statistical parameters and photoelectrochemical activity. **Chemosphere**, 346, p.140579.
15. Safarkhani, M., Farasati Far, B., Kim, S.H., Makvandi, P., Park, M.K., Huh, Y. and **Rabiee, N.\***, **2024**. Advances and Challenges of Sensing in Water Using CRISPR-Cas Technology. **ACS Biomaterials Science & Engineering**.

16. Bigham, A., Zarepour, A., Safarkhani, M., Huh, Y., Khosravi, A., **Rabiee, N.\***, Iravani, S. and Zarrabi, A., **2024**. Inspired by nature: Bioinspired and biomimetic photocatalysts for biomedical applications. **Nano Materials Science**.
17. Safarkhani, M., Farasati Far, B., Lima, E.C., Jafarzadeh, S., Makvandi, P., Varma, R.S., Huh, Y., Ebrahimi Warkiani, M. and **Rabiee, N.\***, **2024**. Integration of MXene and Microfluidics: A Perspective. **ACS biomaterials science & engineering**.
18. Jafarzadeh, S., Golgoli, M., Azizi-Lalabadi, M., Farahbakhsh, J., Forough, M., **Rabiee, N.** and Zargar, M., **2024**. Enhanced carbohydrate-based plastic performance by incorporating cerium-based metal-organic framework for food packaging application. **International journal of biological macromolecules**, 265, p.130899.
19. Lima, E.C., Ponce-Vargas, M., Naushad, M., Thue, P.S., dos Reis, G.S., Mello, B.L., **Rabiee, N.**, Abatal, M., Seliem, M.K. and Badawi, M., **2024**. Removal of methylparaben from aqueous effluents using biobased carbon material. Experimental and DFT calculations. **Journal of molecular liquids**, 397, p.124194.
20. Safarkhani, M., Ojaghi, A., Nezhad, S.M., Daneshgar, H., Paiva-Santos, A.C., Radmanesh, F., Bagherzadeh, M., Zare, E.N., **Rabiee, N.\*** and Makvandi, P., **2024**. Engineered (NH<sub>2</sub>)-MIL-125 (Ti)/copolymer@ MnFe<sub>2</sub>O<sub>4</sub> nanocomposite for synergistic eradication of cancer cells via DOX/pCRISPR delivery. **Advanced Composites and Hybrid Materials**, 7(1), p.18.
21. Mikaeeli Kangarshahi, B., Naghib, S.M. and **Rabiee, N.\***, **2024**. DNA/RNA-based electrochemical nanobiosensors for early detection of cancers. **Critical reviews in clinical laboratory sciences**, pp.1-23.
22. Bagherzadeh, M., Salehi, G. and **Rabiee, N.**, **2024**. Rapid and efficient removal of methylene blue dye from aqueous solutions using extract-modified Zn–Al LDH. **Chemosphere**, 350, p.141011.
23. Farzin, M.A., Naghib, S.M. and **Rabiee, N.\***, **2024**. Advancements in Bio-inspired Self-Powered Wireless Sensors: Materials, Mechanisms, and Biomedical Applications. **ACS Biomaterials Science & Engineering**.
24. Nodehi, M., Zirak, M., Reiser, O., Alehdaghi, H., Kazemi, M., Koshki, M.S., **Rabiee, N.** and Baghayeri, M., **2024**. Pushing Back the Detection Limit for Photoelectrochemical Sensing of Bisphenol A by Using a Readily Available and Ultrastable BiVO<sub>4</sub>/ITO Electrode. **ACS Applied Engineering Materials**.

25. Khodadadi Yazdi, M., Seidi, F., Hejna, A., Zarrintaj, P., **Rabiee, N.**, Kucinska-Lipka, J., Saeb, M.R. and Bencherif, S.A., **2024**. Tailor-Made Polysaccharides for Biomedical Applications. **ACS Applied Bio Materials**.
26. Gao, W., Bigham, A., Ghomi, M., Zarrabi, A., **Rabiee, N.**, Saeb, M.R., Ertas, Y.N., Goel, A., Sharifi, E., Ashrafizadeh, M. and Sethi, G., **2024**. Micelle-engineered nanoplatfoms for precision oncology. **Chemical Engineering Journal**, p.153438.
27. Daneshgar, H., Sojdeh, S., Salehi, G., Edrisi, M., Bagherzadeh, M. and **Rabiee, N.\***, **2024**. Comparative study of synthesis methods and pH-dependent adsorption of methylene blue dye on UiO-66 and NH<sub>2</sub>-UiO-66. **Chemosphere**, 353, p.141543.
28. Farzin, M.A., Naghib, S.M. and **Rabiee, N.\***, **2024**. Bio-inspired and biomimetic composites based on biodegradable polymers for sensing applications with emphasis on early diagnosis of cancer. **Chemical Engineering Journal**, p.152445.
29. Makurat-Kasprolewicz, B., Ipakchi, H., Rajaei, P., Ossowska, A., Hejna, A., Farokhi, M., Mottaghitalab, F., Pawlak, M., **Rabiee, N.**, Belka, M. and Bączek, T., **2024**. Green engineered biomaterials for bone repair and regeneration: Printing technologies and fracture analysis. **Chemical Engineering Journal**, p.152703.
30. Khorsandi, D., Jenson, S., Zarepour, A., Khosravi, A., **Rabiee, N.\***, Irvani, S. and Zarrabi, A., **2024**. Catalytic and biomedical applications of nanocelluloses: A review of recent developments. **International Journal of Biological Macromolecules**, p.131829.
31. Niazvand, F., Sharifianjazi, F., Esmailkhanian, A., Ahmadi, E., Moradigharibvand, N., **Rabiee, N.**, Seifalian, A., Ghiasvand, A. and Hojjati, M., **2024**. Sol-gel derived bioactive glasses containing boron and strontium: Bioactivity, biocompatibility, and antibacterial properties. **Journal of Non-Crystalline Solids**, 631, p.122909.
32. Safarkhani, M., Saeb, M.R., Lee, J.H., Huh, Y.S. and **Rabiee, N.\***, **2024**. Carbon-based nanomaterials for CRISPR/Cas delivery: a perspective on the design approach. **Carbon Letters**, 34(1), pp.387-397.
33. Zarepour, A., Rafati, N., Khosravi, A., **Rabiee, N.**, Irvani, S. and Zarrabi, A., **2024**. MXene-based composites in smart wound healing and dressings. **Nanoscale Advances**.
34. Wang, Z., Pang, S., Liu, X., Dong, Z., Tian, Y., Ashrafizadeh, M., **Rabiee, N.**, Ertas, Y.N. and Mao, Y., **2024**. Chitosan-and hyaluronic acid-based nanoarchitectures in phototherapy: Combination cancer chemotherapy, immunotherapy and gene therapy. **International Journal of Biological Macromolecules**, p.132579.

35. Khanzada, A.K., Al-Hazmi, H.E., Kurniawan, T.A., Majtacz, J., Piechota, G., Kumar, G., Ezzati, P., Saeb, M.R., **Rabiee, N.**, Karimi-Maleh, H. and Lima, E., **2024**. Hydrochars as a bio-based adsorbent for heavy metals removal: A review of production processes, adsorption mechanisms, kinetic models, regeneration and reusability of hydrochar. **Science of The Total Environment**, p.173972.
36. Albaseer, S.S., Al-Hazmi, H.E., Kurniawan, T.A., Xu, X., Abdulrahman, S.A., Ezzati, P., Habibzadeh, S., Hollert, H., **Rabiee, N.**, Lima, E.C. and Badawi, M., **2024**. Microplastics in water resources: Global pollution circle, possible technological solutions, legislations, and future horizon. **Science of The Total Environment**, p.173963.
37. Yildiz, S.N., Entezari, M., Paskeh, M.D.A., Mirzaei, S., Kalbasi, A., Zabolian, A., Hashemi, F., Hushmandi, K., Hashemi, M., Raei, M. and **Rabiee, N.\***, **2024**. Nanoliposomes as nonviral vectors in cancer gene therapy. **MedComm**, 5(7), p.e583.
38. Jin, X., Heidari, G., Nezhad, S.M., Shao, M., Hua, Z., Lei, Y., Zare, E.N., Paiva-Santos, A.C., Sillanpää, M., Prakash, C. and **Rabiee, N.**, **2024**. Progress in translating bioinorganic nanoplatform discoveries into clinical lung cancer care: Overcoming limitations, targeted drug delivery and imaging. **Alexandria Engineering Journal**, 99, pp.271-281.
39. Jafarzadeh, S., Nooshkam, M., Qazanfarzadeh, Z., Oladzadabbasabadi, N., Strachowski, P., **Rabiee, N.**, Shirvanimoghaddam, K., Abdollahi, M. and Naebe, M., **2024**. Unlocking the potential of 2D nanomaterials for sustainable intelligent packaging. **Chemical Engineering Journal**, 490, p.151711.

## 2023

40. **Rabiee, N.\***, Sharma, R., Foorginezhad, S., Jouyandeh, M., Asadnia, M., Rabiee, M., Akhavan, O., Lima, E.C., Formela, K., Ashrafzadeh, M. and Fallah, Z., **2023**. Green (Nano) membranes: A review. **Environmental research**, p.116133.
41. **Rabiee, N.\***, **2023**. Natural components as surface engineering agents for CRISPR delivery. **Environmental research**, p.116333.
42. **Rabiee, N.\***, **2023**. Sustainable metal-organic frameworks (MOFs) for drug delivery systems. **Materials Today Communications**, p.106244.
43. **Rabiee, N.\***, **2023**. Artificial intelligence assisted with designing metal-organic frameworks (MOFs). **Clinical and Translational Discovery**, 3(3), p.e207.

44. Ghanbari, R., Zare, E.N., Paiva-Santos, A.C. and **Rabiee, N.\***, 2023. Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene@MOF decorated polyvinylidene fluoride membrane for the remediation of heavy metals ions and desalination. **Chemosphere**, 311, p.137191. (IF : 9.0; Citations: 1)
45. Ahmadi, S., Warkiani, M.E., Rabiee, M., Iravani, S. and **Rabiee, N.\***, 2023. Carbon-based nanomaterials against SARS-CoV-2: Therapeutic and diagnostic applications. **OpenNano**, 10, p.100121. (Citescore : 21.0; Citations: 1)
46. Far, B.F., Naimi-Jamal, M.R., Daneshgar, H. and **Rabiee, N.\***, 2023. Co-delivery of doxorubicin/sorafenib by DNA-decorated green ZIF-67-based nanocarriers for chemotherapy and hepatocellular carcinoma treatment. **Environmental Research**, p.115589. (IF : 8.5; Citations: 0)
47. Fooladi, S., Nematollahi, M.H., **Rabiee, N.\*** and Iravani, S., 2023. Bacterial Cellulose-Based Materials: A Perspective on Cardiovascular Tissue Engineering Applications. **ACS Biomaterials Science & Engineering**, 9(6), pp.2949-2969.
48. Mohajer, F., Mirhosseini-Eshkevari, B., Ahmadi, S., Ghasemzadeh, M.A., Mohammadi Ziarani, G., Badiei, A., Farshidfar, N., Varma, R.S., **Rabiee, N.\*** and Iravani, S., 2023. Advanced Nanosystems for Cancer Therapeutics: A Review. **ACS Applied Nano Materials**, 6(9), pp.7123-7149.
49. Shao, M., Bigham, A., Yousefiasl, S., Yiu, C.K., Girish, Y.R., Ghomi, M., Sharifi, E., Sezen, S., Zarrabi, A., **Rabiee, N.** and Paiva-Santos, A.C., 2023. Recapitulating Antioxidant and Antibacterial Compounds into a Package for Tissue Regeneration: Dual Function Materials with Synergistic Effect. **Small**, pp.e2207057-e2207057. (IF : 22.0; Citations: 1)
50. Sharifi, E., Yousefiasl, S., Trovato, M., Sartorius, R., Esmaeili, Y., Goodarzi, H., Ghomi, M., Bigham, A., Moghaddam, F.D., Heidarifard, M. and **Rabiee, N.**, 2023. Nanostructures for prevention, diagnosis, and treatment of viral respiratory infections: from influenza virus to SARS-CoV-2 variants. **Journal of Nanobiotechnology**, 21(1), p.199.
51. Lakhera, S.K., Rugma, T.P., Krishna, B.R., **Rabiee, N.** and Neppolian, B., 2023. Pivotal role of oxygen during the synthesis of Cu (OH) <sub>2</sub>/TiO<sub>2</sub> and its effect on photocatalytic hydrogen production activity. **Catalysis Today**. (IF : 6.0; Citations: 1)
52. Makvandi, P., Shabani, M., **Rabiee, N.**, Anjani, Q.K., Maleki, A., Zare, E.N., Sabri, A.H.B., De Pasquale, D., Koskinopoulou, M., Sharifi, E. and Sartorius, R., 2023. Engineering and Development of a Tissue Model for the Evaluation of Microneedle Penetration Ability, Drug Diffusion, Photothermal Activity, and Ultrasound Imaging: A Promising Surrogate to ex vivo and in vivo Tissues. **Advanced Materials**, p.2210034. (IF : 32.0; Citations: 1)

53. Sharifi, E., Yousefiasl, S., Laderian, N., **Rabiee, N.**, Makvandi, P., Pourmotabed, S., Ashrafizadeh, M., Familsattarian, F. and Fang, W., **2023**. Cell-loaded genipin cross-linked collagen/gelatin skin substitute adorned with zinc-doped bioactive glass-ceramic for cutaneous wound regeneration. **International Journal of Biological Macromolecules**, p.125898.
54. Rahimnejad, M., Jahangiri, S., Zirak Hassan Kiadeh, S., Rezvaninejad, S., Ahmadi, Z., Ahmadi, S., Safarkhani, M. and **Rabiee, N.\***, **2023**. Stimuli-responsive biomaterials: smart avenue toward 4D bioprinting. **Critical Reviews in Biotechnology**, pp.1-32.
55. Sojdeh, S., Banitalebi Dehkordi, A., Badiei, A., Zarrabi, A., Makvandi, P., Ashrafizadeh, M., Saeb, M.R., Lima, E.C., Rabiee, M., Asadnia, M., Webster, T.J. and **Rabiee, N.\***, **2023**. N-doped carbon nanospheres as selective fluorescent probes for mercury detection in contaminated aqueous media: chemistry, fluorescence probing, cell line patterning, and liver tissue interaction. **Environmental Science and Pollution Research**, pp.1-13. (IF : **5.3**; Citations: 0)
56. Makvandi, P., Song, H., Yiu, C.K., Sartorius, R., Zare, E.N., **Rabiee, N.**, Wu, W.X., Paiva-Santos, A.C., Wang, X.D., Yu, C.Z. and Tay, F.R., **2023**. Bioengineered materials with selective antimicrobial toxicity in biomedicine. **Military Medical Research**, 10(1), pp.1-20. (IF : **33.4**; Citations: 0)
57. Mehrabian, M., Akhavan, O., **Rabiee, N.**, Afshar, E.N. and Zare, E.N., **2023**. Lead-free MAGel3 as a suitable alternative for MAPbI3 in nanostructured perovskite solar cells: a simulation study. **Environmental Science and Pollution Research**, pp.1-9. (IF : **5.3**; Citations: 0)
58. Zarrintaj, P., Seidi, F., Azarfam, M.Y., Yazdi, M.K., Erfani, A., Barani, M., Chauhan, N.P.S., **Rabiee, N.**, Kuang, T., Kucinska-Lipka, J. and Saeb, M.R., **2023**. Biopolymer-based composites for tissue engineering applications. **Composites Part B: Engineering**, p.110701. (IF : **11.3**; Citations: 0)
59. Ashrafizadeh, M., Zarrabi, A., Bigham, A., Taheriazam, A., Saghari, Y., Mirzaei, S., Hashemi, M., Hushmandi, K., Karimi-Maleh, H., Nazarzadeh Zare, E. and **Rabiee, N.**, **2023**. (Nano) platforms in breast cancer therapy: Drug/gene delivery, advanced nanocarriers and immunotherapy. **Medicinal Research Reviews**.
60. Peng, H., Zhang, J., Zhang, Z., Turdi, S., Han, X., Liu, Q., Hu, H., Ye, H., Dong, M., Duan, Y. and **Rabiee, N.**, **2023**. Cardiac-specific overexpression of catalase attenuates lipopolysaccharide-induced cardiac anomalies through reconciliation of autophagy and ferroptosis. **Life Sciences**, p.121821.

61. Khanmohammadi, S., Saeedi Moghaddam, S., Azadnajafabad, S., Rezaei, N., Esfahani, Z., Rezaei, N., **Rabiee, N.**, Larijani, B., Farzadfar, F., Moghaddam, S.S. and Abbasi-Kangevari, Z., **2023**. Burden of tracheal, bronchus, and lung cancer in North Africa and Middle East countries, 1990 to 2019: Results from the GBD study 2019. **Frontiers in Oncology**, 12, p.1098218.
62. Al-Hazmi, H.E., Kot-Wasik, A., Shokrani, A., Majtacz, J., Vatanpour, V., Munir, M.T., Habibzadeh, S., Hejna, A., Hasanpour, M., Mohammadi, A. and **Rabiee, N.\***, **2023**. Diving boldly into COVID-19 contaminated wastewater: Eyes at nanotechnology-assisted solutions. **Clinical and Translational Discovery**, 3(3), p.e195.
63. Ahmadi, S., Rahimizadeh, K., Shafiee, A., **Rabiee, N.\*** and Iravani, S., **2023**. Nanozymes and their emerging applications in biomedicine. **Process Biochemistry**.
64. Zarepour, A., Ahmadi, S., **Rabiee, N.\***, Zarrabi, A. and Iravani, S., **2023**. Self-Healing MXene-and Graphene-Based Composites: Properties and Applications. **Nano-micro letters**, 15(1), p.100.
65. Wiśniewska, P., Haponiuk, J., Saeb, M.R., **Rabiee, N.\*** and Bencherif, S.A., **2023**. Mitigating Metal-organic framework (MOF) toxicity for biomedical applications. **Chemical Engineering Journal**, p.144400.
66. Ghomi, M., Zare, E.N., Alidadi, H., Pourreza, N., Sheini, A., **Rabiee, N.**, Mattoli, V., Chen, X. and Makvandi, P., **2023**. A multifunctional bioresponsive and fluorescent active nanogel composite for breast cancer therapy and bioimaging. **Advanced Composites and Hybrid Materials**, 6(1), p.51.
67. Teixeira, R.A., Lima, E.C., Benetti, A.D., Naushad, M., Thue, P.S., Mello, B.L., Dos Reis, G.S., **Rabiee, N.**, Franco, D. and Seliem, M.K., **2023**. Employ a Clay@ TMSPEDETA hybrid material as an adsorbent to remove textile dyes from wastewater effluents. **Environmental Science and Pollution Research**, pp.1-15.
68. He, Z., **Rabiee, N.**, Wei, Q., Hou, Y., Yan, B. and Xie, J., **2023**. Composites and surface and interface engineering (CSIE): preparation and modification of biomaterials and their anti-biofouling ability and surface wettability. **Frontiers in Bioengineering and Biotechnology**, 11, p.1230571.
69. Karimi, K., Mojtabavi, S., Tehrany, P.M., Nejad, M.M., Rezaee, A., Mohtashamian, S., Hamedi, E., Yousefi, F., Salmani, F., Zandieh, M.A. and **Rabiee, N.**, **2023**. Chitosan-based nanoscale delivery systems in hepatocellular carcinoma: Versatile bio-platform with theranostic application. **International journal of biological macromolecules**, p.124935.

70. Far, B.F., Naimi-Jamal, M.R., Ahmadi, S. and **Rabiee, N.\***, 2023. Enhancing bone tissue engineering with calcium and strontium nanoparticles immobilized on HKUST-1. **Alexandria Engineering Journal**, 76, pp.221-235.
71. **Rabiee, N.\*** and Iravani, S., 2023. MXenes and Their Composites: A Versatile Platform for Biomedical Applications. **Materials Chemistry Horizons**.
72. Cunha, M.R., Naushad, M., Ponce-Vargas, M., Lima, E.C., Sher, F., **Rabiee, N.**, Franco, D.S., Thue, P.S., Tran, H.N. and Badawi, M., 2023. Removal of enalapril maleate drug from industry waters using activated biochar prepared from Butia capitata seed. Kinetics, equilibrium, thermodynamic, and DFT calculations. **Journal of Molecular Liquids**, 386, p.122470.
73. **Rabiee, N.\*** and Iravani, S., 2023. Nanosponges for hydrogen evolution reaction: current trends and future perspectives. **Sustainable Energy & Fuels**.
74. Tavakolizadeh, M., Atarod, M., Tabaei, S.J.S., Sojdeh, S., Zare, E.N., Rabiee, M. and **Rabiee, N.\***, 2023. Green modified-UiO-66/MXene sandwich composites for gene-chemotherapy synergistic cancer suppression: Co-delivery of doxorubicin and pCRISPR. **Alexandria Engineering Journal**, 80, pp.144-154.
75. Ahmadi, S., Rahimizadeh, K., Shafiee, A., **Rabiee, N.\*** and Iravani, S., 2023. Nanozymes and their emerging applications in biomedicine. **Process Biochemistry**.
76. Kazemi, M., Zirak, M., Alehdaghi, H., Baghayeri, M., Nodehi, M., Baedi, J. and **Rabiee, N.**, 2023. Toward preparation of large scale and uniform mesoporous BiVO<sub>4</sub> thin films with enhanced photostability for solar water splitting. **Journal of alloys and compounds**, 969, p.172409.
77. **Rabiee, N.\***, Chen, S., Ahmadi, S. and Veedu, R.N., 2023. Aptamer-engineered (nano) materials for theranostic applications. **Theranostics**, 13(15), p.5183.
78. Fooladi, S., **Rabiee, N.\*** and Iravani, S., 2023. Genetically engineered bacteria: a new frontier in targeted drug delivery. **Journal of Materials Chemistry B**.
79. **Rabiee, N.\*** and Iravani, S., 2023. Nanosponges for hydrogen evolution reaction: current trends and future perspectives. **Sustainable Energy & Fuels**, 7(19), pp.4825-4838.
80. Safarkhani, M., Aldhafer, A., Lima, E.C., Zargar, M., Jung, E.E., Huh, Y. and **Rabiee, N.\***, 2023. Engineering MXene@ MOF Composites for a Wide Range of Applications: A Perspective. **ACS Applied Engineering Materials**.

81. Fooladi, S., Nematollahi, M.H., **Rabiee, N.\*** and Iravani, S., **2023**. Bacterial Cellulose-Based Materials: A Perspective on Cardiovascular Tissue Engineering Applications. **ACS Biomaterials Science & Engineering**, 9(6), pp.2949-2969.
82. Koshki, M.S., Zirak, M., Kazemi, M., Alehdaghi, H., Baghayeri, M., Nodehi, M. and **Rabiee, N.\***, **2023**. Molybdenum-doped BiVO<sub>4</sub> thin films: Facile preparation via hot-spin coating method and the relationship between surface statistical parameters and photoelectrochemical activity. **Chemosphere**, p.140579.

## 2022

73. **Rabiee, N.\***, Fatahi, Y., Asadnia, M., Daneshgar, H., Kiani, M., Ghadiri, A.M., Atarod, M., Mashhadzadeh, A.H., Akhavan, O., Bagherzadeh, M. and Lima, E.C., **2022**. Green porous benzamide-like nanomembranes for hazardous cations detection, separation, and concentration adjustment. **Journal of Hazardous Materials**, p.127130. (IF : 14.5; Citations: 21)
74. **Rabiee, N.\***, Atarod, M., Tavakolizadeh, M., Asgari, S., Rezaei, M., Akhavan, O., Pourjavadi, A., Jouyandeh, M., Lima, E.C., Mashhadzadeh, A.H. and Ehsani, A., **2022**. Green metal-organic frameworks (MOFs) for biomedical applications. **Microporous and Mesoporous Materials**, p.111670. (IF : 6.5; Citations: 9)
75. **Rabiee, N.\***, Fatahi, Y., Ahmadi, S., Abbariki, N., Ojaghi, A., Rabiee, M., Radmanesh, F., Dinarvand, R., Bagherzadeh, M., Mostafavi, E. and Ashrafizadeh, M., **2022**. Bioactive hybrid metal-organic framework (MOF)-based nanosensors for optical detection of recombinant SARS-CoV-2 spike antigen. **Science of The Total Environment**, p.153902. (IF : 10.5; Citations: 15)
76. **Rabiee, N.\***, Ghadiri, A.M., Alinezhad, V., Sedaghat, A., Ahmadi, S., Fatahi, Y., Makvandi, P., Saeb, M.R., Bagherzadeh, M., Asadnia, M. and Varma, R.S., **2022**. Synthesis of green benzamide-decorated UiO-66-NH<sub>2</sub> for biomedical applications. **Chemosphere**, p.134359. (IF : 9.0; Citations: 14)
77. Ramezani Farani, M., Nourmohammadi Khirak, B., Tao, R., Wang, Z., Ahmadi, S., Hassanpour, M., Rabiee, M., Saeb, M.R., Lima, E.C., and **Rabiee, N.\***, **2022**. 2D MXene nanocomposites: electrochemical and biomedical applications. **Environmental Science: Nano**. (IF : 9.5; Citations: 0)
78. **Rabiee, N.\***, Ahmadi, S., Akhavan, O., Luque, R., **2022**. Silver and Gold Nanoparticles for Antimicrobial Purposes against Multi-Drug Resistance Bacteria. **Materials**. (IF : 4.5; Citations: 5)

79. **Rabiee, N.\***, Akhavan, O., Fatahi, Y., Ghadiri, A.M., Kiani, M., Makvandi, P., Rabiee, M., Nicknam, M.H., Saeb, M.R., Varma, R.S. and Ashrafizadeh, M., **2022**. CaZnO-based nanoghosts for the detection of ssDNA, pCRISPR and recombinant SARS-CoV-2 spike antigen and targeted delivery of doxorubicin. **Chemosphere**, p.135578. (IF : 9.0; Citations: 8)
80. **Rabiee, N.\***, Ahmadi, S., Iravani, S. and Varma, R.S., **2022**. Natural resources for sustainable synthesis of nanomaterials with anticancer applications: A move toward green nanomedicine. **Environmental Research**, p.114803. (IF : 8.9; Citations: 2)
81. **Rabiee, N.**, Iravani, S. and Varma, R.S., **2022**. Biowaste-Derived Carbon Dots: A Perspective on Biomedical Potentials. **Molecules**, 27(19), p.6186. (IF : 5.0; Citations: 0)
82. Rahimnejad, M., Rasouli, F., Jahangiri, S., Ahmadi, S., **Rabiee, N.\***, Ramezani Farani, M., Akhavan, O., Asadnia, M., Fatahi, Y., Hong, S. and Lee, J., **2022**. Engineered Biomimetic Membranes for Organ-on-a-Chip. **ACS Biomaterials Science & Engineering**. (IF : 5.6; Citations: 0)
83. Ashrafizadeh, M., Zare, E.N., Rossi, F., **Rabiee, N.\***, Sharifi, E. and Makvandi, P., **2022**. Photoactive polymers-decorated Cu-Al layered double hydroxide hexagonal architectures: A potential non-viral vector for photothermal therapy and co-delivery of DOX/pCRISPR. **Chemical Engineering Journal**, p.137747. (IF : 16.7; Citations: 5)
84. Hajebi, S., Yousefiasl, S., Rahimmanesh, I., Dahim, A., Ahmadi, S., Kadumudi, F.B., Rahgozar, N., Amani, S., Kumar, A., Kamrani, E., Rabiee, M., and **Rabiee, N.\***, **2022**. Genetically Engineered Viral Vectors and Organic-based Non-viral Nanocarriers for Drug Delivery Applications. **Advanced Healthcare Materials**, p.2201583. (IF: 11.5; Citations: 0)
85. Jouyandeh, M., Sajadi, S.M., Seidi, F., Habibzadeh, S., Munir, M.T., Abida, O., Ahmadi, S., Kowalkowska-Zedler, D., **Rabiee, N.\***, Rabiee, M. and Heidari, G., **2022**. Metal nanoparticles-assisted early diagnosis of diseases. **OpenNano**, p.100104. (Cite Score: 21; Citations: 0)
86. Jahangiri, S., Rahimnejad, M., Boroujeni, N.N., Ahmadi, Z., Fath, P.M., Ahmadi, S., Safarkhani, M. and **Rabiee, N.\***, **2022**. Viral and Non-viral Gene Therapy using 3D (Bio) printing. **The Journal of Gene Medicine**, p.e3458. (IF: 5; Citations: 0)
87. Ghanbari, R., Zare, E.N., Paiva-Santos, A.C. and **Rabiee, N.\***, **2022**. Ti<sub>3</sub>C<sub>2</sub>Tx MXene@MOF decorated polyvinylidene fluoride membrane for the remediation of heavy metals ions and desalination. **Chemosphere**, p.137191. (IF : 9.1; Citations: 5)

88. Mohseni, M.M., Jouyandeh, M., Sajadi, S.M., Hejna, A., Habibzadeh, S., Mohaddespour, A., **Rabiee, N.\***, Daneshgar, H., Akhavan, O., Asadnia, M. and Rabiee, M., **2022**. Metal-organic frameworks (MOF) based heat transfer: A comprehensive review. **Chemical Engineering Journal**, p.137700. (IF : 16.7; Citations: 11)
89. Saeedi, M., Vahidi, O., Moghbeli, M., Ahmadi, S., Asadnia, M., Akhavan, O., Seidi, F., Rabiee, M., Saeb, M.R., Webster, T.J., Varma, R.S., and **Rabiee, N.\***, **2022**. Customizing nano-chitosan for sustainable drug delivery. **Journal of Controlled Release**, pp.S0168-3659. (IF : 11.5; Citations: 2)
90. Shafiee, A., **Rabiee, N.\***, Ahmadi, S., Baneshi, M., Khatami, M., Irvani, S. and Varma, R.S., **2022**. Core-Shell Nanophotocatalysts: Review of Materials and Applications. **ACS Applied Nano Materials**. (IF : 5.5; Citations: 2)
91. Naghdi, M., Ghovvati, M., **Rabiee, N.\***, Ahmadi, S., Abbariki, N., Sojdeh, S., Ojaghi, A., Bagherzadeh, M., Akhavan, O., Sharifi, E. and Rabiee, M., **2022**. Magnetic nanocomposites biomedical applications. **Advances in Colloid and Interface Science**, p.102771. (IF : 15.2; Citations: 2)
92. Nasiri, G., Ahmadi, S., Shahbazi, M.A., Nosrati, V., Fatahi, Y., Dinarvand, R., Rabiee, M., Haftlang, F., Kim, H.S. and **Rabiee, N.\***, **2022**. 3D printing of bioactive materials for drug delivery applications. **Expert Opinion on Drug Delivery**. (IF : 8.1; Citations: 0)
93. Ghasemi, K., Darroudi, M., Rahimmanesh, I., Ghomi, M., Hassanpour, M., Sharifi, E., Yousefiasl, S., Ahmadi, S., Zarrabi, A., Borzacchiello, A. and **Rabiee, N.\***, **2022**. Advances in aptamer-based drug delivery vehicles for cancer therapy. **Biomaterials Advances**, p.213077. (IF : 8.5; Citations: 2)
94. Toudeshkchouei, M.G., Tavakoli, A., Mohammadghasemi, H., Karimi, A., Ai, J., Rabiee, M. and **Rabiee, N.\***, **2022**. Recent approaches to mRNA vaccine delivery by lipid-based vectors prepared by continuous-flow microfluidic devices. **Future Medicinal Chemistry**, 14(21), pp.1561-1581. (IF : 4.5; Citations: 2)
95. Ramezani Farani, M., Azarian, M., Heydari Sheikh Hossein, H., Abdolvahabi, Z., Mohammadi Abgarmi, Z., Moradi, A., Mousavi, M., Ashrafizadeh, M., Makvandi, P., Saeb, M.R., and **Rabiee, N.\***, **2022**. Folic Acid-Adorned Curcumin-Loaded Iron Oxide Nanoparticles for Cervical Cancer. **ACS Applied Bio Materials**. (IF : 3.5; Citations: 2)
96. Ramezani Farani, M., Aminzadeh Jahromi, N., Vahid, A., Ebrahimpour, A., Salehian, E., Shafiee Ardestani, M., Seyedhamzeh, M., Ahmadi, S., Sharifi, E., Ashrafizadeh, M., **Rabiee, N.\***, and Makvandi, P., **2022**. Detection of Dopamine Receptors Using Nanoscale Dendrimer for Potential Application in Targeted Delivery and Whole-Body Imaging:

Synthesis and *In Vivo* Organ Distribution. **ACS Applied Bio Materials**. (IF : 3.5; Citations: 0)

97. Jalilinejad, N., Rabiee, M., Baheiraei, N., Ghahremanzadeh, R., Salarian, R., **Rabiee, N.\***, Akhavan, O., Zarrintaj, P., Hejna, A., Saeb, M.R. and Zarrabi, A., **2022**. Electrically Conductive Carbon-based (Bio)-nanomaterials for Cardiac Tissue Engineering. **Bioengineering & Translational Medicine**, p.e10347. (IF : 10.7; Citations: 0)
98. Mazraeh, M., Eshrati Yeganeh, F., Yousefi, M., Baniyaghoob, S., Farasati Far, B., Akbarzadeh, I., Bigham, A., Ashrafizadeh, M., **Rabiee, N.\***, Makvandi, P., and Saeb, M.R., **2022**. Multifunctional Tetracycline-Loaded Silica-Coated Core–Shell Magnetic Nanoparticles: Antibacterial, Antibiofilm, and Cytotoxic Activities. **ACS Applied Bio Materials**. (IF : 3.5; Citations: 0)
99. Shokrani, H., Shokrani, A., Sajadi, S.M., Seidi, F., Mashhadzadeh, A.H., **Rabiee, N.\***, Saeb, M.R., Aminabhavi, T. and Webster, T.J., **2022**. Cell-Seeded Biomaterial Scaffolds: The Urgent Need for Unanswered Accelerated Angiogenesis. **International Journal of Nanomedicine**, 17, p.1035. (IF : 6.6; Citations: 0)
100. Bagherzadeh, M., Aldhafer, A., Ahmadi, S., Baheiraei, N. and **Rabiee, N.**, **2022**. Carbon-based Nanocomposite Decorated with Bioactive Glass and CoNi<sub>2</sub>S<sub>4</sub> Nanoparticles with Potential for Bone Tissue Engineering. **OpenNano**, p.100102. (Cite Score: 21; Citations: 0)
101. Feitoza, U.D.S., Thue, P.S., Lima, E.C., dos Reis, G.S., **Rabiee, N.**, de Alencar, W.S., Mello, B.L., Dehmani, Y., Rinklebe, J. and Dias, S.L., **2022**. Use of Biochar Prepared from the Açai Seed as Adsorbent for the Uptake of Catechol from Synthetic Effluents. **Molecules**, 27(21), p.7570. (IF : 3.9; Citations: 0)
102. Maghsoudi, S., Shahraki, B.T., Rameh, F., Nazarabi, M., Fatahi, Y., Akhavan, O., Rabiee, M., Mostafavi, E., Lima, E.C., Saeb, M.R. and **Rabiee, N.\***, **2022**. A Review on Computer-aided Chemogenomics and Drug Repositioning for Rational COVID-19 Drug Discovery. **Chemical Biology & Drug Design**. (IF : 2.5; Citations: 0)
103. Jouyandeh, M., Ganjali, M.R., Rezapour, M., Mohaddespour, A., Jabbour, K., Vahabi, H., **Rabiee, N.\***, Habibzadeh, S., Formela, K. and Saeb, M.R., **2022**. Nonisothermal Cure Behavior and Kinetics of Cerium-doped Fe<sub>3</sub>O<sub>4</sub>/Epoxy Nanocomposites. **Applied Organometallic Chemistry**, p.e6825. (IF : 4.2; Citations: 0)
104. Ahmadi, S., Jajarmi, V., Ashrafizadeh, M., Zarrabi, A., Haponiuk, J.T., Saeb, M.R., Lima, E.C., Rabiee, M. and **Rabiee, N.\***, **2022**. Mission impossible for cellular internalization: When porphyrin alliance with UiO-66-NH<sub>2</sub> MOF gives the cell lines a ride. **Journal of Hazardous Materials**, p.129259. (IF : 14.5; Citations: 0)

105. Farshi, P., Salarian, R., Rabiee, M., Alizadeh, S., Gholipourmalekabadi, M., Ahmadi, S. and **Rabiee, N.\***, 2022. Design, preparation, and characterization of silk fibroin/carboxymethyl cellulose wound dressing for skin tissue regeneration applications. **Polymer Engineering & Science**. (IF : 4.5; Citations: 0)
106. Nasserri, B., Alizadeh, E., Bani, F., Davaran, S., Akbarzadeh, A., **Rabiee, N.**, Bahadori, A., Ziaei, M., Bagherzadeh, M., Saeb, M.R. and Mozafari, M., 2022. Nanomaterials for photothermal and photodynamic cancer therapy. **Applied Physics Reviews**, 9(1), p.011317. (IF : 19.9; Citations: 5)
107. Ashrafizadeh, M., Delfi, M., Zarrabi, A., Bigham, A., Sharifi, E., **Rabiee, N.**, Paiva-Santos, A.C., Kumar, A.P., Tan, S.C., Hushmandi, K. and Ren, J., 2022. Stimuli-responsive liposomal nanoformulations in cancer therapy: Pre-clinical & clinical approaches. **Journal of Controlled Release**, pp.S0168-3659. (IF : 11.5; Citations: 5)
108. Yazdi, M.K., Sajadi, S.M., Seidi, F., **Rabiee, N.**, Fatahi, Y., Rabiee, M., Dominic, C.M., Zarrintaj, P., Formela, K., Saeb, M.R. and Bencherif, S.A., 2022. Clickable Polysaccharides for Biomedical Applications: A Comprehensive Review. **Progress in Polymer Science**, p.101590. (IF : 32.0; Citations: 1)
109. Ashrafizadeh, M., Aghamiri, S., Tan, S.C., Zarrabi, A., Sharifi, E., **Rabiee, N.**, Kadumudi, F.B., Pirouz, A.D., Delfi, M., Byrappa, K. and Thakur, V.K., 2022. Nanotechnological Approaches in Prostate Cancer Therapy: Integration of engineering and biology. **Nano Today**, 45, p.101532. (IF : 19.8; Citations: 6)
110. Dey, A.D., Bigham, A., Esmaeili, Y., Ashrafizadeh, M., Moghaddam, F.D., Tan, S.C., Yousefiasl, S., Sharma, S., Maleki, A., **Rabiee, N.** and Kumar, A.P., 2022, June. Dendrimers as nanoscale vectors: Unlocking the bars of cancer therapy. **Seminars in Cancer Biology**. Academic Press. (IF : 15.5; Citations: 4)
111. Bagherzadeh, M., Safarkhani, M., Kiani, M., Radmanesh, F., Daneshgar, H., Ghadiri, A.M., Taghavimandi, F., Fatahi, Y., Safari-Alighiarloo, N., Ahmadi, S. and **Rabiee, N.**, 2022. MIL-125-based nanocarrier decorated with Palladium complex for targeted drug delivery. **Scientific Reports**, 12(1), pp.1-15. (IF : 5.0; Citations: 0)
112. Jouyandeh, M., Tavakoli, O., Sarkhanpour, R., Sajadi, S.M., Zarrintaj, P., **Rabiee, N.**, Akhavan, O., Lima, E.C. and Saeb, M.R., 2022. Green products from herbal medicine wastes by subcritical water treatment. **Journal of Hazardous Materials**, p.127294. (IF : 14.5; Citations: 14)
113. Kashizadeh, A., Pastras, C., **Rabiee, N.**, Mohseni-Dargah, M., Mukherjee, P. and Asadnia, M., 2022. Potential nanotechnology-based diagnostic and therapeutic approaches

for Meniere's disease. **Nanomedicine: Nanotechnology, Biology and Medicine**, p.102599. (IF : 6.6; Citations: 1)

114. Deka Dey, A., Yousefiasl, S., Kumar, A., Dabbagh Moghaddam, F., Rahimmanesh, I., Samandari, M., Jamwal, S., Maleki, A., Mohammadi, A., **Rabiee, N.** and Paiva-Santos, A.C., **2022**. miRNA-encapsulated abiotic materials and biovectors for cutaneous and oral wound healing: biogenesis, mechanisms, and delivery nanocarriers. **Bioengineering & Translational Medicine**, p.e10343. (IF : 10.7; Citations: 3)
115. Ashrafizadeh, M., Zarrabi, A., Karimi-Maleh, H., Taheriazam, A., Mirzaei, S., Hashemi, M., Hushmandi, K., **Rabiee, N.\*.**, Zare, E.N., Sharifi, E. and Goel, A., **2022**. (Nano) platforms in bladder cancer therapy: Challenges and opportunities. **Bioengineering & Translational Medicine**, p.e10353. (IF : 10.7; Citations: 2)
116. Bagherzadeh, M., Safarkhani, M., Daneshgar, H., Radmanesh, F., Taghavimandi, F., Ghadiri, A.M., Kiani, M., Fatahi, Y., Safari-Alighiarloo, N., Ahmadi, S. and **Rabiee, N.**, **2022**. Fe<sub>3</sub>O<sub>4</sub>/MWCNT–COOH–based nanocomposite decorated with palladium complex for co-delivery of DOX/pCRISPR. **Journal of Drug Delivery Science and Technology**, p.103917. (IF : 5; Citations: 2)
117. Seidi, F., Yazdi, M.K., Jouyandeh, M., Habibzadeh, S., Munir, M.T., Vahabi, H., Bagheri, B., **Rabiee, N.**, Zarrintaj, P. and Saeb, M.R., **2022**. Crystalline Polysaccharides: A Review. **Carbohydrate Polymers**, p.118624. (IF : 10.5; Citations: 6)
118. Jafari, A., Farahani, M., Sedighi, M., **Rabiee, N.**, Savoji, H., **2022**. Carrageenans for tissue engineering and regenerative medicine applications: A review, **Carbohydrate Polymers**, p.119045. (IF : 10.5; Citations: 0)
119. Shokrani, H., Shokrani, A., Seidi, F., Munir, M.T., **Rabiee, N.**, Fatahi, Y., Kucinska-Lipka, J. and Saeb, M.R., **2022**. Biomedical engineering of polysaccharide-based tissue adhesives: Recent advances and future direction. **Carbohydrate Polymers**, p.119787. (IF : 10.5; Citations: 0)
120. Taghizadehjehed, M., Sepahdar, A., **Rabiee, N.**, Nazbar, A., Farzad-Mohajeri, S., Dehghan, M.M., Shokrgozar, M.A., Majidi, M., Mardjanmehr, S.H., Aminianfar, H. and Akbari Javar, H., **2022**. Comparison of engineered cartilage based on BMSCs and chondrocytes seeded on PVA-PPU scaffold in a sheep model. **Journal of Biomedical Materials Research Part B: Applied Biomaterials**. (IF : 3.5; Citations: 0)
121. Vatanpour, V., Jouyandeh, M., Akhi, H., Khadem, S.S.M., Ganjali, M.R., Moradi, H., Mirsadeghi, S., Badieli, A., Esmaeili, A., **Rabiee, N.** and Habibzadeh, S., **2022**. Hyperbranched polyethylenimine functionalized silica/polysulfone nanocomposite membranes for water purification. **Chemosphere**, p.133363. (IF : 8.9; Citations: 3)

122. Kiani, M., Bagherzadeh, M., Ghadiri, A.M., Makvandi, P. and **Rabiee, N.**, 2022. Multifunctional green synthesized Cu–Al layered double hydroxide (LDH) nanoparticles: anti-cancer and antibacterial activities. **Scientific Reports**, 12(1), pp.1-14. (IF : 5.0; Citations: 3)
123. Ashrafizadeh, M., **Rabiee, N.**, Kumar, A.P., Sethi, G., Zarrabi, A. and Wang, Y., 2022. Long noncoding RNAs (lncRNAs) in pancreatic cancer progression. **Drug Discovery Today**. (IF : 7.8; Citations: 0)
124. Deka Dey, A., Yousefiasl, S., Kumar, A., Dabbagh Moghaddam, F., Rahimmanesh, I., Samandari, M., Jamwal, S., Maleki, A., Mohammadi, A., **Rabiee, N.** and Paiva-Santos, A.C., 2022. miRNA-encapsulated abiotic materials and biovectors for cutaneous and oral wound healing: biogenesis, mechanisms, and delivery nanocarriers. **Bioengineering & Translational Medicine**, p.e10343. (IF : 10.7; Citations: 6)
125. Vatanpour, V., Jouyandeh, M., Khadem, S.S.M., Paziresh, S., Dehghan, A., Ganjali, M.R., Moradi, H., Mirsadeghi, S., Badiiei, A., Munir, M.T., Mohaddespour, A. and **Rabiee, N.**, 2022. Highly antifouling polymer-nanoparticle-nanoparticle/polymer hybrid membranes. **Science of The Total Environment**, p.152228. (IF : 10.5; Citations: 8)
126. Bigham, A., Rahimkhoei, V., Abasian, P., Delfi, M., Naderi, J., Ghomi, M., Dabbagh Moghaddam, F., Waqar, T., Nuri Ertas, Y., Sharifi, S., **Rabiee, N.**, Ersoy, S., Maleki, A., Nazarzadeh Zare, E., Sharifi, E., Jabbari, E., Makvandi, P., Akbari, A., 2022. Advances in tannic acid-incorporated biomaterials: Infection treatment, regenerative medicine, cancer therapy, and biosensing. **Chemical Engineering Journal**, p.134146 (IF : 16.7; Citations: 12)
127. Shokrani, H., Shokrani, A., Jouyandeh, M., Seidi, F., Gholami, F., Kar, S., Munir, M.T., Kowalkowska-Zedler, D., Zarrintaj, P., **Rabiee, N.** and Saeb, M.R., 2022. Green Polymer Nanocomposites for Skin Tissue Engineering. **ACS Applied Bio Materials**. (IF : 3.5; Citations: 0)
128. Ashrafizadeh, M., Saebfar, H., Gholami, M.H., Hushmandi, K., Zabolian, A., Bikarannejad, P., Hashemi, M., Daneshi, S., **Rabiee, N.**, Sharifi, E. and Kumar, A.P., 2022. Doxorubicin-loaded graphene oxide nanocomposites in cancer medicine: Stimuli-responsive carriers, co-delivery and suppressing resistance. **Expert Opinion on Drug Delivery**. (IF : 8.1; Citations: 12)
129. Abadehie, F.S., Dehkordi, A.H., Zafari, M., Bagheri, M., Yousefiasl, S., Pourmotabed, S., Mahmoodnia, L., Validi, M., Ashrafizadeh, M., Zare, E.N. and **Rabiee, N.**, 2022. Lawsone-encapsulated chitosan/polyethylene oxide nanofibrous mat as a

potential antibacterial biobased wound dressing. **Engineered Regeneration**. (IF : NA; Citations: 1)

130. Hooshmand, S.E., Sabet, M.J., Hasanzadeh, A., Mousavi, S.M.K., Moghadam, N.H., Hooshmand, S.A., **Rabiee, N.**, Liu, Y., Hamblin, M.R. and Karimi, M., 2022. Histidine-enhanced gene delivery systems: The state of the art. **The Journal of Gene Medicine**, p.e3415. (IF : 4.5; Citations: 11)
131. Jouyandeh, M., Ganjali, M.R., Mehrpooya, M., Abida, O., Jabbour, K., **Rabiee, N.**, Habibzadeh, S., Mashhadzadeh, A.H., García-Peñas, A., Stadler, F.J. and Saeb, M.R., 2022. Cure Kinetics of Samarium-Doped Fe<sub>3</sub>O<sub>4</sub>/Epoxy Nanocomposites. **Journal of Composites Science**, 6(1), p.29. (IF : NA; Citations: 3)
132. Dehaghani, M.Z., Yousefi, F., Seidi, F., Sajadi, S.M., **Rabiee, N.**, Habibzadeh, S., Esmaili, A., Mashhadzadeh, A.H., Spitas, C., Mostafavi, E. and Saeb, M.R., 2022. Dynamics of Antimicrobial Peptide Encapsulation in Carbon Nanotubes: The Role of Hydroxylation. **International Journal of Nanomedicine**, 17, pp.125-136. (IF : 6.6; Citations: 0)
133. Shokrani, H., Shokrani, A., Sajadi, S.M., Seidi, F., Jouyandeh, M., Zarrintaj, P., Kar, S., Kim, S., Kuang, T., **Rabiee, N.** and Hejna, A., 2022. Polysaccharide-based Nanocomposites for Biomedical Applications: A Critical Review. **Nanoscale Horizons**. (IF : 11.6; Citations: 4)
134. Edrisi, M., Daneshgar, H., **Rabiee, N.**, Bagherzadeh, M. and Moosavi-Movahedi, A.A., 2022. Ability of A520 in side effect control of doxorubicin upon interaction with human hemoglobin. **Biophysical Journal**, 121(3), pp.543a-544a. (IF : 4; Citations: 0)
135. Alvarez, E.M., Force, L.M., Xu, R., Compton, K., Lu, D., Henrikson, H.J., Kocarnik, J.M., Harvey, J.D., **Rabiee, N.**, Dean, F.E. and Fu, W., 2022. The global burden of adolescent and young adult cancer in 2019: a systematic analysis for the Global Burden of Disease Study 2019. **The Lancet Oncology**, 23(1), pp.27-52. (IF : 41.3; Citations: 13)
136. Vatanpour, V., Khadem, S.S.M., Dehqan, A., Paziresh, S., Ganjali, M.R., Mehrpooya, M., Pournasheer, E., Badiei, A., Esmaili, A., **Rabiee, N.**, Koyuncu, I. and Naderi, G., 2022. Application of g-C<sub>3</sub>N<sub>4</sub>/ZnO nanocomposites for fabrication of anti-fouling polymer membranes with dye and protein rejection superiority. **Journal of Membrane Science**, p.120893. (IF : 10.5; Citations: 11)
137. Momeni, A., Rostami-Nejad, M., Salarian, R., Rabiee, M., Aghamohammadi, E., Zali, M.R., **Rabiee, N.\***, Tay, F.R. and Makvandi, P., 2022. Gold-based nanoplatform for a rapid lateral flow immunochromatographic test assay for gluten detection. **BMC Biomedical Engineering**, 4(1), pp.1-11.

138. Armocida, B., Monasta, L., Sawyer, S., Bustreo, F., Segafredo, G., Castelpietra, G., Ronfani, L., **Rabiee, N.**, Hay, S., Sawyer, S.M. and Hay, S.I., **2022**. Burden of non-communicable diseases among adolescents aged 10–24 years in the EU, 1990–2019: a systematic analysis of the Global Burden of Diseases Study 2019. **The Lancet Child & Adolescent Health**. (IF : 11.2; Citations: 23)
139. Tyrovolas, S., Stergachis, A., Krish, V.S., Chang, A.Y., **Rabiee, N.**, Chatterji, S., Abd-Allah, F., Ärnlöv, J., Asaad, M., Asadi-Aliabadi, M. and Asadi-Pooya, A.A., **2022**. Global, regional, and national burden of diseases and injuries for adults 70 years and older: systematic analysis for the Global Burden of Disease 2019 Study. **BMJ. British Medical Journal**, 376. (IF : 39.8; Citations: 0)
140. Cousin, E., Duncan, B.B., Stein, C., **Rabiee, N.**, Vos, T., Abbafati, C., Abbasi-Kangevari, M., Abdelmasseh, M., Abdoli, A., Abd-Rabu, R. and Abolhassani, H., **2022**. Diabetes mortality and trends before 25 years of age: an analysis of the Global Burden of Disease Study 2019. **The Lancet Diabetes & Endocrinology**. (IF : 32; Citations: 5)
141. Mirzaei, S., Deldar Abad Paskeh, M., Saghari, Y., Zarrabi, A., Hamblin, M.R., Entezari, M., Hashemi, M., Aref, A.R., Hushmandi, K., Prem Kumar, A., **Rabiee, N.**, Ashrafizadeh, M., Samarghandian, S., **2022**. Transforming growth factor-beta (TGF- $\beta$ ) in prostate cancer: A dual function mediator?, **International Journal of Biological Macromolecules**. (IF : 6.7; Citations: 1)
142. Khadem, S.S.M., Mashhadzadeh, A.H., Yousefi, F., Sajadi, S.M., Habibzadeh, S., Munir, M.T., **Rabiee, N.**, Varma, R.S., Badawi, M., Lima, E.C. and Saeb, M.R., **2022**. Dynamics of Topology-dependent Water Purification by Siliceous Zeolite Membranes. **Journal of Molecular Liquids**, p.119250. (IF : 6.1; Citations: 0)
143. Iranmanesh, H., Entezari, M., Rejali, L., Nazemalhosseini-Mojarad, E., Maghsoudloo, M., Aghdaei, H.A., Zali, M.R., Hushmandi, K., **Rabiee, N.**, Makvandi, P. and Ashrafizadeh, M., **2022**. The Association of Clinicopathological Characterizations of Colorectal Cancer with Membrane-Bound Mucins genes and LncRNAs. **Pathology-Research and Practice**, p.153883. (IF : 3.2; Citations: 0)
144. Sharma, R., Abbasi-Kangevari, M., Abd-Rabu, R., Abidi, H., **Rabiee, N.**, Acuna, J.M., Adhikari, S., Advani, S.M., Afzal, M.S., Meybodi, M.A. and Ahinkorah, B.O., **2022**. Global, regional, and national burden of colorectal cancer and its risk factors, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. **The Lancet Gastroenterology & Hepatology**. (IF : 18.4; Citations: 1)
145. Farzadfar, F., Naghavi, M., Sepanlou, S.G., Moghaddam, S.S., Dangel, W.J., Weaver, N.D., Aminorroaya, A., **Rabiee, N.**, Koolaji, S., Mohammadi, E. and Rezaei, N.,

2022. Health system performance in Iran: a systematic analysis for the Global Burden of Disease Study 2019. **The Lancet**. (IF : 79.3; Citations: 1)
146. Kocarnik, J.M., Compton, K., Dean, F.E., Fu, W., Gaw, B.L., Harvey, J.D., Henrikson, H.J., Lu, D., **Rabiee, N.**, Xu, R. and Ababneh, E., 2022. Cancer incidence, mortality, years of life lost, years lived with disability, and disability-adjusted life years for 29 cancer groups from 2010 to 2019: a systematic analysis for the Global Burden of Disease Study 2019. **JAMA oncology**, 8(3), pp.420-444. (IF : 33.1; Citations: 49)
147. Adel, M., Zahmatkeshan, M., Akbarzadeh, A., **Rabiee, N.**, Ahmadi, S., Keyhanvar, P., Rezayat, S.M. and Seifalian, A.M., 2022. Chemotherapeutic effects of Apigenin in breast cancer: preclinical evidence and molecular mechanisms; enhanced bioavailability by nanoparticles. **Biotechnology Reports**, p.e00730. (Cite Score: 6; Citations: 0)
148. Sheena, B.S., Hiebert, L., Han, H., Ippolito, H., Abbasi-Kangevari, M., Abbasi-Kangevari, Z., Abbastabar, H., Abdoli, A., Ali, H.A., **Rabiee, N.** and Adegboye, O.A., 2022. Global, regional, and national burden of hepatitis B, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. **The Lancet Gastroenterology & Hepatology**. (IF : 45.0; Citations: 11)
149. Ikuta, K.S., Swetschinski, L.R., Aguilar, G.R., Sharara, F., Mestrovic, T., Gray, A.P., Weaver, N.D., Wool, E.E., Han, C., **Rabiee, N.** and Aali, A., 2022. Global mortality associated with 33 bacterial pathogens in 2019: a systematic analysis for the Global Burden of Disease Study 2019. **The Lancet**. (IF : 79.0; Citations: 3)
150. Cimirro, N.F., Lima, E.C., Cunha, M.R., Thue, P.S., Grimm, A., dos Reis, G.S., **Rabiee, N.**, Saeb, M.R., Keivanimehr, F. and Habibzadeh, S., 2022. Removal of diphenols using pine biochar. Kinetics, equilibrium, thermodynamics, and mechanism of uptake. **Journal of Molecular Liquids**, p.119979. (IF : 6.5; Citations: 0)
151. Entezari, M., Sadrkhanloo, M., Rashidi, M., Asnaf, S.E., Taheriazam, A., Hashemi, M., Ashrafizadeh, M., Zarrabi, A., **Rabiee, N.**, Hushmandi, K. and Mirzaei, S., 2022. Non-coding RNAs and macrophage interaction in tumor progression. **Critical Reviews in Oncology/Hematology**, p.103680. (IF : 6.5; Citations: 0)
152. Teixeira, R.A., Lima, E.C., Benetti, A.D., Thue, P.S., Lima, D.R., Sher, F., Dos Reis, G.S., **Rabiee, N.**, Seliem, M.K. and Abatal, M., 2022. Composite of methyl polysiloxane and avocado biochar as adsorbent for removal of ciprofloxacin from waters. **Environmental Science and Pollution Research**, pp.1-18. (IF : 4.2; Citations: 0)
153. Kyu, H.H., Vongpradith, A., Sirota, S.B., Novotney, A., Troeger, C.E., Doxey, M.C., Bender, R.G., Ledesma, J.R., Biehl, M.H., **Rabiee, N.** and Frostad, J.J., 2022. Age–sex differences in the global burden of lower respiratory infections and risk factors, 1990–

2019: results from the Global Burden of Disease Study 2019. **The Lancet Infectious Diseases**. (IF : 71.4; Citations: 0)

154. Tran, K.B., Lang, J.J., Compton, K., Xu, R., Acheson, A.R., Henrikson, H.J., Kocarnik, J.M., Penberthy, L., **Rabiee, N.**, Abbas, Q. and Abbasi, B., **2022**. The global burden of cancer attributable to risk factors, 2010–19: a systematic analysis for the Global Burden of Disease Study 2019. **The Lancet**, 400(10352), pp.563-591. (IF : 202.7; Citations: 0)
155. Kiani, M., Bagherzadeh, M., Ghadiri, A.M., Makvandi, P. and **Rabiee, N.**, **2022**. Multifunctional green synthesized Cu–Al layered double hydroxide (LDH) nanoparticles: anti-cancer and antibacterial activities. **Scientific Reports**, 12(1), pp.1-14. (IF : 4.3; Citations: 0)
156. Entezari, M., Ghanbarirad, M., Taheriazam, A., Sadrkhanloo, M., Zabolian, A., Goharrizi, M.A.S.B., Hushmandi, K., Aref, A.R., Ashrafizadeh, M., **Rabiee, N.** and Nabavi, N., **2022**. Long non-coding RNAs and exosomal lncRNAs: Potential functions in lung cancer progression, drug resistance and tumor microenvironment remodeling. **Biomedicine & Pharmacotherapy**, 150, p.112963. (IF : 6.5; Citations: 0)
157. Mirzaei, S., Paskeh, M.D.A., Okina, E., Gholami, M.H., Hushmandi, K., Hashemi, M., Kalu, A., Zarrabi, A., Nabavi, N., **Rabiee, N.** and Sharifi, E., **2022**. Molecular Landscape of LncRNAs in Prostate Cancer: A focus on pathways and therapeutic targets for intervention. **Journal of Experimental & Clinical Cancer Research**, 41(1), pp.1-26. (IF: 10.5; Citations: 0)
158. Bagherzadeh, M., Safarkhani, M., Ghadiri, A.M., Kiani, M., Fatahi, Y., Taghavimandi, F., Daneshgar, H., Abbariki, N., Makvandi, P., Varma, R.S. and **Rabiee, N.**, **2022**. Bioengineering of CuO porous (nano) particles: role of surface amination in biological, antibacterial, and photocatalytic activity. **Scientific Reports**, 12(1), pp.1-15. (IF: 5.0; Citations: 0)

## 2021

159. **Rabiee, N.**, Bagherzadeh, M., Heidarian Haris, M., Ghadiri, A.M., Matloubi Moghaddam, F., Fatahi, Y., Dinarvand, R., Jarahiyan, A., Ahmadi, S. and Shokouhimehr, M., **2021**. Polymer-Coated NH<sub>2</sub>-UiO-66 for the Codelivery of DOX/pCRISPR. **ACS Applied Materials & Interfaces**. (IF : 9.2; Citations: 28)
160. **Rabiee, N.**, Bagherzadeh, M., Ghadiri, A.M., Kiani, M., Fatahi, Y., Tavakolizadeh, M., Pourjavadi, A., Jouyandeh, M., Saeb, M.R., Mozafari, M. and Shokouhimehr, M., **2021**. Multifunctional 3D Hierarchical Bioactive Green Carbon-Based Nanocomposites. **ACS Sustainable Chemistry & Engineering**. (IF : 8.1; Citations: 18)

161. **Rabiee, N.\***, Khatami, M., Jamalipour Soufi, G., Fatahi, Y., Iravani, S. and Varma, R.S., **2021**. Diatoms with Invaluable Applications in Nanotechnology, Biotechnology, and Biomedicine: Recent Advances. **ACS Biomaterials Science & Engineering**. (IF : 4.7; Citations: 25)
162. **Rabiee, N.**, Bagherzadeh, M., Ghadiri, A.M., Fatahi, Y., Baheiraei, N., Safarkhani, M., Aldhaher, A. and Dinarvand, R., **2021**. Bio-multifunctional noncovalent porphyrin functionalized carbon-based nanocomposite. **Scientific reports** (IF : 4.3; Citations: 16)
163. **Rabiee, N.**, Bagherzadeh, Fatahi, Y. and Dinarvand, R., **2021**. Zn-rich (GaN)<sub>1-x</sub>(ZnO)<sub>x</sub>: a biomedical friend?. **New Journal of Chemistry** (IF : 3.5; Citations: 17)
164. **Rabiee, N.**, Ahmadi, S., Fatahi, Y., Rabiee, M., Bagherzadeh, Dinarvand, R. Bagheri, B., Zarrintaj, P., Saeb, M.R., and Webster, T.J., **2021**. Nanotechnology-assisted microfluidic systems: from bench to bedside. **Nanomedicine** (IF : 5.5; Citations: 13)
165. **Rabiee, N.**, Bagherzadeh, M., Jouyandeh, M., Zarrintaj, P., Saeb, M.R., Mozafari, M., Shokouhimehr, M. and Varma, R.S., **2021**. Natural Polymers Decorated MOF-MXene Nanocarriers for Co-delivery of Doxorubicin/pCRISPR. **ACS Applied Bio Materials**. (IF : 3.5; Citations: 22)
166. **Rabiee, N.**, Bagherzadeh, M., Ghadiri, A.M., Fatahi, Y., Aldhaher, A., Makvandi, P., Dinarvand, R., Jouyandeh, M., Saeb, M.R., Mozafari, M. and Shokouhimehr, M., **2021**. Turning Toxic Nanomaterials into a Safe and Bioactive Nanocarrier for Co-delivery of DOX/pCRISPR. **ACS Applied Bio Materials**. (IF : 3.5; Citations: 21)
167. **Rabiee, N.\***, Rabiee, M., Sojdeh, S., Fatahi, Y., Dinarvand, R., Safarkhani, M., Ahmadi, S., Daneshgar, H., Radmanesh, F., Maghsoudi, S. and Bagherzadeh, M., **2021**. Porphyrin Molecules Decorated on Metal–Organic Frameworks for Multi-Functional Biomedical Applications. **Biomolecules**, 11(11), p.1714. (IF : 4.6; Citations: 4)
168. **Rabiee, N.**, Bagherzadeh, M., Ghadiri, A.M., Kiani, M., Ahmadi, S., Jajarmi, V., Fatahi, Y., Aldhaher, A., Tahriri, M., Webster, T.J. and Mostafavi, E., **2021**. Calcium-based nanomaterials and their interrelation with chitosan: optimization for pCRISPR delivery. **Journal of Nanostructure in Chemistry**, pp.1-14. (IF : 6.6; Citations: 4)
169. **Rabiee, N.**, Ahmadi, S., Rabiee, M., Bagherzadeh, M., Vahabi, H., Jouyandeh, M. and Saeb, M.R., **2021**. Green carbon-based nanocomposite biomaterials through the lens of microscopes. **Emergent Materials**, pp.1-7. (IF : NA; Citations: 4)
170. Jouyandeh, M., Khadem, S.S.M., Habibzadeh, S., Esmaili, A., Abida, O., Vatanpour, V., **Rabiee, N.\***, Bagherzadeh, M., Iravani, S., Saeb, M.R. and Varma, R.S.,

**2021.** Quantum dots for photocatalysis: Synthesis and environmental applications. **Green Chemistry.** (IF : 10.5; Citations: 14)

171. Tavakolizadeh, M., Pourjavadi, A., Ansari, M., Tebyanian, H., Seyyed Tabaei, S.J., Atarod, M., **Rabiee, N.**, Bagherzadeh, M. and Varma, R.S. **2021.** An environmentally wound dressing based on a self-healing, extensible and compressible antibacterial hydrogel. **Green Chemistry** (IF : 10.5; Citations: 28)
172. Nikfarjam, N., Ghomi, M., Agarwal, T., Hassanpour, M., Sharifi, E., Khorsandi, D., Ali Khan, M., Rossi, F., Rossetti, A., Nazarzadeh Zare, E. and **Rabiee, N.**, **2021.** Antimicrobial ionic liquid-based materials for biomedical applications. **Advanced Functional Materials**, p.2104148. (IF : 18.8; Citations: 25)
173. Jafari, Z., Bigham, A., Sadeghi, S., Dehdashti, S.M., **Rabiee, N.\***, Abedivash, A., Bagherzadeh, M., Nasserli, B., Karimi-Maleh, H., Sharifi, E. and Varma, R.S., **2021.** Nanotechnology-Assisted Astaxanthin Formulations in Multimodal Therapeutic and Biomedical Applications. **Journal of Medicinal Chemistry.** (IF : 7.5; Citations: 3)
174. Rahimnejad, M., Nasrollahi Boroujeni, N., Jahangiri, S., **Rabiee, N.\***, Rabiee, M., Makvandi, P., Akhavan, O. and Varma, R.S., **2021.** Prevascularized Micro-/Nano-Sized Spheroid/Bead Aggregates for Vascular Tissue Engineering. **Nano-Micro Letters**, 13(1), pp.1-24. (IF : 16.5; Citations: 9)
175. Rahimnejad, M., **Rabiee, N.\***, Ahmadi, S., Jahangiri, S., Sajadi, S.M., Akhavan, O., Saeb, M.R., Kwon, W., Kim, M. and Hahn, S.K., **2021.** Emerging Phospholipid Nanobiomaterials for Biomedical Applications to Lab-on-a-Chip, Drug Delivery, and Cellular Engineering. **ACS Applied Bio Materials.** (IF : 3.5; Citations: 4)
176. Wu, A.M., Bisignano, C., James, S.L., Abady, G.G., Abedi, A., Abu-Gharbieh, E., Alhassan, R.K., Alipour, V., Arabloo, J., **Rabiee, N.** and Asmare, W.N., **2021.** Global, regional, and national burden of bone fractures in 204 countries and territories, 1990–2019: a systematic analysis from the Global Burden of Disease Study 2019. **The Lancet Healthy Longevity.** (IF : 31.2; Citations: 15)
177. Alvarez, E.M., Force, L.M., Xu, R., Compton, K., Lu, D., Henrikson, H.J., Kocarnik, J.M., Harvey, J.D., Pennini, A., **Rabiee, N.**, Dean, F.E. and Fu, W., **2021.** The global burden of adolescent and young adult cancer in 2019: a systematic analysis for the Global Burden of Disease Study 2019. **The Lancet Oncology.** (IF : 41.3; Citations: 6)
178. Salmankhani, A., Mousavi Khadem, S.S., Seidi, F., Hamed Mashhadzadeh, A., Zarrintaj, P., Habibzadeh, S., Mohaddespour, A., **Rabiee, N.**, Lima, E.C., Shokouhimehr, M. and Varma, R.S., **2021.** Adsorption onto zeolites: molecular perspective. **Chemical Papers**, pp.1-23. (IF : 3.5; Citations: 4)

179. Paulson, K.R., Kamath, A.M., Alam, T., Bienhoff, K., Abady, G.G., Abbas, J., Abbasi-Kangevari, M., Abbastabar, H., Abd-Allah, F., **Rabiee, N.** and Abdoli, A., **2021**. Global, regional, and national progress towards Sustainable Development Goal 3.2 for neonatal and child health: all-cause and cause-specific mortality findings from the Global Burden of Disease Study 2019. **The Lancet**. (IF : 202.7; Citations: 35)
180. Jouyandeh, M., Vahabi, H., **Rabiee, N.**, Rabiee, M., Bagherzadeh, M. and Saeb, M.R., **2021**. Green composites in bone tissue engineering. **Emergent Materials**, pp.1-18. (IF : NA; Citations: 6)
181. Ebrahimi, H., Aryan, Z., Moghaddam, S.S., Bisignano, C., Rezaei, S., Pishgar, F., Force, L.M., Abolhassani, H., **Rabiee, N.**, Advani, S.M. and Ahmad, S., **2021**. Global, regional, and national burden of respiratory tract cancers and associated risk factors from 1990 to 2019: a systematic analysis for the Global Burden of Disease Study 2019. **The Lancet Respiratory Medicine**. (IF : 30.7; Citations: 8)
182. Force, L.M., Abdollahpour, I., Advani, S.M., Agius, D., **Rabiee, N.**, Alahdab, F., Alam, T., Alebel, A., Alipour, V., Allen, C.A. and Almasi-Hashiani, A., **2021**. The global burden of childhood and adolescent cancer in 2017: an analysis of the Global Burden of Disease Study 2017. **The Lancet Oncology**, 20(9), pp.1211-1225. (IF : 41.3; Citations: 130)
183. Zarghami Dehaghani, M., Yousefi, F., Sajadi, S.M., Tajammal Munir, M., Abida, O., Habibzadeh, S., Mashhadzadeh, A.H., **Rabiee, N.**, Mostafavi, E. and Saeb, M.R., **2021**. Theoretical Encapsulation of Fluorouracil (5-FU) Anti-Cancer Chemotherapy Drug into Carbon Nanotubes (CNT) and Boron Nitride Nanotubes (BNNT). **Molecules**, 26(16), p.4920. (IF : 4; Citations: 4)
184. Galles, N.C., Liu, P.Y., Updike, R.L., **Rabiee, N.**, Nguyen, J., Rolfe, S., Sbarra, A.N., Schipp, M.F., Marks, A., Abady, G.G. and Abbas, K.M., **2021**. Measuring routine childhood vaccination coverage in 204 countries and territories, 1980–2019: a systematic analysis for the Global Burden of Disease Study 2020, Release 1. **The Lancet**. (IF : 202.7; Citations: 16)
185. Sbarra, A.N., **Rabiee, N.**, Nguyen, J.Q., Earl, L., Galles, N.C., Marks, A., Abbas, K.M., Abbasi-Kangevari, M., Abbastabar, H., Abd-Allah, F. and Abdelalim, A., **2021**. Mapping routine measles vaccination in low-and middle-income countries. **Nature**. (IF : 49.9; Citations: 25)
186. Truong, L.B., Medina-Cruz, D., Mostafavi, E. and **Rabiee, N.\***, **2021**. Selenium Nanomaterials to Combat Antimicrobial Resistance. **Molecules**, 26(12), p.3611. (IF : 4; Citations: 5)

187. Baheiraei, N., Eyni, H., Bakhshi, B., Najafloo, R. and **Rabiee, N.**, 2021. Effects of strontium ions with potential antibacterial activity on *in vivo* bone regeneration. **Scientific Reports**, 11(1), pp.1-9. (IF : 4.5; Citations: 11)
188. Saeb, M.R., **Rabiee, N.\***, Mozafari, M. and Mostafavi, E., 2021. Metal-Organic Frameworks-Based Nanomaterials for Drug Delivery. **Materials**, 14(13), p.3652. (IF : 3.5; Citations: 14)
189. Khadem, S.S.M., Nasiriasayesh, A., Mashhadzadeh, A.H., Habibzadeh, S., Sajadi, S.M., Abida, O., Munir, M.T., Esmaeili, A., **Rabiee, N.**, Saeb, M.R. and Shokouhimehr, M., 2021. MEL zeolite nanosheet membranes for water purification: insights from molecular dynamics simulations. **Journal of Nanostructure in Chemistry**, pp.1-15. (IF : 6.6; Citations: 1)
190. Zare, H., Ahmadi, S., Ghasemi, A., Ghanbari, M., **Rabiee, N.**, Bagherzadeh, M., Karimi, M., Webster, T.J., Hamblin, M.R. and Mostafavi, E., 2021. Carbon Nanotubes: Smart Drug/Gene Delivery Carriers. **International Journal of Nanomedicine**, 16, p.1681. (IF : 6.6; Citations: 34)
191. Dehaghani, M.Z., Bagheri, B., Yousefi, F., Nasiriasayesh, A., Mashhadzadeh, A.H., Zarrintaj, P., **Rabiee, N.**, Bagherzadeh, M., Fierro, V., Celzard, A. and Saeb, M.R., 2021. Boron Nitride Nanotube as an Antimicrobial Peptide Carrier: A Theoretical Insight. **International Journal of Nanomedicine**, 16, p.1837. (IF : 6.6; Citations: 11)
192. Ahmadi, S., **Rabiee, N.**, Fatahi, Y., Hooshmand, S.E., Bagherzadeh, M., Rabiee, M., Jajarmi, V., Dinarvand, R., Habibzadeh, S., Saeb, M.R. and Varma, R.S., 2021. Green Chemistry and Coronavirus. **Sustainable Chemistry and Pharmacy**, p.100415. (IF : 4.5; Citations: 19)
193. Haile, L.M., Kamenov, K., **Rabiee, N.**, Orji, A.U., Steinmetz, J.D., Abdoli, A., Abdollahi, M., Abu-Gharbieh, E., Afshin, A., Ahmed, H. and Rashid, T.A., 2021. Hearing loss prevalence and years lived with disability, 1990–2019: findings from the Global Burden of Disease Study 2019. **The Lancet**, 397(10278), pp.996-1009. (IF : 202.7; Citations: 94)
194. Saeb, M.R., **Rabiee, N.**, Seidi, F., Far, B.F., Bagherzadeh, M., Lima, E.C. and Rabiee, M., 2021. Green CoNi2S4/Porphyrin Decorated Carbon-based Nanocomposites for Genetic Materials Detection. **Journal of Bioresources and Bioproducts**. (IF : NA; Citations: 16)
195. Dehaghani, M.Z., Yousefi, F., Bagheri, B., Seidi, F., Mashhadzadeh, A.H., **Rabiee, N.**, Zarrintaj, P., Mostafavi, E., Saeb, M.R. and Kim, Y.C., 2021.  $\alpha$ -Helical Antimicrobial

Peptide Encapsulation and Release from Boron Nitride Nanotubes: A Computational Study. **International Journal of Nanomedicine**, 16, pp.4277-4288. (IF : 6.6; Citations: 5)

196. Micah, A.E., Cogswell, I.E., Cunningham, B., Ezoe, S., Harle, A.C., Maddison, E.R., McCracken, D., Nomura, S., Simpson, K.E., **Rabiee, N.** and Tsakalos, G., **2021**. Tracking development assistance for health and for COVID-19: a review of development assistance, government, out-of-pocket, and other private spending on health for 204 countries and territories, 1990–2050. **The Lancet**. (IF : 202.7; Citations: 47)
197. Paulson, K.R., Kamath, A.M., Alam, T., Bienhoff, K., Abady, G.G., Abbas, J., Abbasi-Kangevari, M., Abbastabar, H., **Rabiee, N.**, Abd-Elsalam, S.M. and Abdoli, A., **2021**. Global, regional, and national progress towards Sustainable Development Goal 3.2 for neonatal and child health: all-cause and cause-specific mortality findings from the Global Burden of Disease Study 2019. **The Lancet**, 398(10303), pp.870-905. (IF : 202.7; Citations: 35)

## **2020**

198. **Rabiee, N.**, Bagherzadeh, M., Ghadiri, A.M., Kiani, M., Aldhafer, A., Ramakrishna, S., Tahriri, M., Tayebi, L. and Webster, T.J., **2020**. Green Synthesis of ZnO NPs via *Salvia hispanica*: Evaluation of Potential Antioxidant, Antibacterial, Mammalian Cell Viability, H1N1 Influenza Virus Inhibition and Photocatalytic Activities. **Journal of Biomedical Nanotechnology** (IF : 5.5; Citations: 23)
199. **Rabiee, N.**, Bagherzadeh, M., Tavakolizadeh, M., Pourjavadi, A., Atarod, M. and Webster, T.J., **2020**. Synthesis, characterization and mechanistic study of nano chitosan tetrazole as a novel and promising platform for CRISPR delivery. **International Journal of Polymeric Materials and Polymeric Biomaterials** (IF : 4.5; Citations: 19)
200. **Rabiee, N.**, Bagherzadeh, M., Ghadiri, A.M., Kiani, M., Ahmadi, S., Aldhafer, A., Varma, R.S. and Webster, T.J., **2020**. High-Gravity-Assisted Green Synthesis of NiO-NPs Anchored on the Surface of Biodegradable Nanobeads with Potential Biomedical Applications. **Journal of Biomedical Nanotechnology** (IF : 4.5; Citations: 15)
201. **Rabiee, N.**, Bagherzadeh, M., Kiani, M., mohammad Ghadiri, A., Zhang, K., Jin, Z., Ramakrishna, S. and Shokouhimehr, M., **2020**. High gravity-assisted green synthesis of ZnO nanoparticles via *Allium ursinum*: Conjoining nanochemistry to neuroscience. **Nano Express** (IF : NA; Citations: 16)
202. **Rabiee, N.**, Yaraki, M.T., Garakani, S.M., Garakani, S.M., Ahmadi, S., Lajevardi, A., Bagherzadeh, M., Rabiee, M., Tayebi, L., Tahriri, M. and Hamblin, M.R., **2020**. Recent

Advances in Porphyrin-Based Nanocomposites for Effective Targeted Imaging and Therapy. **Biomaterials** (IF : 12.4; Citations: 81)

203. Rabiee, N., Bagherzadeh, M., Ghasemi, A., Zare, H., Ahmadi, S., Fatahi, Y., Dinarvand, R., Rabiee, M., Ramakrishna, S., Shokouhimehr, M. and Varma, R.S., 2020. Point-of-use rapid detection of sars-cov-2: Nanotechnology-enabled solutions for the covid-19 pandemic. **International journal of molecular science** (IF : 5.9; Citations: 75)
204. Rabiee, N., Ahmadi, S., Arab, Z., Bagherzadeh, M., Safarkhani, M., Nasserri, B., Rabiee, M., Tahriri, M., Webster, T.J. and Tayebi, L., 2020. Aptamer Hybrid Nanocomplexes as Targeting Components for Antibiotic/Gene Delivery Systems and Diagnostics: A Review. **International Journal of Nanomedicine** (IF : 6.6; Citations: 21)
205. Rabiee, N., Bagherzadeh, M., Kiani, M., Ghadiri, A.M., Etesamifar, F., Jaberizadeh, A.H. and Shakeri, A., 2020. Biosynthesis of Copper Oxide Nanoparticles with Potential Biomedical Applications. **International Journal of Nanomedicine** (IF : 6.6; Citations: 37)
206. Rabiee, N., Bagherzadeh, M., Kiani, M. and Ghadiri, A.M., 2020. Rosmarinus officinalis directed palladium nanoparticle synthesis: Investigation of potential anti-bacterial, anti-fungal and Mizoroki-Heck catalytic activities. **Advanced Powder Technology** (IF : 5.5; Citations: 34)
207. Rabiee, N., Kiani, M., Bagherzadeh, M., Ghadiri, A.M., Fatahi, Y., Dinarvand, R. and Webster, T.J., 2020. Improved green biosynthesis of chitosan decorated Ag-and Co<sub>3</sub>O<sub>4</sub>-nanoparticles: A relationship between surface morphology, Photocatalytic and biomedical applications. **Nanomedicine: Nanotechnology, Biology and Medicine** (IF : 6.5; Citations: 19)
208. Rabiee, N., Kiani, M., Bagherzadeh, M., Ghadiri, A.M., Fatahi, Y., Dinarvand, R. and Webster, T.J., 2020. High-gravity-assisted green synthesis of palladium nanoparticles: the flowering of nanomedicine. **Nanomedicine: Nanotechnology, Biology and Medicine** (IF : 6.5; Citations: 29)
209. Rabiee, N., Bagherzadeh, M., Ghadiri, A.M., Salehi, Gh., Fatahi, Y. and Dinarvand, R., 2020. ZnAl Nano Layered Double Hydroxides for dual functional CRISPR/Cas9 delivery and enhanced green fluorescence protein biosensor. **Scientific reports** (IF : 4.5; Citations: 18)
210. Ahmadi, S., Rabiee, N., Bagherzadeh, M., Elmi, F., Fatahi, Y., Farjadian, F., Baheiraei, N., Nasserri, B., Rabiee, M., Dastjerd, N.T. and Valibeik, A., 2020. Stimulus-responsive sequential release systems for drug and gene delivery. **Nano Today** (IF : 19.8; Citations: 58)

211. Kiani, M., Bagherzadeh, M., Meghdadi, S., **Rabiee, N.**, Abbasi, A., Schenk, K., Tahriri, M., Tayebi, L. and Webster, T.J., **2020**. Development of a Novel Carboxamide-Based Off-On Switch Fluorescence Sensor: Hg<sup>2+</sup>, Zn<sup>2+</sup> and Cd<sup>2+</sup>. **New Journal of Chemistry (IF : 4.5; Citations: 15)**
212. Shahraki, B.T., Maghsoudi, S., Fatahi, Y., **Rabiee, N.**, Bahadorikhalili, S., Dinarvand, R., Bagherzadeh, M. and Verpoort, F., **2020**. The flowering of Mechanically Interlocked Molecules: Novel approaches to the synthesis of rotaxanes and catenanes. **Coordination Chemistry Reviews (IF : 23; Citations: 14)**
213. Maghsoudi, S., Shahraki, B.T., **Rabiee, N.**, Fatahi, Y., Dinarvand, R., Tavakolizadeh, M., Ahmadi, S., Rabiee, M., Bagherzadeh, M., **2020**. Burgeoning Polymer Nano Blends for Improved Controlled Drug Release: A Review. **International Journal of Nanomedicine (IF : 6.6; Citations: 31)**
214. Nasr, S.M., **Rabiee, N.**, Hajebi, S., Ahmadi, S., Fatahi, Y., Hosseini, M., Bagherzadeh, M., Ghadiri, A.M., Rabiee, M., Jajarmi, V. and Webster, T.J., **2020**. Biodegradable Nanopolymers in Cardiac Tissue Engineering: From Concept Towards Nanomedicine. **International Journal of Nanomedicine (IF : 6.6; Citations: 36)**
215. Hajebi, S., Mohammadi Nasr, S., **Rabiee, N.**, Bagherzadeh, M., Ahmadi, S., Rabiee, M., Tahriri, M., Tayebi, L. and Hamblin, M.R., **2020**. Bioresorbable composite polymeric materials for tissue engineering applications. **International Journal of Polymeric Materials and Polymeric Biomaterials (IF : 3.6; Citations: 11)**
216. Nik, A.B., Zare, H., Razavi, S.S., Mohammadi, H., **Rabiee, N.** and Mobarakeh, J.I., **2020**. Smart Drug Delivery: Capping Strategies for Mesoporous Silica Nanoparticles. **Microporous and Mesoporous Materials (IF : 6.2; Citations: 53)**
217. Ghadiri, A.M., **Rabiee, N.**, Bagherzadeh, M., Kiani, M., Fatahi, Y., Di Bartolomeo, A., Dinarvand, R. and Webster, T.J., **2020**. Green synthesis of CuO- and Cu<sub>2</sub>O-NPs in assistance with high-gravity: The flowering of Nanobiotechnology. **Nanotechnology (IF : 4.8; Citations: 22)**
218. Pourjavadi, A., Tavakolizadeh, M., Hosseini, S.H., **Rabiee, N.** and Bagherzadeh, M., **2020**. Highly stretchable, self-adhesive, and self-healable double network hydrogel based on alginate/polyacrylamide with tunable mechanical properties. **Journal of Polymer Science (IF : 4.2; Citations: 20)**
219. Nasserri, B., Turk, M., Kosemehmetoglu, K., Kaya, M., Piskin, E., **Rabiee, N.** and Webster, T.J., **2020**. The Pimpled Gold Nanosphere: A Superior Candidate for Plasmonic Photothermal Therapy. **International Journal of Nanomedicine (IF : 6.6; Citations: 14)**

220. Kiani, M., Bagherzadeh, M., Fadaei-Tirani, F., Schenk-Joß, K. and **Rabiee, N.**, 2020. Catalytic and antibacterial properties of 3-dentate carboxamide Pd/Pt complexes obtained via a benign route. **Applied Organometallic Chemistry** (IF : 4.6; Citations: 6)
221. Maghsoudi, S., Taghavi Shahraki, B., **Rabiee, N.**, Fatahi, Y., Bagherzadeh, M., Dinarvand, R., Ahmadi, S., Rabiee, M., Tahriri, M., Hamblin, M.R. and Tayebi, L., 2020. The colorful world of carotenoids: a profound insight on therapeutics and recent trends in nano delivery systems. **Critical reviews in food science and nutrition** (IF : 10.7; Citations: 10)
222. Roth, G.A., Mensah, G.A., Johnson, C.O., **Rabiee, N.**, Ammirati, E., Baddour, L.M., Barengo, N.C., Beaton, A.Z., Benjamin, E.J., Benziger, C.P. and Bonny, A., 2020. Global burden of cardiovascular diseases and risk factors, 1990–2019: update from the GBD 2019 study. **Journal of the American College of Cardiology**. (IF : 24; Citations: 939)
223. Dehaghani, M.Z., Bagheri, B., Nasiriasayesh, A., Mashhadzadeh, A.H., Zarrintaj, P., **Rabiee, N.**, Bagherzadeh, M., Habibzadeh, S., Abida, O., Saeb, M.R. and Jang, H.W., 2020. Insight into the Self-Insertion of a Protein Inside the Boron Nitride Nanotube. **ACS omega** (IF : 3.2; Citations: 16)
224. Kiani, M., Bagherzadeh, M., Kaveh, R., **Rabiee, N.**, Fatahi, Y., Dinarvand, R., Jang, H.W., Shokouhimehr, M. and Varma, R.S., 2020. Novel Pt-Ag<sub>3</sub>PO<sub>4</sub>/CdS/Chitosan Nanocomposite with Enhanced Photocatalytic and Biological Activities. **Nanomaterials** (IF : 5.6; Citations: 11)
225. **Rabiee, N.**, Rabiee, M., Bagherzadeh, M. and Rezaei, N., 2020. COVID-19 and picotechnology: Potential opportunities. **Medical hypotheses**, 144, p.109917. (IF : 2.8; Citations: 36)
226. Nayebi, B., **Rabiee, N.**, Nayebi, B., Asl, M.S., Ramakrishna, S., Jang, H.W., Varma, R.S. and Shokouhimehr, M., 2020. Boron nitride-palladium nanostructured catalyst: efficient reduction of nitrobenzene derivatives in water. **Nano Express**, 1(3), p.030012. (IF : NA; Citations: 17)
227. Murray, C.J., Aravkin, A.Y., Zheng, P., **Rabiee, N.**, Abbas, K.M., Abbasi-Kangevari, M., Abd-Allah, F., Abdelalim, A., Abdollahi, M., Abdollahpour, I. and Abegaz, K.H., 2020. Global burden of 87 risk factors in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. **The Lancet**, 396(10258), pp.1223-1249. (IF : 202.7; Citations: 1220)

228. Wang, H., Abbas, K.M., **Rabiee, N.**, Abbasi-Kangevari, M., Abbastabar, H., Abd-Allah, F., Abdelalim, A., Abolhassani, H., Abreu, L.G., Abrigo, M.R. and Abushouk, A.I., **2020**. Global age-sex-specific fertility, mortality, healthy life expectancy (HALE), and population estimates in 204 countries and territories, 1950–2019: a comprehensive demographic analysis for the Global Burden of Disease Study 2019. **The Lancet**, 396(10258), pp.1160-1203. (IF : **202.7**; Citations: **326**)
229. Vos, T., Lim, S.S., Abbafati, C., **Rabiee, N.**, Abbasi, M., Abbasifard, M., Abbasi-Kangevari, M., Abbastabar, H., Abd-Allah, F., Abdelalim, A. and Abdollahi, M., **2020**. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. **The Lancet**, 396(10258), pp.1204-1222. (IF : **202.7**; Citations: **1568**)
230. Murray, C.J., **Rabiee, N.**, Abbas, K.M., Abbasi, M., Abbasi-Kangevari, M., Abd-Allah, F., Abdollahi, M., Abedi, P., Abedi, A., Abolhassani, H. and Aboyans, V., **2020**. Five insights from the global burden of disease study 2019. **The Lancet**, 396(10258), pp.1135-1159. (IF : **202.7**; Citations: **221**)
231. Hasanzadeh, A., Jahromi, M.A.M., Abdoli, A., Mohammad-Beigi, H., Fatahi, Y., Nourizadeh, H., Zare, H., Kiani, J., Radmanesh, F., **Rabiee, N.** and Jahani, M., **2020**. Photoluminescent carbon quantum dot/poly-l-Lysine core-shell nanoparticles: A novel candidate for gene delivery. **Journal of Drug Delivery Science and Technology**, p.102118. (IF : **5.1**; Citations: **17**)
232. James, S.L., Castle, C.D., **Rabiee, N.**, Fox, J.T., Hamilton, E.B., Liu, Z., Roberts, N.L., Sylte, D.O., Bertolacci, G.J., Cunningham, M. and Henry, N.J., **2020**. Estimating global injuries morbidity and mortality: methods and data used in the Global Burden of Disease 2017 study. **Injury Prevention**, 26(Supp 1), pp.i125-i153. (IF : **4.5**; Citations: **77**)
233. James, S.L., **Rabiee, N.**, Dingels, Z.V., Fox, J.T., Hamilton, E.B., Liu, Z., Roberts, N.L., Sylte, D.O., Henry, N.J., LeGrand, K.E. and Abdelalim, A., **2020**. Global injury morbidity and mortality from 1990 to 2017: results from the Global Burden of Disease Study 2017. **Injury Prevention**, 26(Supp 1), pp.i96-i114. (IF : **4.5**; Citations: **136**)
234. Crowe, C.S., **Rabiee, N.**, Morrison, S.D., Chang, J., Friedrich, J.B., Abady, G.G., Alahdab, F., Alipour, V., Arabloo, J., Asaad, M. and Banach, M., **2020**. Global trends of hand and wrist trauma: a systematic analysis of fracture and digit amputation using the Global Burden of Disease 2017 Study. **Injury prevention**, 26(Supp 1), pp.i115-i124. (IF : **4.5**; Citations: **18**)
235. Franklin, R.C., Peden, A.E., **Rabiee, N.**, Bisignano, C., Castle, C.D., Dingels, Z.V., Hay, S.I., Liu, Z., Mokdad, A.H., Roberts, N.L. and Sylte, D.O., **2020**. The burden of

unintentional drowning: global, regional and national estimates of mortality from the Global Burden of Disease 2017 Study. **Injury prevention**, 26(Supp 1), pp.i83-i95. (IF : 4.5; Citations: 68)

236. Lalloo, R., **Rabiee, N.**, Bisignano, C., Castle, C.D., Dingels, Z.V., Fox, J.T., Hamilton, E.B., Liu, Z., Roberts, N.L., Sylte, D.O. and Alahdab, F., **2020**. Epidemiology of facial fractures: incidence, prevalence and years lived with disability estimates from the Global Burden of Disease 2017 study. **Injury prevention**, 26(Supp 1), pp.i27-i35. (IF : 4.5; Citations: 36)
237. James, S.L., Lucchesi, L.R., Bisignano, C., Castle, C.D., **Rabiee, N.**, Fox, J.T., Hamilton, E.B., Henry, N.J., McCracken, D., Roberts, N.L. and Sylte, D.O., **2020**. Epidemiology of injuries from fire, heat and hot substances: global, regional and national morbidity and mortality estimates from the Global Burden of Disease 2017 study. **Injury prevention**, 26(Supp 1), pp.i36-i45. (IF : 7.8; Citations: 40)
238. Micah, A.E., Su, Y., Bachmeier, S.D., **Rabiee, N.**, Cogswell, I.E., Crosby, S.W., Cunningham, B., Harle, A.C., Maddison, E.R., Moitra, M. and Sahu, M., **2020**. Health sector spending and spending on HIV/AIDS, tuberculosis, and malaria, and development assistance for health: progress towards Sustainable Development Goal 3. **The Lancet**, 396(10252), pp.693-724. (IF : 202.7; Citations: 46)
239. Deshpande, A., Miller-Petrie, M.K., **Rabiee, N.**, Baumann, M.M., Johnson, K.B., Blacker, B.F., Abbastabar, H., Abd-Allah, F., Abdelalim, A., Abdollahpour, I. and Abegaz, K.H., **2020**. The global distribution of lymphatic filariasis, 2000–18: a geospatial analysis. **The Lancet Global Health**, 8(9), pp.e1186-e1194. (IF : 26.7; Citations: 33)
240. Deshpande, A., Miller-Petrie, M.K., **Rabiee, N.**, Baumann, M.M., Johnson, K.B., Blacker, B.F., Abbastabar, H., Abd-Allah, F., Abdelalim, A., Abdollahpour, I. and Abegaz, K.H., **2020**. Mapping geographical inequalities in access to drinking water and sanitation facilities in low-income and middle-income countries, 2000–17. **The Lancet Global Health**, 8(9), pp.e1162-e1185. (IF : 26.7; Citations: 21)
241. Kharati, M., Rabiee, M., Rostami-Nejad, M., Aghamohammadi, E., Asadzadeh-Aghdaei, H., Zali, M.R., **Rabiee, N.**, Fatahi, Y., Bagherzadeh, M. and Webster, T.J., **2020**. Development of a nano biosensor for anti-gliadin detection for Celiac disease based on suspension microarrays. **Biomedical Physics & Engineering Express**, 6(5), p.055015. (IF : 3.6; Citations: 5)
242. Wiens, K.E., **Rabiee, N.**, Blacker, B.F., Johnson, K.B., Baumann, M.M., Schaeffer, L.E., Abbastabar Sr, H., Abd-Allah, F., Abdelalim, A., Abdollahpour, I. and Abegaz, K.H., **2020**. Mapping geographical inequalities in oral rehydration therapy coverage in low-

income and middle-income countries, 2000–17. **The Lancet Global Health**, 8(8), pp.e1038-e1060. (IF : 26.7; Citations: 10)

243. Reiner Jr, R.C., Wiens, K.E., **Rabiee, N.**, Baumann, M.M., Lindstedt, P.A., Blacker, B.F., Troeger, C.E., Earl, L., Munro, S.B., Abate, D. and Abbastabar, H., 2020. Mapping geographical inequalities in childhood diarrhoeal morbidity and mortality in low-income and middle-income countries, 2000–17: analysis for the Global Burden of Disease Study 2017. **The Lancet**, 395(10239), pp.1779-1801. (IF : 202.7; Citations: 40)
244. Kamangar, F., Nasrollahzadeh, D., Safiri, S., **Rabiee, N.**, Fitzmaurice, C., Ikuta, K.S., Bisignano, C., Islami, F., Roshandel, G., Lim, S.S. and Abolhassani, H., 2020. The global, regional, and national burden of oesophageal cancer and its attributable risk factors in 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. **The lancet Gastroenterology & hepatology**, 5(6), pp.582-597. (IF : 18.4; Citations: 76)
245. Dirac, M.A., Safiri, S., Tsoi, D., **Rabiee, N.**, Afshin, A., Akhlaghi, N., Alahdab, F., Almulhim, A.M., Amini, S., Ausloos, F. and Bacha, U., 2020. The global, regional, and national burden of gastro-oesophageal reflux disease in 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. **The Lancet Gastroenterology & Hepatology**, 5(6), pp.561-581. (IF : 18.4; Citations: 34)
246. Moshayedi, H.R., Rabiee, M. and **Rabiee, N.**, 2020. Graphene Oxide/Polyaniline-Based Multi Nano Sensor for Simultaneous Detection of Carbon Dioxide, Methane, Ethanol and Ammonia Gases. **Iranian Journal of Chemistry and Chemical Engineering (IJCCE)**, 39(3), pp.93-105. (IF : 3.7; Citations: 4)
247. Bernabe, E., Marcenes, W., **Rabiee, N.**, Bailey, J., Abreu, L.G., Alipour, V., Amini, S., Arabloo, J., Arefi, Z. and Arora, A., 2020. Global, regional, and national levels and trends in burden of oral conditions from 1990 to 2017: a systematic analysis for the global burden of disease 2017 study. **Journal of dental research**, 99(4), pp.362-373. (IF : 5; Citations: 279)
248. Sepanlou, S.G., Safiri, S., Bisignano, C., Ikuta, K.S., **Rabiee, N.**, Saberifiroozi, M., Poustchi, H., Tsoi, D., Colombara, D.V., Abdoli, A. and Adedoyin, R.A., 2020. The global, regional, and national burden of cirrhosis by cause in 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. **The Lancet gastroenterology & hepatology**, 5(3), pp.245-266. (IF : 18.4; Citations: 119)
249. **Rabiee, N.**, Safarkhani, M. and Rabiee, M., 2020. Rapid electrochemical ultra-sensitive evaluation and determination of daptomycin based on continuous cyclic voltammetry. **Current Pharmaceutical Analysis**, 16(2), pp.181-185. (IF : 5; Citations: 24)

250. **Rabiee, N.**, Ahmadi, S., Afshari, R., Khalaji, S., Rabiee, M., Bagherzadeh, M., Fatahi, Y., Dinarvand, R., Tahriri, M., Tayebi, L. and Hamblin, M.R., **2020**. Polymeric Nanoparticles for Nasal Drug Delivery to the Brain: Relevance to Alzheimer's Disease. **Advanced Therapeutics**, p.2000076. (IF : 6.2; Citations: 29)
251. Kinyoki, D.K., Ross, J.M., Lazzar-Atwood, A., **Rabiee, N.** and LBD Double Burden of Malnutrition Collaborators, **2020**. Mapping local patterns of childhood overweight and wasting in low-and middle-income countries between 2000 and 2017. **Nature Medicine**, 26(5), pp.750-759. (IF : 53.4; Citations: 47)
252. Etemadi, A., **Rabiee, N.**, Sepanlou, S.G., Ikuta, K., Bisignano, C., Shakeri, R., Amani, M., Fitzmaurice, C., Nixon, M., Abbasi, N. and Abolhassani, H., **2020**. The global, regional, and national burden of stomach cancer in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease study 2017. **The Lancet Gastroenterology & Hepatology**, 5(1), pp.42-54. (IF : 18.4; Citations: 275)
253. Alatab, S., Sepanlou, S.G., **Rabiee, N.**, Vahedi, H., Bisignano, C., Safiri, S., Sadeghi, A., Nixon, M.R., Abdoli, A., Abolhassani, H. and Alipour, V., **2020**. The global, regional, and national burden of inflammatory bowel disease in 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. **The Lancet gastroenterology & hepatology**, 5(1), pp.17-30. (IF : 18.4; Citations: 382)

## 2019

254. **Rabiee, N.**, Safarkhani, M. and Amini, M.M., **2019**. Investigating the structural chemistry of organotin (IV) compounds: recent advances. **Reviews in Inorganic Chemistry**
255. **Rabiee, N.**, Hajebi, S., Bagherzadeh, M., Ahmadi, S., Rabiee, M., Roghani-Mamaqani, H., Tahriri, M., Tayebi, L. and Hamblin, M.R., **2019**. Stimulus-Responsive Polymeric Nanogels as Smart Drug Delivery Systems. **Acta biomaterialia**
256. Toudeshkchoui, M.G., **Rabiee, N.**, Rabiee, M., Bagherzadeh, M., Tahriri, M., Tayebi, L. and Hamblin, M.R., **2019**. Microfluidic devices with gold thin film channels for chemical and biomedical applications: a review. **Biomedical microdevices**
257. Nour, S., Baheiraei, N., Imani, R., Khodaei, M., Alizadeh, A., **Rabiee, N.** and Moazzeni, S.M., **2019**. A review of accelerated wound healing approaches: biomaterial-assisted tissue remodeling. **Journal of Materials Science: Materials in Medicine**

258. Darbasizadeh, B., Fatahi, Y., Feyzi-barnaji, B., Arabi, M., Motasadizadeh, H., Farhadnejad, H., Moraffah, F. and **Rabiee, N.**, 2019. Crosslinked-polyvinyl alcohol-carboxymethyl cellulose/ZnO nanocomposite fibrous mats containing erythromycin (PVA-CMC/ZnO-EM): Fabrication, characterization and in-vitro release and anti-bacterial properties. **International Journal of Biological Macromolecules**
259. Nour, S., Baheiraei, N., Imani, R., **Rabiee, N.**, Khodaei, M., Alizadeh, A. and Moazzeni, S.M., 2019. Bioactive Materials: A Comprehensive Review on Interactions with Biological Microenvironment Based on the Immune Response. **Journal of Bionic Engineering**
260. Maghsoudi, S., Shahraki, B.T., **Rabiee, N.**, Afshari, R., Fatahi, Y., Dinarvand, R., Ahmadi, S., Bagherzadeh, M., Rabiee, M., Tayebi, L. and Tahriri, M., 2019. Recent Advancements in aptamer-bioconjugates: Sharpening Stones for breast and prostate cancers targeting. **Journal of Drug Delivery Science and Technology**
261. Norahan, M.H., Amroon, M., Ghahremanzadeh, R., **Rabiee, N.** and Baheiraei, N., 2019. Reduced Graphene Oxide: Osteogenic Potential for Bone Tissue Engineering. **IET Nanobiotechnology**
262. Chavoshi, S., Rabiee, M., Rafizadeh, M., **Rabiee, N.**, Shamsabadi, A.S., Bagherzadeh, M., Salarian, R., Tahriri, M. and Tayebi, L., 2019. Mathematical modeling of drug release from biodegradable polymeric microneedles. **Bio-Design and Manufacturing**
263. Nasserri, B., Kocum, I.C., Seymen, C.M. and **Rabiee, N.**, 2019. Penetration depth in Nanoparticles incorporates radiofrequency Hyperthermia into the tissue: Comprehensive Study with Histology and Pathology Observations. **IET Nanobiotechnology**
264. Bahrami, S., Baheiraei, N., Mohseni, M., Razavi, M., Ghaderi, A., Azizi, B., **Rabiee, N.** and Karimi, M., 2019. Three-dimensional graphene foam as a conductive scaffold for cardiac tissue engineering. **Journal of biomaterials applications**
265. Fitzmaurice, C., **Rabiee, N.**, Abbasi, N., Abbastabar, H., Abd-Allah, F., Abdel-Rahman, O., Abdelalim, A., Abdoli, A., Abdollahpour, I., Abdulle, A.S. and Abebe, N.D., 2019. Global, regional, and national cancer incidence, mortality, years of life lost, years lived with disability, and disability-adjusted life-years for 29 cancer groups, 1990 to 2017: a systematic analysis for the global burden of disease study. **JAMA oncology**, 5(12), pp.1749-1768.

266. Parsa, Z., Tahay, P., **Rabiee, N.** and Safari, N., **2019**. Dye and Cobalt Electrolyte Interaction Effect on the Performance of Dye-Sensitized Solar Cell. **Inorganic Chemistry Research**, 2(2), pp.145-157.
267. Pourshams, A., Sepanlou, S.G., Ikuta, K.S., Bisignano, C., **Rabiee, N.**, Roshandel, G., Sharif, M., Khatibian, M., Fitzmaurice, C., Nixon, M.R. and Abbasi, N., **2019**. The global, regional, and national burden of pancreatic cancer and its attributable risk factors in 195 countries and territories, 1990–2017: A systematic analysis for the Global Burden of Disease Study 2017. **The lancet Gastroenterology & hepatology**, 4(12), pp.934-947.
268. Safiri, S., **Rabiee, N.**, Ikuta, K.S., Bisignano, C., Salimzadeh, H., Delavari, A., Ansari, R., Roshandel, G., Merat, S., Fitzmaurice, C. and Force, L.M., **2019**. The global, regional, and national burden of colorectal cancer and its attributable risk factors in 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. **The lancet Gastroenterology & hepatology**, 4(12), pp.913-933.
269. Stanaway, J.D., Parisi, A., **Rabiee, N.**, Blacker, B.F., Reiner, R.C., Hay, S.I., Nixon, M.R., Dolecek, C., James, S.L., Mokdad, A.H. and Abebe, G., **2019**. The global burden of non-typhoidal salmonella invasive disease: a systematic analysis for the Global Burden of Disease Study 2017. **The Lancet Infectious Diseases**, 19(12), pp.1312-1324.
270. Frank, T.D., **Rabiee, N.**, Jahagirdar, D., Biehl, M.H., Douwes-Schultz, D., Larson, S.L., Arora, M., Dwyer-Lindgren, L., Steuben, K.M., Abbastabar, H. and Abu-Raddad, L.J., **2019**. Global, regional, and national incidence, prevalence, and mortality of HIV, 1980–2017, and forecasts to 2030, for 195 countries and territories: a systematic analysis for the Global Burden of Diseases, Injuries, and Risk Factors Study 2017. **The lancet HIV**, 6(12), pp.e831-e859.
271. Burstein, R., **Rabiee, N.**, Collison, M.L., Marczak, L.B., Sligar, A., Watson, S., Marquez, N., Abbasalizad-Farhangi, M., Abbasi, M., Abd-Allah, F. and Abdoli, A., **2019**. Mapping 123 million neonatal, infant and child deaths between 2000 and 2017. **Nature**, 574(7778), pp.353-358.
272. Moshayedi, H.R., Rabiee, M. and **Rabiee, N.**, **2019**. A novel graphene-based nanosensor for detection of ethanol gas. **Iranian Journal of Science and Technology, Transactions A: Science**, 43(5), pp.2227-2237.
273. Force, L.M., Abdollahpour, I., **Rabiee, N.**, Agius, D., Ahmadian, E., Alahdab, F., Alam, T., Alebel, A., Alipour, V., Allen, C.A. and Almasi-Hashiani, A., **2019**. The global burden of childhood and adolescent cancer in 2017: an analysis of the Global Burden of Disease Study 2017. **The Lancet Oncology**, 20(9), pp.1211-1225.

274. Chang, A.Y., **Rabiee, N.**, Micah, A.E., Chapin, A., Chen, C.S., Ikilezi, G., Sadat, N., Tsakalos, G., Wu, J., Younker, T. and Zhao, Y., **2019**. Past, present, and future of global health financing: a review of development assistance, government, out-of-pocket, and other private spending on health for 195 countries, 1995–2050. **The Lancet**, 393(10187), pp.2233-2260.
275. **Rabiee, N.** and Rabiee, M., **2019**. A promising Stimuli-Responsive nanocomposite as a Theranostic agent for Targeted Delivery. **Journal of Bioengineering Research**, 1(1), pp.27-36.
276. Deljoo, S., **Rabiee, N.** and Rabiee, M., 2019. Curcumin-hybrid nanoparticles in drug delivery system. **Asian Journal of Nanosciences and Materials**, 2(1), pp.66-91.

## 2018

277. Vafajoo, A.; Rostami, A.; Parsa, S. F.; Salarian, R.; **Rabiee, N.**; Rabiee, G.; Rabiee, M.; Tahriri, M.; Vashae, D.; Tayebi, L., **2018**. Early Diagnosis of Disease Using Microbead Array Technology: A Review. **Analytica Chimica Acta**
278. Vafajoo A, Salarian R, **Rabiee N.** **2018**. Biofunctionalized microbead arrays for early diagnosis of breast cancer. **Biomedical Physics & Engineering Express**
279. Nasser, B.; Soleimani, N.; **Rabiee, N.**; Kalbasi, A.; Karimi, M.; Hamblin, M. R., **2018**. Point-of-care microfluidic devices for pathogen detection. **Biosensors and Bioelectronics**
280. Ghasemi, A.; **Rabiee, N.**; Ahmadi, S.; Lolasi, F.; Borzgomid, M.; Kalbasi, A.; Nasser, B.; Dezfouli, A. S.; Aref, A.; Karimi, M., **2018**. Optical Assays Based on Colloidal Inorganic Nanoparticles. **Analyst**
281. Vafajoo, A.; Rostami, A.; Parsa, S. F.; Salarian, R.; **Rabiee, N.**; Rabiee, G.; Rabiee, M.; Tahriri, M.; Vashae, D.; Tayebi, L., **2018**. Multiplexed microarrays based on optically encoded microbeads. **Biomedical microdevices**
282. **Rabiee, N.**; Bagherzadeh, M.; Rabiee, M., **2018**. A perspective to the correlation between Brain insulin resistance and Alzheimer: Medicinal Chemistry approach. **Current diabetes reviews**
283. Ahmadi, S.; **Rabiee, N.**; Rabiee, M., **2018**. Application of Aptamer-based hybrid molecules in Early Diagnosis and Treatment of Diabetes Mellitus: From the Concepts toward the Future. **Current diabetes reviews**

284. Farjadian, F.; Moghoofei, M.; Mirkiani, S.; Ghasemi, A.; **Rabiee, N.**; Hadifar, S.; Beyzavi, A.; Karimi, M.; Hamblin, M. R., **2018**. Bacterial components as naturally inspired nano-carriers for drug/gene delivery and immunization: Set the bugs to work? **Biotechnology advances**
285. **Rabiee, N.** and Rabiee, M., **2018**. Magnetic Stimuli-Responsive Cobalt Ferrite Nanoparticle as Theranostic agents for Targeted Delivery. **Current Nanomaterials**, 3(3), pp.160-167.
286. **Rabiee, N.** and Rabiee, M., **2018**. Biocompatibility and neuroprotective potential of encapsulated S-Allyl-L-Cysteine into PCL-based nanocarrier. **Drug Delivery Letters**, 8(3), pp.242-247.
287. **Rabiee, N.**, Safarkhani, M. and Rabiee, M., **2018**. Ultra-sensitive electrochemical on-line determination of Clarithromycin based on Poly (L-Aspartic acid)/graphite oxide/pristine graphene/glassy carbon electrode. **Asian Journal of Nanosciences and Materials**, 1(2), pp.63-73.
288. Moshayedi, H.R., Rabiee, M. and **Rabiee, N.**, **2018**. Design and manufacture multi nano biosensor for simultaneous detection of Carbon Dioxide, Methane, Ethanol and Ammonia gases. **Advanced Materials and Novel Coatings**
289. Kharati, M., Foroutanparsa, S., Rabiee, M., Salarian, R., **Rabiee, N.** and Rabiee, G., **2018**. Early diagnosis of multiple sclerosis based on optical and electrochemical biosensors: comprehensive perspective. **Current Analytical Chemistry**, 16(5), pp.557-569.
290. Pourghasem, M., Feizi, F., Abedian, Z., Ghasemi, M., Babazadeh, Z. and **Rabiee, N.**, **2018**. Time dependent of epigenetic effect of disulfiram on tumor suppressor gene of RASSF1A in Hela cancer cell line. **Journal of Basic Research in Medical Sciences**, 5(2), pp.8-13.

### **BOOK CHAPTERS:**

1. Bakhshi, A., Naghib, S.M. and **Rabiee, N.**, **2024**. Antibacterial and Antiviral Nanofibrous Membranes. In Antibacterial and Antiviral Functional Materials, Volume 2 (pp. 47-88). **American Chemical Society**.
2. **Rabiee, N.\***, **2025**. Green Biomaterials in Biomedical Applications: A Focus on CRISPR. In Green Biomaterials in Tissue Engineering (pp. 371-382). **American Chemical Society**.

3. Ahmadi, S., Fatahi, Y., Safarkhani, M., Rabiee, M., Warkiani, M.E. and **Rabiee, N.\***, 2023. Electric-Responsive Materials: Properties, Design, and Applications. In *Stimuli-Responsive Materials for Biomedical Applications* (pp. 31-52). **American Chemical Society**.
4. Ahmadi, S. and **Rabiee, N.\***, 2023. Antimicrobial Properties. In *Electrically Conducting Polymers and Their Composites for Tissue Engineering* (pp. 81-94). **American Chemical Society**.
5. **Rabiee, N.\***, Ahmadi, S., Ghadiri, A.M., Rabiee, M. and Webster, T.J., 2023. Nanomaterials obtained from biowastes: Applications for cancer therapy. In *Nanomedicine* (pp. 469-482). **Woodhead Publishing**.
6. Jouyandeh, M., Vahabi, H., Laoutid, F., **Rabiee, N.** and Saeb, M.R., 2021. Flame Retardancy of Recycled Polymer Composites. In *Recycling of Plastics, Metals, and Their Composites* (pp. 197-219). **CRC Press**.
7. Maghsoudi, S., **Rabiee, N.**, Ahmadi, S., Rabiee, M., Bagherzadeh, M. and Karimi, M., 2020. An overview of microfluidic devices. *Biomedical Applications of Microfluidic Devices*. **Academic Press**.
8. Hosseini, M., **Rabiee, N.** and Bagherzadeh, M., 2020. Targeted delivery of nucleic acids using microfluidic systems. In *Biomedical Applications of Microfluidic Devices* (pp. 289-318). **Academic Press**.
9. Aghamiri, S., **Rabiee, N.**, Ahmadi, S., Rabiee, M., Bagherzadeh, M. and Karimi, M., 2020. Microfluidics: Organ-on-a-chip. In *Biomedical Applications of Microfluidic Devices* (pp. 99-115). **Academic Press**.
10. Aghamiri, S., **Rabiee, N.**, Ahmadi, S., Rabiee, M., Bagherzadeh, M. and Karimi, M., 2020. Microfluidic devices: Synthetic approaches. In *Biomedical Applications of Microfluidic Devices* (pp. 23-36). **Academic Press**.
11. Rabiee, M., Rostami, A., **Rabiee, N.** and Bagherzadeh, M., 2020. Microarray technologies. In *Biomedical Applications of Microfluidic Devices* (pp. 77-98). **Academic Press**.
12. Rabiee, M., Ghasemnia, N.N., **Rabiee, N.** and Bagherzadeh, M., 2020. Microfluidic devices and drug delivery systems. In *Biomedical Applications of Microfluidic Devices* (pp. 153-186). **Academic Press**.
13. Ahmadi, S., **Rabiee, N.**, Bagherzadeh, M. and Karimi, M., 2020. Microfluidic devices for gene delivery systems. In *Biomedical Applications of Microfluidic Devices* (pp. 187-208). **Academic Press**.

14. Ahmadi, S., **Rabiee**, N., Bagherzadeh, M. and Karimi, M., **2020**. Microfluidic devices for pathogen detection. In *Biomedical Applications of Microfluidic Devices* (pp. 117-151). **Academic Press**.

### **FUNDINGS:**

- 2021-2024 NRF, Korea  
Metal-organic frameworks (MOFs)-based wearable biosensors for detection of ssDNA  
Role: Co-PI
- 2022-2025 KRF in collaborations with SpaceX, and USA  
Development of fully biocompatible porous inorganic nano-platform for investigating the drug-gene interactions in different environments  
Role: PI
- 2021- 2022 Shahid Beheshti University of Medical Sciences (SBMU)  
Design, synthesis, and characterization of nanocomposites based on metal-organic frameworks and porphyrins with the aim of *in vitro* optimizations in smart and targeted delivery of doxorubicin; Role: PI
- 2021- 2022 Shahid Beheshti University of Medical Sciences (SBMU)  
Design, synthesis and characterization of biocompatible nanocomposite based on UiO-66 and MXene with low cytotoxicity as a bioactive molecules nanocarrier with the ability of cellular internalization; Role: PI
- 2021- 2022 Shahid Beheshti University of Medical Sciences (SBMU)  
Design, synthesis, and characterization of nanocomposites based on Zirconium-based-metal-organic frameworks for corona virus detection and inhibition; Role: PI
- 2021- 2022 Shahid Beheshti University of Medical Sciences (SBMU)  
Design, synthesis, and characterization of Benzamide-like derivative decorated UiO-66-NH<sub>2</sub> as a versatile multifunctional nano-bioplatform: *in vitro* studies; Role: PI

### **INDUSTRIAL/CLINICAL EXPERIENCES:**

1. **Development of novel inorganic-based nanocarriers (based on rGO/MWCNT/Fe<sub>3</sub>O<sub>4</sub>/ZnO) for chemotherapy**
2. **Development of bioactive Ti<sub>3</sub>C<sub>2</sub>-based nanocomposite for chemotherapy**
3. **Green synthesis of metal oxide nanoparticles from biowastes and pathogens, viruses and bacteria**
4. **Green synthesis of MOFs in reduced temperature and time of reaction**

5. Development of high-gravity system based on rotating packed bed system for cost-effective and highly efficient synthesis of MOFs, COFs, NPs, LDHs and nanocomposites
6. Development of cost-effective and green wearable multi-functional biosensor for trace-concentrations detections of cancer biomarkers
7. Development of cost-effective and green wearable multi-functional biosensor for trace-concentrations detections of glucose
8. Development of cost-effective and green wearable multi-functional biosensor for trace-concentrations detections of hazardous cations

### **FELLOWSHIPS/PRIZES:**

- CLS Fellowship, China, 2025
- Saramadan Fellowship, Iran, 2023
- Rising Talent List of the Precision Nanomedicine, 2023
- BK21 Fellowship, South Korea, 2022
- Saramadan Fellowship, Iran, 2022

### **SCIENTIFIC ORGANIZATIONS:**

- Iranian Chemical Society, 2019- now
- American Chemical Society, 2020- now
- Royal Society of Chemistry, 2020- now
- Iranian Ceramic Society, 2019- now
- Korean Chemical Society, 2022-now
- The Korean Society for Biotechnology and Bioengineering, 2022-now
- American Biomedical Engineering Society, 2022-now

### **PROFESSIONAL ROLES:**

#### *Reviewer for journals:*

- |                                                 |                                     |                                    |
|-------------------------------------------------|-------------------------------------|------------------------------------|
| • ACS Nano                                      | • Bioactive Materials               | • Materials Today<br>Communication |
| • ACS Applied Materials<br>& Interfaces         | • Composites Part B:<br>Engineering | • Frontiers in Medicine            |
| • ACS Sustainable<br>Chemistry &<br>Engineering | • Science Progress                  | • Plos One                         |

- Journal of the American Chemical Society (JACS)
- ACS Omega
- ACS Sensors
- OpenNano
- Nano Express
- Express Polymer Letter
- Iranian Polymer Journal
- IEEE Journal of Biomedical and Health Informatics
- Polymers from Renewable Resources
- Materials Chemistry Horizons
- Industrial & Engineering Chemistry Research
- Pharmacological Research
- Clinical Epidemiology
- Recent Progress in Materials
- Journal of Food Science
- Microporous and Mesoporous Materials
- Veterinary Sciences
- Journal of Photochemistry and Photobiology A: Chemistry
- Energies
- Science of The Total Environment
- International Journal of Nanomedicine
- Photochemistry & Photobiology
- BMC Biotechnology
- BMC Biomedical Engineering
- IET Image Processing
- Drug Design, Development & Therapy
- Vaccine
- Journal of Translational Internal Medicine
- Clinical Nutrition ESPEN
- Analytica Chimica Acta
- Expert Opinion on Drug Delivery
- Cancers
- Polymers
- Pharmaceutics
- Journal of Composites Science
- Pathology Research and Practice
- Nanomaterials
- Journal of Industrial and Engineering Chemistry
- European Polymer Journal
- IET Nanobiotechnology
- World Journal of Surgical Oncology
- Frontiers in Physiology
- Polymer Testing
- Colloids and Surfaces A: Physicochemical and Engineering Aspects
- Journal of Materials Research and Technology
- International Journal of Molecular Sciences
- Biomedicines
- Acta Biomaterialia
- Sensors and Actuators A: Physical
- Coatings
- Polymer Engineering & Science
- Electronics
- Diagnostics
- Materials
- Chemosphere
- Biosensors
- Preparative Biochemistry and Biotechnology

### Editorial for journals:

- Associate Editor of Polymers from Renewable Resources (SAGE- UK)
- Editorial Board of BMC Biotechnology (Springer Nature)
- Editorial Board of Journal of Ionic Liquids (Elsevier)
- Editorial Board of OpenNano (Elsevier)
- Editorial Board of BMC Biomedical Engineering (Springer Nature)
- Editorial Board of Inorganics (MDPI)
- Editorial Board of Biomedicines (MDPI)
- Editorial Board of iMeta (Wiley)
- Guest Editor of Inorganics (MDPI)
- Guest Editor of Biosensors (MDPI)
- Guest Editor of Sensors (MDPI)
- Guest Editor of Molecules (MDPI)
- Guest Editor of Environmental Research (Elsevier)
- Guest Editor of Cellular Signaling (Elsevier)
- Member of the Rising Talent List of the Precision Nanomedicine

### **SKILLS AND ABILITIES:**

- Skilled in cell and tissue culture methods, flow cytometric analysis, immunostaining and various other cell and molecular biology techniques
- Skilled in design, synthesis and characterization of different nanoparticles, nanocomposites and nanomaterials such as metallic nanoparticles, metal oxide nanoparticles, metal-organic frameworks (MOF), covalent organic frameworks (COF), zeolites, MXene, organometallic complexes, carbon-based nanocomposites, polymeric nanostructures, hydrogels, nanobeads and etc.
- Skilled in developing and scale-up cutting-edge research for industrial/clinical usage/applications
- Skilled in writing grants and communicating with industries/clinics
- Skilled in pre-clinical, *in vivo* (modelling, injection, surgery, H&E, and analysis) and whole *in vitro* tests
- Skilled in the analysis of results and working with FESEM, XRD, AFM, XPS, TEM, FTIR, MTT, GC, GC-MASS, HPLC, ICP, Contact Angle and etc.
- Excellent oral and written communication skills in English and Farsi