



Mohammad Mofidfar

Physical Science Research Scientist
Chemistry

Bio

ACADEMIC APPOINTMENTS

- Phys Sci Res Assoc, Chemistry

PROFESSIONAL EDUCATION

- Postdoctoral Fellow, Georgia Institute of Technology , Chemical and Biomolecular Engineering
- PhD, Case Western Reserve University , Polymer Science and Engineering
- MSc, Amirkabir University of Technology , Chemical Engineering
- BSc, Sahand University of Technology , Chemical Engineering

Publications

PUBLICATIONS

- **Dependence on relative humidity in the formation of reactive oxygen species in water droplets.** *Proceedings of the National Academy of Sciences of the United States of America*
Mofidfar, M., Mehrgardi, M. A., Xia, Y., Zare, R. N.
2024; 121 (12): e2315940121
- **One-step Formation of Urea from Carbon Dioxide and Nitrogen Using Water Microdroplets.** *Journal of the American Chemical Society*
Song, X., Basheer, C., Xia, Y., Li, J., Abdulazeez, I., Al-Saadi, A. A., Mofidfar, M., Suliman, M. A., Zare, R. N.
2023
- **Therapeutic contact lenses for the treatment of corneal and ocular surface diseases: advances in extended and targeted drug delivery.** *International journal of pharmaceutics*
Abdi, B., Mofidfar, M., Hassanpour, F., Kirbas Cilingir, E., Kalajahi, S. K., Milani, P. H., Ghanbarzadeh, M., Fadel, D., Barnett, M., Ta, C. N., Leblanc, R. M., Chauhan, A., Abbasi, et al
2023: 122740
- **Silicone Wristband Spray Ionization Mass Spectrometry for Combined Exposome and Metabolome Profiling** *ISRAEL JOURNAL OF CHEMISTRY*
Mofidfar, M., Song, X., Kelly, J. T., Rubenstein, M. H., Zare, R. N.
2023
- **On-demand electrochemically controlled compound release from an ultrasonically powered implant** *RSC ADVANCES*
Wang, M. L., Chamberlayne, C. F., Xu, H., Mofidfar, M., Baltsavias, S., Annes, J. P., Zare, R. N., Arbabian, A.
2022; 12 (36): 23337-23345
- **Capturing Reactive Carbanions by Microdroplets.** *Journal of the American Chemical Society*
Kumar, A., Mondal, S., Mofidfar, M., Zare, R. N., Banerjee, S.
2022

- **Sprayed Water Microdroplets Are Able to Generate Hydrogen Peroxide Spontaneously.** *Journal of the American Chemical Society*
Mehrgardi, M. A., Mofidfar, M., Zare, R. N.
2022
- **Antimicrobial Activity of Silver Containing Crosslinked Poly(Acrylic Acid) Fibers** *MICROMACHINES*
Mofidfar, M., Kim, E., Larkin, E. L., Long, L., Jennings, W. D., Ahadian, S., Ghannoum, M. A., Wnek, G. E.
2019; 10 (12)
- **Pharmaceutical jewelry: Earring patch for transdermal delivery of contraceptive hormone** *JOURNAL OF CONTROLLED RELEASE*
Mofidfar, M., O'Farrell, L., Prausnitz, M. R.
2019; 301: 140-145
- **Electrospun Transdermal Patch for Contraceptive Hormone Delivery** *CURRENT DRUG DELIVERY*
Mofidfar, M., Prausnitz, M. R.
2019; 16 (6): 577-583
- **Polymeric Nanofiber/Antifungal Formulations Using a Novel Co-extrusion Approach** *AAPS PHARMSCITECH*
Mofidfar, M., Wang, J., Long, L., Hager, C. L., Vareechon, C., Pearlman, E., Baer, E., Ghannoum, M., Wnek, G. E.
2017; 18 (6): 1917-1924