

Mustafa ElGharib, PhD

Doctorate

Materials Chemistry (Bionanotechnology)

Education

PhD, Materials Chemistry (Bionanotechnology), *Hamburg University, Germany, 2017-2020*

MSc, Biochemistry (Cancer Biology), Ain Shams University, Egypt, 2011-2014

BSc, Biochemistry and Chemistry, Ain Shams University, Egypt, 2005-2009

Experience

Postdoctoral Research Fellow, Laboratory for Vascular Translational Science, Université Sorbonne Paris Nord, France, 2023-2026

Lecturer of Bionanotechnology, National Centre for Radiation Research and Technology, Egypt, 2021-2023

Postdoctoral Research Fellow, Centre for Hybrid Nanostructures, University of Hamburg, Germany, 2020-2021

PhD Graduate Student, Faculty of Mathematics, Informatics and Natural Sciences, Hamburg University, Germany, 2017-2020

Assistant Lecturer of Biochemistry, National Centre for Radiation Research and Technology, Egypt, 2012-2016

Senior Clinical Biochemist, Dr. Samir Shaker Labs and Royal Labs for Clinical Investigation, Egypt, 2009-2016

Research Interests

- Nanomedicine
- Nanotheranostics
- Photodynamic & photothermal therapy
- Sonodynamic therapy
- Liposomal nanoformulations

- Targeted drug delivery

Last 5 Publications

Ghanim MI, Abdelrahman IY, Kelany AK, Askar MA, **Gharib M**, Abdelhakim HK. Chemotherapeutic efficacy of nano formulation capecitabine@ SNPs and gamma radiation: a novel metronomic approach for breast cancer treatment. **Drug Delivery and Translational Research**. 2026 May 15:1-28.

<https://doi.org/10.1007/s13346-026-02099-5>

Gharib M, Said M, Lévy R. Correspondence on “Carbon-Dot-Based Dual-Emission Nanohybrid Produces a Ratiometric Fluorescent Sensor for in Vivo Imaging of Cellular Copper Ions”. **Angewandte Chemie**. 2026 Apr 6;138(15):e4904466.

<https://doi.org/10.1002/ange.4904466>

Gharib M, Said M, Pons T, Hondow N, Zrig S, Lévy R. Failed, aborted replication of ‘Carbon-dot-based dual-emission nanohybrid produces a ratiometric fluorescent sensor for in vivo imaging of cellular copper ions’. **Royal Society Open Science**. 2026 Mar 1;13(3):252457.

<https://doi.org/10.1098/rsos.252457>

Said M, **Gharib M**, Lévy R. Towards More Robust Nanobioscience: Launching the NanoBubbles Replication Initiative. **Angewandte Chemie (International ed. in English)**. 2026 Feb 12;65(12):e11631.

<https://doi.org/10.1002/anie.202511631>

Abdeen AM, **Gharib M**, Abdelrahman IY. Synergistic effect of low-dose gamma radiation and/or clove oil loaded on silica nanoparticles on regeneration of human gingival fibroblast cell line: an in vitro study. **Odontology**. 2025 Sep 18:1-8.

<https://doi.org/10.1007/s10266-025-01198-y>

Memberships

- Egyptian syndicate of scientific professions (2009-now).

Awards

Poster Prize Award

Nanotechnology in Cancer, Nanotechnology in Cancer: Engineering for Oncology, Cambridge, UK,

2019

PIER Helmholtz Graduate School Travel Award

PIER Helmholtz Graduate School, Germany

2019

DAAD PhD Scholarship

German Academic Exchange Service (DAAD), Germany

2017

Best MSc Topic Award

BioKMT Society, Egypt

2012

MSc Degree Scholarship, ASRT, Egypt

2010