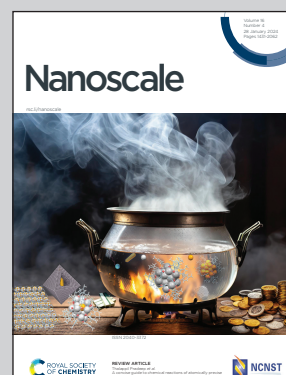


**Presenting research from the Department of Advanced Materials Metrology and Life Science at the Istituto Nazionale di Ricerca Metrologica (INRiM), Turin, Italy.**

Dual-responsive magnetic nanodroplets for controlled oxygen release *via* ultrasound and magnetic stimulation

A method for decorating ultrasound-sensitive oxygen-loaded nanodroplets with magnetic nanoparticles is reported, to obtain dual-responsive drug delivery nanosystems. A comprehensive analysis of the physicochemical properties of these nanosystems confirms their suitability for oxygen release applications, following the magnetic droplet vaporization induced by alternating magnetic fields. This positions the magnetic nanodroplets as promising candidates for the development of innovative oxygen delivery systems in biomedical fields.

**As featured in:**



See Simone Galati, Marta Vassallo *et al.*, *Nanoscale*, 2024, **16**, 1711.