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Nota di contenuto	Introduction -- Methods -- Quantifying interactions between water and surfaces -- Quantifying interactions between lipids and surfaces -- Quantifying interactions between serum proteins and gold nanoparticles -- Conclusion.
Sommario/riassunto	This thesis demonstrates the adaptation of existing techniques and principles towards enabling clean and precise measurements of biomolecules interacting with inorganic surfaces. In particular, it

includes real-time measurement of serum proteins interacting with engineered nanomaterial. Making meaningful and unambiguous measurements has been an evolving problem in the field of biology and its various allied domains, primarily due to the complex nature of experiments and the large number of possible interferants. The subsequent quantification of interactions between biomolecules and inorganic surfaces solves pressing problems in the rapidly developing fields of lipidomics and nanomedicine.