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A fluorescent nanodiamond foundation for quantum sensing in cells

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Propositions

1. Adsorption of serum proteins and antibodies on the surface of fluorescent nanodiamonds has to be evaluated for each situation. (this thesis)
2. When incorporating nanodiamonds into cells by additional physical or chemical manipulations, the (sub)cellular responses have to be closely monitored. (this thesis)
3. Cleaned nanodiamonds in the ten to hundred nanometer range are not harmful to research cell lines. (this thesis)
4. Directing diamonds towards specific cellular structures or proteins will lead to nanoscale chemical information. (this thesis)
5. Researchers should take more advantage of information technology when analyzing their data.
6. The limitation of exact quantification of nanodiamond uptake inside cells is time and money.
7. Supervisors should motivate PhD students to remove their uncertainty about their own knowledge and skill.
8. The statement: "If a cluttered desk is a sign of a cluttered mind, of what, then, is an empty desk a sign?" of Albert Einstein is a fallacy.
9. The current way of educating researchers is a poor reflection of the original ideology of academia.