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The solid state photo-CIDNP effect

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Propositions

1. Nanosecond-flash photo-CIDNP opens new possibilities to understand primary electron-nuclear interactions in the solid-state.
This thesis.
2. The solid-state photo-CIDNP effect in *Rb. sphaeroides* WT and its R26 mutant follows the same general mechanisms.
See Chapter 1 and 3.
3. Time resolve nanosecond-flash photo-CIDNP MAS NMR experiments can be performed very fast.
See Chapter 2.
4. Nanosecond-flash photo-CIDNP provides insight into the nuclear polarization kinetics and the triplet quenching mechanisms.
See Chapter 3.
5. Nanosecond-flash photo-CIDNP allows to resolve the electronic structure of both the ground state and of the primary radical pair state of the photosynthetic machinery.
See Chapter 4, 5 and Diller et al. (2007) J. Phys. Chem. B, 111, 10606-10614.
6. To resolve the problems of energy and famine, not scientific breakthroughs but more scientific awareness is required.
7. Scientific progress is built on artifacts.
8. Being a good chef helps to be a good chemist, being a good chemist helps to be a good chef.
9. Love is the universal driving force that makes everything possible.