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**Title:** Taking control of charge transfer : strategic design for solar cells  
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Stellingen:

1. Conversion of sunlight into power and fuel requires control over photoinduced charge transfer processes. (Chapter 3, 4, and 5)

2. The evolution of an exciton state into a charge separated state involves the coupling to specific nuclear vibrational modes. (Chapter 4)

3. During electron transfer, the electronic system acts as a phonon antenna. (Chapter 4)

4. To investigate in detail electron transfer processes, it is necessary to go beyond the Marcus representation. (Chapter 1, 4, 5)

5. An accurate modelling of proton-coupled electron transfer process requires the explicit description of the solvent. (Chapter 5)

6. Quantum-classical simulations can provide answers to fundamental questions beyond chemical intuition and experimental observations.

7. All chemical reactions are in part non-adiabatic.

8. When a calculation does not converge or outputs an error message, the machine is not the first but rather the last to blame.

9. The future of solar fuel is in the merging between chemistry and law.

10. Our society is already based on the exploitation of solar energy. We are just using the wrong one.