

List of Publications

Tomáš Jíra, Ph.D.

September 8, 2026

- (1) Jíra, T.; Larson, Å.; Aissaoui, L.; Buchowiecki, M. Wavepacket Dynamics and Quantum Scattering in Spin-Orbit Induced Excitation and Quenching in $\text{N}^+(\text{}^3\text{P})\text{-He}(\text{}^1\text{S})$ and $\text{N}^+(\text{}^1\text{D})\text{-He}(\text{}^1\text{S})$ Collisions. *Physical Review A* **2026**, *114*, 032805, DOI: [10.1103/mgff-cjs8](https://doi.org/10.1103/mgff-cjs8).
- (2) Buchowiecki, M.; Jíra, T. Spin-Orbit Induced Charge Transfer in $\text{H}^+/\text{D}^+/\text{T}^+\text{-N}(\text{}^4\text{S})$ Collisions. *Journal of Quantitative Spectroscopy and Radiative Transfer* **2025**, *347*, 109697, DOI: [10.1016/j.jqsrt.2025.109697](https://doi.org/10.1016/j.jqsrt.2025.109697).
- (3) Jíra, T.; Janoš, J.; Slavíček, P. Critical Assessment of Curvature-Driven Surface Hopping Algorithms. *Journal of Chemical Theory and Computation* **2025**, *21*, 9784–9798, DOI: [10.1021/acs.jctc.5c01176](https://doi.org/10.1021/acs.jctc.5c01176).
- (4) Jíra, T.; Janoš, J.; Slavíček, P. Sensitivity Analysis in Photodynamics: How Does the Electronic Structure Control *cis*-Stilbene Photodynamics? *Journal of Chemical Theory and Computation* **2024**, *20*, 10972–10985, DOI: [10.1021/acs.jctc.4c01008](https://doi.org/10.1021/acs.jctc.4c01008).