

PUBLICATIONS

Peer-Reviewed
Journals

D.V. Makhov, G. Armstrong, **G.H.-H. Chuang**, H. Ambalampitiya, K. Lemishko, S. Mohr, A. Nelson, J. Tennyson, D. Shalashilin, "Dissociation of hydrofluorocarbon molecules after electron impact in plasma"
J. Phys. Chem. Lett. **2024**, *15*, 3404. [10.1021/acs.jpcllett.4c00348](https://doi.org/10.1021/acs.jpcllett.4c00348)

B. Chen, R.Y. He, H.M. Chien, C.C. Lee, **G.H.-H. Chuang**, C.P. Hsu, J. Chan, J.T. Huang, "Superresolution Imaging of Photochromic Acylhydrazone Moieties on Amyloid Nanofibrils: Implications for Photoswitchable Probes"
ACS Appl. Nano Mater. **2022**, *5*, 1734. [10.1021/acsanm.1c04004](https://doi.org/10.1021/acsanm.1c04004)

G.H.-H. Chuang, D.J. Tantillo, C.P. Hsu, "Construction of Two-Dimensional Potential Energy Surfaces of Reactions with Post-Transition-State Bifurcations"
J. Chem. Theory Comput. **2020**, *16*, 4050. [10.1021/acs.jctc.0c00172](https://doi.org/10.1021/acs.jctc.0c00172)

C.W. Chang, C.H. Wu, M.H. Line, P.H. Liao, C.C. Chang, **G.H.-H. Chuang**, S.C. Lin, S. Lam, V.P. Verma, C.P. Hsu, C.C. Wang, "Establishment of Guidelines for the Control of Glycosylation Reactions and Intermediates by Quantitative Assessment of Reactivity",
Angew. Chem. Int. Ed. **2019**, *58*, 16775. [10.1002/anie.201906297](https://doi.org/10.1002/anie.201906297)

K.C. Tang, C.L. Cheng, **G.H.-H. Chuang**, J.L. Chen, Y.J. Lin, J.Y. Shen, W.P. Hu, P.T. Chou, "A Genuine Intramolecular Proton Relay System Undergoing Excited-State Double Proton Transfer Reaction",
J. Phys. Chem. Lett. **2011**, *2*, 3063. [10.1021/jz201439w](https://doi.org/10.1021/jz201439w)

Under Review

W. Quapp, **G.H.-H. Chuang**, J.M. Bofill, "Exploring potential energy surfaces around valley-ridge inflection points"
- Submitted to Theoretical Chemistry Accounts **2025**

G.H.-H. Chuang, A. Pendse, "Capturing spin chain dynamics with periodically projected time-dependent basis "
- Submitted to Journal of Computational Physics **2025** [arXiv:2306.07407v3](https://arxiv.org/abs/2306.07407v3)

In Preparation

G.H.-H. Chuang, W. Quapp, D. Tantillo, "General method for building reaction coordinates of asymmetric PTSB reactions" **2025**

G.H.-H. Chuang, U. Saalman, A. Eisfeld, "Calculating Excitonic Interactions using Transition Currents with Application to PTCDA" **2025**

Thesis &
Dissertation

G.H.-H. Chuang, "Two-Dimensional Potential Energy Surfaces of the Reactions with Post-Transition-State Bifurcation",
PhD dissertation, National Taiwan University **2020**
[10.6342/NTU202001503](https://doi.org/10.6342/NTU202001503)

G.H.-H. Chuang, "Theoretical Study on the Excited-State Proton Transfer Reactions and on the Prebiotic Synthesis of α -amino acids",
Master's thesis, National Chung-Cheng University **2012**
[NDLTD ID: 099CCU00065056](https://doi.org/10.6342/NTU202001503)