

Publications

Book Chapters

- 3) **Gary Hastings**, Syed Lal Badshah, Nan Zhao and Kevin Redding (2022)
The A₁ Pigment in Photosystem I Contributes to (P700+ – P700) FTIR Difference Spectra.
In: Photosynthesis: From Plants to Nanomaterials. Chapter 5.
Eds: Harvey Hou and Suleyman Allakhverdiev. Elsevier. *In press*.
- 2) **Gary Hastings** (2006)
FTIR Studies of the Intermediate Electron Acceptor A₁. *In: Photosystem I: The Plastocyanin:Ferredoxin Oxidoreductase in Photosynthesis*. Editor: Golbeck, J. Series Title: Advances in Photosynthesis in Respiration, Volume 24. Chapter 20, 301-318.
- 1) **Gary Hastings** (1999)
Physics 1112K: Introductory Physics. *In Ace Your Midterm and Finals: Introduction To Physics*. Chapter 23, 232-248. Editor: A. Axelrod. (McGraw Hill).

Proceedings (Not Refereed)

- 9) John A. Ward, Chadi Filfili, Ruli Wang, **Gary Hastings**, Jing Guo, Yu-Sheng Hsu, David Katz, Julia Hilliard (2011)
Integrating a partial least squares model with an artificial neural network to discriminate FTIR spectra of virus infected Vero cells at 6 hours post exposure.
2011 IEEE International Conference on Bioinformatics and Biomedicine Workshops. Atlanta.
- 8) Hilliard, J., Filfili, C., Patrusheva, I., Fuchs, P., Katz, D., Wang, R., **Hastings, G.**, Guo, J., Hsu, Y.-S., and Ward, J. (2010)
Cell Biosensors: Rapid Detection and Identification of Pathogens Using FTIR Microspectroscopic Spectra. Document MP-HFM-182-29, pp1-12.
NATO Research and Technology Organization. Symposium RTO-MP-HFM-182-29. Use of Advanced Technologies and New Procedures in Medical Field Operations. Essen, Germany.
- 7) **Gary Hastings** and Priyangika Bandaranayake (2008)
Quinone anion bands in A₁⁻/A₁ FTIR difference spectra investigated using photosystem I particles with specifically labeled Naphthoquinones incorporated into the A₁ binding site.
In: Photosynthesis. Energy from the Sun. 14th International Congress on Photosynthesis Research 2007. Editors: Allen, JF, Gantt, E, Golbeck, JH, Osmond, B. Chapter 12, 69-72.
- 6) Ruili Wang and **Gary Hastings** (2004)
Computed infrared spectra of protonated and metal bound 4-methylimidazole. In Photosynthesis: Fundamental Aspects to Global Perspectives. (Eds. van der Est, A, Bruce, D). p70-72
Alliance Communications Group, Lawrence, KS.
- 5) Velautham Sivakumar, Ruili Wang, T. Wade Johnson and **Gary Hastings** (2004)
A₁ Reduction in Intact Cyanobacterial Photosystem I Studied Using Time-resolved Step-scan Fourier Transform Infra-red Difference Spectroscopy In Combination With Site Directed Mutagenesis and Quinone Exchange Experiments.
In Photosynthesis: Fundamental Aspects to Global Perspectives. (Eds. van der Est, A, Bruce, D). Alliance Communications Group, Lawrence, KS.
- 4) **Gary Hastings** and Velautham Sivakumar, V. (2001)
Time Resolved Fourier Transform Infrared Difference Spectroscopy for the Study of A₁ Reduction in Intact Photosystem I. In: PS2001: 12th International Conference In Photosynthesis. (Editor: Critchley, C). CSIRO Publishers. Melbourne, Australia. August 18-23, 2001.
- 3) **Gary Hastings**, James Durrant, James Barber, George Porter and David Klug (1992)
Electron and Energy Transfer in Isolated Photosystem II Reaction Centers 2: Radical Pair Formation. In *Research in Photosynthesis*, (Editor: Murata, N.) Vol. II, 247-250.
- 2) David Klug, James Durrant, **Gary Hastings**, James Barber and George Porter (1992)

- Electron and Energy Transfer in Isolated Photosystem II Reaction Centers 1: Discrimination of Five Kinetic Components. In *Research in Photosynthesis*, (Editor: Murata, N.) Vol. II, 243-246.
- 1) Klug, D. R., Durrant, J. R., **Hastings, G.**, Barber, J. & Porter G., (1991)
Electron Transfer in Photosystem II Reaction Centers. In *Spectroscopy of Biological Molecules*, (Editors: Hester R.E., Girling R. B.) 51-54.