**Invited Oral Presentation at International Conference**

3) **Gary Hastings** (2009)

2) **Gary Hastings** (2005)

1) **Gary Hastings** (2004)

**Oral Presentations** (presenter underlined)

   Biological Electron Transfer in Photosystem I. Physics Graduate Student Association Annual Conference. April 24.


32) Hiroki Makita and **Gary Hastings** (2014)

31) Nan Zhao, Hiroki Makita and **Gary Hastings** (2014)


29) Yasser Hussein and **Gary Hastings** (2012)


26) **Hari P. Lamichhanne** and **Gary Hastings** (2010).
ONIOM method for the exploration of double difference spectra of ubiquinone in the QA binding site of Rb. Sphaeroides. 

Molecular Details of Cofactors involved in Solar Energy Conversion in Plants and Bacteria
5th Annual Molecular Basis of Disease Focus Group Research Conference. May 2010. Georgia State University. Atlanta GA.

Viral Infection of Cells in Culture Detected Using Infrared Microscopy

23) Gary Hastings and Sreeja Parameswaran
Modifying P700, An Important Chlorophyll Species Involved In Solar Energy Conversion in Plants and Bacteria

22) Nan Zhao and Gary Hastings (2009)
FTIR Difference Spectroscopy for the Study of A1 in Photosystem I.

21) Hari Lamichhane and Gary Hastings (2009)


19) Hari Prasad Lamichhane and Gary Hastings (2008)
Light induced FTIR difference spectroscopy of photosynthetic reaction centers in the frequency region between 1000-250 cm⁻¹.

18) Sreeja Parameswaran and Gary Hastings (2008)
Calculation of the properties of P700.

25th Eastern Regional Photosynthesis Conference in Photosynthesis.
Calculation of the Vibrational Properties of Chlorophyll-a In Solution.

16) Sreeja Parameswaran and Gary Hastings (2007)
24th Eastern Regional Photosynthesis Conference in Photosynthesis.

23rd Annual Eastern Regional Conference in Photosynthesis.
On the Origin of the 1656(+) / 1637(-) cm⁻¹ Difference Band in (P700⁺ - P700) FTIR Difference Spectra: Low Temperature FTIR Difference Spectroscopy for the Study of P700 IN Y(B718)T Mutant Cyanobacterial PS I particles.

23rd Annual Eastern Regional Conference in Photosynthesis, Woods Hole, MA.
23rd Annual Eastern Regional Conference in Photosynthesis, Woods Hole, MA.
12) Gary Hastings (2005)
3rd International Conference on Advanced Vibrational Spectroscopy. Delavan, WI.
Solar Conversion In Plants and Bacteria Studied Using Time-resolved Step-scan Fourier Transform Infra-red Difference Spectroscopy”
31st Annual Midwest/Southeast Regional Conference in Photosynthesis. Marshall, IN.
10) Priyangika K.M. Bandaranayake and Gary Hastings (2005)
22nd Annual Eastern Regional Conference in Photosynthesis, Woods Hole, MA.
13th International Conference Of Photosynthesis. Montreal, Canada.
21st Annual Eastern Regional Conference in Photosynthesis, Woods Hole, MA.
FTIR Difference Spectroscopy in Combination With Site Directed Mutagenesis and Isotope Labeling for the Identification of the Carbonyl Modes of P700 and P700⁺ in Photosystem I.
20th Annual Eastern Regional Conference in Photosynthesis. Woods Hole, MA.
FTIR Difference Spectroscopy and Isotope Labeling for the Identification of The Carbonyl Modes of P700 in Photosystem I.
20th Annual Eastern Regional Conference in Photosynthesis, Woods Hole, MA.
Mutation Induced Modulation of Hydrogen Bonding to P700 Studied Using FTIR Difference Spectroscopy.
19th Annual Eastern Regional Conference in Photosynthesis. Woods Hole, MA.
XXII Annual Meeting of the American Society for Photobiology. Scottsdale, AZ.
Energy and Electron Transfer Processes in Photosystem I.
Poster Presentations

78) Hiroki Makita and Gary Hastings (2015)
On the Directionality of Electron Transfer In Photosystem I.
Conference Program and Abstract Booklet Page 53.

77) Nan Zhao and Gary Hastings (2015)
Phyloquinone in the A1 binding site in photosystem I is very strongly hydrogen bonded. 32nd Annual Eastern Regional Photosynthesis Conference. Woods Hole. MA. April. 17-19.
Conference Program and Abstract Booklet Poster 16.

76) Hiroki Makita and Gary Hastings (2015)
P700+A1 Charge Recombination in Photosystem I Occurs in the Marcus Inverted Region.
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Conference Program and Abstract Booklet Poster 36.

75) Hiroki Makita and Gary Hastings (2014)
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40th Annual Midwest/Southeast Photosynthesis Meeting.

74) Hiroki Makita, Velautham Sivakumar, Yasser Hussein and Gary Hastings (2014)

73) Hiroki Makita and Gary Hastings (2014)

72) Nan Zhao and Gary Hastings (2014)
Vibrational properties of quinones in photosystem I reaction centers.

71) Hiroki Makita and Gary Hastings (2014)
Fourier Transform Infrared Difference Spectroscopy for the Studies of Zinc-substituted Reaction Center from Rhodobacter sphaeroides. 31st Eastern regional photosynthesis conference. Woods Hole. MA. April. 4-6.

70) Hiroki Makita and Gary Hastings (2014)

69) Nan Zhao, Hiroki Makita and Gary Hastings (2014)

68) Yasser Hussein, Velautham Sivakumar, Elham Bassam and Gary Hastings (2014)
Laser Flash Photolysis Studies of Quenching the Triplet Excited State of Chloranil by dAMP in Proton and Aprotic Solvents. 5th Annual Symposium on Materials Science and Engineering. Qatar University, Center for Advanced Materials. February 18.

67) Hiroki Makita and Gary Hastings (2013)
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39th Annual midwest/southeast photosynthesis meeting.
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66) Nan Zhao and **Gary Hastings**
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65) Hiroki Makita and **Gary Hastings** (2013)
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63) Nan Zhao and **Gary Hastings** (2013)
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61) Nan Zhao and **Gary Hastings** (2013)
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Hybrid Density Functional Theory For The Prediction of The Vibrational Properties of Unlabeled
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