

# Stanford

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## Michael P. Minitti

Senior Scientist, SLAC National Accelerator Laboratory

 Curriculum Vitae available Online

### Bio

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#### BIO

A native of Arizona, I studied chemistry at Mesa Community College and Arizona State University, receiving my bachelor's degree in 2000. I then did graduate work in chemistry at SUNY Stony Brook and Brown University, eventually specializing in time-resolved studies of the dynamics of chemical reactions. Following my interest in combining chemistry with ultrafast lasers, I did postdoctoral research at Princeton and Brown before joining SLAC as a staff scientist in 2011.

#### CURRENT ROLE AT STANFORD

I am a Senior Staff Scientist specializing in time-resolved gas-phase chemistry and structural dynamics studies using ultrabright, ultrafast X-rays and electrons. I also serve as the Director of the Mega-electronvolt Ultrafast Electron Diffraction (MeV-UED) user facility and as the LCLS Soft X-Ray Department Head at SLAC National Accelerator Laboratory.

#### EDUCATION AND CERTIFICATIONS

- Ph.D, Brown University , Physical Chemistry (2006)
- B.Sc., Arizona State University , Chemistry (2000)
- A.A., Mesa Community College , Chemistry (1997)

#### LINKS

- Molecular Movie of 1,3-CHD: <https://www6.slac.stanford.edu/news/2015-06-22-new-%E2%80%98molecular-movie%E2%80%99-reveals-ultrafast-chemistry-motion.aspx>
- Engadget - Crazy Fast FEL!: <https://www.engadget.com/2015/06/26/crazy-fast-x-ray-laser-catches-chemical-reactions-in-the-act/>
- X-rays and molecular movies: <https://www.nature.com/articles/522395a>
- Molecular Movie Viewpoint: <https://physics.aps.org/articles/v8/59>
- Chemistry World: <https://www.chemistryworld.com/research/ultra-bright-x-rays-film-molecular-reaction/8675.article>
- Yahoo News!: <https://www.yahoo.com/news/watch-ring-shaped-molecule-unravel-record-fast-movie-114733706.html>
- AMO Instrument at LCLS: <https://lcls.slac.stanford.edu/instruments/amo>
- SXR Instrument at LCLS: <https://lcls.slac.stanford.edu/instruments/sxr>
- LCLS-II Instruments: <https://lcls.slac.stanford.edu/instruments/l2si>

### Professional

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#### PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Member, American Chemical Society (2001 - present)

## Publications

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### PUBLICATIONS

- **Brighter, faster, stronger: ultrafast scattering of free molecules** *ADVANCES IN PHYSICS-X*  
Odate, A., Kirrander, A., Weber, P. M., Minitti, M. P.  
2023; 8 (1)
- **Transient vibration and product formation of photoexcited CS<sub>2</sub> measured by time-resolved x-ray scattering.** *The Journal of chemical physics*  
Gabalski, I., Sere, M., Acheson, K., Allum, F., Boutet, S., Dixit, G., Forbes, R., Glownia, J. M., Goff, N., Hegazy, K., Howard, A. J., Liang, M., Minitti, et al  
2022; 157 (16): 164305
- **Following Metal-to-Ligand Charge-Transfer Dynamics with Ligand and Spin Specificity Using Femtosecond Resonant Inelastic X-ray Scattering at the Nitrogen K-Edge.** *The journal of physical chemistry letters*  
Jay, R. M., Eckert, S., Van Kuiken, B. E., Ochmann, M., Hantschmann, M., Cordones, A. A., Cho, H., Hong, K., Ma, R., Lee, J. H., Dakovski, G. L., Turner, J. J., Minitti, et al  
2021: 6676-6683
- **Determination of excited state molecular structures from time-resolved gas-phase X-ray scattering.** *Faraday discussions*  
Yong, H., Moreno Carrascosa, A., Ma, L., Stankus, B., Minitti, M. P., Kirrander, A., Weber, P. M.  
2021
- **Electron-ion coincidence measurements of molecular dynamics with intense X-ray pulses.** *Scientific reports*  
Li, X., Inhester, L., Osipov, T., Boll, R., Coffee, R., Cryan, J., Gatton, A., Gorkhover, T., Hartman, G., Ilchen, M., Knie, A., Lin, M., Minitti, et al  
2021; 11 (1): 505
- **Ultrafast X-ray scattering offers a structural view of excited-state charge transfer.** *Proceedings of the National Academy of Sciences of the United States of America*  
Yong, H. n., Xu, X. n., Ruddock, J. M., Stankus, B. n., Carrascosa, A. M., Zotev, N. n., Bellshaw, D. n., Du, W. n., Goff, N. n., Chang, Y. n., Boutet, S. n., Carbajo, S. n., Koglin, et al  
2021; 118 (19)
- **Advances in ultrafast gas-phase x-ray scattering** *JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS*  
Stankus, B., Yong, H., Ruddock, J., Ma, L., Carrascosa, A., Goff, N., Boutet, S., Xu, X., Zotev, N., Kirrander, A., Minitti, M. P., Weber, P. M.  
2020; 53 (23)
- **High-sensitivity x-ray/optical cross-correlator for next generation free-electron lasers** *OPTICS EXPRESS*  
Droste, S., Zohar, S., Shen, L., White, V. E., Diaz-Jacobo, E., Coffee, R. N., Reid, A. H., Tavella, F., Minitti, M. P., Turner, J. J., Robinson, J. S., Fry, A. R., Coslovich, et al  
2020; 28 (16): 23545–53
- **Observation of the molecular response to light upon photoexcitation.** *Nature communications*  
Yong, H., Zotev, N., Ruddock, J. M., Stankus, B., Simmermacher, M., Carrascosa, A. M., Du, W., Goff, N., Chang, Y., Bellshaw, D., Liang, M., Carbajo, S., Koglin, et al  
2020; 11 (1): 2157
- **Ultrafast X-ray scattering reveals vibrational coherence following Rydberg excitation.** *Nature chemistry*  
Stankus, B., Yong, H., Zotev, N., Ruddock, J. M., Bellshaw, D., Lane, T. J., Liang, M., Boutet, S., Carbajo, S., Robinson, J. S., Du, W., Goff, N., Chang, et al  
2019
- **Simplicity beneath Complexity: Counting Molecular Electrons Reveals Transients and Kinetics of Photodissociation Reactions.** *Angewandte Chemie (International ed. in English)*  
Ruddock, J. M., Zotev, N., Stankus, B., Yong, H., Bellshaw, D., Boutet, S., Lane, T. J., Liang, M., Carbajo, S., Du, W., Kirrander, A., Minitti, M. P., Weber, et al  
2019
- **Soft X-ray spectroscopy with transition-edge sensors at Stanford Synchrotron Radiation Lightsource beamline 10-1.** *The Review of scientific instruments*  
Lee, S. J., Titus, C. J., Alonso Mori, R. n., Baker, M. L., Bennett, D. A., Cho, H. M., Doriese, W. B., Fowler, J. W., Gaffney, K. J., Gallo, A. n., Gard, J. D., Hilton, G. C., Jang, et al  
2019; 90 (11): 113101

- **A deep UV trigger for ground-state ring-opening dynamics of 1,3-cyclohexadiene.** *Science advances*  
Ruddock, J. M., Yong, H. n., Stankus, B. n., Du, W. n., Goff, N. n., Chang, Y. n., Odate, A. n., Carrascosa, A. M., Bellshaw, D. n., Zotev, N. n., Liang, M. n., Carbajo, S. n., Koglin, et al  
2019; 5 (9): eaax6625
- **Scattering off molecules far from equilibrium.** *The Journal of chemical physics*  
Yong, H. n., Ruddock, J. M., Stankus, B. n., Ma, L. n., Du, W. n., Goff, N. n., Chang, Y. n., Zotev, N. n., Bellshaw, D. n., Boutet, S. n., Carbajo, S. n., Koglin, J. E., Liang, et al  
2019; 151 (8): 084301
- **Imaging the ring opening reaction of 1,3-cyclohexadiene with MeV ultrafast electron diffraction**  
Wolf, T. A., Yang, J., Sanchez, D. M., Nunes, J. F., Parrish, R. M., Shen, X., Centurion, M., Coffee, R., Gyan, J. P., Guhr, M., Kareem, H., Kirrander, A., Li, et al  
E D P SCIENCES.2019
- **The photochemical ring-opening of 1,3-cyclohexadiene imaged by ultrafast electron diffraction.** *Nature chemistry*  
Wolf, T. J., Sanchez, D. M., Yang, J. n., Parrish, R. M., Nunes, J. P., Centurion, M. n., Coffee, R. n., Cryan, J. P., Gühr, M. n., Hegazy, K. n., Kirrander, A. n., Li, R. K., Ruddock, et al  
2019
- **Determining Orientations of Optical Transition Dipole Moments Using Ultrafast X-ray Scattering** *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*  
Yong, H., Zotev, N., Stankus, B., Ruddock, J. M., Bellshaw, D., Boutet, S., Lane, T. J., Liang, M., Carbajo, S., Robinson, J. S., Du, W., Goff, N., Chang, et al  
2018; 9 (22): 6556–62
- **Self-consistent internal calibration of x-ray scattering patterns from polarized radiation sources**  
Goff, N., Stankus, B., Ruddock, J., Zhang, Y., Lane, T., Liang, M., Boutet, S., Carbajo, S., Robinson, J., Koglin, J., Aquila, A., Minitti, M., Weber, et al  
AMER CHEMICAL SOC.2018
- **Deconvoluting the isotropic and anisotropic ultrafast x-ray scattering of gas-phase N-methylmorpholine following Rydberg excitation**  
Stankus, B., Ruddock, J., Yong, H., Zotev, N., Bellshaw, D., Lane, T., Boutet, S., Liang, M., Carbajo, S., Robinson, J., Koglin, J., Aquila, A., Zhang, et al  
AMER CHEMICAL SOC.2018
- **Exploring molecular reaction dynamics by ultrafast time-resolved gas phase X-ray scattering**  
Minitti, M., Ruddock, J., Stankus, B., Du, W., Yong, H., Goff, N., Bellshaw, D., Zotev, N., Liang, M., Boutet, S., Kirrander, A., Weber, P.  
AMER CHEMICAL SOC.2018
- **Time-resolved gas-phase X-ray scattering to reveal transients in photodissociation reactions**  
Ruddock, J., Stankus, B., Yong, H., Du, W., Bellshaw, D., Zotev, N., Lane, T., Liang, M., Minitti, M., Boutet, S., Kirrander, A., Weber, P.  
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- **Determining Orientations of Optical Transition Dipole Moments using Ultrafast X-Ray Scattering.** *The journal of physical chemistry letters*  
Yong, H. n., Zotev, N. n., Stankus, B. n., Ruddock, J. M., Bellshaw, D. n., Boutet, S. n., Lane, T. J., Liang, M. n., Carbajo, S. n., Robinson, J. S., Du, W. n., Goff, N. n., Chang, et al  
2018
- **L-edge spectroscopy of dilute, radiation-sensitive systems using a transition-edge-sensor array** *JOURNAL OF CHEMICAL PHYSICS*  
Titus, C. J., Baker, M. L., Lee, S., Cho, H., Doriese, W. B., Fowler, J. W., Gaffney, K., Gard, J. D., Hilton, G. C., Kenney, C., Knight, J., Li, D., Marks, et al  
2017; 147 (21): 214201
- **Nonlinear Ultrafast Spin Scattering in the Skyrmion Phase of Cu2OSeO3** *PHYSICAL REVIEW LETTERS*  
Langner, M. C., Roy, S., Huang, S. W., Koralek, J. D., Chuang, Y., Dakovski, G. L., Turner, J. J., Robinson, J. S., Coffee, R. N., Minitti, M. P., Seki, S., Tokura, Y., Schoenlein, et al  
2017; 119 (10): 107204
- **Soft x-ray absorption spectroscopy of metalloproteins and high-valent metal-complexes at room temperature using free-electron lasers** *STRUCTURAL DYNAMICS*  
Kubin, M., Kern, J., Gul, S., Kroll, T., Chatterjee, R., Loechel, H., Fuller, F. D., Sierra, R. G., Quevedo, W., Weniger, C., Rehanek, J., Firsov, A., Laksmono, et al  
2017; 4 (5): 054307
- **Measurements of the K-Shell Opacity of a Solid-Density Magnesium Plasma Heated by an X-Ray Free-Electron Laser** *PHYSICAL REVIEW LETTERS*  
Preston, T. R., Vinko, S. M., Ciricosta, O., Hollebon, P., Chung, H., Dakovski, G. L., Krzywinski, J., Minitti, M., Burian, T., Chalupsky, J., Hajkova, V., Juha, L., Vozda, et al

2017; 119 (8): 085001

- **Real-Time Elucidation of Catalytic Pathways in CO Hydrogenation on Ru** *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*  
LaRue, J., Krejci, O., Yu, L., Beye, M., Ng, M. L., Oberg, H., Xin, H., Mercurio, G., Moeller, S., Turner, J. J., Nordlund, D., Coffee, R., Minitti, et al  
2017; 8 (16): 3820–25
- **The Linac Coherent Light Source: Recent Developments and Future Plans** *APPLIED SCIENCES-BASEL*  
Schoenlein, R. W., Boutet, S., Minitti, M. P., Dunne, A. M.  
2017; 7 (8)
- **Ultrafast Independent N-H and N-C Bond Deformation Investigated with Resonant Inelastic X-Ray Scattering** *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*  
Eckert, S., Norell, J., Miedema, P. S., Beye, M., Fondell, M., Quevedo, W., Kennedy, B., Hantschmann, M., Pietzsch, A., Van Kuiken, B. E., Ross, M., Minitti, M. P., Moeller, et al  
2017; 56 (22): 6088–92
- **Determination of differential orbital covalency of heme active sites by L-edge spectroscopy**  
Baker, M., Alpert, B., Cho, H., Denison, E., Doriese, W., Fowler, J., Gaffney, K., Gard, J., Gao, B., Hilton, G., Irwin, K., Joe, Y., Kenney, et al  
AMER CHEMICAL SOC.2017
- **Ultrasensitive probing of the local electronic structure of nitrogen doped carbon and its applications to 2D electronics, catalysis and bio-physics**  
Lee, S., Mori, R., Alpert, B., Baker, M., Berry, J., Cho, H., Denison, E., Doriese, W., Fowler, J., Gaffney, K., Gao, B., Gard, J., Hilton, et al  
AMER CHEMICAL SOC.2017
- **Probing the local electronic structure of dilute bioinorganic active sites using ultra-sensitive soft X-ray detectors**  
Titus, C., Alpert, B., Baker, M., Cho, H., Denison, E., Doriese, W., Fowler, J., Gaffney, K., Gao, B., Gard, J., Hilton, G., Irwin, K., Joe, et al  
AMER CHEMICAL SOC.2017
- **Ultra sensitive probing of the local electronic structure based on state-of-the-art Transition-Edge Sensor (TES) technology and soft x-ray spectroscopy**  
Nordlund, D., Alpert, B., Baker, M., Cho, H., Denison, E., Doriese, W., Fowler, J., Gaffney, K., Gao, B., Gard, J., Hilton, G., Irwin, K., Joe, et al  
AMER CHEMICAL SOC.2017
- **Nonequilibrium lattice-driven dynamics of stripes in nickelates using time-resolved x-ray scattering** *PHYSICAL REVIEW B*  
Lee, W. S., Kung, Y. F., Moritz, B., Coslovich, G., Kaindl, R. A., Chuang, Y. D., Moore, R. G., Lu, D. H., Kirchmann, P. S., ROBINSON, J. S., Minitti, M. P., Dakovski, G., Schlotter, et al  
2017; 95 (12)
- **Femtosecond photodissociation dynamics of 1,4-diodobenzene by gas-phase X-ray scattering and photoelectron spectroscopy.** *Faraday discussions*  
Stankus, B., Budarz, J. M., Kirrander, A., Rogers, D., Robinson, J., Lane, T. J., Ratner, D., Hastings, J., Minitti, M. P., Weber, P. M.  
2016: -?
- **Chemical Bond Activation Observed with an X-ray Laser** *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*  
Beye, M., Oberg, H., Xin, H., Dakovski, G. L., Dell'Angela, M., Föhlisch, A., Gladh, J., Hantschmann, M., Hieke, F., Kaya, S., Kuehn, D., LaRue, J., Mercurio, et al  
2016; 7 (18): 3647-3651
- **Chemical Bond Activation Observed with an X-ray Laser.** *journal of physical chemistry letters*  
Beye, M., Öberg, H., Xin, H., Dakovski, G. L., Dell'Angela, M., Föhlisch, A., Gladh, J., Hantschmann, M., Hieke, F., Kaya, S., Kühn, D., LaRue, J., Mercurio, et al  
2016; 7 (18): 3647-3651
- **Ultrafast dynamics of localized magnetic moments in the unconventional Mott insulator Sr<sub>2</sub>IrO<sub>4</sub>** *JOURNAL OF PHYSICS-CONDENSED MATTER*  
Krupin, O., Dakovski, G. L., Kim, B. J., Kim, J. W., Kim, J., Mishra, S., Chuang, Y., Serrao, C. R., Lee, W., Schlotter, W. F., Minitti, M. P., Zhu, D., Fritz, et al  
2016; 28 (32)
- **Indirect excitation of ultrafast demagnetization.** *Scientific reports*  
Vodungbo, B., Tudu, B., Perron, J., Delaunay, R., Müller, L., Berntsen, M. H., Grübel, G., Malinowski, G., Weier, C., Gautier, J., Lambert, G., Zeitoun, P., Gutt, et al  
2016; 6: 18970-?
- **Attosecond processes and X-ray spectroscopy: general discussion** *FARADAY DISCUSSIONS*

- Milne, C. J., Weber, P. M., Kowalewski, M., Marangos, J. P., Johnson, A. S., Forbes, R., Worner, H., Rolles, D., Townsend, D., Schalk, O., Mai, S., Vacher, M., Miller, et al  
2016; 194: 427–62
- **Electronic and non-adiabatic dynamics: general discussion** *FARADAY DISCUSSIONS*  
Orr-Ewing, A. J., Verlet, J. R., Penfold, T. J., Minns, R. S., Minitti, M. P., Solling, T. I., Schalk, O., Kowalewski, M., Marangos, J. P., Robb, M. A., Johnson, A. S., Worner, H., Shalashilin, et al  
2016; 194: 209–57
  - **Structural dynamics: general discussion** *FARADAY DISCUSSIONS*  
Declava, P., Orr-Ewing, A. J., Kowalewski, M., Kornilov, O., Marangos, J. P., Worner, H., Johnson, A. S., Forbes, R., Rolles, D., Townsend, D., Schalk, O., Mai, S., Penfold, et al  
2016; 194: 583–620
  - **Vibrational and condensed phase dynamics: general discussion** *FARADAY DISCUSSIONS*  
Orr-Ewing, A. J., Kornilov, O., Solling, T. I., Keane, T., Minitti, M. P., Worner, H., Schalk, O., Roberts, G. M., Minns, R. S., Milne, C. J., Miseikis, L., Penfold, T. J., Miller, et al  
2016; 194: 747–75
  - **Magnetic order dynamics in optically excited multiferroic TbMnO<sub>3</sub>** *PHYSICAL REVIEW B*  
Johnson, J. A., Kubacka, T., Hoffmann, M. C., Vicario, C., de Jong, S., Beaud, P., Gruebel, S., Huang, S., Huber, L., Windsor, Y. W., Bothschafter, E. M., Rettig, L., Ramakrishnan, et al  
2015; 92 (18)
  - **Imaging Molecular Motion: Femtosecond X-Ray Scattering of an Electrocyclic Chemical Reaction** *PHYSICAL REVIEW LETTERS*  
Minitti, M. P., Budarz, J. M., Kirrander, A., ROBINSON, J. S., Ratner, D., Lane, T. J., Zhu, D., Glownia, J. M., Kozina, M., Lemke, H. T., Sikorski, M., Feng, Y., Nelson, et al  
2015; 114 (25)
  - **Combining THz laser excitation with resonant soft X-ray scattering at the Linac Coherent Light Source** *JOURNAL OF SYNCHROTRON RADIATION*  
Turner, J. J., Dakovski, G. L., Hoffmann, M. C., Hwang, H. Y., Zarem, A., Schlotter, W. F., Moeller, S., Minitti, M. P., Staub, U., Johnson, S., Mitra, A., Swiggers, M., Noonan, et al  
2015; 22: 621-625
  - **Optical laser systems at the Linac Coherent Light Source** *JOURNAL OF SYNCHROTRON RADIATION*  
Minitti, M. P., Robinson, J. S., Coffee, R. N., Edstrom, S., Gilevich, S., Glownia, J. M., Granados, E., Hering, P., Hoffmann, M. C., Miahnahri, A., Milathianaki, D., Polzin, W., Ratner, et al  
2015; 22: 526–31
  - **The Soft X-ray Research instrument at the Linac Coherent Light Source** *JOURNAL OF SYNCHROTRON RADIATION*  
Dakovski, G. L., Heimann, P., Holmes, M., Krupin, O., Minitti, M. P., Mitra, A., Moeller, S., Rowen, M., Schlotter, W. F., Turner, J. J.  
2015; 22: 498–502
  - **The Atomic, Molecular and Optical Science instrument at the Linac Coherent Light Source** *JOURNAL OF SYNCHROTRON RADIATION*  
Ferguson, K. R., Bucher, M., Bozek, J. D., Carron, S., Castagna, J., Coffee, R., Curiel, G. I., Holmes, M., Krzywinski, J., Messerschmidt, M., Minitti, M., Mitra, A., Moeller, et al  
2015; 22: 492-497
  - **Strong Influence of Coadsorbat Interaction on CO Desorption Dynamics on Ru(0001) Probed by Ultrafast X-Ray Spectroscopy and Ab Initio Simulations** *PHYSICAL REVIEW LETTERS*  
Xin, H., LaRue, J., Oberg, H., Beye, M., Dell'Angela, M., Turner, J. J., Gladh, J., Ng, M. L., Sellberg, J. A., Kaya, S., Mercurio, G., HIEKE, F., Nordlund, et al  
2015; 114 (15)
  - **Irreversible transformation of ferromagnetic ordered stripe domains in single-shot infrared-pump/resonant-x-ray-scattering-probe experiments** *PHYSICAL REVIEW B*  
Bergeard, N., Schaffert, S., Lopez-Flores, V., Jaouen, N., Geilhufe, J., Guenther, C. M., Schneider, M., Graves, C., Wang, T., Wu, B., Scherz, A., Baumier, C., Delaunay, et al  
2015; 91 (5)
  - **Atomic-Scale Perspective of Ultrafast Charge Transfer at a Dye-Semiconductor Interface** *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*  
Siefertmann, K. R., Pemmaraju, C. D., Nepl, S., Shavorskiy, A., Cordones, A. A., Vura-Weis, J., Slaughter, D. S., Sturm, F. P., Weise, F., Bluhm, H., Strader, M. L., Cho, H., Lin, et al

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- **Toward structural femtosecond chemical dynamics: imaging chemistry in space and time** *FARADAY DISCUSSIONS*  
Minitti, M. P., Budarz, J. M., Kirrander, A., Robinson, J., Lane, T. J., Ratner, D., Saita, K., Northey, T., Stankus, B., Cofer-Shabica, V., Hastings, J., Weber, P. M.  
2014; 171: 81-91
- **Ultrafast structural dynamics in Rydberg excited N,N,N',N'-tetramethylethylenediamine: conformation dependent electron lone pair interaction and charge delocalization** *CHEMICAL SCIENCE*  
Cheng, X., Zhang, Y., Deb, S., Minitti, M. P., Gao, Y., Jonsson, H., Weber, P. M.  
2014; 5 (11): 4394-4403
- **L-Edge X-ray Absorption Spectroscopy of Dilute Systems Relevant to Metalloproteins Using an X-ray Free-Electron Laser** *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*  
Mitzner, R., Rehanek, J., Kern, J., Gul, S., Hattne, J., Taguchi, T., Alonso-Mori, R., Tran, R., Weniger, C., Schroeder, H., Quevedo, W., Laksmono, H., Sierra, et al  
2013; 4 (21): 3641-3647
- **L-Edge X-ray Absorption Spectroscopy of Dilute Systems Relevant to Metalloproteins Using an X-ray Free-Electron Laser.** *The journal of physical chemistry letters*  
Mitzner, R., Rehanek, J., Kern, J., Gul, S., Hattne, J., Taguchi, T., Alonso-Mori, R., Tran, R., Weniger, C., Schröder, H., Quevedo, W., Laksmono, H., Sierra, et al  
2013; 4 (21): 3641-3647
- **Time-Resolved X-Ray Photoelectron Spectroscopy Techniques For Real-Time Studies Of Interfacial Charge Transfer Dynamics** *22nd International Conference on the Application of Accelerators in Research and Industry (CAARI)*  
Shavorskiy, A., Cordones, A., Vura-Weis, J., Siefertmann, K., Slaughter, D., Sturm, F., Weise, F., Bluhm, H., Strader, M., Cho, H., Lin, M., Bacellar, C., Khurmi, et al  
AMER INST PHYSICS.2013: 475-479
- **Far-UV Photochemical Bond Cleavage of n-Amyl Nitrite: Bypassing a Repulsive Surface** *JOURNAL OF PHYSICAL CHEMISTRY A*  
Minitti, M. P., Zhang, Y., Rosenberg, M., Brogaard, R. Y., Deb, S., Solling, T. I., Weber, P. M.  
2012; 116 (2): 810-19
- **Structural dynamics and energy flow in Rydberg-excited clusters of N,N-dimethylisopropylamine** *JOURNAL OF CHEMICAL PHYSICS*  
Deb, S., Minitti, M. P., Weber, P. M.  
2011; 135 (4): 044319
- **Structural Dynamics in Floppy Systems: Ultrafast Conformer Motions in Rydberg-Excited Triethylamine** *JOURNAL OF PHYSICAL CHEMISTRY A*  
Deb, S., Bayes, B. A., Minitti, M. P., Weber, P. M.  
2011; 115 (10): 1804-9
- **Ring-Closing and Dehydrogenation Reactions of Highly Excited cis-Stilbene: Ultrafast Spectroscopy and Structural Dynamics** *JOURNAL OF PHYSICAL CHEMISTRY A*  
Bao, J., Minitti, M. P., Weber, P. M.  
2011; 115 (9): 1508-15
- **Dissociative Energy Flow, Vibrational Energy Redistribution, and Conformer Structural Dynamics in Bifunctional Amine Model Systems** *JOURNAL OF PHYSICAL CHEMISTRY A*  
Bush, J. C., Minitti, M. P., Weber, P. M.  
2010; 114 (42): 11078-84
- **Structural dynamics of 1,3-Cyclohexadiene upon electrocyclic ring opening**  
Buehler, C. C., Weber, P. M., Minitti, M. P., Deb, S., Bao, J.  
AMER CHEMICAL SOC.2010
- **Probing the Lifetimes of Internally Excited Amyl Nitrite Cations** *JOURNAL OF PHYSICAL CHEMISTRY A*  
Rosenberg, M., Minitti, M. P., Rusteika, N., Bisgaard, C. Z., Deb, S., Weber, P. M., Solling, T. I.  
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