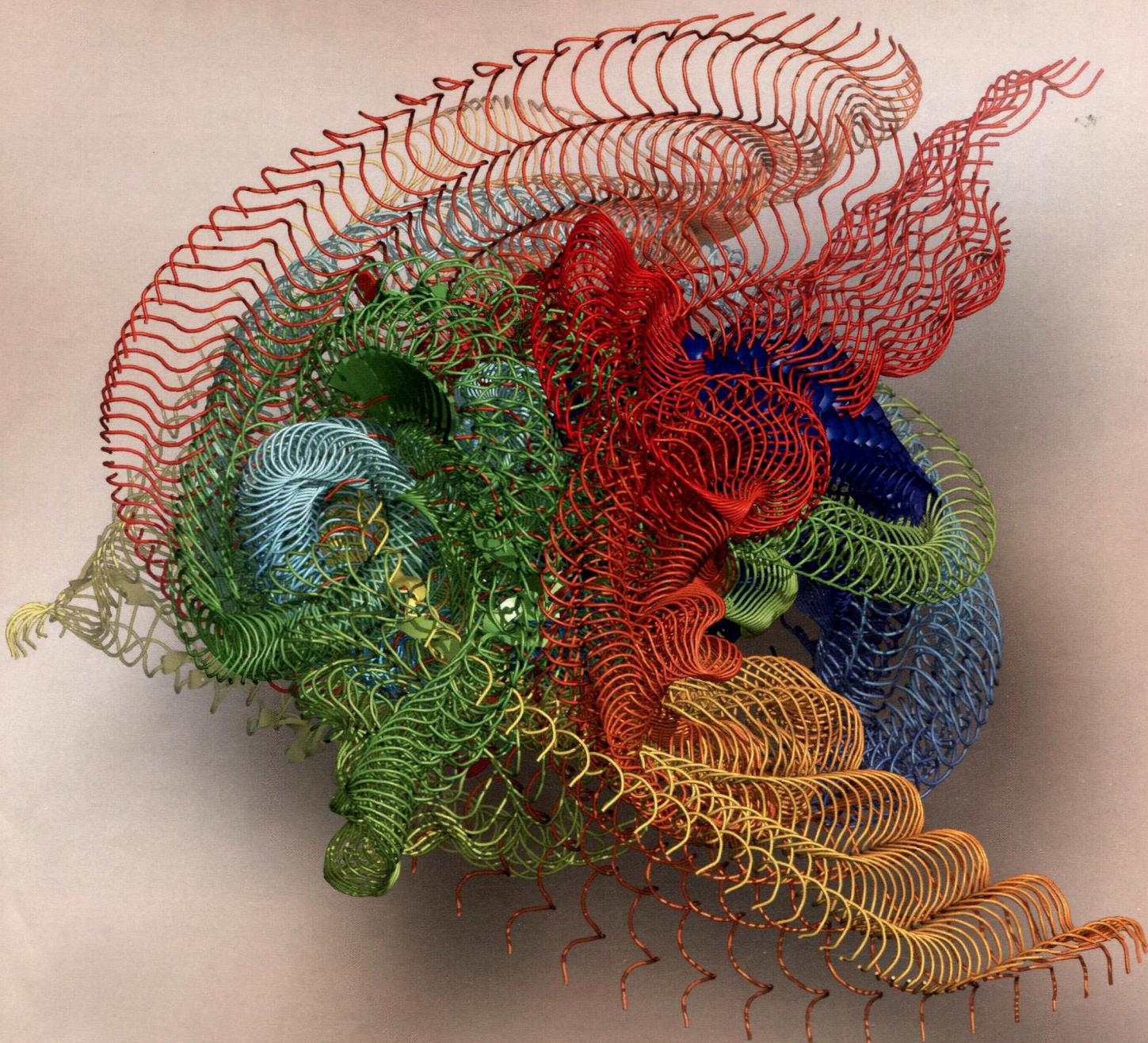


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ON THE COVER: Pictured is an overlay of 300 states of oxidized cytochrome *c*, starting from the “native” fully folded state to an unfolded state. Soffer et al. describe a previously unseen frustrated state of this protein produced under conditions that promote a misfolded ligation state of the heme iron. This image was rendered using PyMol (Schrödinger, LLC) [Soffer, J. B., et al. (2013) *Biochemistry* 52, 1397–1408].

Rapid Reports

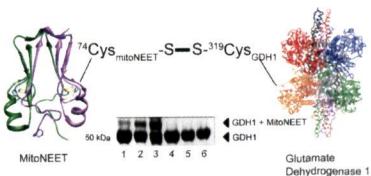
8969

S

[dx.doi.org/10.1021/bi401038w](https://doi.org/10.1021/bi401038w)

Identification of Disulfide Bond Formation between MitoNEET and Glutamate Dehydrogenase 1

Morgan E. Roberts, Jacquelyn P. Crail, Megan M. Laffoon, William G. Fernandez, Michael A. Menze, and Mary E. Konkle*



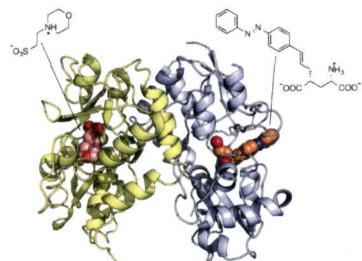
8972

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[dx.doi.org/10.1021/bi4014402](https://doi.org/10.1021/bi4014402)

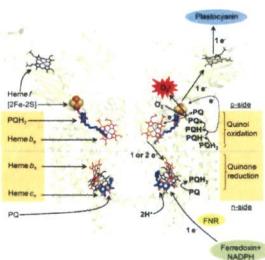
A Photoswitchable Neurotransmitter Analogue Bound to Its Receptor

Alwin Reiter, Arne Skerra, Dirk Trauner,* and André Schieffner*



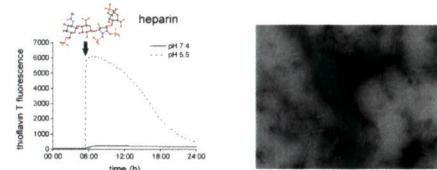
8975

Mechanism of Enhanced Superoxide Production in the Cytochrome *b*₆*f* Complex of Oxygenic Photosynthesis
Danas Baniulis, S. Saif Hasan, Jason T. Stofleth, and William A. Cramer*

**Articles**

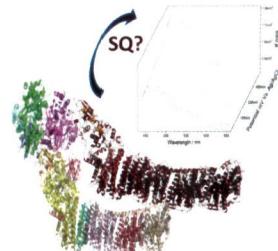
8984

Heparin Promotes the Rapid Fibrillization of a Peptide with Low Intrinsic Amyloidogenicity
Jillian Madine, Hannah A. Davies, Eleri Hughes, and David A. Middleton*



8993

Characterization of Two Quinone Radicals in the NADH:Ubiquinone Oxidoreductase from *Escherichia coli* by a Combined Fluorescence Spectroscopic and Electrochemical Approach
Ruth Hielscher, Michelle Yegres, Mariana Voicescu, Emmanuel Gnandt, Thorsten Friedrich, and Petra Hellwig*

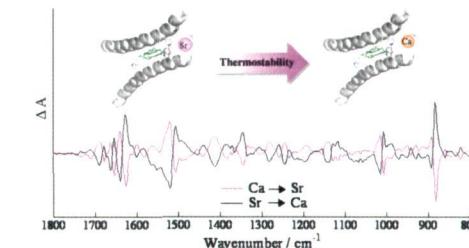


dx.doi.org/10.1021/bi4013534

9001

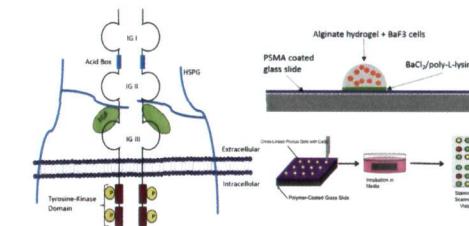
ATR-FTIR Detection of Metal-Sensitive Structural Changes in the Light-Harvesting 1 Reaction Center Complex from the Thermophilic Purple Sulfur Bacterium *Thermochromatium tepidum*

Yong Li, Yukihiro Kimura,* Teruhisa Arikawa, Zheng-Yu Wang-Otomo, and Takashi Ohno



9009

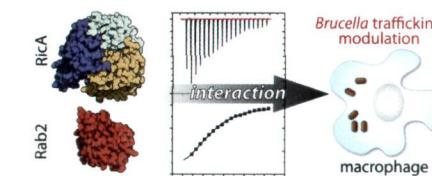
FGF-FGFR Signaling Mediated through Glycosaminoglycans in Microtiter Plate and Cell-Based Microarray Platforms
Eric Sternert, Luciana Meli, Seok-Joon Kwon, Jonathan S. Dordick, and Robert J. Linhardt*



dx.doi.org/10.1021/bi401284r

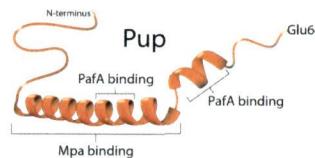
9020

Molecular Structure of the *Brucella abortus* Metalloprotein RicA, a Rab2-Binding Virulence Effector
Julien Herrou and Sean Crosson*



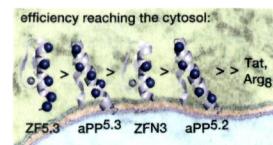
dx.doi.org/10.1021/bi401373r

Bacterial Proteasome and PafA, the Pup Ligase, Interact to Form a Modular Protein Tagging and Degradation Machine

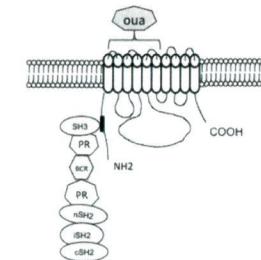
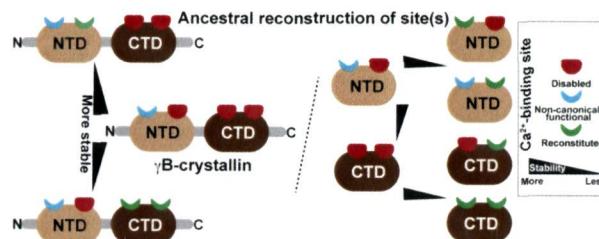


Improved Assays for Determining the Cytosolic Access of Peptides, Proteins, and Their Mimetics

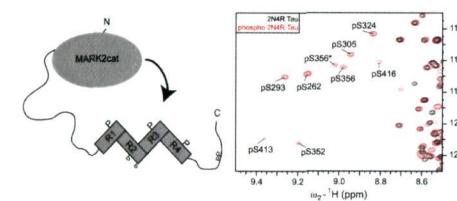
Justin M. Holub, Jonathan R. LaRochelle, Jacob S. Appelbaum, and Alanna Schepartz*



Disability for Function: Loss of Ca^{2+} -Binding Is Obligatory for Fitness of Mammalian β -Crystallin



Phosphorylation of Human Tau Protein by Microtubule Affinity-Regulating Kinase 2
Martin Schwalbe, Jacek Biernat, Stefan Bibow, Valéry Ozenne, Malene R. Jensen, Harindranath Kadavath, Martin Blackledge, Eckhard Mandelkow, and Markus Zweckstetter*



Formation of the High-Affinity Calcium Binding Site in Pro-subtilisin E with the Insertion of a Glycine Residue

