

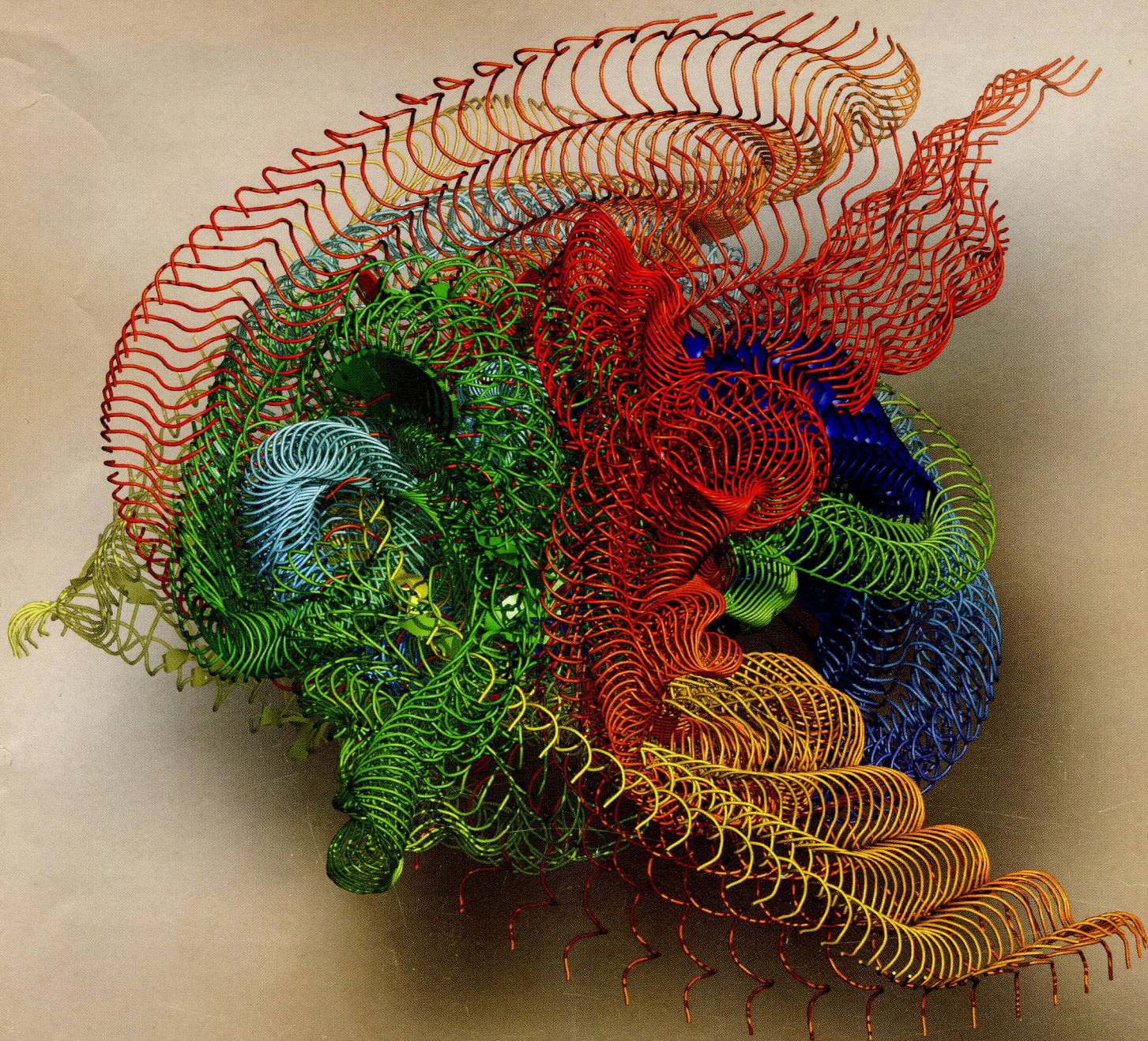
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# BIOCHEMISTRY

including biophysical chemistry & molecular biology

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# BIOCHEMISTRY

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November 5, 2013  
Volume 52, Issue 44  
Pages 7703-7856

## ***Accelerated Publications***

### ***S<sub>0</sub>-State Model of the Oxygen-Evolving Complex of Photosystem II***

Rhitankar Pal, Christian F. A. Negre, Leslie Vogt, Ravi Pokhrel, Mehmed Z. Ertem, Gary W. Brudvig, and Victor S. Batista

pp 7703–7706

**Publication Date (Web):** October 15, 2013 (Accelerated Publication)

**DOI:** 10.1021/bi401214v

 Section:

Plant Biochemistry

## ***Articles***

### ***Kinetic Isotope Effects Support the Twisted Amide Mechanism of Pin1 Peptidyl-Prolyl Isomerase***

Ana Y. Mercedes-Camacho, Ashley B. Mullins, Matthew D. Mason, Guoyan G. Xu, Brendan J. Mahoney, Xingsheng Wang, Jeffrey W. Peng, and Felicia A. Etzkorn

pp 7707–7713

**Publication Date (Web):** October 11, 2013 (Article)

**DOI:** 10.1021/bi400700b

 Section:

Enzymes

### ***Using Single-Molecule Approaches To Study Archaeal DNA-Binding Protein Alba1***

Yen-Wen Lu, Tao Huang, Cheng-Ting Tsai, Yu-Yung Chang, Hung-Wen Li, Chun-Hua Hsu, and Hsiu-Fang Fan

pp 7714–7722

**Publication Date (Web):** October 4, 2013 (Article)

**DOI:** 10.1021/bi4010478

 Section:

General Biochemistry

### ***Fidelity, Mismatch Extension, and Proofreading Activity of the Plasmodium falciparum Apicoplast DNA Polymerase***

Bentley M. Wingert, Eric E. Parrott, and Scott W. Nelson

pp 7723–7730

**Publication Date (Web):** October 22, 2013 (Article)

**DOI:** 10.1021/bi400708m

 Section:

Enzymes

## ***Elastin Binding Protein and FKBP65 Modulate in Vitro Self-Assembly of Human Tropoelastin***

Ming Miao, Sean E. Reichheld, Lisa D. Muiznieks, Yayi Huang, and Fred W. Keeley  
pp 7731–7741

**Publication Date (Web):** October 9, 2013 (Article)

**DOI:** 10.1021/bi400760f

 Section:

General Biochemistry

## ***The Role of Basic Amino Acid Surface Clusters on the Collagenase Activity of Cathepsin K***

Ferez S. Nallaseeth, Fabien Lecaille, Zhenqiang Li, and Dieter Brömme  
pp 7742–7752

**Publication Date (Web):** October 2, 2013 (Article)

**DOI:** 10.1021/bi401051j

 Section:

Enzymes

## ***Structure, Function, and On–Off Switching of a Core Unit Contact between CheA Kinase and CheW Adaptor Protein in the Bacterial Chemosensory Array: A Disulfide Mapping and Mutagenesis Study***

Andrew M. Natale, Jane L. Duplantis, Kene N. Piasta, and Joseph J. Falke  
pp 7753–7765

**Publication Date (Web):** October 3, 2013 (Article)

**DOI:** 10.1021/bi401159k

 Section:

Enzymes

## ***Diacylglycerol Kinase Delta Promotes Lipogenesis***

Yulia V. Shulga, Dessi Loukov, Pavlina T. Ivanova, Stephen B. Milne, David S. Myers, Grant M. Hatch, G. Umeh, Divyanshi Jalan, Morgan D. Fullerton, Gregory R. Steinberg, Matthew K. Topham, H. Alex Brown, and Richard M. Epand  
pp 7766–7776

**Publication Date (Web):** October 3, 2013 (Article)

**DOI:** 10.1021/bi401178y

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Mammalian Biochemistry

## ***Molecular Clues about the Dystrophin–Neuronal Nitric Oxide Synthase Interaction: A Theoretical Approach***

Emmanuel Giudice, Anne-Elisabeth Molza, Yoann Laurin, Aurélie Nicolas, Elisabeth Le Rumeur, and Olivier Delalande  
pp 7777–7784

**Publication Date (Web):** September 24, 2013 (Article)

**DOI:** 10.1021/bi400794p

 Section:

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### ***Effect of Charged Amino Acid Side Chain Length at Non-Hydrogen Bonded Strand Positions on $\beta$ -Hairpin Stability***

Li-Hung Kuo, Jhe-Hao Li, Hsiou-Ting Kuo, Cheng-Yun Hung, Hsin-Yun Tsai, Wen-Chieh Chiu, Cheng-Hsun Wu, Wei-Ren Wang, Po-An Yang, Yun-Chiao Yao, Tong Wai Wong, Shing-Jong Huang, Shou-Ling Huang, and Richard P. Cheng

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**Publication Date (Web):** October 24, 2013 (Article)

**DOI:** 10.1021/bi400911p

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General Biochemistry

### ***$\beta$ -Sheet Structures and Dimer Models of the Two Major Tyrocidines, Antimicrobial Peptides from *Bacillus aneurinolyticus****

Gadzikano Munyuki, Graham E. Jackson, Gerhard A. Venter, Katalin E. Kövér, László Szilágyi, Marina Rautenbach, Barbara M. Spathelf, Bhaswati Bhattacharya, and David van der Spoel

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**Publication Date (Web):** October 8, 2013 (Article)

**DOI:** 10.1021/bi401363m

 Section:

General Biochemistry

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Kevin Knippa and David O. Peterson

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**Publication Date (Web):** October 8, 2013 (Article)

**DOI:** 10.1021/bi4009566

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Christopher W. Davies, Lake N. Paul, and Chittaranjan Das

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**Publication Date (Web):** October 2, 2013 (Article)

**DOI:** 10.1021/bi401106b

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Megan D. Sikowitz, Brateen Shome, Yang Zhang, Tadhg P. Begley, and Steven E. Ealick

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**Publication Date (Web):** September 30, 2013 (Article)

**DOI:** 10.1021/bi400841g

 Section:

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***Uncovering the Determinants of a Highly Perturbed Tyrosine  $pK_a$  in the Active Site of Ketosteroid Isomerase***

Jason P. Schwans, Fanny Sunden, Ana Gonzalez, Yingsu Tsai, and Daniel Herschlag  
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**Publication Date (Web):** September 30, 2013 (Article)

**DOI:** 10.1021/bi401083b

 Section:

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