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# RSC Chemical Biology

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## IN THIS ISSUE

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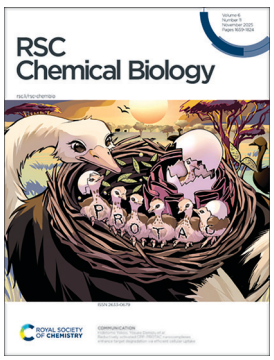


**Cover**
See Hidetomo Yokoo, Yosuke Demizu *et al.*, pp. 1705–1710.
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**Inside cover**
See Shuntaro Takahashi, Naoki Sugimoto *et al.*, pp. 1667–1685.
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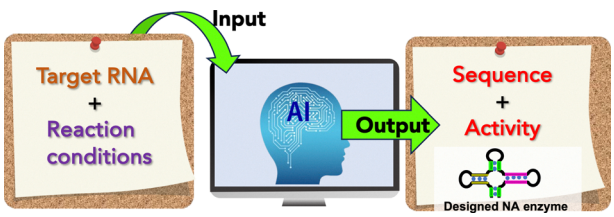
## REVIEWS

1667

**Fitness landscapes and thermodynamic approaches to development of nucleic acids enzymes: from classical methods to AI integration**

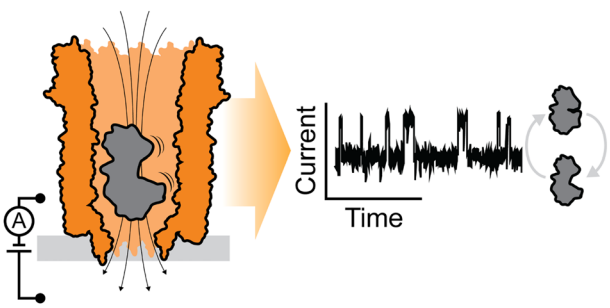
Shuntaro Takahashi,* Michiaki Hamada, Hisae Tateishi-Karimata and Naoki Sugimoto*




1686

**Dynamics of single enzymes confined inside a nanopore**

Nicole Stéphanie Galenkamp, Marco van den Noort and Giovanni Maglia*



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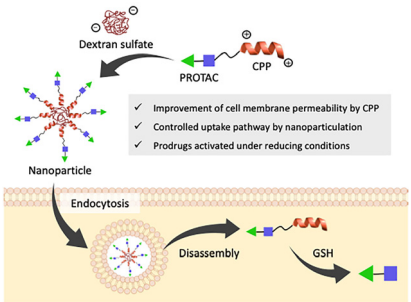
## COMMUNICATIONS

1705

**Reductively activated CPP–PROTAC nanocomplexes enhance target degradation *via* efficient cellular uptake**

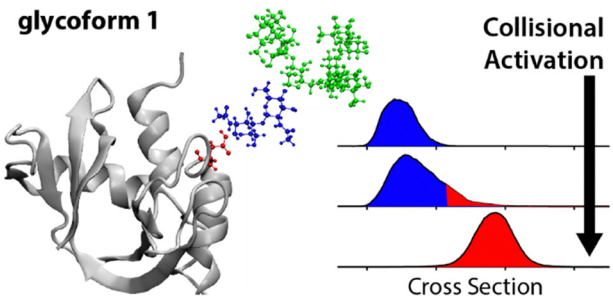
Maho Miyamoto, Kosuke Saito, Hidetomo Yokoo* and Yosuke Demizu*




1711

**Differential melting voltage by tandem-trapped ion mobility spectrometry: glycan structure influences glycoprotein stability**

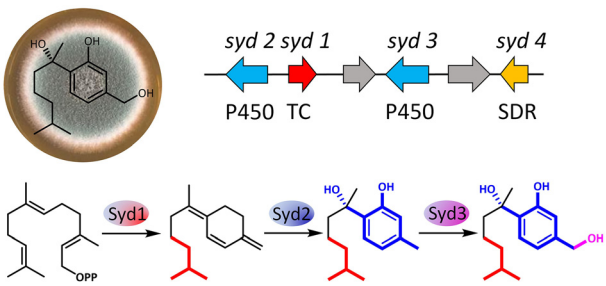
Mengqi Chai, Christian Bleiholder and Fanny C. Liu*




1716

**Biosynthesis of sydonol reveals a new bisabolene cyclase and an unusual P450 aromatase**

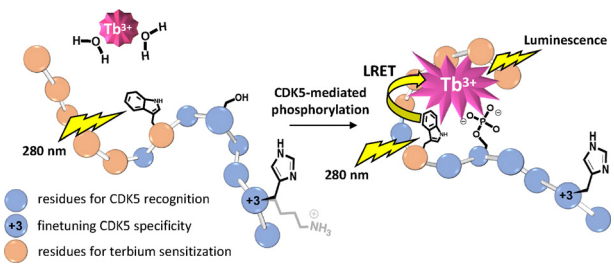
Peiyu Lu and Ling Liu*




1721

**Novel terbium-sensitizing peptide substrates for cyclin-dependent kinase 5 (CDK5) and their demonstration in luminescence kinase assays**

Jason L. Heier, Dylan J. Boselli and Laurie L. Parker*



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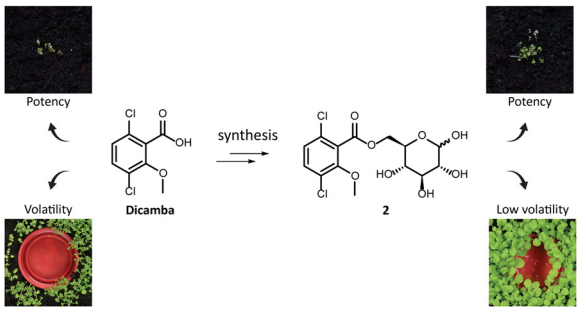
## COMMUNICATIONS

1727




### Sweet dicamba: a carbohydrate pro-herbicide strategy

Karen J. Deane, Joel Haywood, Michael D. Wallace, Kalia Bernath-Levin, Mark T. Waters, Joshua S. Mylne* and Keith A. Stubbs*

## PAPERS

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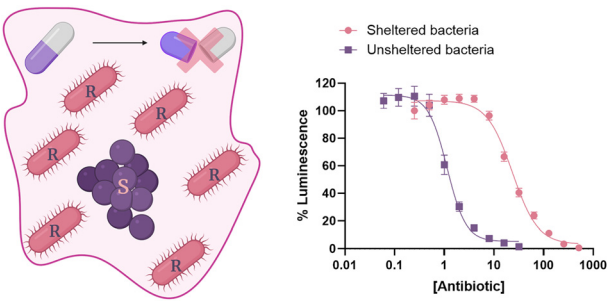
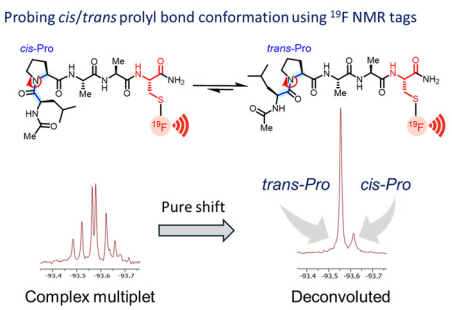



### Contributions of β-lactamase substrate specificity and outer membrate permeability to the antibiotic sheltering of β-lactam-susceptible bacteria

Montserrat Mora-Ochomogo, Mitchell A. Jeffs, Josephine L. Liu and Christopher T. Lohans*

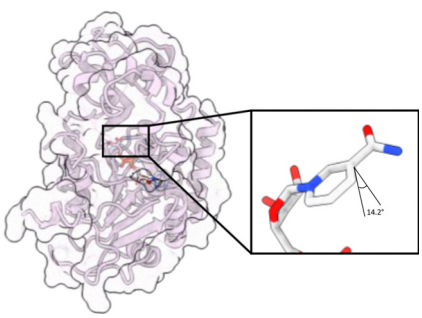
1740




### $^{19}$F NMR-tags for peptidyl prolyl conformation analysis

George S. M. Hanson, Faidra Batsaki, Teagan L. Myerscough, Kristin Piché, Ariel Louwrier and Christopher R. Coxon*

1749



### Structural basis of SIRT2 pre-catalysis NAD$^+$ binding dynamics and mechanism

Nan Zhang, Kah Chee Pow, Lanfang Chen and Quan Hao*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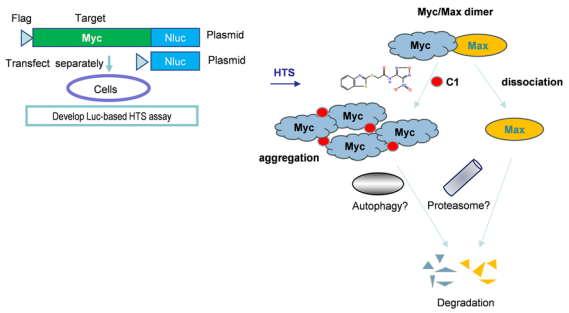
## PAPERS

1759

**Cell-based high-throughput screening using a target–NanoLuc fusion construct to identify molecular glue degraders of c-Myc oncoprotein**

Muyu Xu,* Jinying Qiu, Lin Tan, Jiayu Xu, Yi Wang, Wenyue Kong, Hongda Liao, Anran Chen, Xiaolan Chen, Jiying Zhang, Cookson K. C. Chiu, Meiying Zhang, Yingying Tian, Caohui Li, Biao Ma, Leiming Wang, Jingpeng Fu, Seung H. Choi, Jeffrey Hill* and Weijun Shen*

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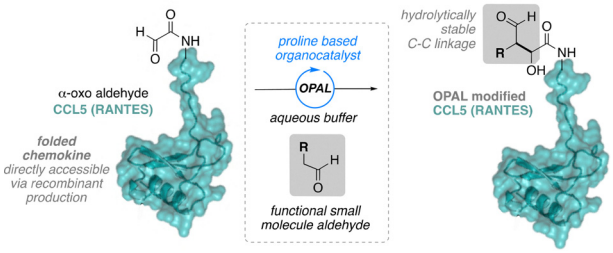
**Convergent construction of N-terminally modified CCL5 chemokines for photoaffinity receptor pull-down using cross-aldol bioconjugations**

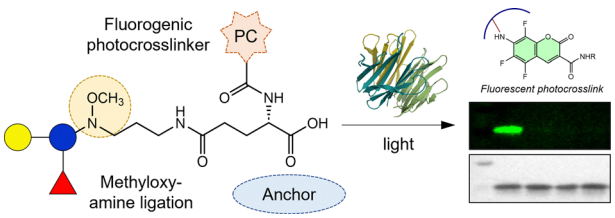
Afzaal Tufail, Matthew E. Warnes, Nathalie Signoret* and Martin A. Fascione*




1779

**A trifunctional probe for generation of fluorogenic glycan-photocrosslinker conjugates**

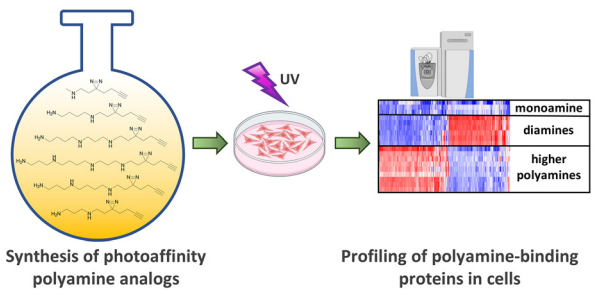
Brandon Vreulz, Daphnée De Crozals and Samy Cecioni*




1787

**Profiling polyamine–protein interactions in live cells through photoaffinity labeling**

Maciej Zakrzewski, Zuzanna Sas, Benjamin Cocom-Chan, Moh Egy Rahman Firdaus, Marcin Kałek, Karolina Szczepanowska, Piotr Gerlach, Anna Marusiak and Remigiusz A. Serwa*



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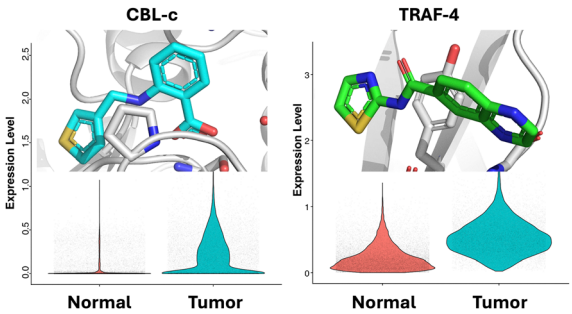
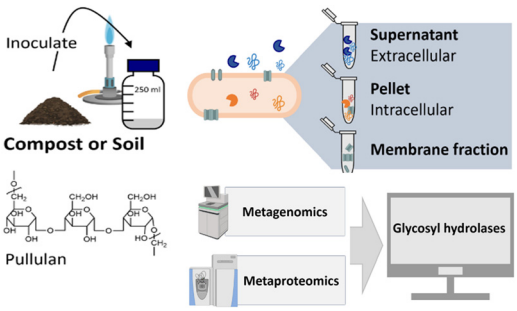



## Identification of ligands for E3 ligases with restricted expression using fragment-based methods

Alex G. Waterson, Brian D. Lehmann, Zhenwei Lu, John L. Sensintaffar, Edward T. Olejniczak, Bin Zhao, Tyson Rietz, William G. Payne, Jason Phan and Stephen W. Fesik*

1809




## Discovery of microbial glycoside hydrolases *via* enrichment and metaproteomics

Jitske M. van Ede, Suzanne van der Steen, Geert M. van der Kraan, Mark C. M. van Loosdrecht and Martin Pabst*

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