

rsc.li/rsc-chembio

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 2633-0679 CODEN RCBSAO 6(3) 319-458 (2025)



Cover

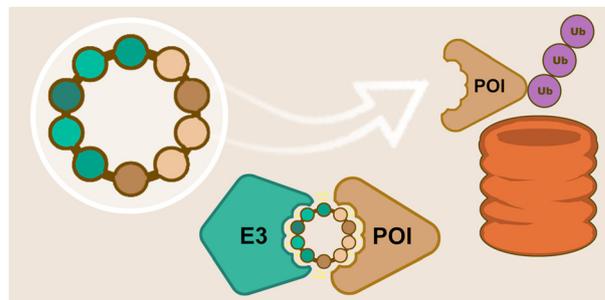
See Christophe Biot, Cédric Lion *et al.*, pp. 364–375. Image reproduced by permission of Vincent Rigolot, Christophe Biot and Cedric Lion from *RSC Chem. Biol.*, 2025, 6, 364.

REVIEWS

326

Macrocyclic peptides as a new class of targeted protein degraders

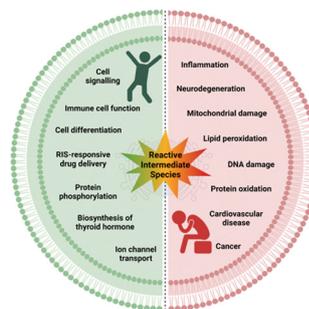
Xuefei Jing, Joel P. Mackay and Toby Passioura*



338

Navigating the dichotomy of reactive oxygen, nitrogen, and sulfur species: detection strategies and therapeutic interventions

Prayasee Baruah, Dikshaa Padhi, Hariharan Moorthy, Madhu Ramesh and Thimmaiah Govindaraju*



EES Catalysis

GOLD
OPEN
ACCESS

Exceptional research on energy
and environmental catalysis

Open to everyone. Impactful for all

rsc.li/EESCatalysis

Fundamental questions
Elemental answers

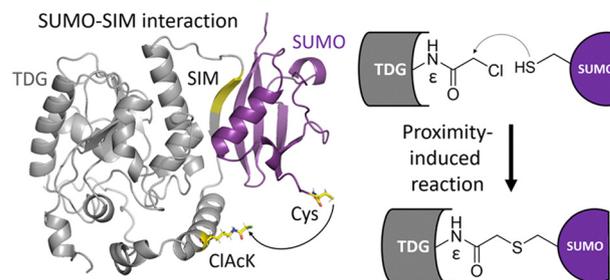


COMMUNICATION

358

Site-specific *in vivo* protein SUMOylation via translational incorporation of a proximity-reactive pyrrolysine analogue

Yuk Hei Chan, Marianne M. Lee and Michael K. Chan*

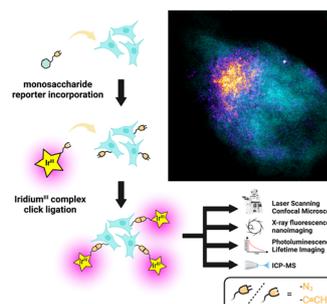


PAPERS

364

Click-ready iridium(III) complexes as versatile bioimaging probes for bioorthogonal metabolic labeling

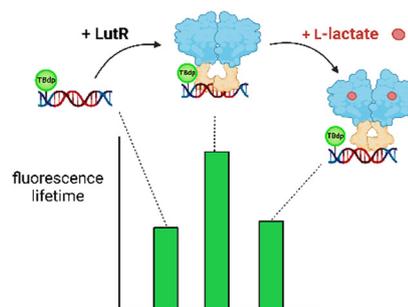
Vincent Rigolot, Clémence Simon, Aude Bouchet, Lucas Lancel, Veronica Di Battista, Dmitry Karpov, Boris Vauzeilles, Corentin Spriet, Michel Sliwa, Sylvain Bohic, Christophe Biot* and Cédric Lion*



376

Using environment-sensitive tetramethylated thiophene-BODIPY fluorophores in DNA probes for studying effector-induced conformational changes of protein–DNA complexes

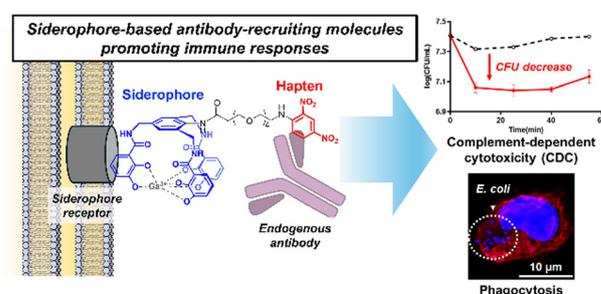
Markéta Šoltysová, Pedro Güixens-Gallardo, Irena Siegllová, Anna Soldánová, Veronika Krejčířiková, Milan Fábry, Jiří Brynda, Petro Khoroshyy, Michal Hocek* and Pavlína Řezáčová*



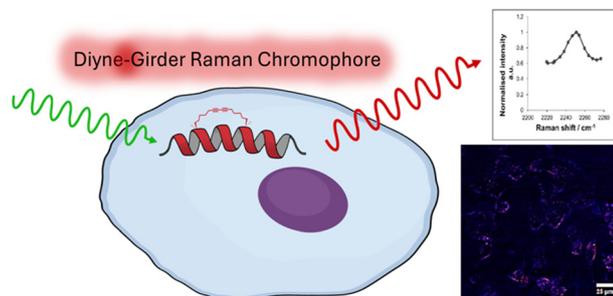
387

Siderophore-based targeted antibody recruitment for promoting immune responses towards Gram-negative pathogens

Seungwoo Kim, Ho-Sung Park, Do Young Kim, Hyunhi Joh, Jiseok Oh, Dong Ho Kim, Min Ju Kang, Chul Hee Choi* and Hak Joong Kim*



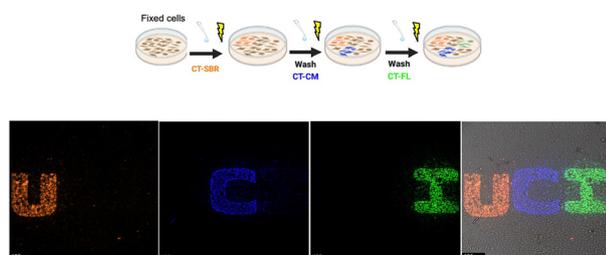
394



Raman active diene-girder conformationally constrained p53 stapled peptides bind to MDM2 for visualisation without fluorophores

Danielle C. Morgan, Laura McDougall, Astrid Knuhtsen, Lori Buetow, Craig F. Steven, Oscar A. Shepperson, Danny T. Huang, Alison N. Hulme and Andrew G. Jamieson*

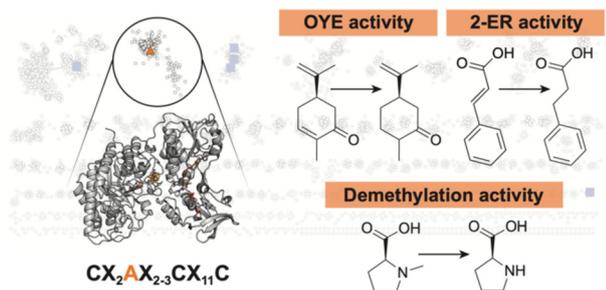
404



Novel photocrosslinking chemical probes utilized for high-resolution spatial transcriptomics

Leslie Spitalny, Natalie Falco, Whitney England, Tyler Allred and Robert C. Spitale*

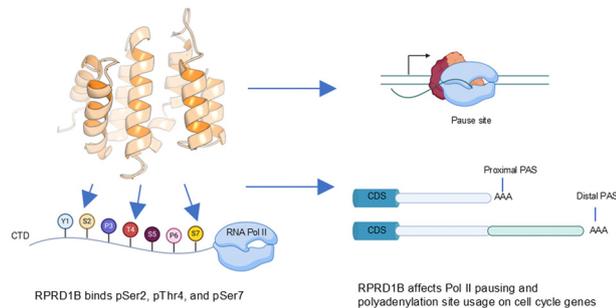
412



Bioinformatic and biochemical analysis uncovers novel activity in the 2-ER subfamily of OYEs

Tamra C. Blue-Lahom, Stacey K. Jones and Katherine M. Davis*

423



RPRD1B's direct interaction with phosphorylated RNA polymerase II regulates polyadenylation of cell cycle genes and drives cancer progression

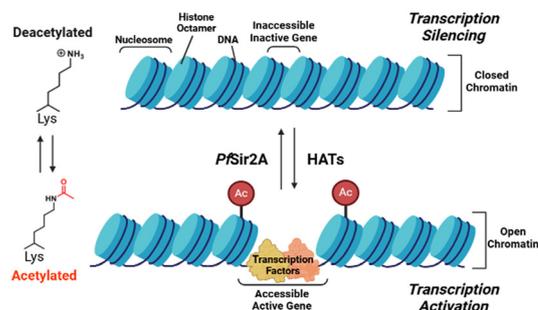
Rosamaria Y. Moreno, Svetlana B. Panina and Y. Jessie Zhang*



438

Biochemical characterization and discovery of inhibitors for *PfSir2A*: new tricks for an old enzyme

Dickson Donu, Emily Boyle, Alyson Curry and Yana Cen*



449

Development of a near-infrared fluorescent probe for the selective detection of severe hypoxia

Takafumi Kasai, Kyohhei Fujita, Toru Komatsu, Tasuku Ueno, Ryosuke Kojima, Kenjiro Hanaoka and Yasuteru Urano*

