Chem Soc Rev

Chemical Society Reviews

rsc.li/chem-soc-rev

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 0306-0012 CODEN CSRVBR 53(19) 9421-9956 (2024)



Cover

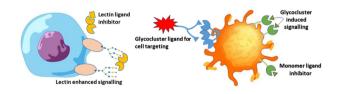
See Ji Young Hyun, Hyun Soo Lee, Injae Shin et al., pp. 9446–9489. Image reproduced by permission of Injae Shin from *Chem. Soc. Rev.*, 2024, **53**, 9446. Background image © Alexandra Barbu, Dreamstime.com; virus image © vitstudio, Shutterstock.com.

TUTORIAL REVIEW

9428

Small lectin ligands as a basis for applications in glycoscience and glycomedicine

Paul V. Murphy,* Ashis Dhara, Liam S. Fitzgerald, Eoin Hever, Saidulu Konda and Kishan Mandal

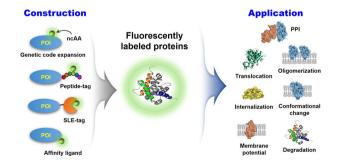


REVIEW ARTICLES

9446

Selective fluorescent labeling of cellular proteins and its biological applications

Joo Hee Choi, Sooin Kim, On-Yu Kang, Seong Yun Choi, Ji Young Hyun,* Hyun Soo Lee* and Injae Shin*





Royal Society of Chemistry approved training courses

Explore your options.

Develop your skills.

Discover learning that suits you.

Courses in the classroom, the lab, or online

Find something for every stage of your professional development. Search our database by:

- subject area
- location
- event type
- skill level

Members get at least 10% off

Visit rsc.li/cpd-training

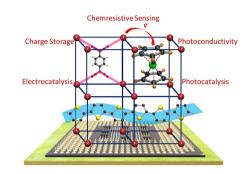


REVIEW ARTICLES

9490

Extrinsically conducting MOFs: guest-promoted enhancement of electrical conductivity, thin film fabrication and applications

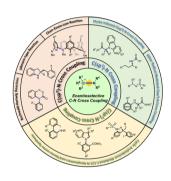
Rajat Saha* and Carlos J. Gómez García*



9560

Transition-metal-catalyzed enantioselective C-N cross-coupling

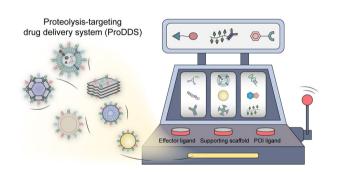
Jia Feng, Long-Long Xi, Chuan-Jun Lu and Ren-Rong Liu*



9582

Proteolysis-targeting drug delivery system (ProDDS): integrating targeted protein degradation concepts into formulation design

Yu Chen, Fengyuan Liu, Samira Pal and Quanyin Hu*



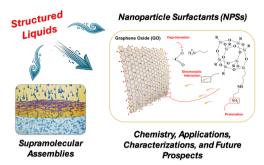
9609

Closed-loop recyclable polymers: from monomer and polymer design to the polymerization—depolymerization cycle

Shuaiqi Yang, Shuai Du, Jin Zhu and Songqi Ma*



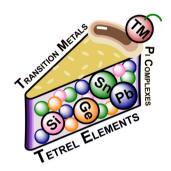
REVIEW ARTICLES



Chemistry, applications, and future prospects of structured liquids

Ahmadreza Ghaffarkhah, Seyyed Alireza Hashemi, Ali Akbar Isari, Mahyar Panahi-Sarmad, Feng Jiang, Thomas P. Russell, Orlando J. Rojas* and Mohammad Arjmand*

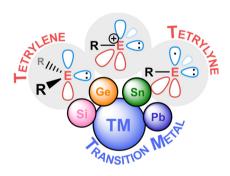
9718



Heavier group 14-transition metal π -complex congeners

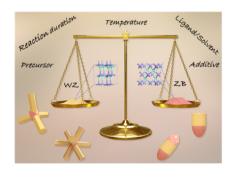
Terrance J. Hadlington

9738



Heavier tetrylene- and tetrylyne-transition metal chemistry: it's no carbon copy

Terrance J. Hadlington*



Polytypic metal chalcogenide nanocrystals

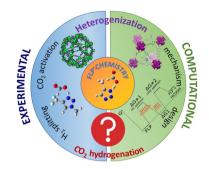
Liang Wu, Yi Li, Guo-Qiang Liu and Shu-Hong Yu*

REVIEW ARTICLES

9874

Experimental and computational aspects of molecular frustrated Lewis pairs for CO₂ hydrogenation: en route for heterogeneous systems?

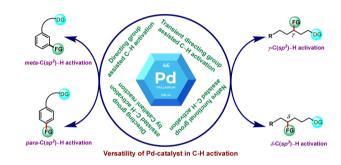
Riddhi Kumari Riddhi, Francesc Penas-Hidalgo, Hongmei Chen, Elsje Alessandra Quadrelli, Jérôme Canivet,* Caroline Mellot-Draznieks* and Albert Solé-Daura*



9904

Pd-catalyzed regioselective activation of $C(sp^2)$ -H and $C(sp^3)$ -H bonds

Wajid Ali, Gwyndaf A. Oliver, Daniel B. Werz* and Debabrata Maiti*



CORRECTION

9954

Correction: Recent progress in SERS monitoring of photocatalytic reactions

Xinlu Zheng, Ziwei Ye, Zeeshan Akmal, Chun He, Jinlong Zhang and Lingzhi Wang*