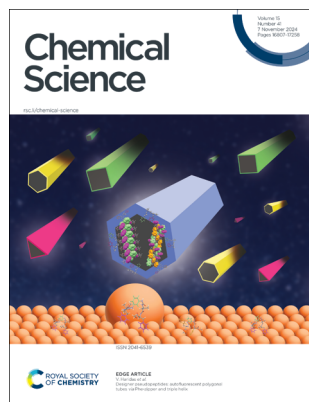
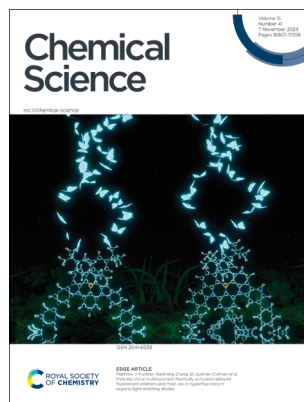


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Cover
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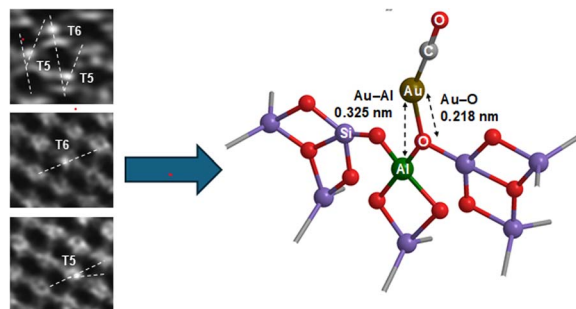
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See Matthew J. Fuchter, Xiaohong Zhang, Eli Zysman-Colman *et al.*, pp. 16917–16927. Image reproduced by permission of Eli Zysman-Colman from *Chem. Sci.*, 2024, **15**, 16917. Image created by Ettore Crovini.

PERSPECTIVE

16821

Mononuclear metal complex catalysts on supports: foundations in organometallic and surface chemistry and insights into structure, reactivity, and catalysis

Bruce C. Gates

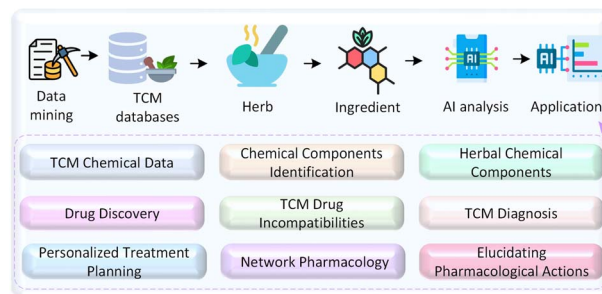


REVIEWS

16844

AI empowering traditional Chinese medicine?

Zhilin Song, Guanxing Chen and Calvin Yu-Chian Chen*



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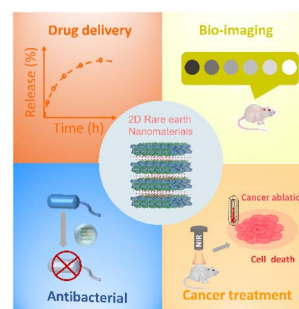
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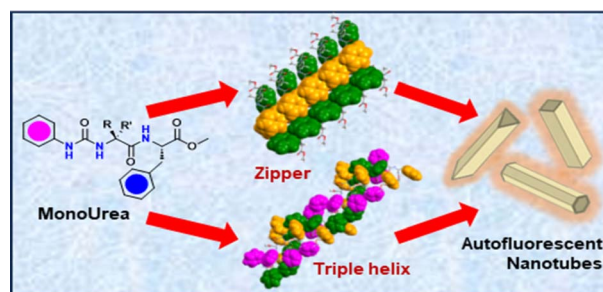
REVIEWS

16887

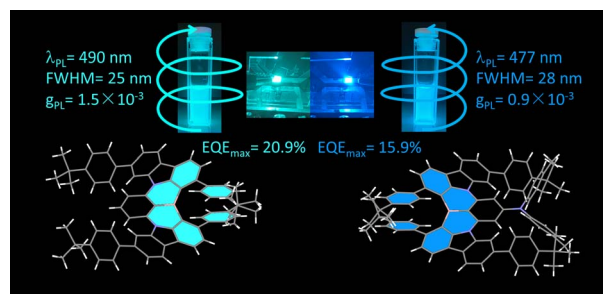
Two-dimensional nanomaterials based on rare earth elements for biomedical applicationsMingjun Bai, Hao Wan,^{*} Ying Zhang, Siqi Chen, Chunyin Lu, Xiaohu Liu,^{*} Gen Chen, Ning Zhang and Renzhi Ma^{*}

EDGE ARTICLES

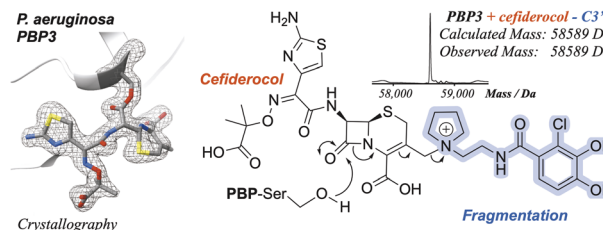
16908

Designer pseudopeptides: autofluorescent polygonal tubes via Phe-zipper and triple helixV. Haridas,^{*} Govind P. Maurya and Souvik Dutta

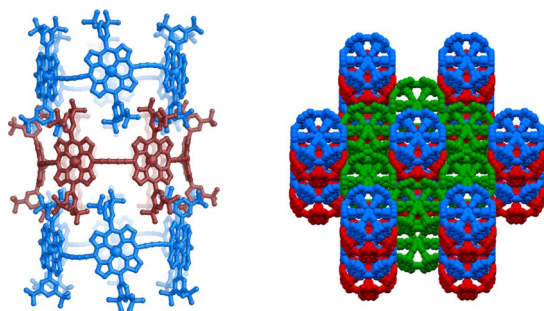
16917

Helically chiral multiresonant thermally activated delayed fluorescent emitters and their use in hyperfluorescent organic light-emitting diodesJingxiang Wang, Dongyang Chen, Juan Manuel Moreno-Naranjo, Francesco Zinna, Lucas Frédéric, David B. Cordes, Aidan P. McKay, Matthew J. Fuchter,^{*} Xiaohong Zhang^{*} and Eli Zysman-Colman^{*}

16928

Structural basis of *Pseudomonas aeruginosa* penicillin binding protein 3 inhibition by the siderophore-antibiotic cefiderocolHelen G. Smith, Shyam Basak, Victor Aniebok, Matthew J. Beech, Faisal M. Alshref, Mark D. Allen, Alistair J. M. Farley and Christopher J. Schofield^{*}

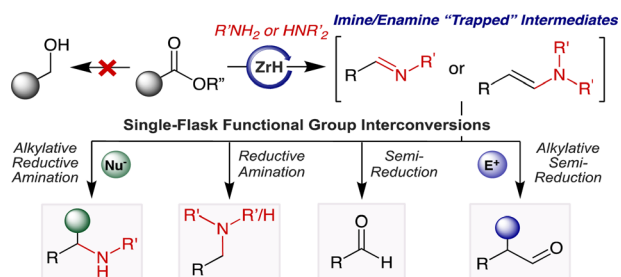
16938



Polymorphism and flexibility of six-porphyrin nanorings in the solid state

Wojciech Stawski* and Harry L. Anderson*

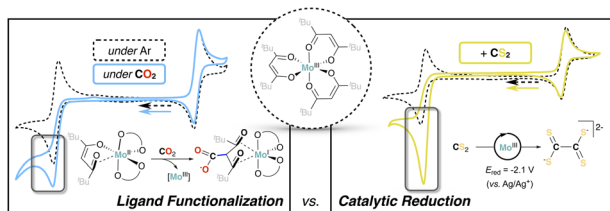
16947



Direct conversion of esters to imines/enamines and applications to polyester waste upcycling

Rebecca A. Kehner, Weiheng Huang and Liela Bayeh-Romero*

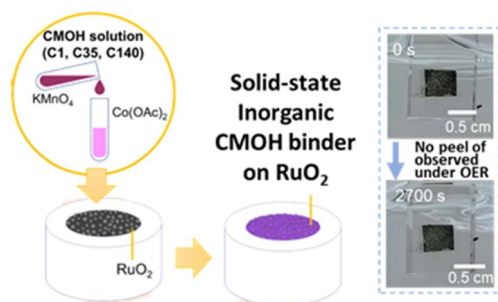
16954



Chemical and redox non-innocence in low-valent molybdenum β diketonate complexes: novel pathways for CO_2 and CS_2 activation

Fabio Masero and Victor Mougel*

16966



A robust inorganic binder against corrosion and peel-off stress in electrocatalysis

Joey Andrew A. Valinton, Meng-Yu Lin, Cheng-Han Tsai, Cheng-Te Tsai, Ming-Jia Chiu, Cheng-chau Chiu* and Chun-Hu Chen*



16977

Making an inverted Keggin ion lacunary

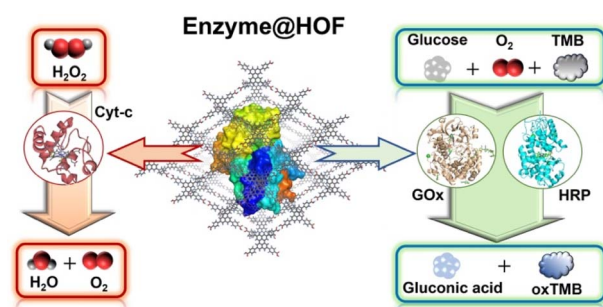
Lu-Lu Liu, Zi-Yu Xu, Peng Yi, Chao-Qin Chen, Zhong-Ling Lang* and Peng Yang*



16987

Facile and scale-up syntheses of high-performance enzyme@meso-HOF biocatalysts

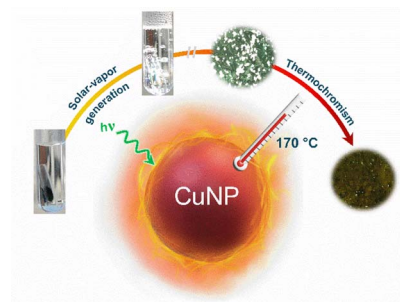
Zhengyi Di, Yu Qi, Xin-Xin Yu, Hai-Ruo Li, Meng-Xuan Zuo, Tian-Tian Ren, Cheng-Peng Li* and Yanli Zhao*



16997

Plasmon-powered chemistry with visible-light active copper nanoparticles

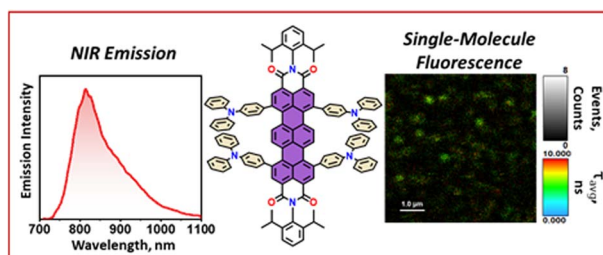
Shreya Tyagi, Radha Krishna Kashyap, Ankit Dhankhar and Pramod P. Pillai*



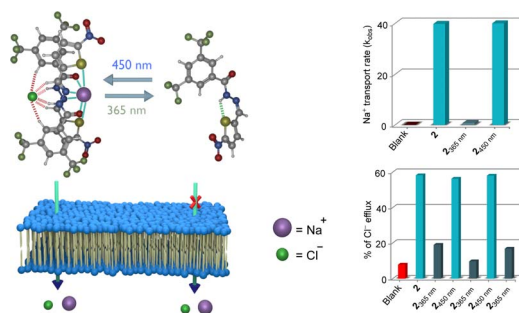
17007

Single-molecule detection of a terylenediimide-based near-infrared emitter

Suvarna Sujilkumar, Philip Daniel Maret, Kavya Vinod, Athira T. John and Mahesh Hariharan*



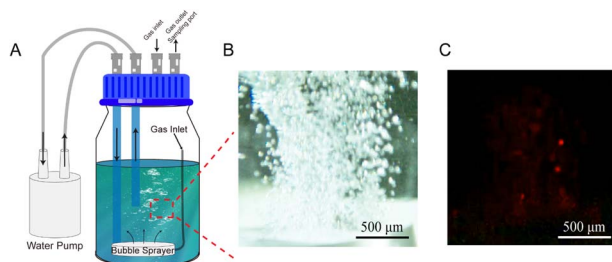
17017



Acylhydrazone-based reversibly photoswitchable ion pair transporter with OFF–ON cotransport activity

Sandip Chattopadhyay, Paras Wanjari and Pinaki Talukdar*

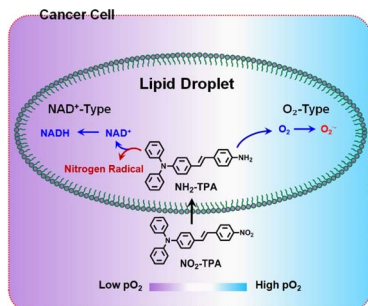
17026



Methane C(sp³)–H bond activation by water microbubbles

Juan Li, Jinheng Xu, Qingyuan Song, Xinxing Zhang,* Yu Xia* and Richard N. Zare*

17032



Tumor oxygen microenvironment-tailored electron transfer-type photosensitizers for precise cancer therapy

Yiting Yang, Yafu Wang, Yang Liu, Kui Wang, Ge Wang, Yonggang Yang, Won Jun Jang, Tony D. James, Juyoung Yoon* and Hua Zhang*

17041

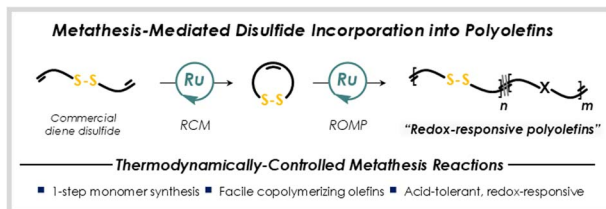


Dynamic handedness inversion of self-organized helical superstructures enabled by novel thermally stable light-driven chiral hydrazone switches

Jingyu Chen, Zichen Wang, Yuexin Yu, Jun Huang, Xinyu Chen, Tongji Du, Xinyue Song, Haiyang Yuan, Shuai Zhou, Xiang-Guo Hu, Xingping Zeng, Shengliang Zhong* and Ruochen Lan*



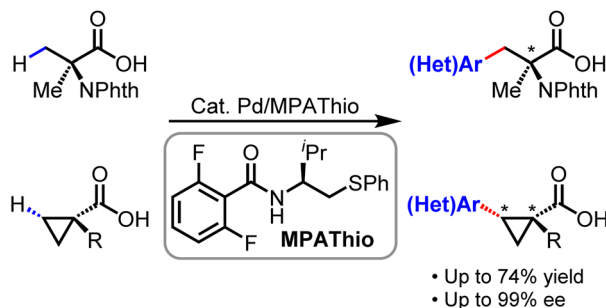
17084



Degradable polyolefins prepared by integration of disulfides into metathesis polymerizations with 3,6-dihydro-1,2-dithiine

Hong-Gyu Seong, Thomas P. Russell and Todd Emrick*

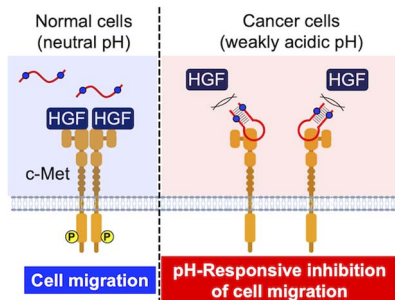
17092



Synthesis of chiral α -amino acids via Pd(II)-catalyzed enantioselective C–H arylation of α -aminoisobutyric acid

Zi-Yu Zhang, Tao Zhang, Yuxin Ouyang, Peng Lu, Jennifer X. Qiao and Jin-Quan Yu*

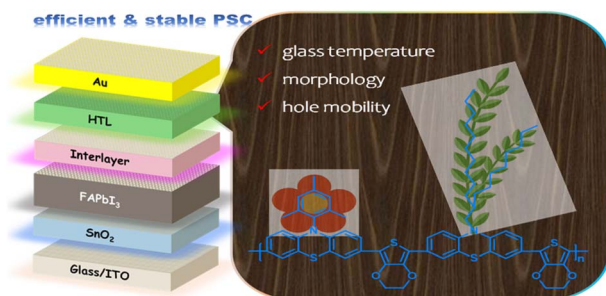
17097



Selective inhibition of cancer cell migration using a pH-responsive nucleobase-modified DNA aptamer

Yuyuan Chen, Kunihiko Morihira,* Yui Nemoto, Akito Ichimura, Ryosuke Ueki, Shinsuke Sando and Akimitsu Okamoto*

17103



An alternating copolymer of phenothiazine and ethylenedioxythiophene for perovskite solar cells: effects of flexible and rigid substituent alternation

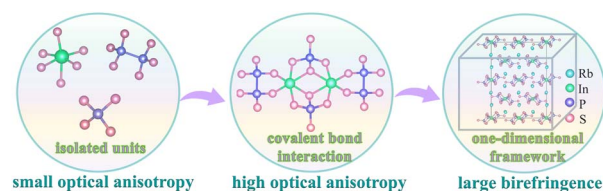
Bing Zhang, Yaohang Cai, Lifei He, Niansheng Xu,* Yi Yuan, Jing Zhang, Yuyan Zhang* and Peng Wang*



17114

Reconstructing nearly isotropic microstructures to construct a one-dimensional framework causing record birefringence in thiophosphates

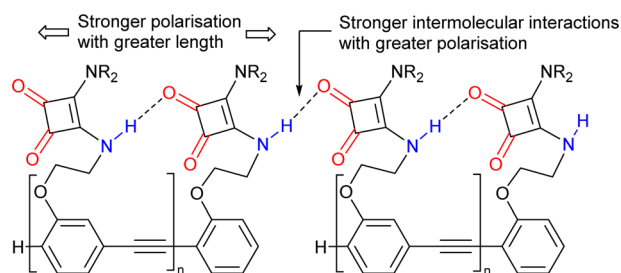
Lin-Tao Jiang, Xiao-Ming Jiang, Yu-Hang Fan, Bin-Wen Liu* and Guo-Cong Guo*



17120

Cooperative intra- and intermolecular hydrogen bonding in scaffolded squaramide arrays

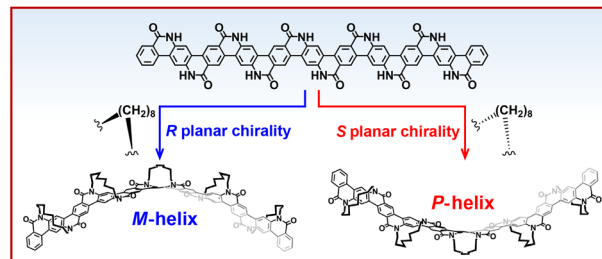
Luis Martínez-Crespo,* George F. S. Whitehead, Iñigo J. Vitórica-Yrezábal and Simon J. Webb*



17128

Tether-entangled conjugated helices

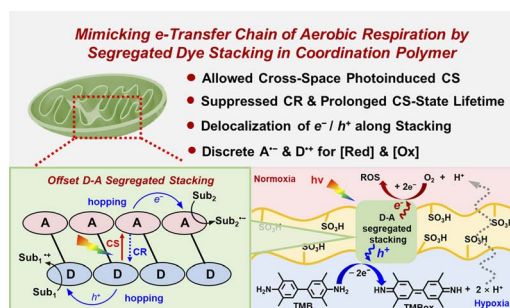
Ke Jin, Zuo Xiao,* Huidong Xie, Xingxing Shen,* Jizheng Wang, Xiangyu Chen, Zhijie Wang, Zujin Zhao, Keyou Yan, Yong Ding and Liming Ding*



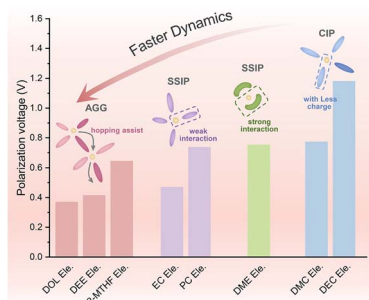
17150

Electron transport chain-inspired coordination polymers for macroscopic spatiotemporal scales of charge separation and transport in photocatalysis

Lin Ma, Tiexin Zhang,* Mochen Li, Xu Zhang, Lanqiao Li, Yusheng Shi, Rui Cai, Xueming Yang and Chunying Duan



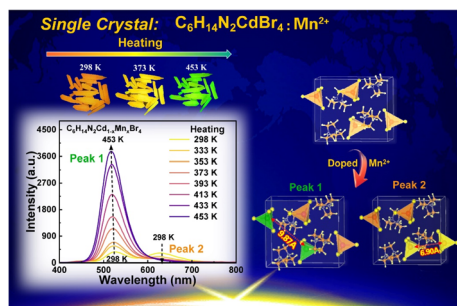
17161



Solvation structure dependent ion transport and desolvation mechanism for fast-charging Li-ion batteries

Zhenyu Fan, Jingwei Zhang, Lanqing Wu, Huaqing Yu, Jia Li, Kun Li and Qing Zhao*

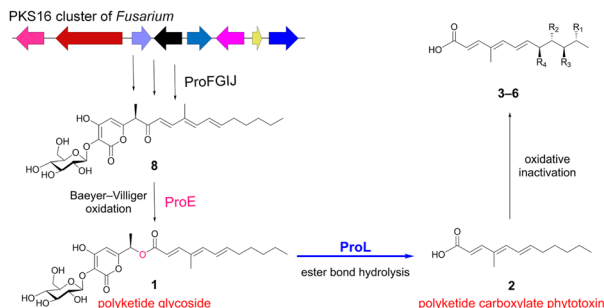
17173



Dual-emissive luminescence in OIHMH single crystals: tunable red-green emissions via Mn²⁺ doping and theoretical insights

Qianrong Jin, Rui Wu, Yuexiao Pan,* Yihong Ding, Hongzhou Lian, Jun Lin* and Liyi Li*

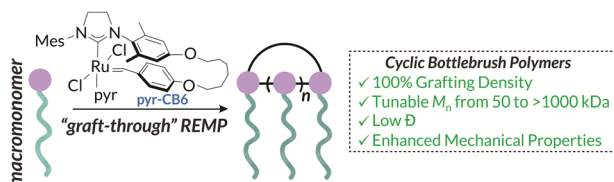
17183



Discovery of a polyketide carboxylate phytotoxin from a polyketide glycoside hybrid by β -glucosidase mediated ester bond hydrolysis

Xin Wang, De-Kun Kong, Hua-Ran Zhang and Yi Zou*

17193



A general synthesis of cyclic bottlebrush polymers with enhanced mechanical properties via graft-through ring expansion metathesis polymerization

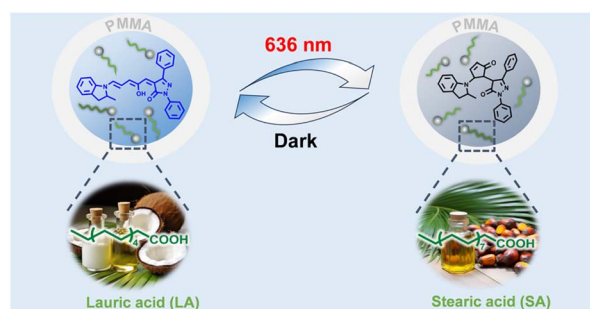
Matthew J. Elardo, Adelaide M. Levenson, Ana Paula Kitos Vasconcelos, Meredith N. Pomfret and Matthew R. Golder*



17200

A DASA displaying highly efficient and rapid reversible isomerization within sustainable nano/micro capsules: one step closer to sustainability

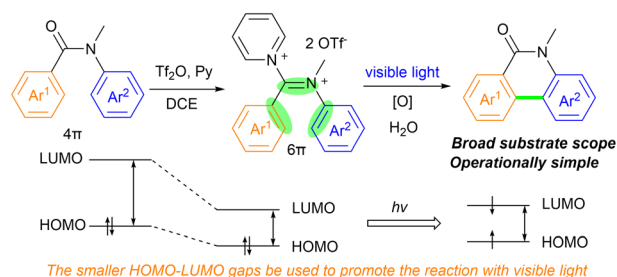
Baoshuo Liu, Xinnian Fan, Hao Ma, Yutong Xie, Haojun Fan, Qiang Yan and Jun Xiang*



17210

Visible light-induced Mallory reaction of tertiary benzanilides via iminium intermediates

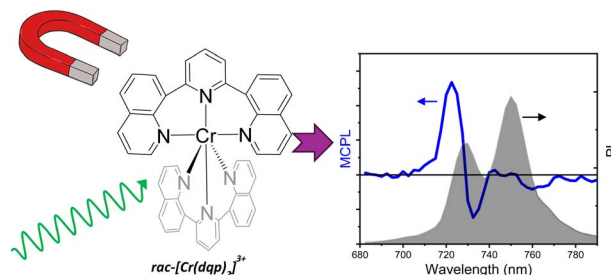
Xiaoqiang Ma, Si Wang, Zhanyong Tang, Jialin Huang, Tianhao Jia, Xingda Zhao and Depeng Zhao*



17217

Magnetic circularly polarized luminescence from spin-flip transitions in a molecular ruby

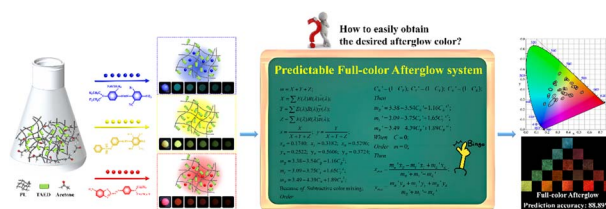
Alessio Gabbani, Maxime Poncet, Gennaro Pescitelli, Laura Carbonaro, J. Krzystek, Enrique Colacio, Claude Piguet, Francesco Pineider, Lorenzo Di Bari, Juan-Ramón Jiménez* and Francesco Zinna*



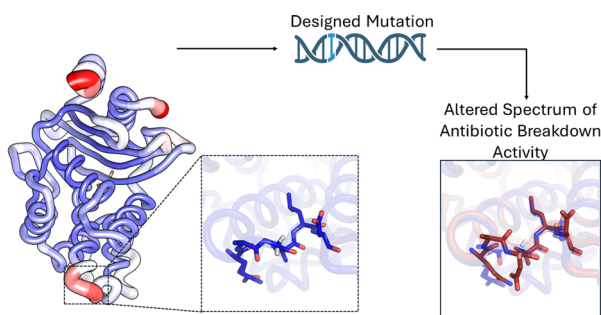
17224

Simplifying complexity: integrating color science for predictable full-color and on-demand persistent luminescence using industrial disperse dyes

Guowei Xiao, Xiaoyan Wang, Xiaoyu Fang, Jinmei Du, Yang Jiang, Dagang Miao, Dongpeng Yan* and Changhai Xu*



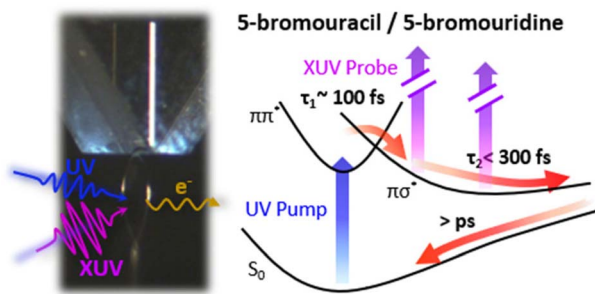
17232



Dynamical responses predict a distal site that modulates activity in an antibiotic resistance enzyme

Michael Beer, Ana Sofia F. Oliveira, Catherine L. Tooke, Philip Hinchliffe, Angie Tsz Yan Li, Balazs Balega, James Spencer* and Adrian J. Mulholland*

17245



Dynamics of photoexcited 5-bromouracil and 5-bromo-2'-deoxyuridine studied by extreme ultraviolet time-resolved photoelectron spectroscopy in liquid flat jets

Do Hyung Kang, Masafumi Koga, Neal Haldar and Daniel M. Neumark*

