

# ChemComm

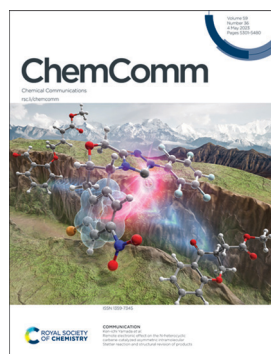
Chemical Communications

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ISSN 1359-7345 CODEN CHCOFS 59(36) 5301-5480 (2023)



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### Inside cover

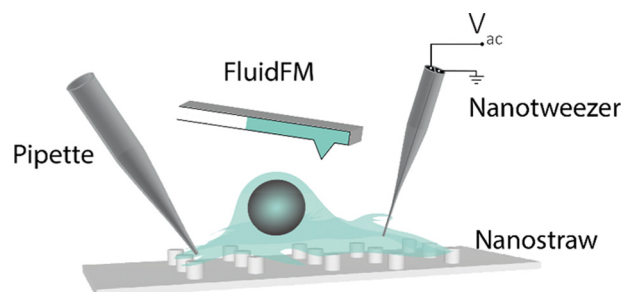
See Zhengxu Cai, Zhouyu Wang, Xiaoqi Yu *et al.*, pp. 5329–5342. Image reproduced by permission of Zhengxu Cai from *Chem. Commun.*, 2023, 59, 5329.

## HIGHLIGHT

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### Recent advances in single-cell subcellular sampling

Annie Sahota, Anthony Monteza Cabrejos, Zoe Kwan, Binoy Paulose Nadappuram,\* Aleksandar P. Ivanov\* and Joshua B. Edel\*

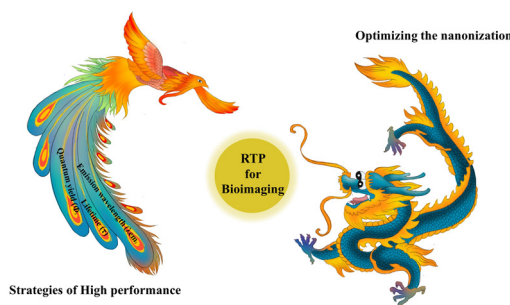


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### Organic room-temperature phosphorescence materials for bioimaging

Yahui Zhang, Hairong Li, Mengdie Yang, Wenbo Dai, Jianbing Shi, Bin Tong, Zhengxu Cai,\* Zhouyu Wang,\* Yuping Dong and Xiaoqi Yu\*



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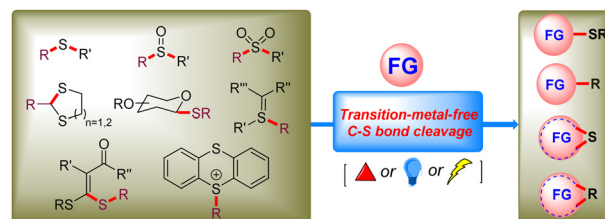


## FEATURE ARTICLES

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## Transition-metal-free C–S bond cleavage and transformation of organosulfur compounds

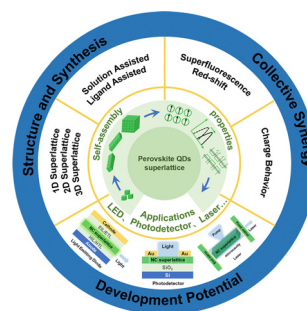
Ke Yang,\* Qin Li, Zhengyi Li and Xiaoqiang Sun



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## Perovskite nanocrystal superlattices: self-assembly, collective behavior, and applications

Danni Yan, Qingsong Shan,\* Yuhui Dong,\* Lu Han, Xinli Wu, Yi Peng and Haibo Zeng\*

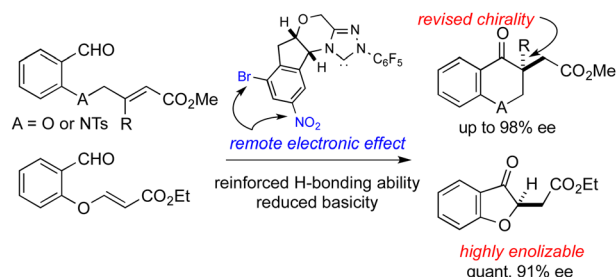


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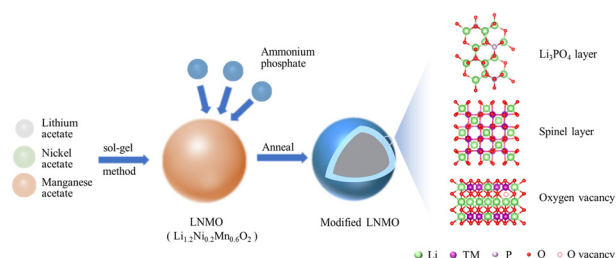
Tsubasa Inokuma, Kohei Iritani, Yuki Takahara, Chunzhao Sun, Yousuke Yamaoka, Satoru Kuwano and Ken-ichi Yamada\*



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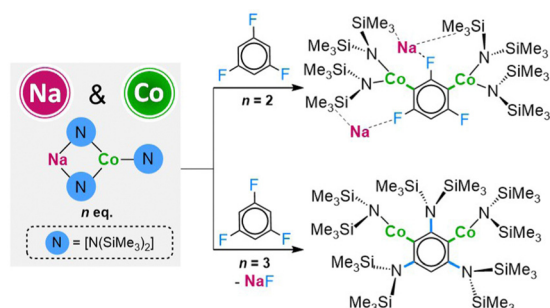
## Access to high-performance Li-rich layered oxide cathodes via ammonium phosphate surface treatment

Xiaobao Huang, Ding Zhang,\* Shoudong Xu, Liang Chen and Xiaochuan Duan\*



## COMMUNICATIONS

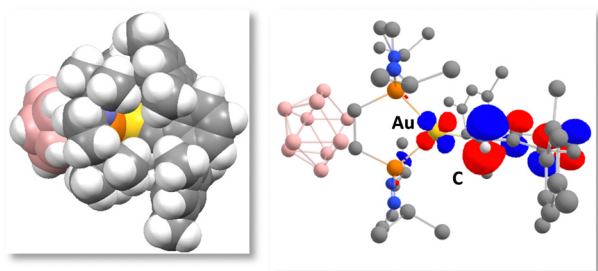
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### Applying Na/Co(II) bimetallic partnerships to promote multiple Co–H exchanges in polyfluoroarenes

Alessandra Logallo and Eva Hevia\*

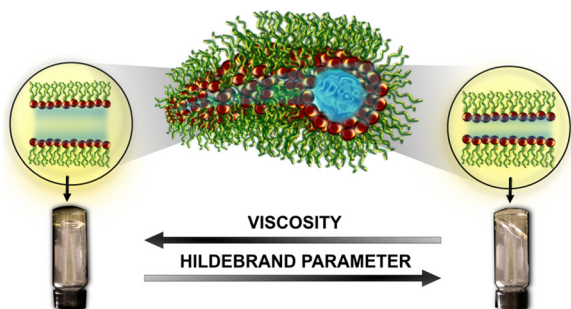
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### Combining ligand-enhanced backdonation and steric shielding to stabilize a mono-substituted $\text{Au}(\text{I})$ carbene

David Vesseur, Karinne Miqueu and Didier Bourissou\*

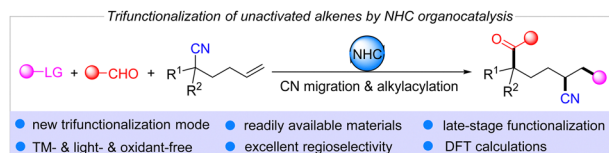
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### Probing water mobility in confining channels of reverse wormlike micelles

Hilda Camila Nascimento Nogueira, Daniela Almeida Vieira Fogaça da Rocha and Edvaldo Sabadini\*

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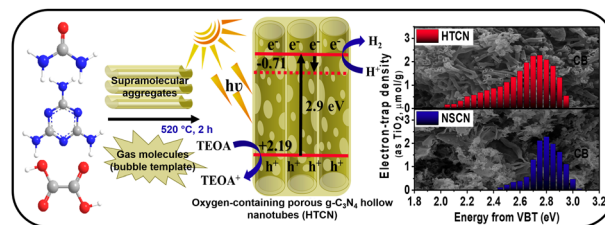
Jingyi Wang, Yuchan Wang, Jibin Li, Zexuan Wei, Jie Feng\* and Ding Du\*



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### All-alike hollow nanotubes of g-C<sub>3</sub>N<sub>4</sub> converting photons into fuel by splitting water

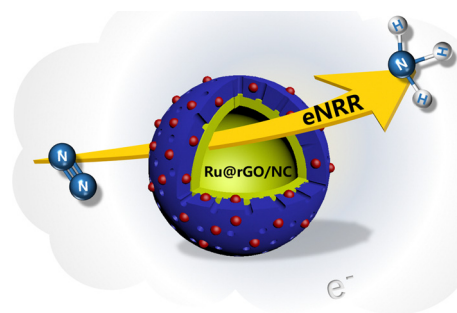
Mani Preeyanghaa, Chitiphon Chuaicham, Sulakshana Shenoy, Bernaudshaw Neppolian, Keiko Sasaki\* and Karthikeyan Sekar\*



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### Facile preparation of single-atom Ru catalysts via a two-dimensional interface directed synthesis technique for the NRR

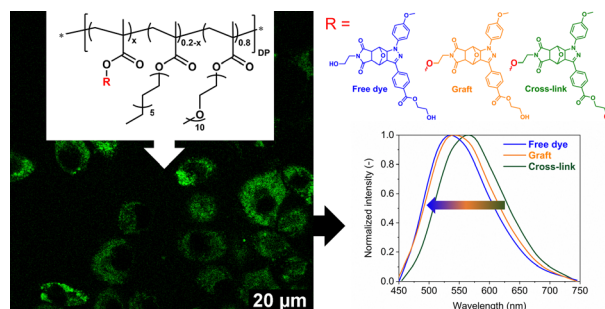
Yao Chen, Rui Xu,\* Yuchao Li,\* Lu Cai, Yubo Yang, Yanxia Zheng, Cuncun Zuo, Haofei Huang, Zijian Wen and Qian Wang



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### Simultaneously controlling conformational and operational stability of single-chain polymeric nanoparticles in complex media

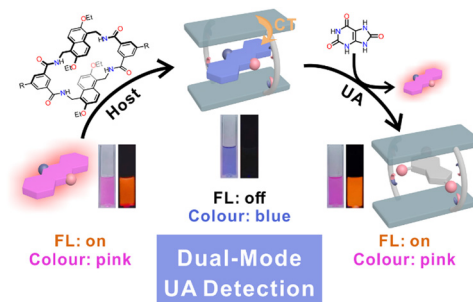
Stefan Wijker, Rico Monnink, Luc Rijnders, Linlin Deng and Anja R.A. Palmans\*



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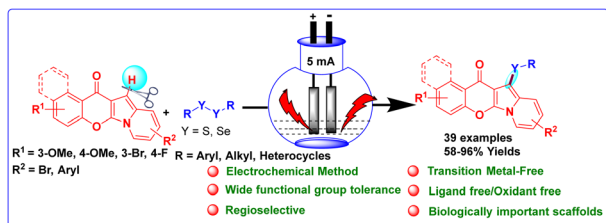
### Tetralactam macrocycle based indicator displacement assay for colorimetric and fluorometric dual-mode detection of urinary uric acid

Huan Yao, Shi-Yao Li, Hong Zhang, Xin-Yu Pang, Jia-Le Lu, Cong Chen, Wei Jiang, Liu-Pan Yang\* and Li-Li Wang\*





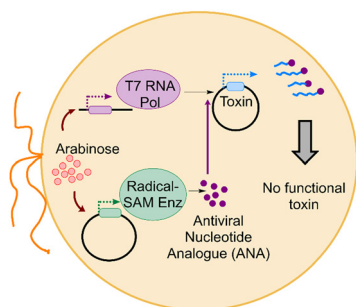
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### Electrochemical site-selective direct C–H sulfenylation and selenylation of a chromone-fused-indolizine (CFI) skeleton

Pooja Kumari Jat, Lalit Yadav, Amreen Chouhan, Kusum Ucheniya and Satpal Singh Badsara\*

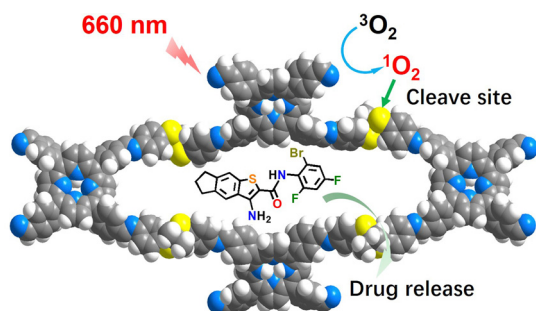
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### VITAS, a sensitive *in vivo* selection assay to discover enzymes producing antiviral natural products

Aws Fahd Alharbi, Hayun Kim, Dhirish Chumroo, Yuxuan Ji, Mohammed Hakil and Kourosh H. Ebrahimi\*

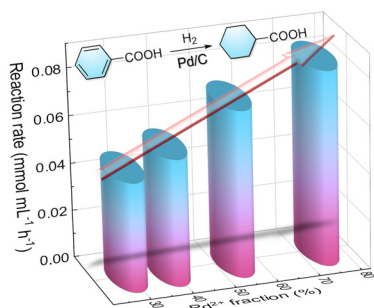
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### A reactive oxygen species-responsive covalent organic framework for tumor combination therapy

Wen-Yan Li, Jing-Lan Kan, Jing-Jing Wan, Yan-An Li, Tian Song, Bo Wang, Qun Guan, Le-Le Zhou and Yu-Bin Dong\*

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### Electronic property-dependent activity and durability in Pd/C-catalysed hydrogenation of benzoic acid

Ke Xu, Yu Sun, You Wang, Bing Du, Xiaolong Li and Sai Zhang\*

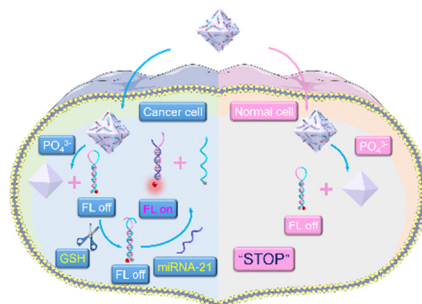


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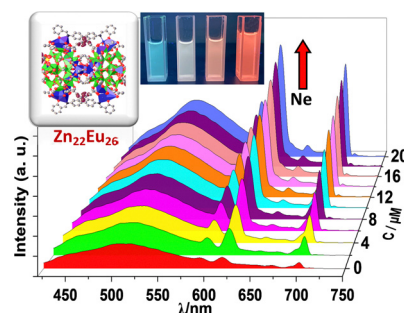
Yuyan Li, Fanghua Zhang, Wendong Liu, Mingzheng Shao, Zhe Hao, Hongyan Zhang, Ruizhong Zhang, Xiyang Li and Libing Zhang\*



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### Rapid and quantitative detection of the inflammatory marker neopterin based on a visible luminescent Zn(II)–Eu(III) nanocluster

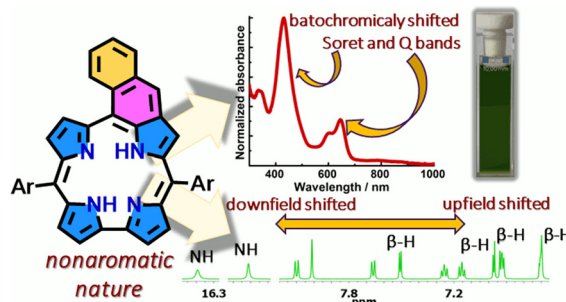
Jinni Zhao, Xilong Leng, Jiazhao Lin, Xiaoping Yang,\* Xiaoli Lv, Xianfeng Huang, Zhi Yang\* and Desmond Schipper



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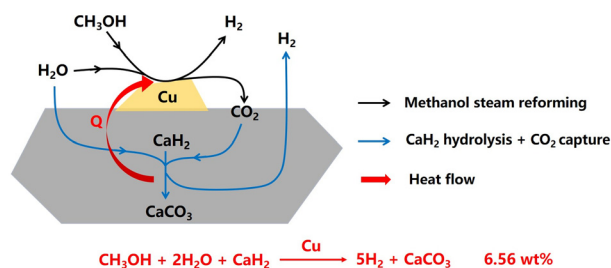
Łukasz Kielesiński, Francesco F. Summa, Jeanet Conradie, Hilah C. Honig, Ariel Friedman, Guglielmo Monaco,\* Lior Elbaz,\* Abhik Ghosh\* and Daniel T. Gryko\*



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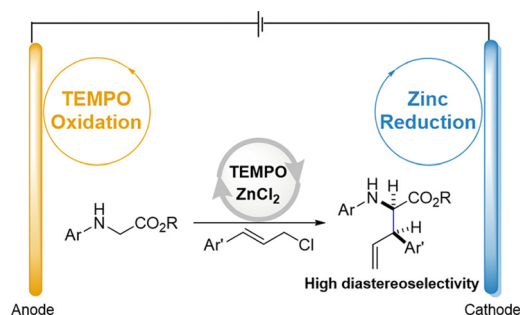
### Hydrogen generation by coupling methanol steam reforming with metal hydride hydrolysis

Kuerbangnisha Kadeer, Xingguo Li and Jie Zheng\*



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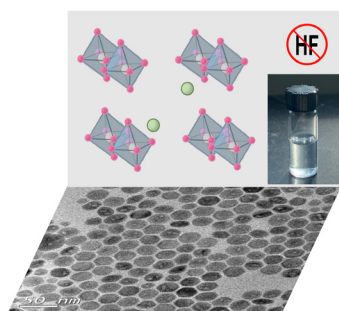
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Hahyoun Park, Minjun Kim, Jungtaek Kang, Hyunjoon Song\* and Hyunwoo Kim\*

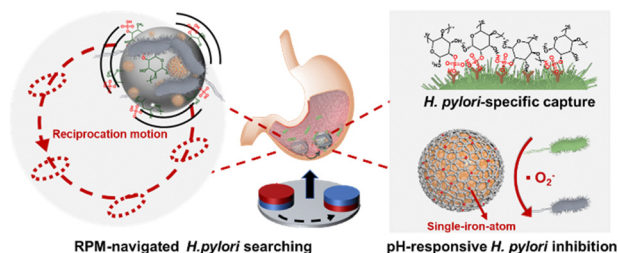
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### HF-Free synthesis of colloidal $\text{Cs}_2\text{ZrF}_6$ and $(\text{NH}_4)_2\text{ZrF}_6$ nanocrystals

Eden Tzanetopoulos, Julie Schwartz and Daniel R. Gamelin\*

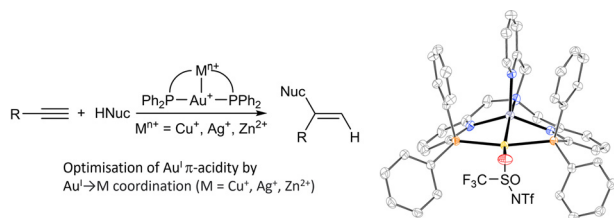
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Xinqi Cai, Zhiyang Li, Wen-jing Zhou, Hui Deng, Xiaoxu Cao, Jieqiong Xu, Zhiwei Yin, Shen Wang, Xin Xia, Chao Ma, Long Chen, Ding Ding,\* Weihong Tan and Zhuo Chen\*

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M. Alexander Eltester, Hans Gildenast, Kristina Rabatinová, Christopher Pütz, Christopher Cremer, Patrick Lanzerath, Julian P. Schroers and Michael E. Tauchert\*

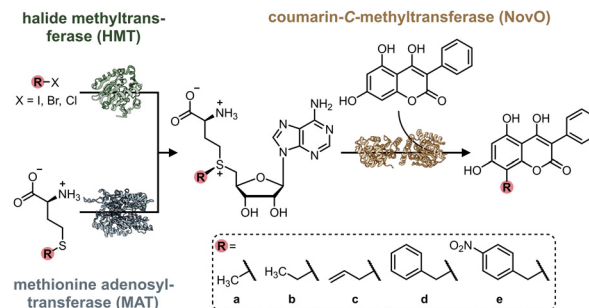




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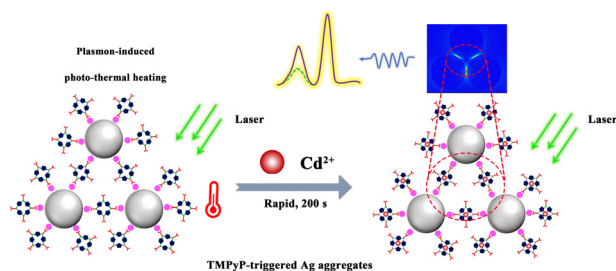
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Arne Hoffmann, Kai H. Schülke, Stephan C. Hammer,\*  
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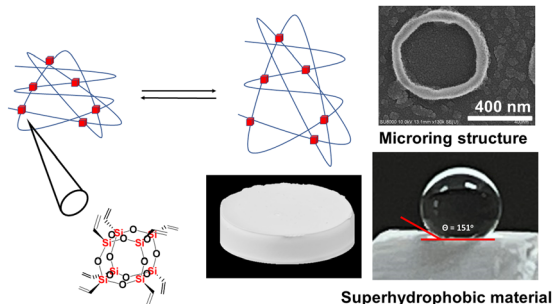
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## A porphyrin-based ratiometric SERS sensor for high-throughput and ultrasensitive cadmium ion detection

Rui Wang, Shuo Wu, Yumiao Dong, Yunfei Xie\* and  
Wei Ji\*

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Chidchanok Wannasiri, Supphachok Chanmungkalakul,  
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Xiaobo Qu\* and Vladislav Orekhov\*