## **Chem Soc Rev**

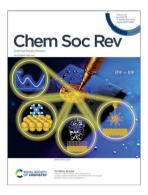
### Chemical Society Reviews

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ISSN 0306-0012 CODEN CSRVBR 52(18) 6223-6588 (2023)



#### Cover

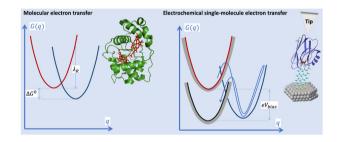
See Renat R. Nazmutdinov, Jens Ulstrup et al., pp. 6230-6253. Image reproduced by permission of Renat R. Nazmutdinov, Jens Ulstrup et al. from Chem. Soc. Rev., 2023, 52, 6230. Artwork by Dr Shokirbek Shermukhamedov.

#### TUTORIAL REVIEWS

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Understanding molecular and electrochemical charge transfer: theory and computations

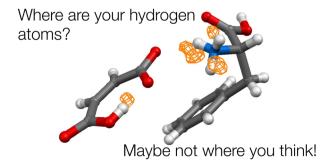
Renat R. Nazmutdinov,\* Shokirbek A. Shermokhamedov, Tamara T. Zinkicheva, Jens Ulstrup\* and Xinxin Xiao



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Hydrogen atoms in supramolecular chemistry: a structural perspective. Where are they, and why does it matter?

Amber L. Thompson\* and Nicholas G. White\*



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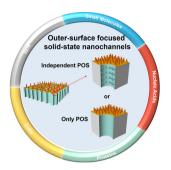


#### TUTORIAL REVIEWS

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#### Solid-state nanochannels for bio-marker analysis

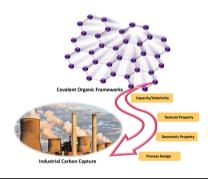
Yu Huang, Lingxiao Liu, Cihui Luo, Wei Liu, Xiaoding Lou, Lei Jiang and Fan Xia\*



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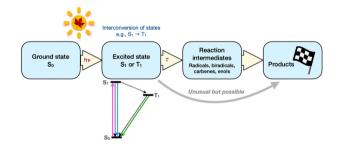
He Li, Akhil Dilipkumar, Saifudin Abubakar and Dan Zhao\*



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A beginners guide to understanding the mechanisms of photochemical reactions: things you should know if light is one of your reagents

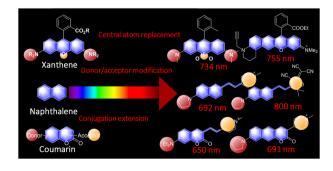
Juan C. Scaiano



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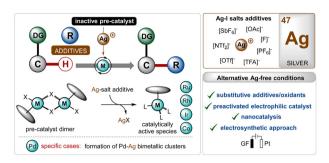
Strategies to convert organic fluorophores into red/near-infrared emitting analogues and their utilization in bioimaging probes

Mingchong Dai,\* Yun Jae Yang, Sourav Sarkar and Kyo Han Ahn\*



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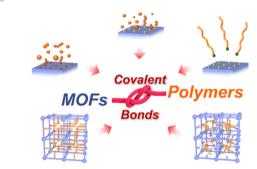
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The crucial role of silver(1)-salts as additives in C-H activation reactions: overall analysis of their versatility and applicability

Renato L. de Carvalho, Emilay B. T. Diogo, Simon L. Homölle, Suman Dana, Eufrânio N. da Silva Júnior\* and Lutz Ackermann\*

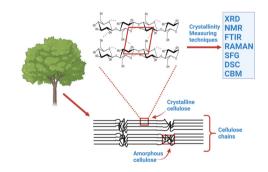
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Jonghyeon Lee, Jooyeon Lee, Jin Yeong Kim\* and Min Kim\*

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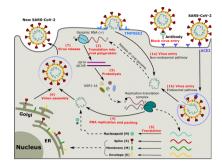
Xianbin Ma, Mingchuan Mao, Jiaqi He, Chao Liang and Hai-Yan Xie\*

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Hung Nguyen, Hoang Linh Nguyen, Pham Dang Lan, Nguyen Quoc Thai, Mateusz Sikora and Mai Suan Li\*



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Andrei V. Kabashin,\* Vasyl G. Kravets and Alexander N. Grigorenko\*

