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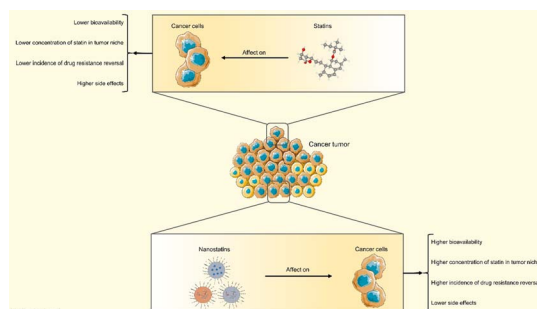
See Sherine O. Obare, Anthony L. Dellinger *et al.*, pp. 5833–5852.
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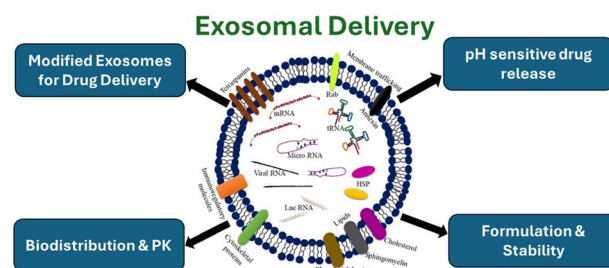
**Fundamental questions
Elemental answers**

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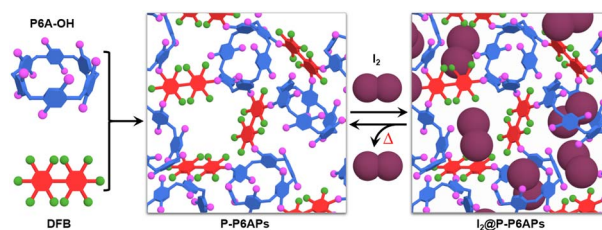


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Porous pillar[6]arene-based polymers for reversible iodine capture

Shujie Lin, Ziliang Zhang, Di Gao, Longming Chen, Chengyang Tian, Junyi Chen* and Qingbin Meng*

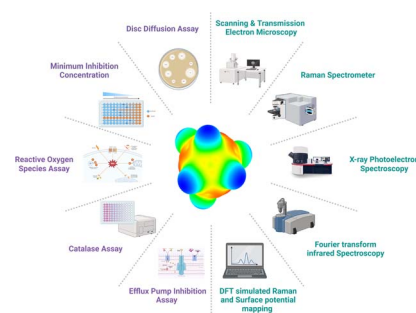


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A rapid one-step synthesis of silver and copper coordinated chlorine functionalized fullerene nanoparticles with enhanced antibacterial activity

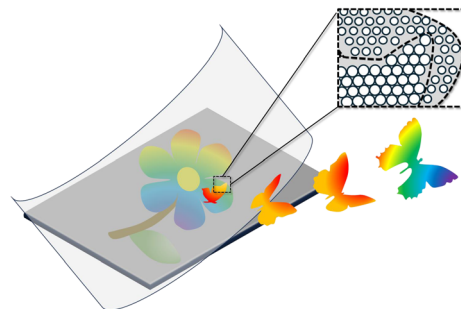
Abed Alqader Ibrahim, Tariq Khan, Kyle Nowlin, Jared Averitt, Gayani Pathiraja, Dennis LaJeunesse, Sherine O. Obare* and Anthony L. Dellinger*



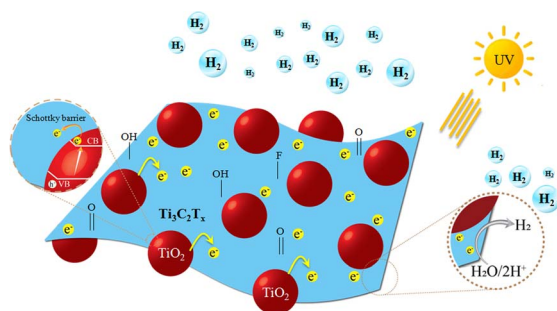
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Anti-counterfeiting labels of photonic crystals with versatile structural colors

Nguyen Hoang Minh, Kwanoh Kim, Do Hyun Kang, Yeong-Eun Yoo and Jae Sung Yoon*



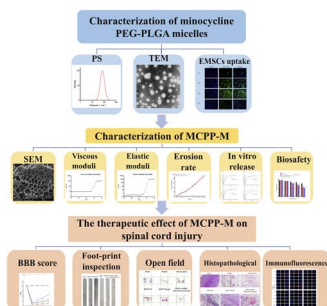
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Unveiling the potential of MXene-fabricated catalysts: an effective approach for H₂ generation from water splitting

Muhammad Zeeshan Abid, Khezina Rafiq,^{*} Abdul Rauf and Ejaz Hussain^{*}

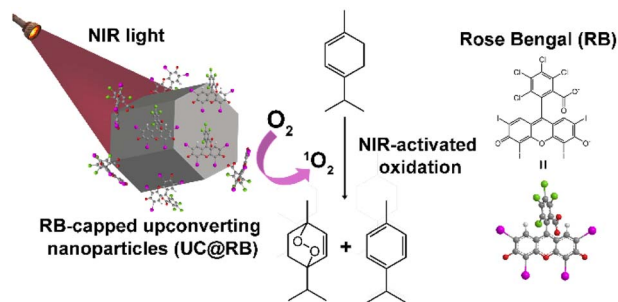
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Preparation of a minocycline polymer micelle thermosensitive gel and its application in spinal cord injury

Jun Gu, Xiaohu Cai, Faisal Raza, Hajra Zafar, Bo Chu, Haitao Yuan, Tianqi Wang, Jiapeng Wang and Xiaojun Feng^{*}

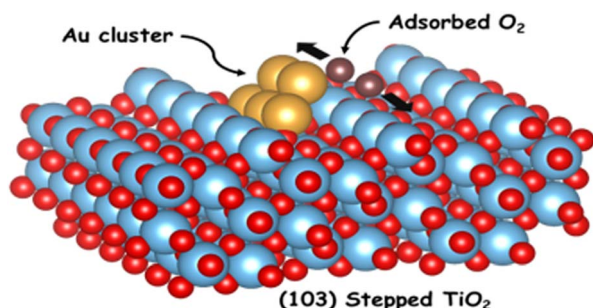
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NIR-triggered photooxygenation of α -terpinene with upconversion nanohybrids

Laura Francés-Soriano, Delia Bellezza, Juan Ferrera-González, María González-Béjar^{*} and Julia Pérez-Prieto^{*}

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Tailoring surface morphology on anatase TiO₂ supported Au nanoclusters: implications for O₂ activation

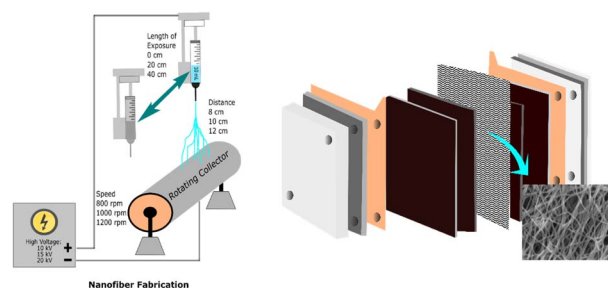
Muhammed Fasil Puthiyaparambath, Julian Ezra Samuel and Raghu Chathanathi^{*}



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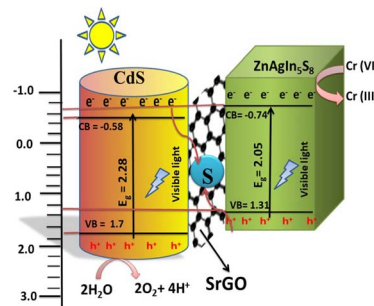
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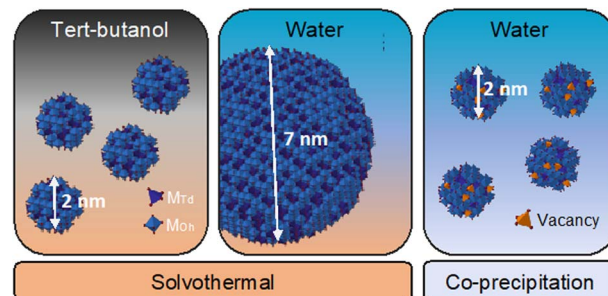
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Effect of solvothermal synthesis parameters on the crystallite size and atomic structure of cobalt iron oxide nanoparticles

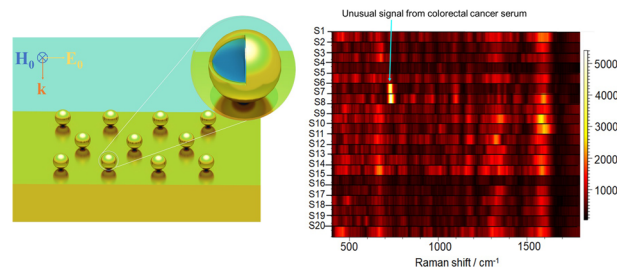
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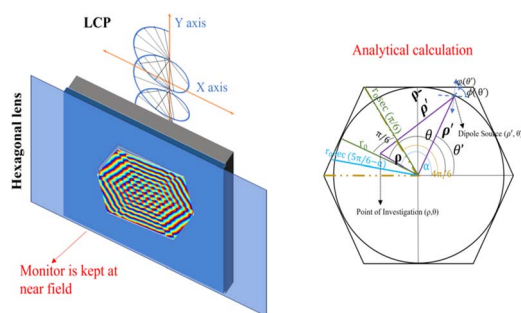
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Fano enhancement of SERS for rapid early diagnosis of colorectal cancer

Tianxun Gong, Zhenjiang Wei, Libin Huang, Yan Hong, Yuan Li, Ke-ling Chen, Wen Huang, Xiaojing Zhong, Jinzhao He, Ming-Yi Lee, En-Chi Chang, Kien Voon Kong,* Xiaosheng Zhang* and Zongguang Zhou*



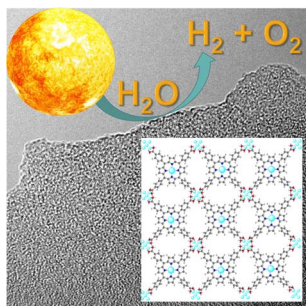
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Optimization of a plasmonic lens structure for maximum optical vortices induced on Weyl semimetal surface states

Ritwik Banerjee and Tanmoy Maiti*

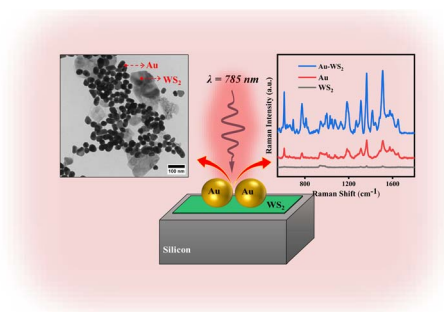
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Photocatalytic activity of a 2D copper porphyrin metal–organic framework for visible light overall water splitting

Andrés Uscategui-Linares, Horatiu Szalad, Josep Albero* and Hermenegildo García*

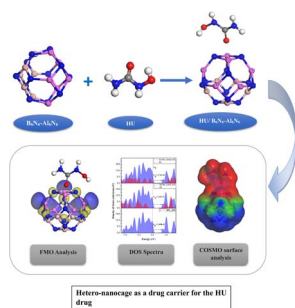
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Highly sensitive label-free biomolecular detection using Au–WS₂ nanohybrid based SERS substrates

Om Prakash, Abhijith T, Priya Nagpal, Vivekanandan Perumal, Supravat Karak, Udai B. Singh and Santanu Ghosh*

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Mithila Roy Swarna, Mehedi Hasan Opi, Tanvir Ahmed, Afiya Akter Piya, Umme Habiba and Siraj Ud Daula Shamim*

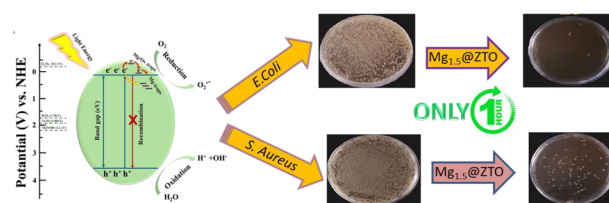


PAPERS

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Ternary zinc–tin–oxide nanoparticles modified by magnesium ions as a visible-light-active photocatalyst with highly strong antibacterial activity

Alaa Kamo, Ozlem Ates Sonmezoglu and Savas Sonmezoglu*



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Monolayers $\text{Sn}_2\text{Te}_2\text{X}_4$ ($\text{X} = \text{P}, \text{As}$) as promising materials for photocatalytic water splitting and flexible devices: a DFT study

Dat D. Vo, Tuan V. Vu, A. I. Kartamyshev, Thi H. Ho and Nguyen N. Hieu*

