# Nanoscale Advances

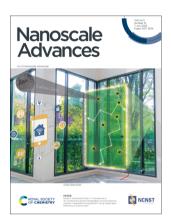
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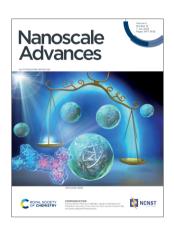
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## Inside cover See Guillem Pratx, Mamoru Fuiitsuka, Yasuko Osakada et al., pp. 3424-3427. Image

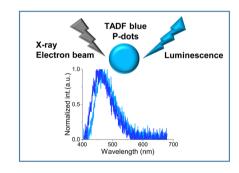
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# COMMUNICATION

3424

## Radioluminescence from polymer dots based on thermally activated delayed fluorescence

Daiki Asanuma, Hieu Thi Minh Nguyen, Zuoyue Liu, Sachiko Tojo, Hajime Shigemitsu, Minoru Yamaji, Kiyohiko Kawai, Tadashi Mori, Toshiyuki Kida, Guillem Pratx,\* Mamoru Fujitsuka\* and Yasuko Osakada\*

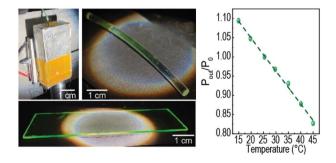


#### **PAPERS**

3428

## An autonomous power temperature sensor based on window-integrated transparent PV using sustainable luminescent carbon dots

Sandra F. H. Correia,\* Lianshe Fu, Lília M. S. Dias, Rui F. P. Pereira, V. de Zea Bermudez, Paulo S. André and Rute A. S. Ferreira\*



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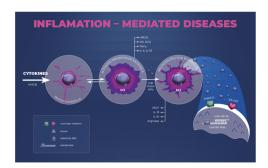


## **PAPERS**

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Optimization and characterization of miRNA-129-5p-encapsulated poly (lactic-co-glycolic acid) nanoparticles to reprogram activated microglia

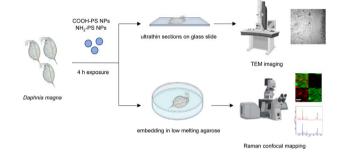
Irina Kalashnikova, Heather Cambell, Daniel Kolpek and Jonghyuck Park\*



#### 3453

## Label-free detection of polystyrene nanoparticles in Daphnia magna using Raman confocal mapping

Jasreen Kaur, Egle Kelpsiene, Govind Gupta, Illia Dobryden, Tommy Cedervall and Bengt Fadeel\*



#### 3463

Supramolecular Pd@methioine-EDTA-chitosan nanocomposite: an effective and recyclable biobased and eco-friendly catalyst for the green Heck cross-coupling reaction under mild conditions

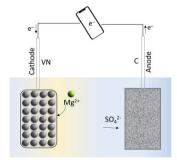
Mohammad Dohendou, Mohammad G. Dekamin\* and Danial Namaki



## 3485

## Superior cyclability of high surface area vanadium nitride in salt electrolytes

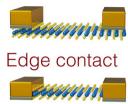
James Kasten, Cheng-Che Hsiao, Denis Johnson and Abdoulage Djire'

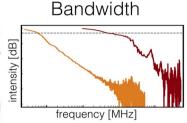


## **PAPERS**

#### 3494

# Top contact

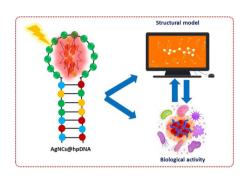




## Edge contacts accelerate the response of MoS<sub>2</sub> photodetectors

Fabian Strauß, Christine Schedel and Marcus Scheele\*

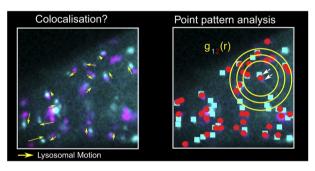
#### 3500



## Optical, structural, and biological properties of silver nanoclusters formed within the loop of a C-12 hairpin sequence

Akhilesh Kumar Gupta, Nolan Marshall, Liam Yourston, Lewis Rolband, Damian Beasock, Leyla Danai, Elizabeth Skelly, Kirill A. Afonin and Alexey V. Krasnoslobodtsev\*

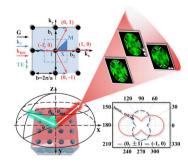
#### 3512



## Identification of nanoparticles as vesicular cargo via Airy scanning fluorescence microscopy and spatial statistics

Christian Wimmenauer and Thomas Heinzel\*

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## Direction- and polarization-tunable spontaneous emission beneficial from diffraction orders of a square R6G-nanopore array

Shijia He, Yi Wang, \* Tianyu Wang, Dongda Wu, Jungiao La, Jiang Hu, Jiamin Xiao and Wenxin Wang\*

## **PAPERS**

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A tube-like Pd@coordination polymer with enhanced solar light harvesting for boosting photocatalytic H<sub>2</sub> production in a wide pH range and seawater

Jieling Li, Shihao Sun, Ningshuang Gao, Hua Li, Kun Liang,\* Jun Hai, Suisui He, Xijiao Mu\* and Baodui Wang\*

