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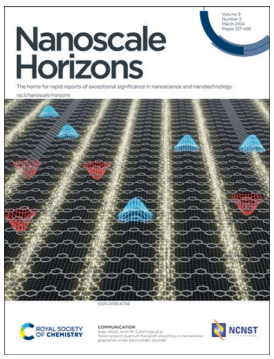

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See Isaac Alcón, Aron W. Cummings *et al.*, pp. 407–415. Image reproduced by permission of Stephan Roche from *Nanoscale Horiz.*, 2024, **9**, 407.

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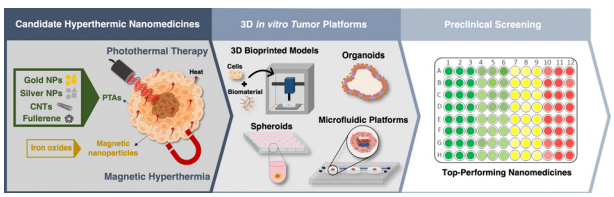
Joana F. Soeiro, Filipa L. Sousa, Maria V. Monteiro, Vítor M. Gaspar,* Nuno J. O. Silva* and João F. Mano*



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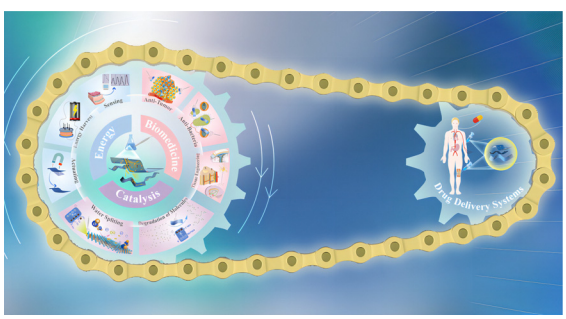
Advancing piezoelectric 2D nanomaterials for applications in drug delivery systems and therapeutic approaches

Anshuo Li, Jiawei Yang, Yuchu He, Jin Wen* and Xinquan Jiang*



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REVIEWS

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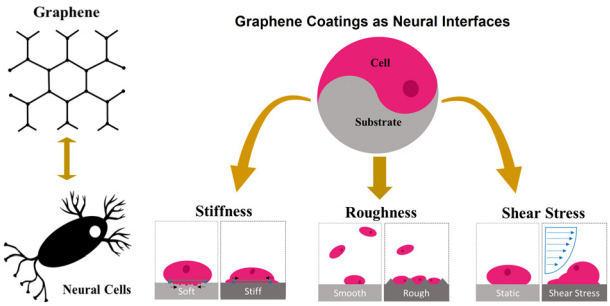
The potential of graphene coatings as neural interfaces

Vicente Lopes, Gabriel Moreira, Mattia Bramini* and Andrea Capasso*



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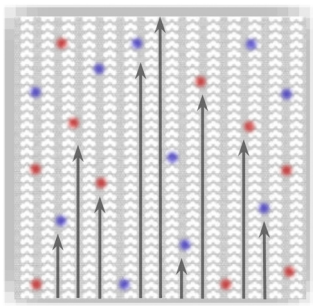
Tailoring giant quantum transport anisotropy in nanoporous graphenes under electrostatic disorder

Isaac Alcón,* Aron W. Cummings* and Stephan Roche



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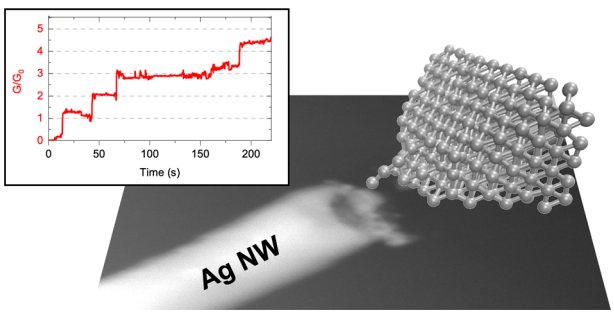
Electrochemical rewiring through quantum conductance effects in single metallic memristive nanowires

Gianluca Milano,* Federico Raffone,* Katarzyna Bejtka, Ivan De Carlo, Matteo Fretto, Fabrizio Candido Pirri, Giancarlo Cicero, Carlo Ricciardi and Ilia Valov



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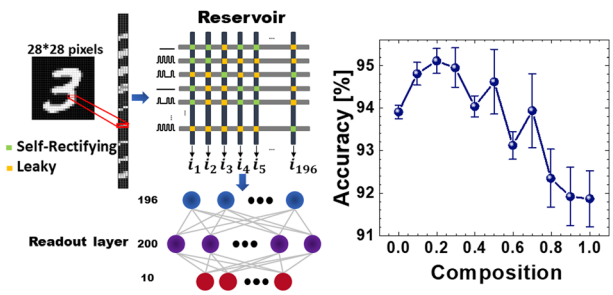
Nestor Ghenzi, Tae Won Park, Seung Soo Kim, Hae Jin Kim, Yoon Ho Jang, Kyung Seok Woo* and Cheol Seong Hwang*



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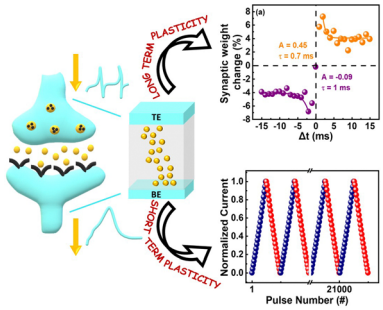

Insights into synaptic functionality and resistive switching in lead iodide flexible memristor devices

Muskan Jain, Mayur Jagdishbhai Patel, Lingli Liu, Jeny Gosai, Manish Khemnani, Himangshu Jyoti Gogoi, Mun Yin Chee, Antonio Guerrero, Wen Siang Lew and Ankur Solanki*

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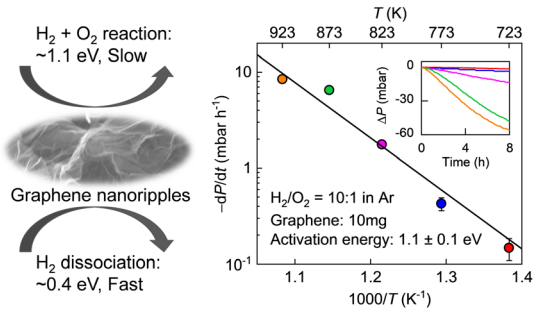

Catalytic selectivity of nanorippled graphene

Yu Liu, Wenqi Xiong, Achintya Bera,* Yu Ji, Miao Yu, Shi Chen, Li Lin, Shengjun Yuan* and Pengzhan Sun*

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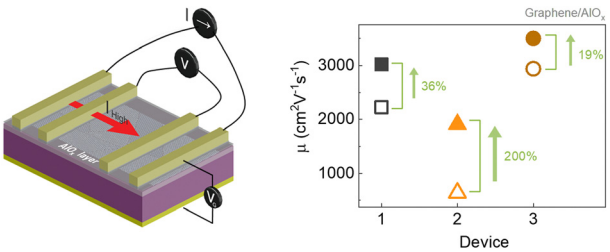

High current treated-passivated graphene (CTPG) towards stable nanoelectronic and spintronic circuits

Daria Belotcerkovtceva, Henry Nameirakpam, Gopal Datt, Ulrich Noumbe and M. Venkata Kamalakar*

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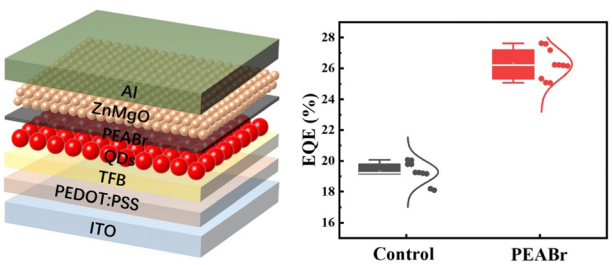

Phenethylammonium bromide interlayer for high-performance red quantum-dot light emitting diodes

Qiyin Chen, Yun Hu, Jie Lin, Jingsong Huang,* Shu-Ling Gong* and Guohua Xie*

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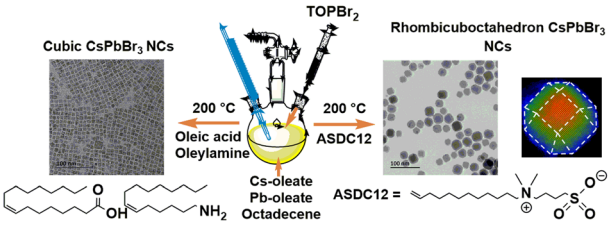
Surfactant-tail control of $CsPbBr_3$ nanocrystal morphology

Yoarhy A. Amador-Sánchez, Brenda Vargas, Josué E. Romero-Ibarra, Rubén Mendoza-Cruz, Estrella Ramos and Diego Solis-Ibarra*



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Chemical exfoliation of 1-dimensional antiferromagnetic nanoribbons from a non-van der Waals material

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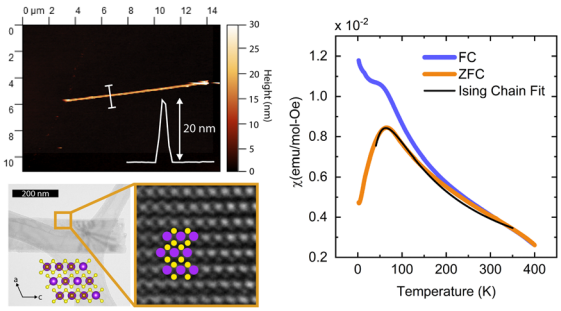

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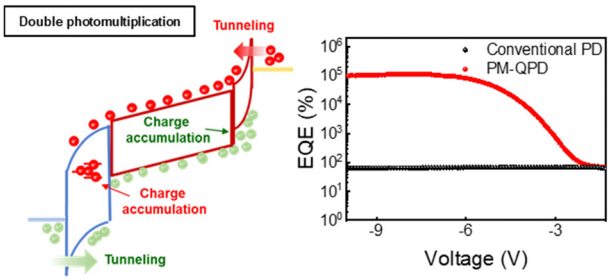
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