

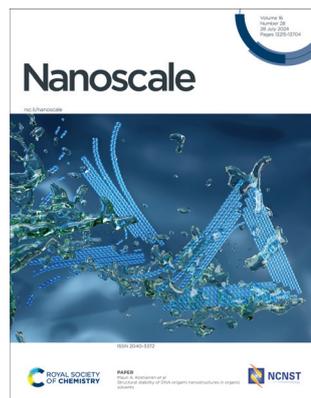
Nanoscale

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ISSN 2040-3372 CODEN NANOHL 16(28) 13215–13704 (2024)



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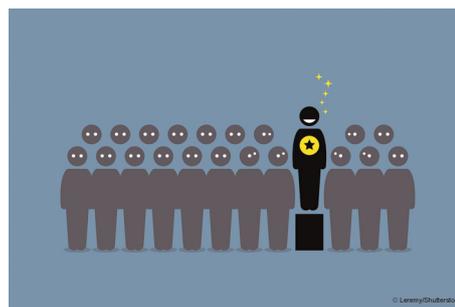
See Mauri A. Kostianen *et al.*, pp. 13407–13415.

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EDITORIAL

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Outstanding Reviewers for *Nanoscale* in 2023



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Bio-gel nanoarchitectonics in tissue engineering

Jingwen Song,* Wenyan Lyu, Kohsaku Kawakami and Katsuhiko Ariga*



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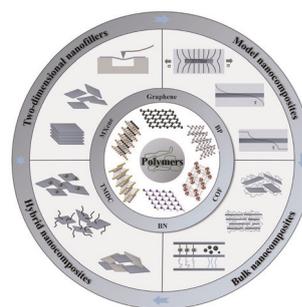


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Mechanical reinforcement from two-dimensional nanofillers: model, bulk and hybrid polymer nanocomposites

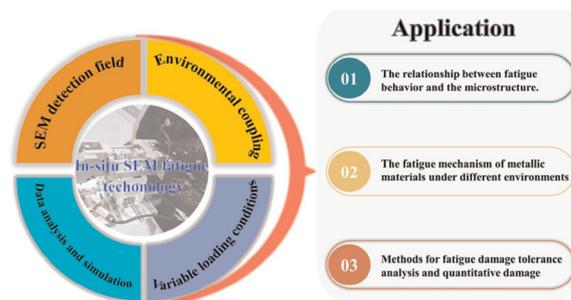
Ming Dong, Yiwei Sun, David J. Dunstan, Robert J. Young* and Dimitrios G. Papageorgiou*



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In situ SEM fatigue testing technology for metallic materials: a review

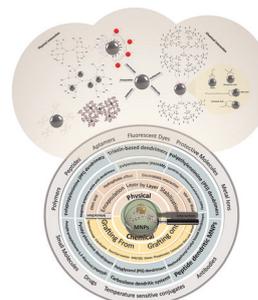
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Salma Habib, Mohammed Talhami, Amani Hassanein, Elsadig Mahdi, Maryam AL-Ejji, Mohammad K. Hassan, Ali Altaee, Probir Das and Alaa H. Hawari*

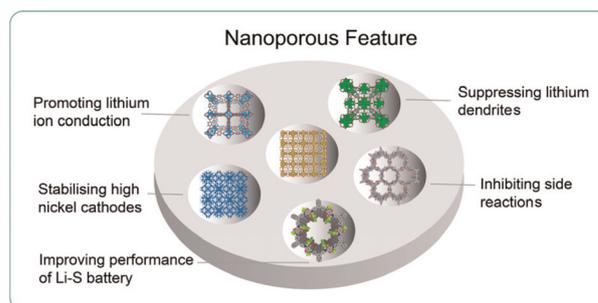


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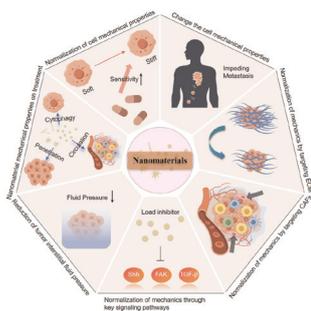
Advances in nanoporous materials for next-generation battery applications

Li Sheng, Xiangming He and Hong Xu*



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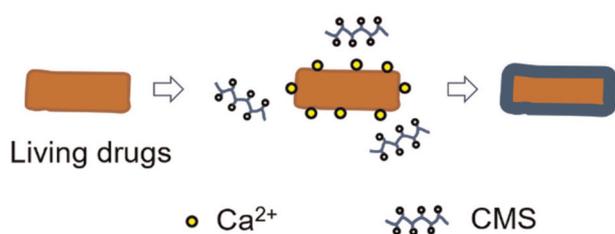
The application of nanomaterials in tumor therapy based on the regulation of mechanical properties

Xiaolei Wang, Hongxi Yu, Dan Liu, Boxian Hu, Ruihang Zhang, Lihua Hu, Guiping Hu* and Cheng Li*

COMMUNICATION

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Interfacial engineering

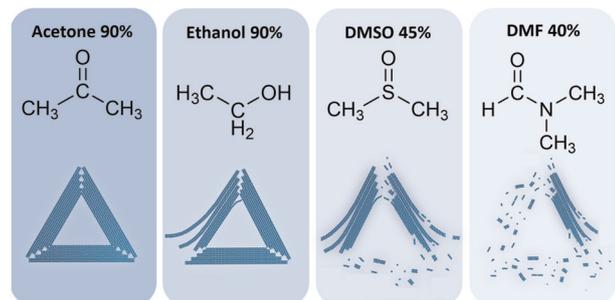


Interfacial-engineered living drugs with "ON/OFF" switching for oral delivery

Pingping Feng,* Xuefei Bai, Xiaofei Ma, Han Kong and Rui Yang*

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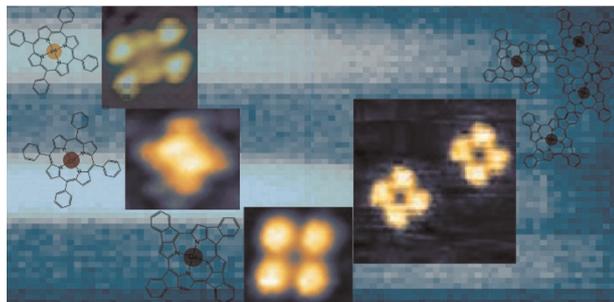
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Structural stability of DNA origami nanostructures in organic solvents

Eeva Enlund, Sofia Julin, Veikko Linko and Mauri A. Kostainen*

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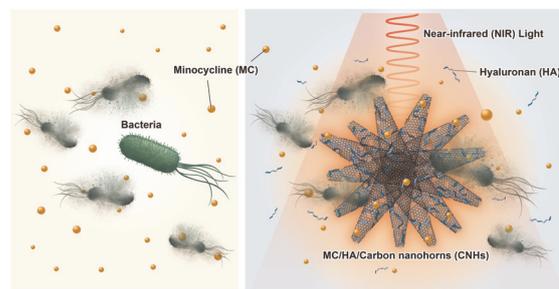


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Near-infrared light-boosted antimicrobial activity of minocycline/hyaluronan/carbon nanohorn composite toward peri-implantitis treatments

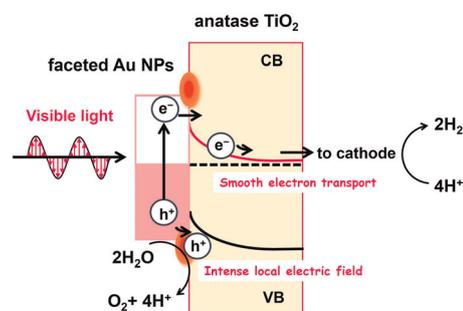
Daisuke Konishi, Eri Hirata,* Yuta Takano,* Yukari Maeda, Natsumi Ushijima, Masako Yudasaka and Atsuro Yokoyama



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Efficient plasmonic water splitting by heteroepitaxial junction-induced faceting of gold nanoparticles on an anatase titanium(IV) oxide nanoplate array electrode

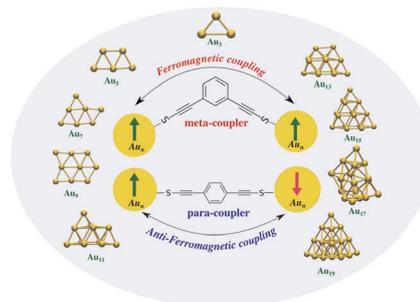
Shin-ichi Naya, Yoko Morita, Hisashi Sugime, Tetsuro Soejima, Musashi Fujishima and Hiroaki Tada*



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Orchestration of ferro- and anti-ferromagnetic ordering in gold nanoclusters

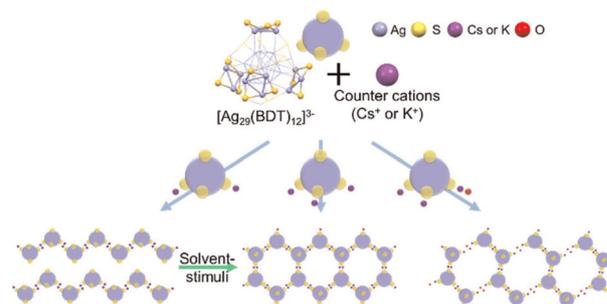
Nisha Mehla, Aritra Mukhopadhyaya, Shahjad Ali and Md. Ehesan Ali*



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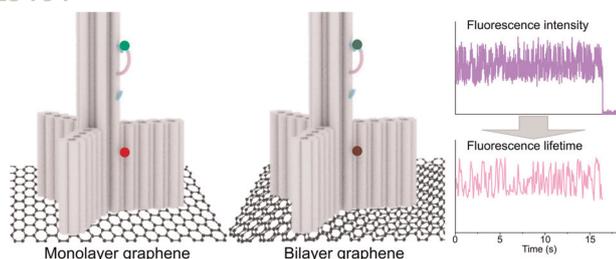
Assembly of anionic silver nanoclusters with controlled packing structures through site-specific ionic bridges

Wataru Ishii, Rika Tanaka and Takuya Nakashima*



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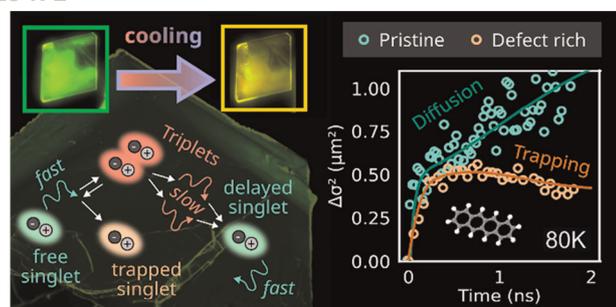
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Expanding the range of graphene energy transfer with multilayer graphene

Karolina Gronkiewicz, Lars Richter, Fabian Knechtel, Patryk Pyczc, Paul Leidinger, Sebastian Günther, Evelyn Ploetz, Philip Tinnefeld* and Izabela Kamińska*

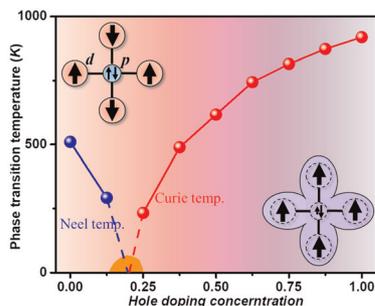
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Transport, trapping, triplet fusion: thermally retarded exciton migration in tetracene single crystals

Dominik Muth, Sebastian Anhäuser, Daniel Bischof, Anton Krüger, Gregor Witte* and Marina Gerhard*

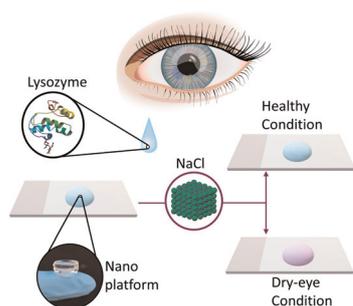
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Exploring unconventional ferromagnetism in hole-doped LaCrAsO: insights into charge-transfer and magnetic interactions

Zhao Liu* and Nikhil V. Medhekar*

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Lysozyme-sensitive plasmonic hydrogel nanocomposite for colorimetric dry-eye inflammation biosensing

Yasamin Ziai, Chiara Rinoldi, Francesca Petronella, Anna Zakrzewska, Luciano De Sio and Filippo Pierini*

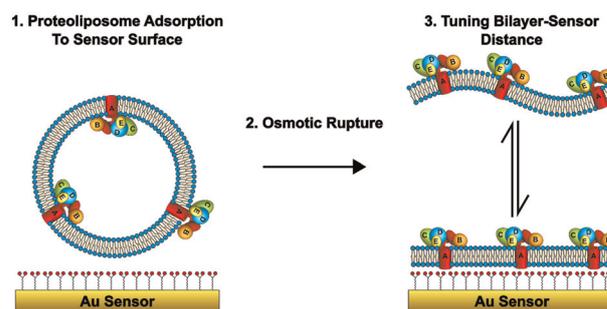


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Distance tuneable integral membrane protein containing floating bilayers *via in situ* directed self-assembly

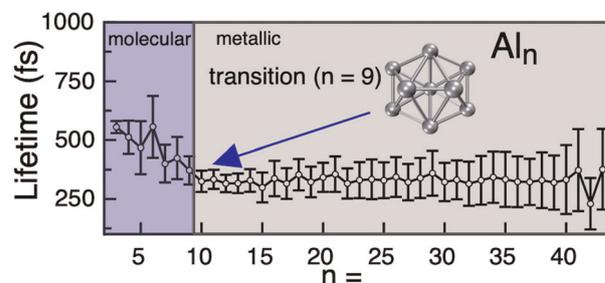
Stephen C. L. Hall, David J. Hardy, Éilís C. Bragginton, Hannah Johnston, Tudor Onose, Rachel Holyfield, Pooja Sridhar, Timothy J. Knowles and Luke A. Clifton*



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Size onset of metallic behavior in neutral aluminum clusters

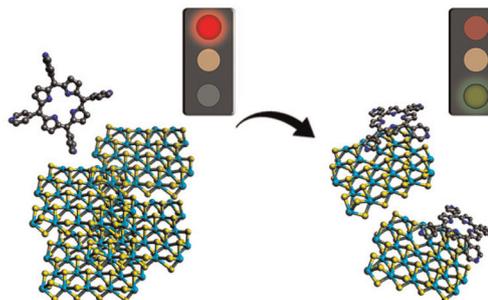
Chase H. Rotteger, Carter K. Jarman, Shaun F. Sutton and Scott G. Sayres*



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Simultaneous exfoliation and functionalization of MoS₂ with tetrapyrrolyl porphyrin

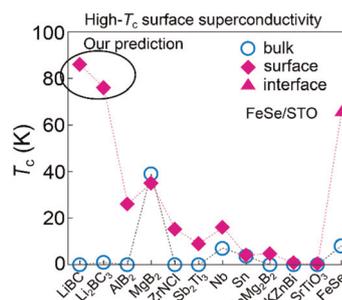
Marina Garrido,* Alejandro Criado* and Maurizio Prato*



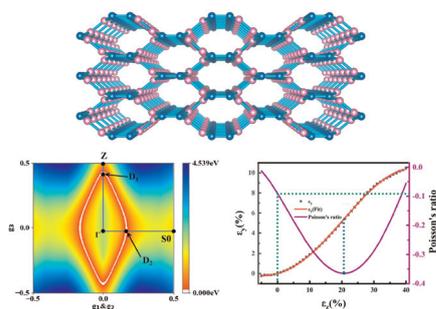
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Surface inducing high-temperature superconductivity in layered metal carbides Li₂BC₃ and LiBC by metallizing σ electrons

Muyao Wang, Xiaohan Liu, Xiaowei Huang* and Liangliang Liu*



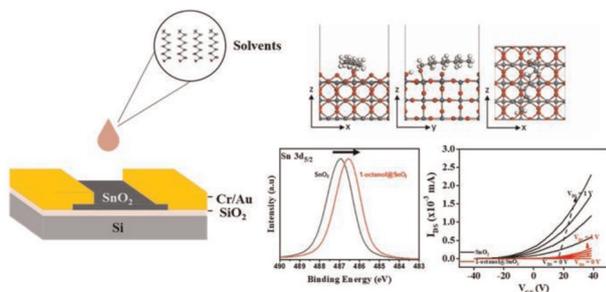
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A topological nodal line semi-metal with a negative Poisson's ratio in a three-dimensional carbon network with sp^2 hybridization

Wen Jiang, Jun Jiang, Zhixun Zhang, Wenjie Wu, Li-Chuan Zhang,* Yuee Xie* and Yuanping Chen*

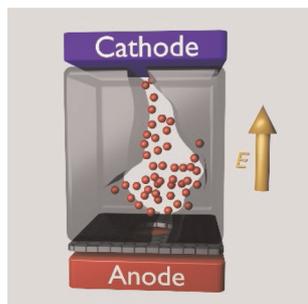
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Surface chemistry altering electronic behaviour of liquid metal-derived tin oxide nanosheets

Xiaotian Wei, Chung Kim Nguyen, Patrick D. Taylor, Vaishnavi Krishnamurthi, Nitu Syed, Phuong Y. Le, Michelle J. S. Spencer, Torben Daeneke* and Lei Bao*

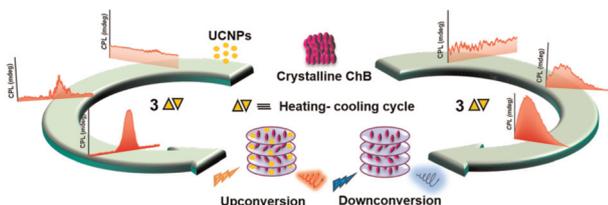
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Kinetic Monte Carlo simulations on electroforming in nanomanipulated conductive bridge random access memory devices

Yu-Chen Li, Ping Xu, Yang-Yang Lv, Wei Fa and Shuang Chen*

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Clustering triggered emissive liquid crystalline template for dual mode upconverted and downconverted circularly polarized luminescence

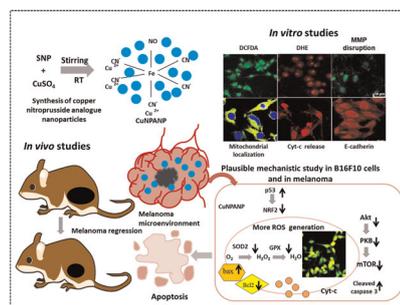
Sreelakshmi Theyanchery Nalavadath, Sonia Maniappan, Anannya Mandal and Jatish Kumar*



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Copper nitroprusside analogue nanoparticles against melanoma: detailed *in vitro* and *in vivo* investigation

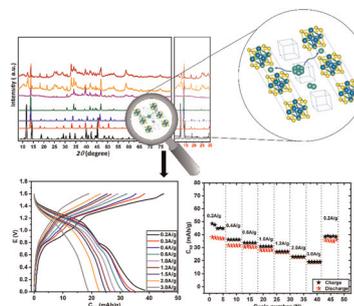
Sanchita Tripathy, Swapnali Londhe, Arti Patel, Sudipta Saha, Yogesh Chandra and Chitta Ranjan Patra*



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Nanosized Chevrel phases for dendrite-free zinc-ion based energy storage: unraveling the phase transformations

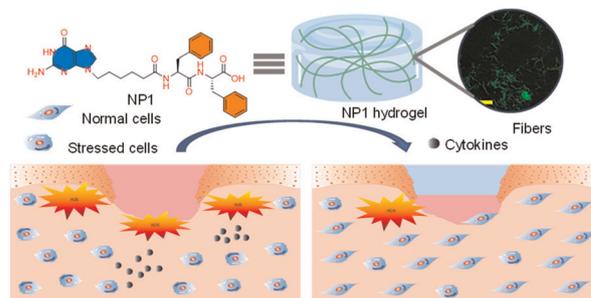
Amr Elgendy, Athanasios A. Papaderakis, Andinet Ejigu, Katharina Helmbrecht, Ben F. Spencer, Axel Groß, Alex S. Walton, David J. Lewis* and Robert A. W. Dryfe*



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Design and synthesis of a nucleobase functionalized peptide hydrogel: *in vitro* assessment of anti-inflammatory and wound healing effects

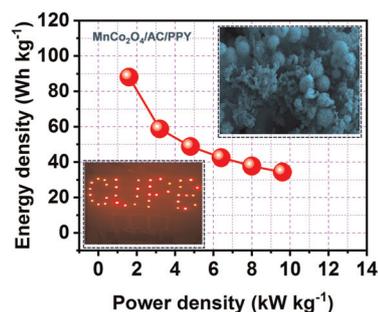
Sourav Bhowmik, Budhadev Baral, Tanmay Rit, Hem Chandra Jha and Apurba K. Das*



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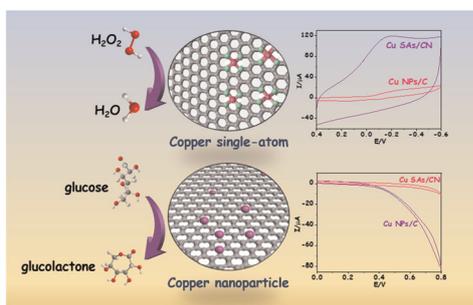
Polypyrrole and activated carbon enriched MnCo₂O₄ ternary composite as efficient electrode material for hybrid supercapacitors

Simran Kour, Pawanpreet Kour and A. L. Sharma*



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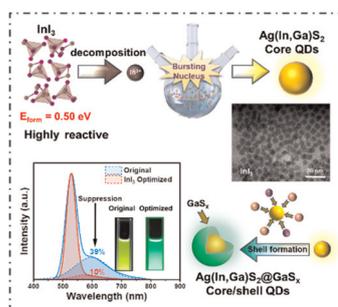
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Selecting effective electrocatalyst from Cu single-atoms and nanoparticles for realizing highly sensitive electrochemical sensing of glucose and H₂O₂

Ziyin Yang,* Chongchao Zhang and Chengcheng Qi*

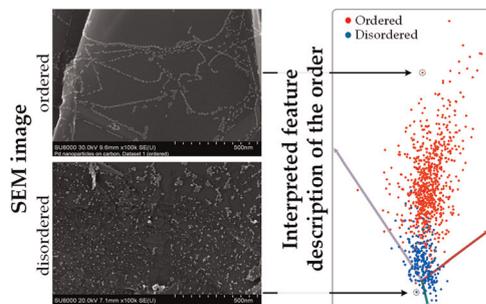
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Reactivity-matched synthesis of monodisperse Ag(In,Ga)S₂ QDs with efficient luminescence

Naiwei Wei, Hong Zhu, Danni Yan, Shuai Yang, Lili Xu, Shengli Zhang, Yuhui Dong,* Yousheng Zou* and Haibo Zeng*

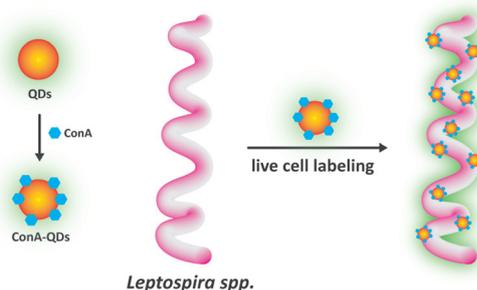
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Determining the orderliness of carbon materials with nanoparticle imaging and explainable machine learning

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Quantum dots as a fluorescent labeling tool for live-cell imaging of *Leptospira*

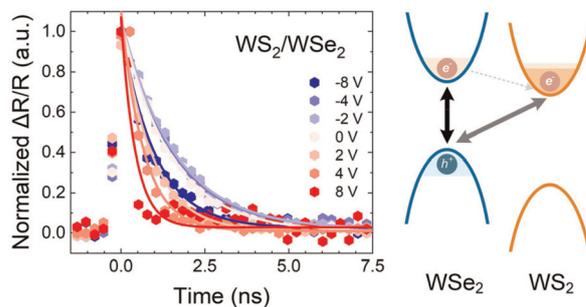
Yotsakorn Tantiapibalkun, Sopon Nuchpun, Wid Mekseriwattana, Sukhonta Limsampan, Galayanee DOUNGCHAWEE, Kulachart Jangpatarapongsa, Toemsak Srihirin and Kanlaya Prapainop Katewongsa*



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Electrically tunable non-radiative lifetime in WS_2/WSe_2 heterostructures

Anran Wang, Xingguang Wu, Siwen Zhao, Zheng Vitto Han, Yi Shi, Giulio Cerullo and Fengqiu Wang*



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Dual-site OER mechanism exploration through regulating asymmetric multi-site NiOOH

Fei Wu, Biao Wu, Liang Chen, Yunan Wang,* Jiejie Li* and Qiuju Zhang*

