

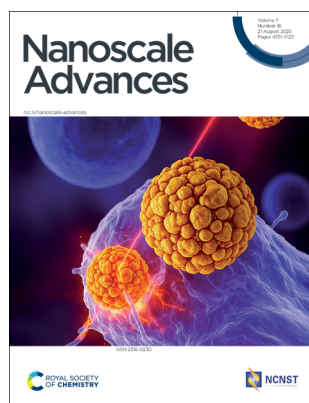
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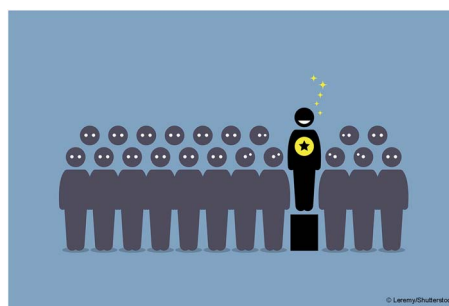


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EDITORIAL

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Outstanding Reviewers for *Nanoscale Advances* in 2024

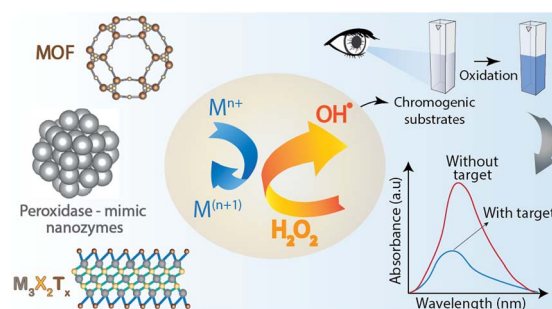


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Nano-enhanced Fenton/Fenton-like chemistry: integrating peroxidase nanozymes, MOFs, and MXenes for next-generation colorimetric biosensors

Hanh An Nguyen, Nguyen Tran Truc Phuong, Nguyen Bao Tran, Thi Ngoc Diep Trinh, Ngoc Xuan Dat Mai, Ngoc Quang Tran, Nhu Hoa Thi Tran* and Kieu The Loan Trinh*



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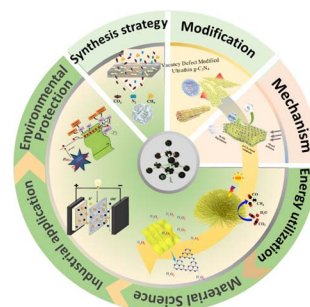
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REVIEWS

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Recent advances in graphitic carbon nitride-based composites for enhanced photocatalytic degradation of rhodamine B: mechanism, properties and environmental applications

Meie Zheng, Mengru Guo, Fei Ma,* Wenwen Li and Yujia Shao



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AI-integrated wearable strain sensors: advances in e-skin, robotics, and personalized health monitoring

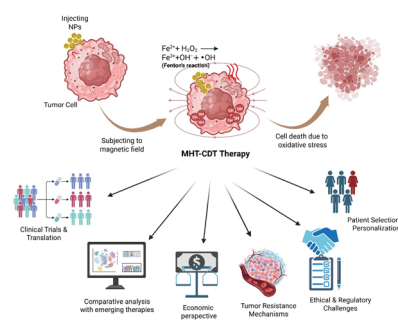
Neha Yadav, Qianqian Zhang, Dongfeng Qi, Ashish Yadav* and Hongyu Zheng*



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The evolution of integrated magnetic hyperthermia and chemodynamic therapy for combating cancer: a comprehensive viewpoint

Anjali Chauhan, Anamika Saini and Deepika Sharma*

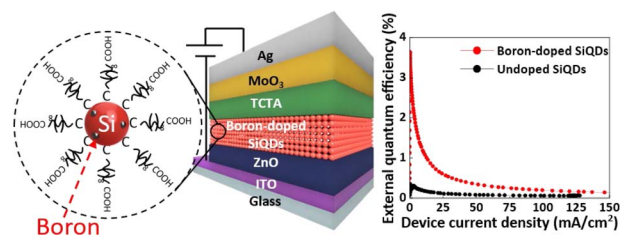


COMMUNICATIONS

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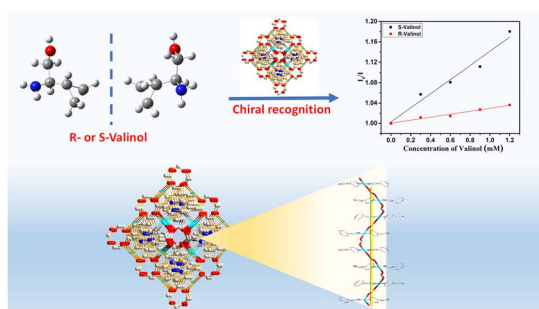
Rational impurity doping for enhanced hole mobility in silicon quantum dots for light-emitting diodes

Hiroyuki Yamada,* Tadaaki Nagao and Naoto Shirahata*



COMMUNICATIONS

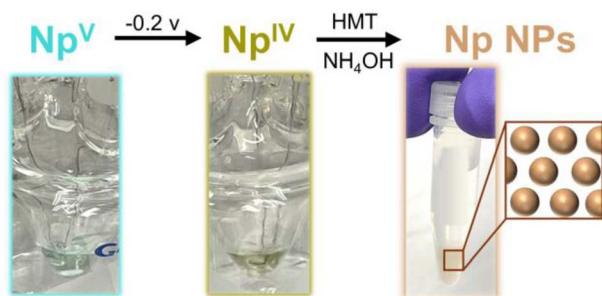
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A metal–organic framework with chiral nanochannels for enantioselective fluorescence switching of amino alcohols

Ritu Ladhi, Arshminster Kaur Dhillon and Monika Singh*

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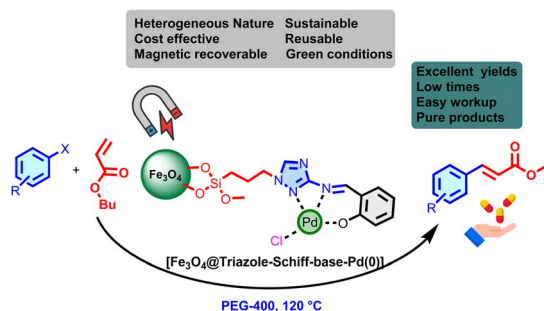


Synthetic engineering of neptunium oxide nanoparticles

Ashley M. Hastings,* Nic Cicchetti, Joseph R. Boro, Tashi Parsons-Davis and Jennifer A. Shusterman

PAPERS

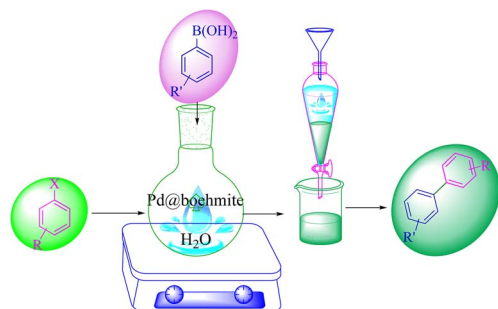
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A nanomagnetic triazole-based Schiff-base complex of palladium(0) as an efficient heterogeneous catalyst for the Mizoroki–Heck C–C cross-coupling reaction under green conditions

Yassin T. H. Mehdar,* Fatimah Mohammed Alshamsan, Asma Ahmad Nashawi, Hussein Eledum, Ahmed Mohajja Alshammari and Jawza A. Almutairi

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A new palladium complex Schiff-base on functionalized nanoboehmite as a reusable and practical catalyst for selective Suzuki C–C bond formation

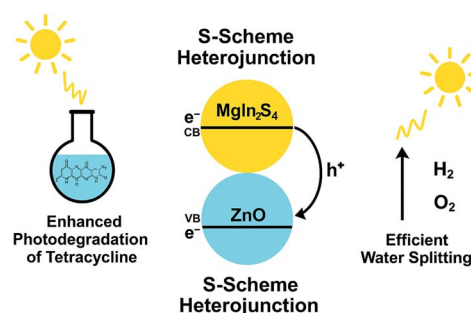
Samaneh Heydarian,* Bahman Tahmasbi and Mitra Darabi



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Interfacial S-scheme charge transfer in $\text{MgIn}_2\text{S}_4/\text{ZnO}$ heterojunction for enhanced photodegradation of tetracycline and efficient water splitting

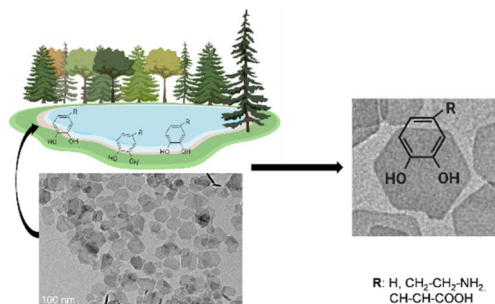
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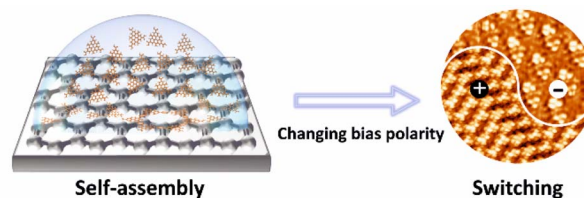
Katja Drobež,* Nina Popov and Darja Lisjak



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Switching of supramolecular nanostructures at the solid–liquid interface: interplay of bias polarity and solution concentration

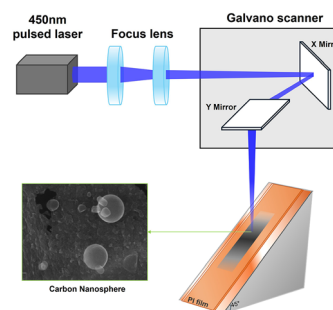
Baoxin Jia, Mihaela Enache, Bettina D. Gliemann, Angelina Jovic, Milan Kivala* and Meike Stöhr*



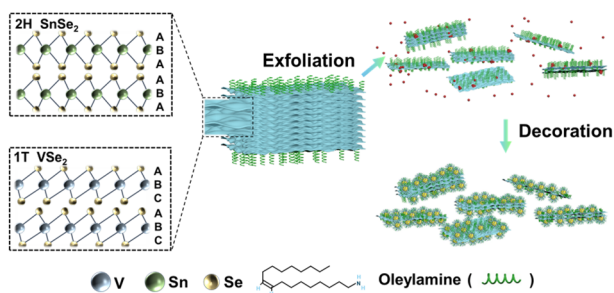
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Experimental and molecular dynamics study of laser-induced carbon nanosphere formation using nanosecond-pulsed lasers

Cheol Hwan Kim, Chae Yoon Shin, Jun Uk Lee, Sung-Yeob Jeong* and Bo Sung Shin*



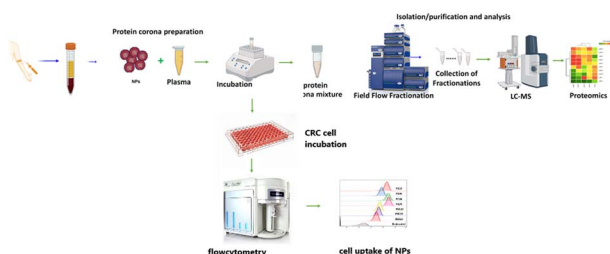
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Synthesis, redox exfoliation, and magnetic nanoparticle decoration of VSe₂ and SnSe₂ nanosheets

Zhengxi Xuan, Zheng Fu, B. Medini Rajapakse, Ali Jawaaid, Shuo Liu, Richard A. Vaia,^{*} Luis Velarde,^{*} Paras N. Prasad^{*} and Mark T. Swihart^{*}

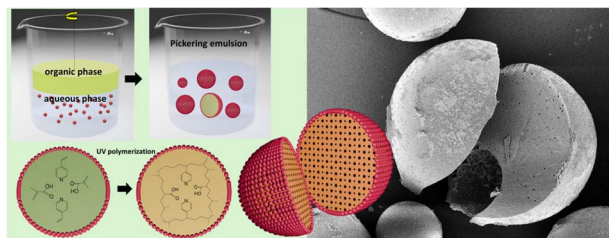
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Protein corona composition modulates uptake of polymeric micelles by colorectal cancer cells

Munira Sirazum, Ahmed Abdelfattah, Prashant Pandey, Aliakbar Ashkarran, Soheyl Tadjiki, Shahriar Sharifi, Hassan Gharibi, Amir Ata Saei, Morteza Mahmoudi^{*} and Afsaneh Lavasanifar^{*}

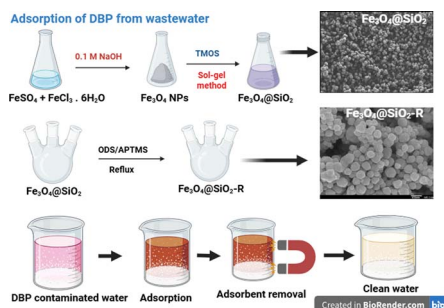
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Optimizing surface properties and particle morphology for metal ion adsorption: precise tuning via Pickering emulsion polymerization

Andrei Honciuc,^{*} Oana-Iuliana Negru and Mirela Honciuc

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Highly efficient removal of dibutyl phthalate from wastewater using a novel hydrophilic–lipophilic magnetic adsorbent based on silica-coated iron oxide nanoparticles

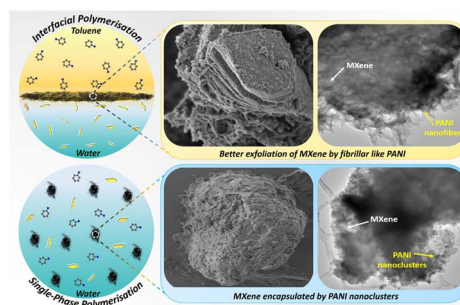
Sarah Alharthi, Tahira Bibi, Eman Y. Santali and Ashraf Ali^{*}



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Liquid/liquid interface assisted *in situ* polymerisation of aniline on $\text{Ti}_3\text{C}_2\text{T}_x$ MXene for electrochemical detection of dopamine

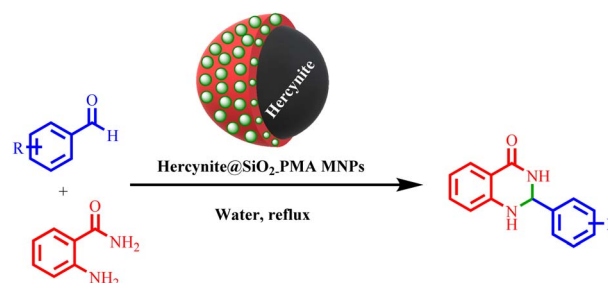
Anjali Sugunan, Aiswarya Anil Syamala, Athul Beena Radhakrishnan and Mini Mol Menamparambath*



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Synthesis of a hercynite supported phosphomolybdic acid magnetic nanocomposite as an efficient catalyst for the synthesis of N-heterocycles

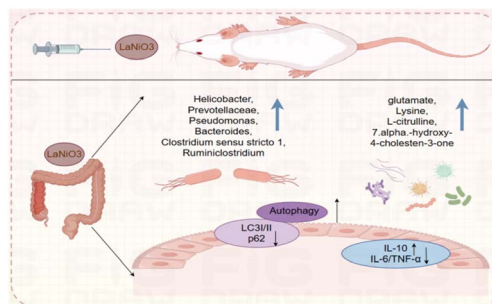
Kowsar Azizi, Saba Ghasemi* and Ahmad Nikseresht*



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Oral exposure to LaNiO_3 regulates the immune system, modulates gut flora, and induces intestinal autophagy in mice

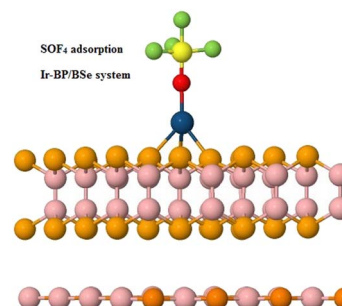
Xiaoying Lin,* Yanfei Zhang, Qingxuan Liu, Di Wu, Lili Zuo, Yuanbao Zhang, Nianqiu Shi* and Rui Chen*



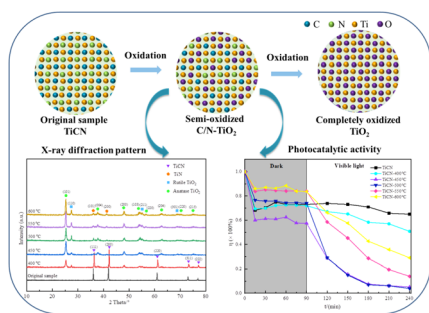
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Iridium (Ir) and osmium (Os) modified BP/BSe heterostructures as promising nanoscale molecule sensors for detection of H_2S , SO_2F_2 and SOF_4 gases: a DFT outlook

Amirali Abbasi*



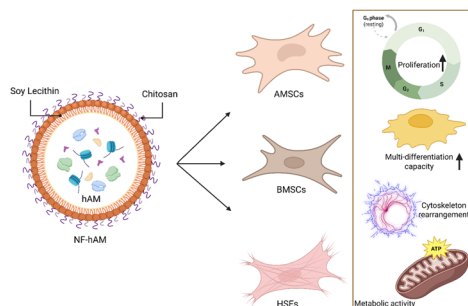
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Oxidation behavior of TiC and TiCN and their potential photocatalytic activity in a semi-oxidized state

Shiyun Tang, Guoqiang Song,* Junjiang Guo, Claudia Li, Kang Hui Lim, Pinli Diao, Wenting Chen, Feiyang Hu, Jaka Sunarso, Hao Tang* and Sibudjing Kawi*

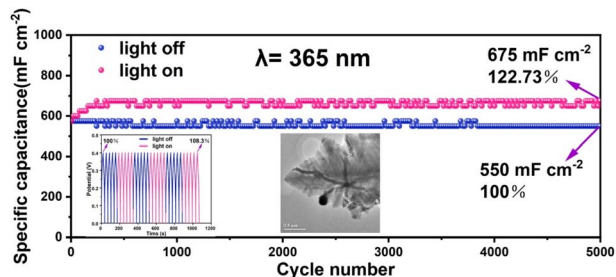
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Amniotic membrane-encapsulated chitosan–lecithin nanoparticles promote the regenerative potential of mesenchymal stromal cells and fibroblasts

Ahmed M. Abou-Shanab, Mostafa Fytoy, Shaimaa Shouman, Dina Atta, Asmaa Khairy, Radwa Ayman Salah, Omaima Idris and Nagwa El-Badri*

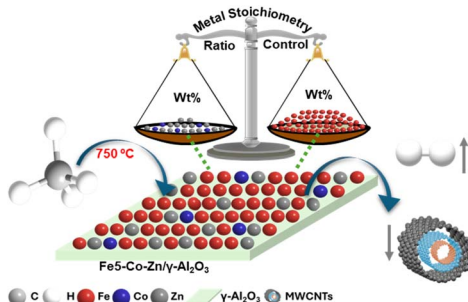
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Designed formation of Cu₂S hierarchical nanostructures as self-supported photoelectrodes for photo-supercapacitors

Ruitong Xu, Muhammad Arif, Guopeng Pan, Lin Xu* and Ting Zhu*

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Boosting turquoise hydrogen and carbon nanotube production via catalytic methane decomposition: influence of active metal ratios in Fe₅–Co–Zn/γ-Al₂O₃ nanocatalysts

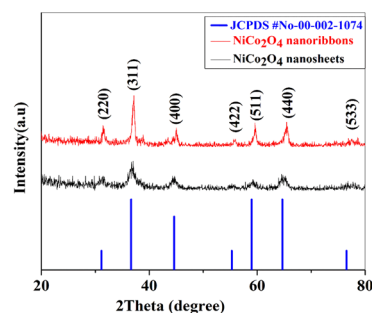
Aakash Rajpoot, Afaq Ahmad Khan and Ejaz Ahmad*



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Enhanced electrocatalytic performance of NiCo₂O₄ nanosheets and nanoribbons for methanol oxidation in alkaline media: morphology-dependent insights

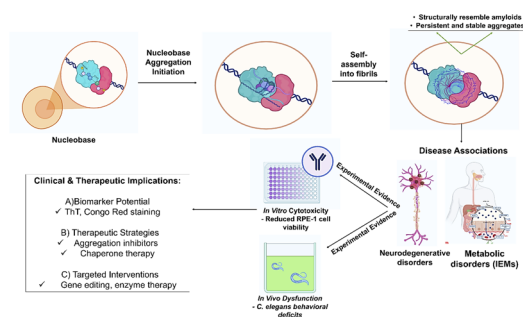
Hagar Ali, Waleed M. A. El Rouby, M. H. Khedr and Mai F. M. Hmamm*



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Nucleobase self-assembly: aggregation, morphological characterization, and toxicity analysis

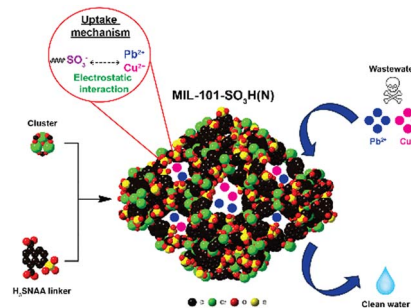
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A new MIL-101-type chromium-based metal-organic framework with densely packed sulfonic groups: an ultra-high uptake of toxic Pb²⁺ and Cu²⁺ ions from an aqueous medium

My V. Nguyen,* Huy K. Duong, Hung N. Nguyen, Loc C. Luu and Thai M. Nguyen



5120

Correction: A nanomagnetic triazole-based Schiff-base complex of palladium(0) as an efficient heterogeneous catalyst for the Mizoroki–Heck C–C cross-coupling reaction under green conditions

Yassin T. H. Mehdar,* Fatimah Mohammed Alshamsan, Asma Ahmad Nashawi, Hussein Eledum, Ahmed Mohajja Alshammari and Jawza A. Almutairi

