

Journal of Materials Chemistry B

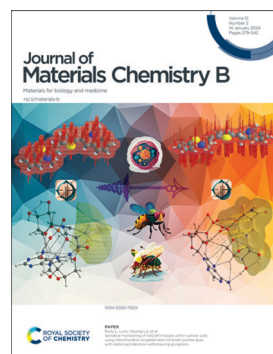
Materials for biology and medicine

rsc.li/materials-b

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

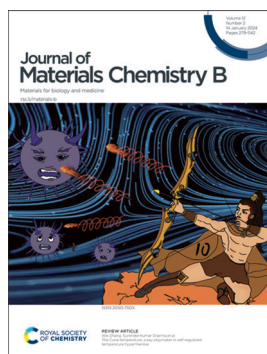
IN THIS ISSUE

ISSN 2050-750X CODEN JMCBDV 12(2) 279–542 (2024)



Cover

See Rudy L. Luck, Haiying Liu *et al.*, pp. 448–465. Image reproduced by permission of Haiying Liu from *J. Mater. Chem. B*, 2024, 12, 448.



Inside cover

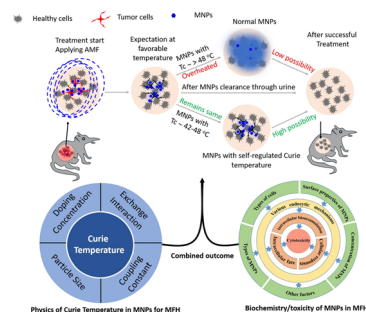
See Wei Zhang, Surender Kumar Sharma *et al.*, pp. 286–331. Image reproduced by permission of Wei Zhang from *J. Mater. Chem. B*, 2024, 12, 286.

REVIEWS

286

The Curie temperature: a key playmaker in self-regulated temperature hyperthermia

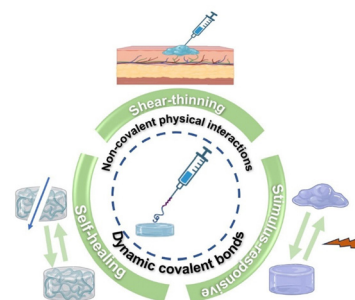
Gopal Niraula, Chengwei Wu, Xiaogang Yu, Sonia Malik, Dalip Singh Verma, Rengpeng Yang, Boxiong Zhao, Shuaiwen Ding, Wei Zhang* and Surender Kumar Sharma*



332

Recent advances in fabricating injectable hydrogels via tunable molecular interactions for bio-applications

Wenshuai Yang, Jingsi Chen, Ziqian Zhao, Meng Wu, Lu Gong, Yimei Sun, Charley Huang, Bin Yan and Hongbo Zeng*



RSC Applied Interfaces

GOLD
OPEN
ACCESS

Interfacial and surface research with an applied focus

Interdisciplinary and open access



rsc.li/RSCApplInter

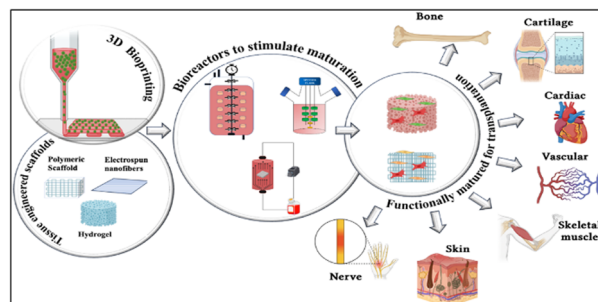
Fundamental questions
Elemental answers

REVIEWS

350

Emerging perspectives on 3D printed bioreactors for clinical translation of engineered and bioprinted tissue constructs

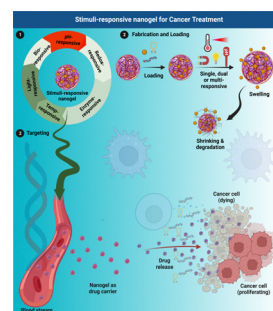
Madhumithra Thangadurai, Sai Sadhananth Srinivasan, Muthu Parkkavi Sekar, Swaminathan Sethuraman and Dhakshinamoorthy Sundaramurthi*



382

Recent advances in stimuli-responsive tailored nanogels for cancer therapy; from bench to personalized treatment

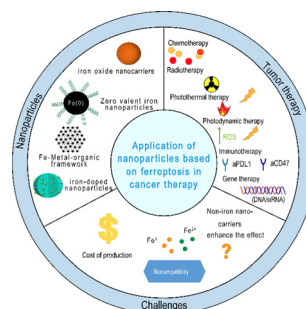
Prinsy Rana, Charan Singh, Ajeet Kaushik,* Shakir Saleem and Arun Kumar*



413

The application of nanoparticles based on ferroptosis in cancer therapy

Yifei Li, Chen Wei, Jianqin Yan, Fashun Li, Bohan Chen, Yong Sun,* Kui Luo, Bin He and Yan Liang*

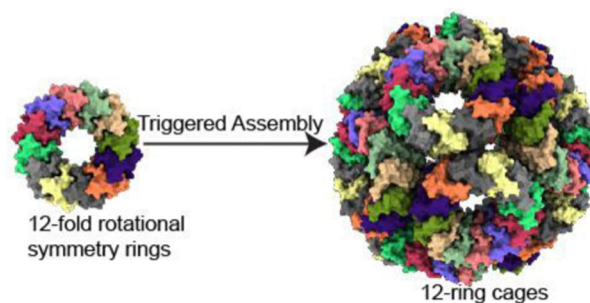


COMMUNICATION

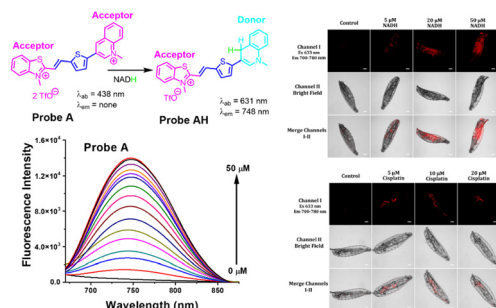
436

An artificial protein cage made from a 12-membered ring

Izabela Stupka, Artur P. Biela,* Bernard Piette, Agnieszka Kowalczyk, Karolina Majsterkiewicz, Kinga Borzęcka-Solarz, Antonina Naskalska and Jonathan G. Heddle*



448



Sensitive monitoring of NAD(P)H levels within cancer cells using mitochondria-targeted near-infrared cyanine dyes with optimized electron-withdrawing acceptors

Dilka Liyana Arachchige, Sushil K. Dwivedi, May Waters, Sophia Jaeger, Joe Peters, Daniel R. Tucker, Micaela Geborkoff, Thomas Werner, Rudy L. Luck,* Bhaskar Godugu and Haiying Liu*

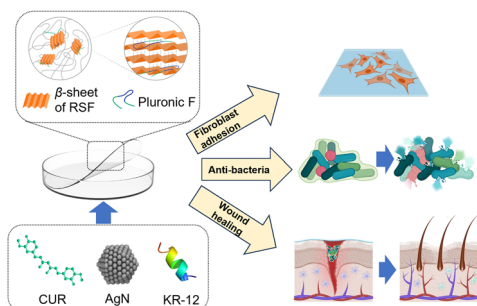
466



Polyarylether-based COFs coordinated by Tb³⁺ for the fluorescent detection of anthrax-biomarker dipicolinic acid

Yinsheng Liu, Mingyue Wang, Yinfei Hui, Lei Sun, Yanrui Hao, Henlong Ren, Hao Guo* and Wu Yang*

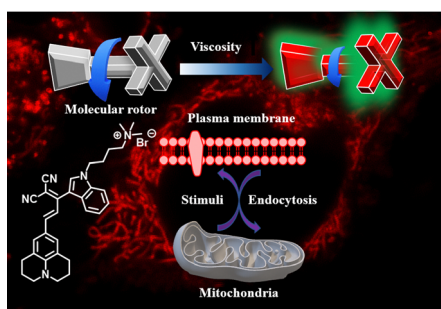
475



Transparent silk fibroin film-facilitated infected-wound healing through antibacterial, improved fibroblast adhesion and immune modulation

Jiamei Zhang, Lingshuang Wang, Cheng Xu, Yingui Cao, Shengsheng Liu, Rui L. Reis, Subhas C. Kundu, Xiao Yang,* Bo Xiao* and Lian Duan*

489



Dual role far red fluorescent molecular rotor for decoding the plasma membrane and mitochondrial viscosity

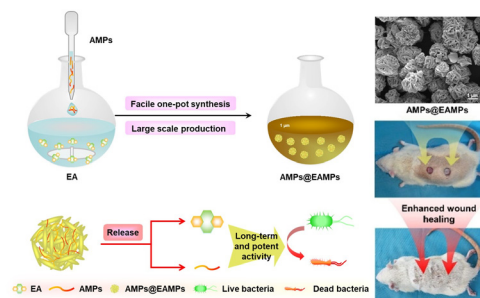
Akshay Silswal, Anup Pramanik and Apurba Lal Koner*



500

Facile one-pot synthesis of flower-like ellagic acid microparticles incorporating anti-microbial peptides for enhanced wound healing

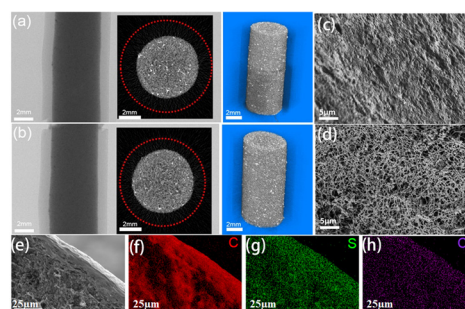
Guo Zhang, Yu Wang, Hua Qiu* and Lei Lu*



508

Glucose microenvironment sensitive degradation of arginine modified calcium sulfate reinforced poly(lactide-co-glycolide) composite scaffolds

Yongzhan Zhu,* Yinghao Li, Xiaosong Zhou, Haoxuan Li,
Min Guo* and Peibiao Zhang*



525

Physicochemical, electrochemical, and biological characterization of field assisted gold nanocluster-coated barium titanate nanoparticles for biomedical applications

Ankur Sood,* Ritu Singhmar, Sumanta Sahoo, Dahae Lee,
Chul Min Kim,* Anuj Kumar* and Sung Soo Han*

