

## IN THIS ISSUE

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### Cover

See Longfei Chen and Saif A. Khan, pp. 689–704.

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### Inside cover

See Manzoor Ahmad Mir, Aijaz A. Dar, Abdul Haseeb Shah *et al.*, pp. 705–715.

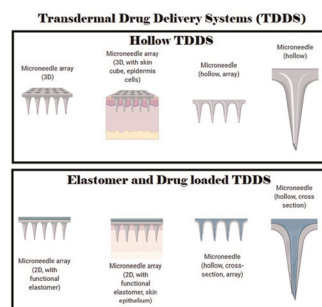
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## REVIEWS

592

### The etiology, pathogenesis, treatment, and development of transdermal drug delivery systems for rheumatoid arthritis

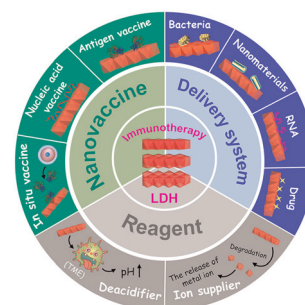
Mirza Muhammad Faran Ashraf Baig,\* Chi Hin Kwan, Hongkai Wu\* and Sek Ying Chair\*



608

### Cancer immunotherapy boosted by layered double hydroxide nanoparticles

Xiaochun Deng, Gaoming Li, Mingwu Shen\* and Xiangyang Shi\*





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## REVIEWS

622

## Approaches to enhance the antimicrobial activity of carbapenems within bacterial biofilms

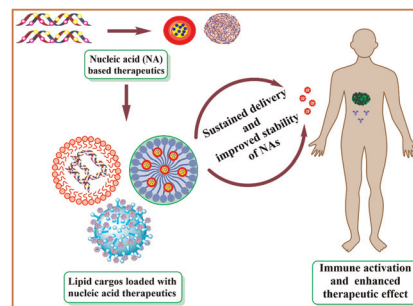
Matthew A. Lamb, Sandra Wiedbrauk and Kathryn E. Fairfull-Smith\*



645

## Recent progress on nanosystems for nucleic acid delivery

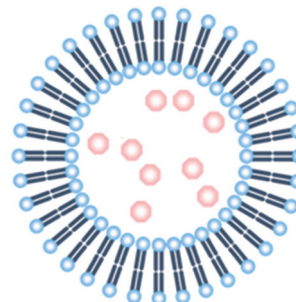
Shanka Walia and Mohit J. Mehta\*



675

## A brief overview of quality by design approach for developing pharmaceutical liposomes as nano-sized parenteral drug delivery systems

Prachi Atre\* and Syed A. A. Rizvi\*

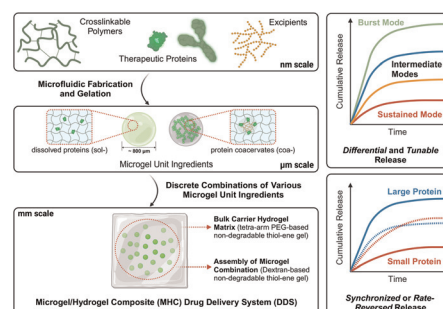


## PAPERS

689

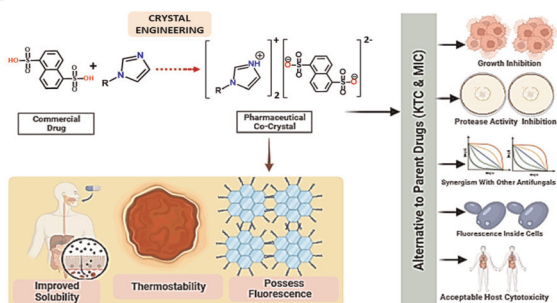
## Programmable protein delivery from microgel/hydrogel composites (MHCs) via discrete combinations of multi-state protein-loaded unit ingredients

Longfei Chen and Saif A. Khan\*



## PAPERS

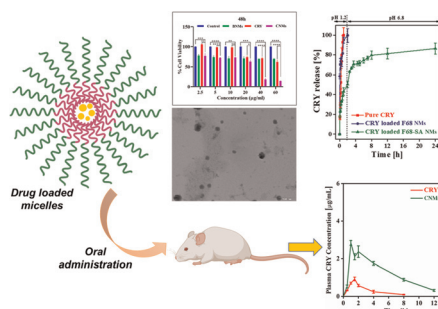
705



### Pharmaceutical salts of azole anti-fungal drugs: physicochemical behaviour and activity studies

Hafsa Qadri, Asif A. Malik, Aadil A. Ahangar, Manzoor Ahmad Mir,\* Ajjaz A. Dar\* and Abdul Haseeb Shah\*

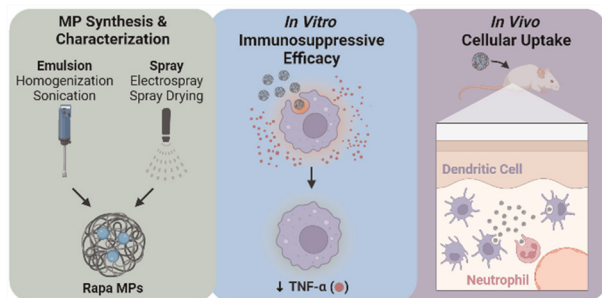
716



### Effect of amorphous chrysin loading in hydrophobically modified Pluronic F68 nanomicelles on its anticancer activity, stability and oral bioavailability

Harihar Narayan, Ashok Kumar Jangid, Jiten R. Sharma, Ankita Kishore, Alok Kumar Mahor, Umesh C. S. Yadav, Hitesh Kulhari\* and Prem Prakash Singh\*

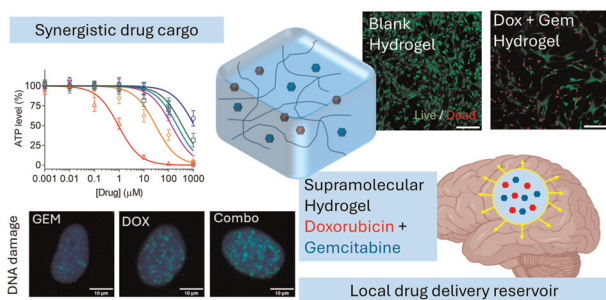
727



### Comparison of emulsion and spray methods for fabrication of rapamycin-loaded acetalated dextran microparticles

Stephen A. Ehrenzeller, Nicole Rose Lukesh, Rebeca T. Stiepel, Denzel D. Middleton, Steven M. Nuzzolo, Aliyah J. Tate, Cole J. Batty, Eric M. Bachelder and Kristy M. Ainslie\*

742



### Supramolecular hydrogels enable co-delivery of chemotherapeutics with synergistic efficacy against patient-derived glioblastoma cells and spheroids

Robert J. Cavanagh,\* Saif Baquain, Cameron Alexander, Oren A. Scherman and Ruman Rahman\*

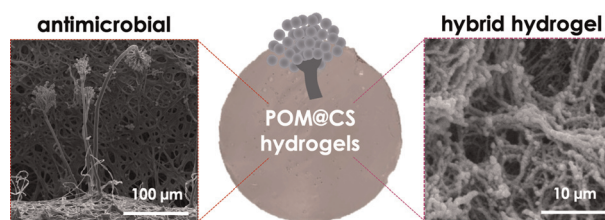


## PAPERS

755

**Acid- and base-resistant antimicrobial hydrogels based on polyoxometalates and chitosan**

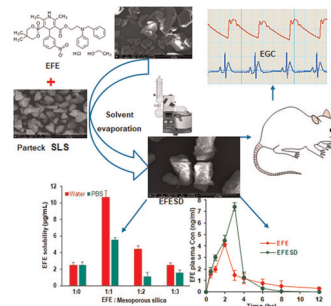
Callum McWilliams, Isabel Franco-Castillo, Andrés Seral Ascaso, Sonia García-Embid, Mariella Malefioudaki, Johann G. Meier, Rafael Martín-Rapún and Scott G. Mitchell\*



765

**Biopharmaceutical advancement of efonidipine hydrochloride ethanolate through amorphous solid dispersion of a Parteck SLC mesoporous silica polymer**

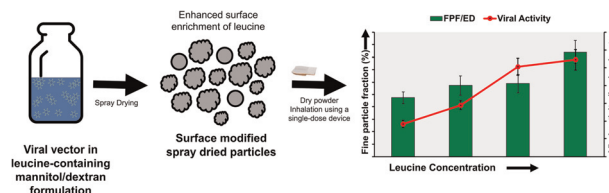
Swati Bharati, Vinod Gaikwad and Bothiraja Chellampillai\*



775

**Effect of leucine as an aerosolization enhancer on the bioactivity of spray dried viral-vectored vaccines for inhalation**

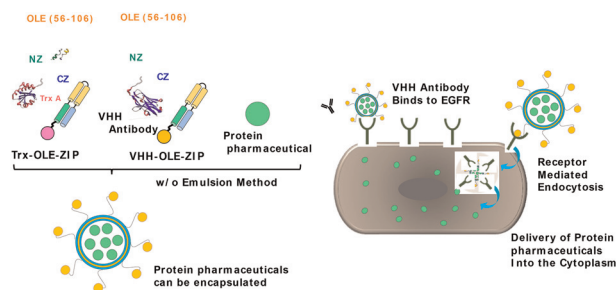
Varsha Singh, Myrna Dolovich, Zhou Xing, Emily D. Cranston and Michael R. Thompson\*



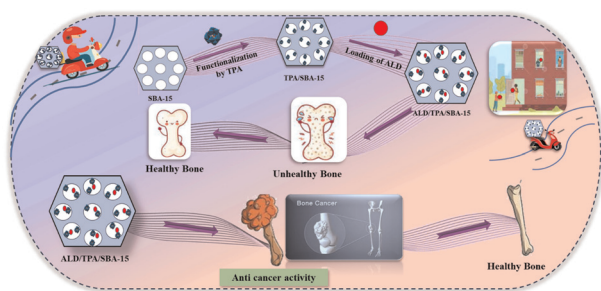
786

**Target-selective cytosolic delivery of cargo proteins using the VHH-presented OLE-ZIP capsules**

Kousuke Takahashi, Yasumichi Inoue, Shigeaki Hida, Ryuki Hosoda, Naoki Umezawa, Isamu Akiba, Mitsuo Umetsu and Toshihisa Mizuno\*



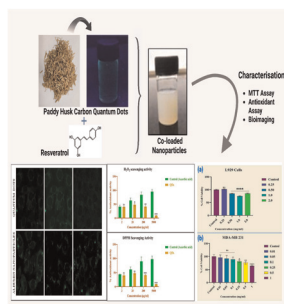
797



## Functionalized SBA-15: engineering, detailed study on release and kinetics of alendronate as well as its anti-tumour properties towards osteosarcoma

Anjali Patel\* and Shivangi Mehta

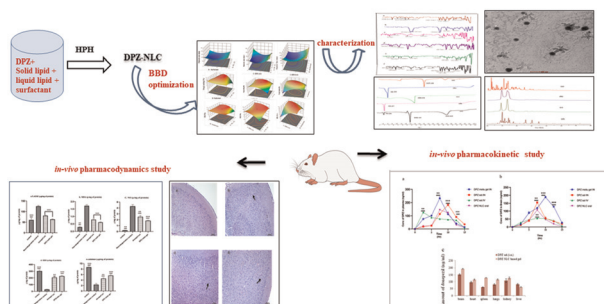
806



## Dual-purpose resveratrol-quantum dots loaded albumin nanoparticles

Deepankar Yadav, Priyanka Chaudhary, Priya Singh, Monu Gupta and Shubhini A. Saraf\*

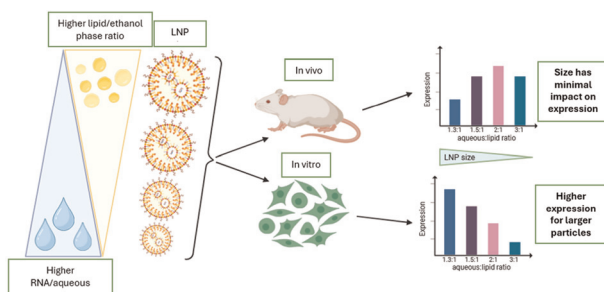
820



## Nose to brain targeting of the donepezil nanostructured lipid carrier *in situ* gel: formulation, *in vitro*, *ex vivo*, *in vivo* pharmacokinetic and pharmacodynamic characterization

Devika Sonawane and Varsha Pokharkar\*

841



## Tailoring lipid nanoparticle dimensions through manufacturing processes

Caitlin McMillan, Amy Druschitz, Stephen Rumbelow, Ankita Borah, Burcu Binici, Zahra Rattray and Yvonne Perrie\*



## CORRECTION

854

**Correction: Pharmaceutical salts of azole anti-fungal drugs: physicochemical behaviour and activity studies**

Hafsa Qadri, Asif A. Malik, Aadil A. Ahangar, Manzoor Ahmad Mir,\* Aijaz A. Dar\* and Abdul Haseeb Shah\*

