

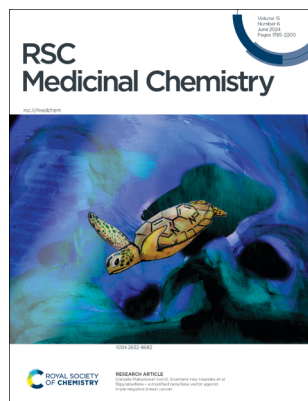
RSC Medicinal Chemistry

rsc.li/medchem

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 2632-8682 CODEN RMCSCX 15(6) 1785-2200 (2024)



Cover

See Danijela Maksimović-Ivanić, Evamarie Hey-Hawkins *et al.*, pp. 1921-1928. Image created by and reproduced by permission of Christoph Selg from *RSC Med. Chem.*, 2024, 15, 1921.

EDITORIAL

1796

Introduction to the themed collection on 'Targeting RNA with small molecules'

Ruth Brenk, Peng Wu and Maria Duca*

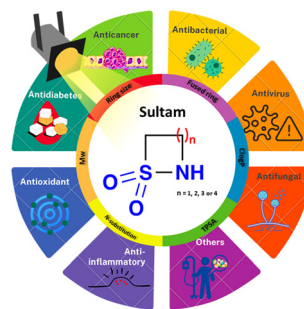


REVIEWS

1798

Unveiling sultam in drug discovery: spotlight on the underexplored scaffold

Yie Kie Chong, Yee Swen Ong and Keng Yoon Yeong*





NEW
JOURNAL

RSC Sustainability

GOLD
OPEN
ACCESS

**Dedicated to sustainable
chemistry and new solutions**

For an open, green and inclusive future

rsc.li/RSCSus

**Fundamental questions
Elemental answers**

Registered charity number: 207890

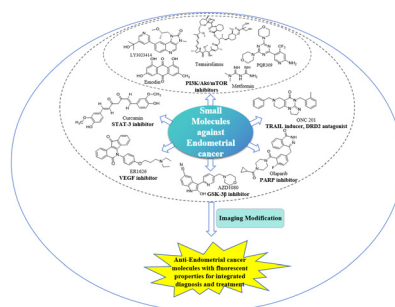


REVIEWS

1828

Small molecule targeted therapies for endometrial cancer: progress, challenges, and opportunities

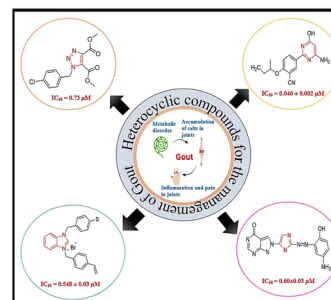
Fei-Fei Yang, Tian-Tian Zhao, Slieman Milaneh, Chun Zhang, Da-Jun Xiang* and Wen-Long Wang*



1849

Heterocyclic compounds as xanthine oxidase inhibitors for the management of hyperuricemia: synthetic strategies, structure–activity relationship and molecular docking studies (2018–2024)

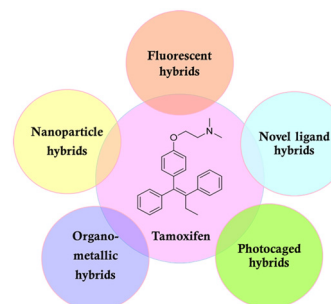
Arshdeep Singh, Rabin Debnath, Viney Chawla and Pooja A. Chawla*



1877

Potential of covalently linked tamoxifen hybrids for cancer treatment: recent update

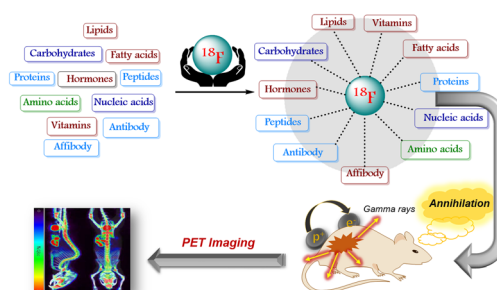
Shagufta,* Irshad Ahmad, Donna J. Nelson, Maheen Imtiaz Hussain and Noora Ali Nasar



1899

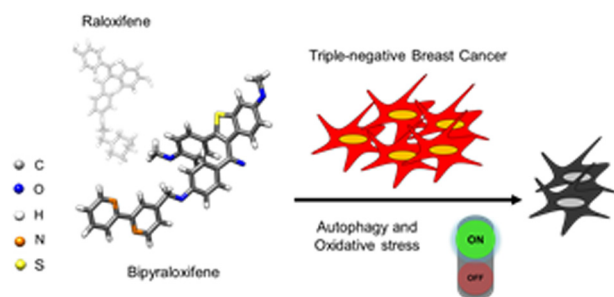
Synthetic ^{18}F labeled biomolecules that are selective and promising for PET imaging: major advances and applications

Manisha Lamba, Prasoon Raj Singh, Anupam Bandyopadhyay* and Avijit Goswami*



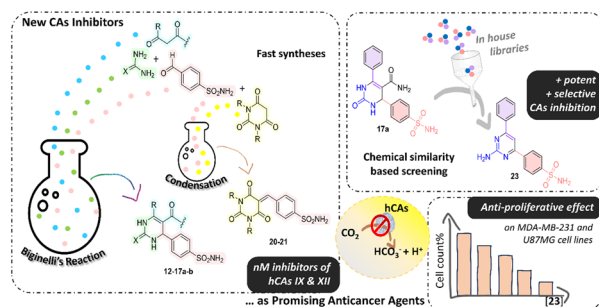
RESEARCH ARTICLES

1921

**Bipyraloxifene – a modified raloxifene vector against triple-negative breast cancer**

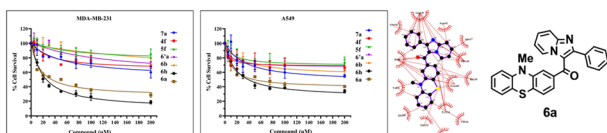
Aleksandr Kazimir, Tom Götze, Blagoje Murganić, Sanja Mijatović, Danijela Maksimović-Ivanic* and Evamarie Hey-Hawkins*

1929

**Benzenesulfonamide decorated dihydropyrimidin(thi)ones: carbonic anhydrase profiling and antiproliferative activity**

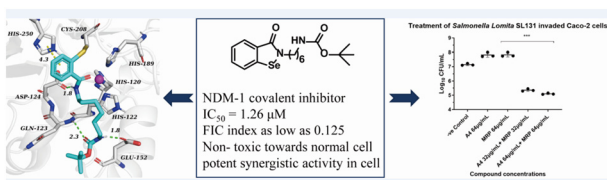
Hakan Aslan,* Gioele Renzi, Andrea Angeli, Ilaria D'Agostino,* Roberto Ronca, Maria Luisa Massardi, Camilla Tavani, Simone Carradori, Marta Ferraroni, Paolo Governa, Fabrizio Manetti, Fabrizio Carta* and Claudiu T. Supuran

1942

**Design, synthesis, molecular docking and anti-proliferative activity of novel phenothiazine containing imidazo[1,2-a]pyridine derivatives against MARK4 protein**

Avijit Bhakta, Sayeed Mukhtar, Saleha Anwar, Shaista Haider, Mohammed Issa Alahmdi, Humaira Parveen, Meshari A. Alsharif, Mohmmad Younus Wani, Anindita Chakrabarty, Md. Imtaiyaz Hassan and Naseem Ahmed*

1959

**Design, synthesis and antibacterial activity evaluation of ebselen derivatives in NDM-1 producing bacteria**

Wanli Meng, Chenyu Liu, Guangxin Wu, Zhongyue Bai, Zhihao Wang, Sheng Chen, Shengbiao Wan* and Wandong Liu*

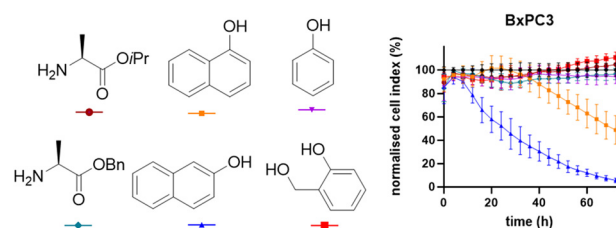


RESEARCH ARTICLES

1973

Cytotoxicity of phosphoramidate, bis-amidate and cycloSal prodrug metabolites against tumour and normal cells

Rebecca E. Farrell, Harrison Steele, Ryan J. Middleton, Danielle Skropeta* and Guo-Jun Liu*

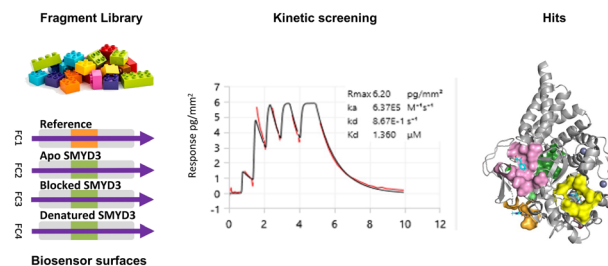


Prodrug metabolite toxicity evaluation

1982

Identification of fragments targeting SMYD3 using highly sensitive kinetic and multiplexed biosensor-based screening

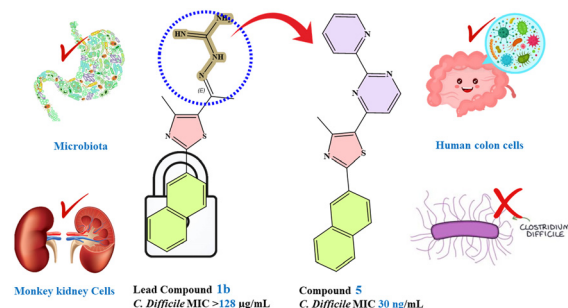
Edward A. FitzGerald, Daniela Cederfelt, Bjarte Aarmo Lund, Nadine E. M. Myers, He Zhang, Doreen Dobritzsch and U. Helena Danielson*



1991

Phenylthiazoles with potent & optimum selectivity toward *Clostridium difficile*

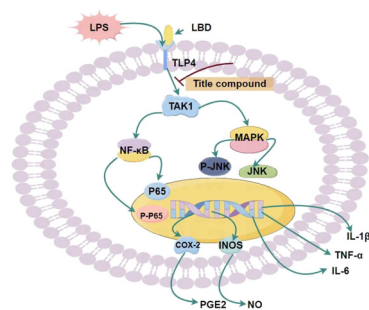
Mahmoud M. Seif El-Din, Mohamed Hagrass* and Abdelrahman S. Mayhoub*



2002

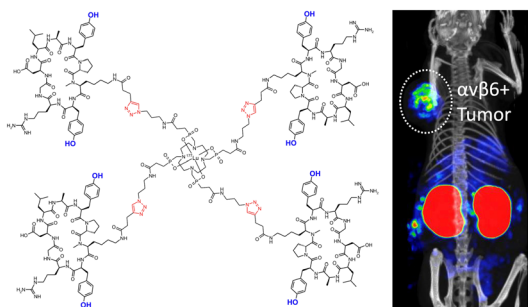
Identification of chalcone analogues as anti-inflammatory agents through the regulation of NF- κ B and JNK activation

Die Zhang, Wenping Wang, Huiping Ou, Jinhua Ning, Yingxun Zhou, Jin Ke, Anguo Hou, Linyun Chen, Peng Li,* Yunshu Ma* and Wen Bin Jin*



RESEARCH ARTICLES

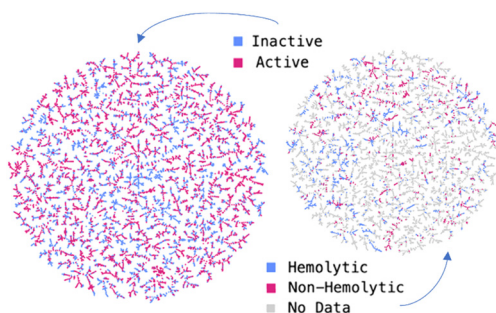
2018



The importance of tyrosines in multimers of cyclic RGD nonapeptides: towards $\alpha_5\beta_1$ -integrin targeted radiotherapeutics

Neil Gerard Quigley, Maximilian Alexander Zierke, Beatrice Stefanie Ludwig, Frauke Richter, Nghia Trong Nguyen, Falco Reissig, Jakub Šimeček, Susanne Kossatz* and Johannes Notni*

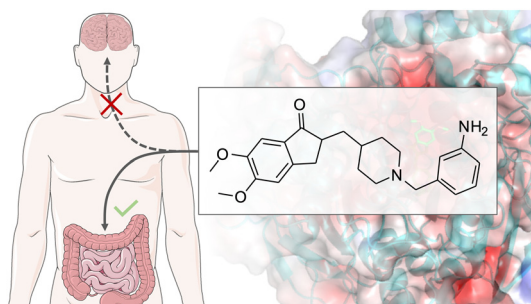
2030



Can large language models predict antimicrobial peptide activity and toxicity?

Markus Orsi and Jean-Louis Reymond*

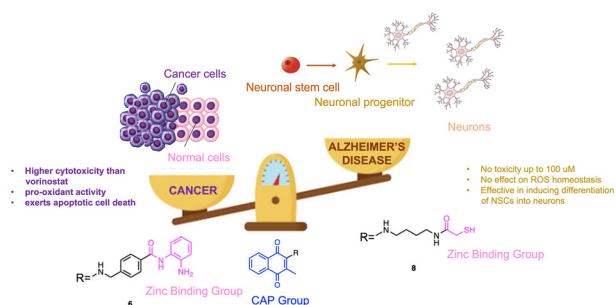
2037



Amine-containing donepezil analogues as potent acetylcholinesterase inhibitors with increased polarity

Jonas Kaltbeitzel, Christian Kersten and Peter R. Wich*

2045



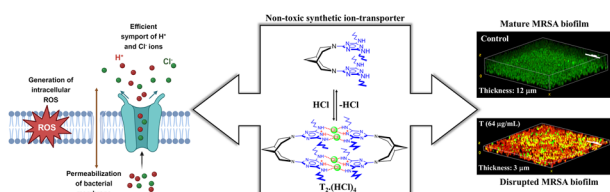
Integrating a quinone substructure into histone deacetylase inhibitors to cope with Alzheimer's disease and cancer

Melissa Guardigni, Giulia Greco, Eleonora Poeta, Alan Santini, Elisa Tassinari, Christian Bergamini, Chiara Zalambani, Angela De Simone, Vincenza Andrisano, Elisa Uliassi, Barbara Monti, Maria Laura Bolognesi,* Carmela Fimognari and Andrea Milelli*



RESEARCH ARTICLES

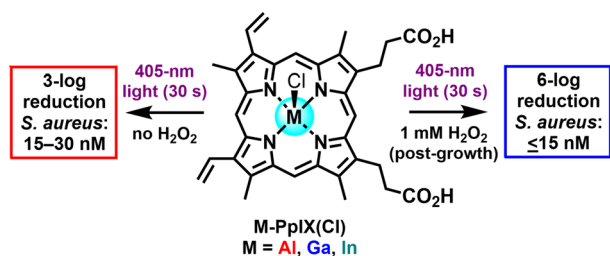
2127



Unveiling the potent activity of a synthetic ion transporter against multidrug-resistant Gram-positive bacteria and biofilms

Sudip Mukherjee, Sopan Valiba Shinde, Pinaki Talukdar and Jayanta Haldar*

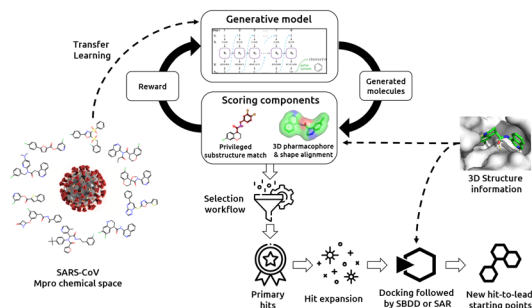
2138



Photodynamic treatment of *Staphylococcus aureus* with non-iron hemin analogs in the presence of hydrogen peroxide

Badhu Prashanthika Sivasubramaniam, Benjamin M. Washer, Yuichiro Watanabe, Kathryn E. Ragheb, J. Paul Robinson and Alexander Wei*

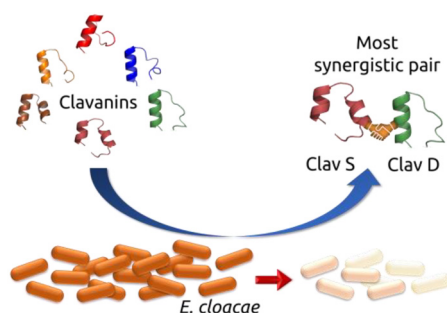
2146



Identification of SARS-CoV-2 Mpro inhibitors through deep reinforcement learning for de novo drug design and computational chemistry approaches

Julien Hazemann, Thierry Kimmerlin, Roland Lange, Aengus Mac Sweeney, Geoffroy Bourquin, Daniel Ritz and Paul Czodrowski*

2160



Synergy between the clavanins as a weapon against multidrug-resistant *Enterobacter cloacae*

Marvin D. Naing, Samuel A. Juliano and Alfredo M. Angeles-Boza*

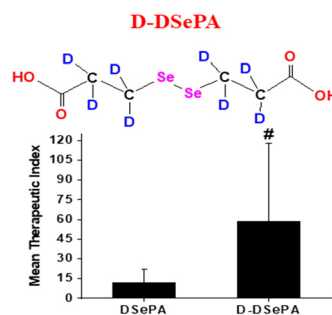


RESEARCH ARTICLES

2165

Deuterium labeling improves the therapeutic index of 3,3'-diselenodipropionic acid as an anticancer agent: insights from redox reactions

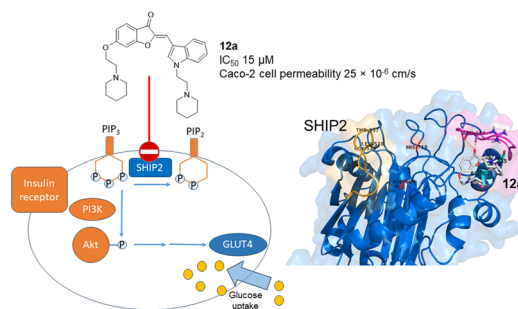
V. V. Gandhi, M. K. Pal, B. G. Singh, R. P. Das, A. P. Wadawale, S. Dey* and A. Kunwar*



2179

Discovery of aurones bearing two amine functionalities as SHIP2 inhibitors with insulin-sensitizing effect in rat myotubes

Phei Ching Lim, Beow Keat Yap, Yi Juin Tay, Nur Aziah Hanapi, Siti Rafidah Yusof and Chong-Yew Lee*



CORRECTION

2196

Correction: Highly potent and selective phosphatidylinositol 4-kinase III β inhibitors as broad-spectrum anti-rhinoviral agents

Avinash G. Vishakantegowda, Dasom Hwang, Prashant Chakrasali, Eunhye Jung, Joo-Youn Lee, Jin Soo Shin* and Young-Sik Jung*

