



A CSIR Publication

Indian Journal of Biochemistry and Biophysics

19/11/2024
CB

47

<https://niscpr.res.in>CSIR-National Institute of Science Communication And
Policy Research

New Delhi, INDIA

Indian Journal of Biochemistry & Biophysics

<http://www.niscpr.res.in>; <http://nopr.niscpr.res.in>

VOLUME 61

NUMBER 11

NOVEMBER 2024

CODEN: IJBBBQ 61 (11) 635-758 (2024)

ISSN: 0301-1208 (Print); 0975-0959 (Online)

CONTENTS

Papers

- Deciphering the therapeutic potential of bergenin in breast cancer: *In silico* insights into HSP90AA1 and HRAS interaction mediated inhibition of PI3K-Akt and MAPK signaling pathway 639
Priyesh Kumar, Khairah Ansari & Devendrasinh Jhala*
- Evaluating the anti-cancer activity of myricetin in the management of oral cancer using *in silico* analysis 659
Shruti Sinnarkar, Gauri M Kumbhar, Ladke Vaibhav S*, Jitendra Bhawalkar & Janhavi Mahajan
- Repurposing drugs as uS12 ribosomal protein inhibitors to overcome UTI resistance in MDR *Pseudomonas* strains: *In silico* and *in vitro* study 672
Pooja Sharma, Abhay Dev Tripathi, Aakanksha Kalra & Bharti Chouhan*
- Computational screening, docking and simulation analysis of phytochemicals from *Senna auriculata* against multiple targets of *Mycobacterium tuberculosis* 688
Neeraja Karamarathodi, Shreya Manjusha Binukumar, Subhankar Das, Sadhana Sundararajan, Keerthana Karunakaran & Rajiniraja Muniyan*
- Evaluation of phenotypic characters and total phenol content in T1 putative transgenic yellow cosmos (*Cosmos sulphureus* Cav.) with *SoSPS1* transgene 704
Aziz Purwantoro*, Tantri Swandari, Dyah Weny Respatie, Widhi Dyah Sawitri & Rudi Hari Murti
- In silico* analysis and expression profiling for Resistance Gene Analogues (RGAs) and defence-related genes in early germinating conditions of rice against bakanae disease caused by *Fusarium fujikuroi* 714
Swagata Thakur, Syed Sharmeen Ekbal, Shashi Pandey, Sapna Sharma, Gopala Krishnan S, Mahendra Singh Saharan & Bishnu Maya Bashyal*
- Trace elements as potential biomarkers for oral squamous cell carcinoma 731
Samata Gadde*, Maruthi Kumar Upadhyayula, Boggula Vamsi Krishna & S Poda

Molecular docking and dynamics analysis to reveal the therapeutic potential of Dostarlimab against novel immune targets in liver cancer 740

Swetha Pulakuntla, Shri Abhiav Singh, Gouthami Kuruvalli, Althaf Hussain Shaik & Vaddi Damodara Reddy*

Instructions to Authors 756

*Author for correspondence

Author Index

| | | | | | |
|--------------|-----|-----------------|-----|----------------|-----|
| Ansari K | 639 | Karamarathodi N | 688 | Reddy VD | 740 |
| Bashyal BM | 714 | Karunakaran K | 688 | Respatie DW | 704 |
| Bhawalkar J | 659 | Krishna BV | 731 | Saharan MS | 714 |
| Binukumar SM | 688 | Krishnan S | 714 | Sawitri WD | 704 |
| Chouhan B | 672 | Kumar MK | 731 | Shaik AH | 740 |
| Das S | 688 | Kumar P | 639 | Sharma P | 672 |
| Ekbal SS | 714 | Kumbhar GM | 659 | Sharma S | 714 |
| Gadde S | 731 | Kuruvalli G | 740 | Singh SA | 740 |
| Jhala D | 639 | Mahajan J | 659 | Sinnarkar S | 659 |
| Kalra A | 672 | Muniyan R | 688 | Sundararajan S | 688 |
| | | Murti RH | 704 | Swandari T | 704 |
| | | Pandey S | 714 | Thakur S | 714 |
| | | Poda S | 731 | Tripathi AD | 672 |
| | | Pulakuntla S | 740 | Vaibhav SL | 659 |
| | | Purwantoro A | 704 | | |

Keyword Index

| | | | | | |
|------------------------------|-----|-----------------------------------|---------------|----------------------------|-----|
| Bakanae | 714 | <i>In silico</i> pharmacokinetics | 672 | Overexpression | 704 |
| Bioherbicide | 704 | Iron | 731 | Peltophorum pterocarpum | 639 |
| Breast cancer | 639 | Lupeol | 688 | Phycocyanin inhibition | 672 |
| Copper | 731 | Magnesium | 731 | PI3K-Akt signaling pathway | 659 |
| Defence-related genes | 714 | MDR strains | 672 | Protein-drug interaction | 672 |
| Exhaustive docking | 688 | Molecular docking | 639, 659, 740 | Qpcr | 714 |
| Floral dip | 704 | Molecular dynamics simulation | 639 | RGAs | 714 |
| <i>Fusarium fujikuroi</i> | 714 | Molecular simulations | 740 | Rhamnolipid production | 672 |
| Hepatocellular carcinoma | 740 | Multiple target approach | 688 | Rice | 714 |
| Immune checkpoint inhibitors | 740 | Myricetin | 659 | Secondary metabolite | 704 |
| Immune targets | 740 | Network pharmacology | 639 | Serum levels | 731 |
| Immune therapy | 740 | Oral cancer | 659 | Simiarenol | 688 |
| <i>In silico</i> analysis | 659 | Oral squamous cell carcinoma | 731 | Stigmasterol | 688 |
| | | | | Sugar accumulation | 704 |
| | | | | Zinc | 731 |