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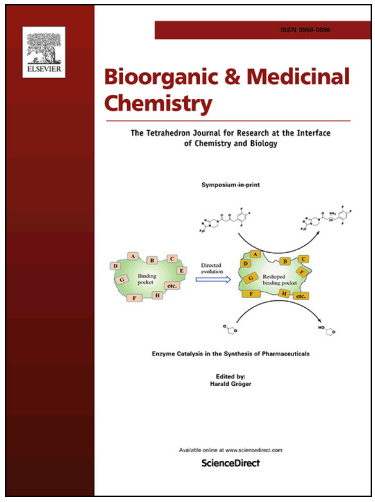

Green synthesis, biological evaluation, molecular docking studies and 3D-QSAR analysis of novel phenylalanine linked quinazoline-4(3*H*)-one-sulphonamide hybrid entities distorting the malarial reductase activity in folate pathway

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Highlights

- Synthesis of quinazolin-4(3*H*)-one as predominantly *E*-stereoisomer from amino acid
- Phenylalanine linked quinazolinones were synthesized using [Bmim][BF_4]-H_2O as media
- *In vitro* Antimalarial screening of quinazolinones and their DHFR inhibitory potency
- 3D-QSAR and *In silico* study of targets quinazolinone entities for lead optimization
- Molecular docking of potent 4(3*H*)-quinazolinones at the binding site of DHFR enzyme