
References

Abdel-Wahab B F, Abdel-Aziz H A, Ahmed E M. Synthesis and antimicrobial evaluation of 1-(benzofuran-2-yl)-4-nitro-3-arylbutan-1-ones and 3-(benzofuran-2-yl)-4,5-dihydro-5-aryl-1-[4-(aryl)-1,3-thiazol-2-yl]-1H-pyrazoles. *Eur J Med Chem.*, 44(6): 2632-5, 2009.

Akhtar F, Rizvi M M A, Kar S K. Oral delivery of curcumin bound to chitosan nanoparticles cured *Plasmodium yoelii* infected mice. *Biotechnol. Adv.*, 30: 310–320, 2010.

Anderson AM, Mitchell MS and Mohan RS, Isolation of curcumin from turmeric, *J Chem Educ.*, 77, 359-360, 2000.

Bentzen P J, Lang E, Lang F. Curcumin Induced Suicidal Erythrocyte Death. *Cell. Physiol. Biochem.*, 19: 153-164, 2007.

Bhandarkar SS and Arbiser JL, Curcumin as an inhibitor of angiogenesis., *Adv Exp Med Biol.*, 595, 185-195, 2007.

Bharti, S. K, Patel, S. K.; Nath, G. Tilak, R., Singh, S. K. Synthesis, charecterisation and DNA cleavageand *in vitro* antimicrobial activities of some novel cu(II) complexes of schiffs bases containing 2,4 disubstitued thiazole *Transit. Metal Chem.*, 35, 917-925, 2010.

Bhawana, Basniwal R K, Buttar H S, Jain V K, Jain N. Curcumin Nanoparticles: Preparation, Characterization, and Antimicrobial Study. *J Agric Food Chem.*, 59(5): 2056-2061, 2011.

Binkowski, T. A.; Naghibzadeh, S.; Liang, J. CASTp: Computed Atlas of Surface Topography of proteins. *Nucleic Acids Res.*, 31(13), 3352-3355, 2003.

Bondock S, Khalifa W, Fadda A A. Synthesis and antimicrobial activity of some new 4-hetarylpyrazole and furo[2,3-c]pyrazole derivatives. *Eur J Med Chem.*, 46(6): 2555-2561, 2011.

Bonnefous, C.; Payne, J. E.; Roppe, J.; Zhuang, H.; Chen, X.; Symons, K. T.; Nguyen, P.M.; Sablad, M.; Rozenkrants, N.; Zhang, Y.; Wang, L.; Severance, D.;

Boschi D, Guglielmo S, Aiello S, Morace G, Borghi E, Fruttero R. Synthesis and *in vitro* antimicrobial activities of new (cyano-NNO-azoxy) pyrazole derivatives. *Bioorg Med Chem Lett.*, 21(11): 3431-3434, 2011.

- Bradbury B J, Pucci M J. Recent advances in bacterial topoisomerase inhibitors. *Curr Opin Pharmacol.*, 8(5): 574-581, 2008.
- Buchini, S.; Buschiazzo, A.; Withers, S. G. Angew. Chem., A new generation of specific Trypanosoma cruzi trans-sialidase inhibitors. *Int. Ed. Engl.* 47, 2700-2703, 2008.
- Bugaev A, Golikov A, Krivenko A. Chem. Synthesis of Substituted Hexahydroindazoles *Heterocycl. Compd.*, 41: 831-834, 2005.
- Chandrakantha B, Isloor A M, Shetty P, Isloor S, Malladi S, Fun H K. Synthesis, characterization and antimicrobial activity of novel ethyl 1-(N-substituted)-5-phenyl-1H-pyrazole-4-carboxylate derivatives. *Med Chem Res* 2011;doi:10.1007/s00044-011-9796-9
- Chattopadhyay I, Biswas K, Bandyopadhyay U, Banerjee R K. Turmeric and curcumin: Biological actions and medicinal applications. *Curr Sci.*; 87(1): 44-53, 2004.
- Claramunt R M, Bouissane L, Cabildo M P, Cornago M P, Elguero J, Radziwon A, Medina C., Synthesis and biological evaluation of curcuminoid pyrazoles as new therapeutic agents in inflammatory bowel disease: Effect on matrix metalloproteinases. *Bioorganic & Medicinal Chemistry.*, 17(3): 1290-1296, 2009.
- Clark, D E, In silico prediction of blood-brain barrier permeation. *Drug Discovery Today*, 8, 927-933, 2003.
- CS Chemoffice version 6.0 Cambridge soft. Corporation software publishers association 1730 Street NW, suite700 Washington, DC 2036.
- Cui L, Miao J, Cui L. Cytotoxic Effect of Curcumin on Malaria Parasite *Plasmodium falciparum*: Inhibition of Histone Acetylation and Generation of Reactive Oxygen Species. *Antimicrob. Agents Chemother.*, 51: 488-494, 2007.
- Dahl T A, McGowan W M, Shand M A, Srinivasan V S. Photokilling of bacteria by the natural dye curcumin. *Arch Microbiol.*, 151(2): 183-185, 1989.
- Dandekar P P, Jain R, Patil S, Dhupal R, Tiwari D, Sharma S, Vanage G, Patravale V. Curcumin-loaded hydrogel nanoparticles: Application in anti-malarial therapy and toxicological evaluation. *J. Pharm. Sci.*, 99: 4992-5010, 2010.

- Dattani J J, Rajput D K, Moid N, Highland H N, George L B, Desai K R. Ameliorative effect of curcumin on hepatotoxicity induced by chloroquine phosphate. *Environ. Toxicol. Pharmacol.*, 30: 103-109, 2010.
- David A, Fidock P, Rosenthal J, Simon L, Croft RB and Solomon N W, Antimalarial drug discovery: efficacy models for compound screening, *Nature Reviews Drug Discovery.*, 3, 509-520, 2004.
- De R, Kundu P, Swarnakar S, Ramamurthy T, Chowdhury A, Nair G B, Mukhopadhyay A K. Antimicrobial activity of curcumin against *Helicobacter pylori* isolates from India and during infections in mice. *Antimicrob Agents Chemother.*, 53(4): 1592-1597, 2009.
- Di Mario F, Cavallaro L G, Nouvenne A, Stefani N, cavestro G M, Iori V, Maino M, Comparato G, Fanigliulo L, Morana E, Pilotto A, Martelli L, Martelli M, Leandro G, Franze A. A curcumin-based 1-week triple therapy for eradication of *Helicobacter pylori* infection: something to learn from failure? *Helicobacter.*, 12(3): 238-43, 2007.
- Didziapetris, R.; Japertas, P.; Avdeef, A.; Petrauskas, A. J. Classification analysis of P-glycoprotein substrate specificity. *Drug Target* , 11, 391-406, 2003.
- Foller M, Bobbala D, Koka S, Huber S M, Gulbins E, Lang F. Suicide for survival - death of infected erythrocytes as a host mechanism to survive malaria. *Cell. Physiol. Biochem.*, 24: 133-140, 2009.
- Gadakh A V, Pandit C, Rindhe S S, Karale B K. Synthesis and antimicrobial activity of novel fluorine containing 4-(substituted-2-hydroxybenzoyl)-1H-pyrazoles and pyrazolyl benzo[d]oxazoles. *Bioorg Med Chem Lett.*, 20(18): 5572-5576, 2010.
- Gasteiger, J., Marsili, M. Iterative partial equalization of orbital electronegativity - a rapid access to atomic charges. *Tetrahedron.*,36(22), 3219-3228, 1980.
- Gentry, C. L., Egleton, R. D., Gillespie, T., Abbruscato, T. J., Bechowski, H. B., Hruby, V. J., Davis, T. P. The effect of halogenation on blood-brain barrier permeability of a novel peptide drug. *Peptides*, 20(10), 1229-1238, 1999.
- Ghose, A. K., Crippen, G. M. Atomic physicochemical parameters for three-dimensional-structure-directed quantitative structure-activity relationships. 2. Modeling dispersive and hydrophobic interactions. *J. Chem. Inf. Comput. Sci.*, 1987, 27(1), 21-35.

Girija CR, Karunakar P, Poojari CS, Begum NS and Syed A, A Molecular Docking Studies of Curcumin Derivatives with multiple Protein targets for Procarcinogen activating enzyme inhibition, *J Proteomics Bioinform.*, 3, 200-203, 2010.

Goel A, Boland CR and Chauhan DP, Specific inhibition of cyclooxygenase-2 (COX-2) expression by dietary curcumin in HT-29 human colon cancer cells, *Cancer Lett.*, 172, 111-118, 2001.

Gokhan-Kelekci N, Simsek O O, Ercan A, Yelekci K, Sahin Z S, Isik S, Ucar G, Bilgin A A. Synthesis and molecular modeling of some novel hexahydroindazole derivatives as potent monoamine oxidase inhibitors. *Bioorg. Med. Chem.*, 17: 6761-6772, 2009.

Golikov A G, Raykova S V, Bugaev A A, Krivenko A P, Shub G M. Synthesis and antimicrobial activity of some (nitro) furfurylidene containing hexahydroindazoles *Pharm. Chem. J.*, 39: 22-24, 2005.

Gomez L, Hack M D, Wu J, Wiener J J, Venkatesan H, Santillan A Jr, Pippel D J, Mani N, Morrow B J, Motley S T, Shaw K J, Wolin R, Grice C A, Jones T K. Novel pyrazole derivatives as potent inhibitors of type II topoisomerases. Part 1: synthesis and preliminary SAR analysis. *Bioorg Med Chem Lett.*, 17(10): 2723-2727, 2007.

Gomis-Ruth FX, Structural aspects of the metzincin clan of metalloendopeptidases. *Mol. Biotechnol.*, 24(2), 157–202, 2003.

Gouda M A, Berghot M A, Abd El-Ghani G E, Khalil A M. Synthesis and antimicrobial activities of some new thiazole and pyrazole derivatives based on 4, 5, 6, 7-tetrahydrobenzothiophene moiety. *Eur J Med Chem.*, 45(4): 1338-1345, 2010.

Grinberg J H W, McQuillan J A, Hunt N, Ginsburg H, Golenser J. Modulation of cerebral malaria by fasudil and other immune-modifying compounds. *Exp. Parasitol.*, 125: 141–146, 2010.

Grossand J, Lapiere CM, Collagenolytic activity in amphibian tissues: a tissue culture assay, *Proc. Natl. Acad. Sci. USA.*, 48(6), 1014–1022, 1962.

Gruber BL, Sorbi D, French DL, Marchese MJ, Nuovo GJ, Kew RR and Arbeit LA, Markedly Elevated Serum MMP-9 (Gelatinase B) Levels in Rheumatoid Arthritis: A Potentially Useful Laboratory Marker, *Clinical Immunology and Immunopathology.*, 78(2), 161–171, 1996.

Gupta A. K., Arockia Babu M., Kaskhedikar S.G., VALSTAT: Validation program

- for quantitative structure activity relationship studies. *Indian J Pharm. Sci.*, 66, 396–402, 2004.
- Hamaguchi T, Ono K and Yamada M, Review: Curcumin and Alzheimer's disease, *CNS Neurosci Ther.*, 16, 285-297, 2010.
- Han S, Yang Y. Antimicrobial activity of wool fabric treated with curcumin. *Dyes and Pigments.*, 64(2): 157-161, 2005.
- Hong J, Bose M, Ju J, Ryu JH, Chen X, Sang S, Lee MJ and Yang CS, Modulation of arachidonic acid metabolism by curcumin and related β -diketone derivatives: effects on cytosolic phospholipase A(2), cyclooxygenases and 5-lipoxygenase, *Carcinogenesis.*, 25(9), 1671-1679, 2004.
- Huang MT, Lysz T, Ferraro T, Abidi TF, Laskin JD and Conney AH, Inhibitory effects of curcumin on in vitro lipoxygenase and cyclooxygenase activities in mouse epidermis, *Cancer Res.*, 51(3), 813-819, 1991.
- Ji H F, Shen F. Interactions of curcumin with the PfATP6 model and the implications for its antimalarial mechanism. *Bioorg. Med. Chem. Lett.*, 19: 2453-2455, 2009.
- Kanagarajan V, Ezhilarasi M R, Gopalakrishnan M. *In vitro* microbiological evaluation of 1,1'-(5,5'-(1,4-phenylene)bis(3-aryl-1H-pyrazole-5,1-(4H,5H)-diyl))diethanones, novel bisacetylated pyrazoles. *Org Med Chem Lett.*, 1(1): 8, 2011.
- Kubinyi H Ed. 3D QSAR in Drug Design. Theory, Methods and Applications, ESCOM, Science Publishers B.V., Leiden, 1993.
- Kumar A, Valecha N, Jain T and Dash AP, Burden of malaria in India: retrospective and prospective view, *Am J Trop Med Hyg.*, 77(6): 69-78, 2007.
- Kumar D, Kumar M, Kumar A and Singh SK, Chalcone and curcumin derivatives: a way ahead for malarial treatment, *Mini review in medicinal chemistry*, 13, 2116-2133, 2013.
- Kundu P, De R, Pal I, Mukhopadhyay A K, Saha D R, et al. Curcumin Alleviates Matrix Metalloproteinase-3 and -9 Activities during Eradication of Helicobacter pylori Infection in Cultured Cells and Mice. *PLoS ONE.*, 6(1), 2011.
- Lambros C, Vanderberg JP. Synchronization of *Plasmodium falciparum* erythrocytic stages in culture. *J Parasitol.* Jun ;65(3):418-20, 1979.

Learner CG and Beutel BA, Antibacterial drug discovery in the post-genomics era, *Curr Drug Targets Infect Disord. Jun;2(2):109-19*, 2002.

Leite, A. C.; Moreira, D. R.; Cardoso, M. V.; Hernandes, M. Z.; Alves Pereira, V. R.; Silva, R. O.; Kiperstok, A. C.; Lima Mda, S.; Soares, M. B. Synthesis, Cruzain docking, and *in vitro* studies of aryl-4-oxothiazolyhydrazones against *Trypanosoma cruzi*. *Chem. Med. Chem. 2*, 1339-1345, 2007.

Liang G, Yang S, Jiang L, Zhao Y, Shao L, Xiao J, Ye F, Li Y and Li, X, Synthesis and anti-bacterial properties of mono-carbonyl analogues of curcumin, *Chem Pharm Bull (Tokyo)*, 56(2), 162-167, 2008.

Livermore DM, Discovery research: the scientific challenge of finding new antibiotics, *J Antimicrob Chemother.*, 66(9), 1941-1944, 2011.

Makler M. T., Ries J. M., Williams J. A., Bancroft J. E., Piper R. C., Gibbens B. L., Hinrichs D. J., Parasite lactate dehydrogenase as an assay for *Plasmodium falciparum* drug sensitivity, *American Journal of Tropical Medicine and Hygiene*, 48 (6), 739-741, 1993.

Manohar S, Khan S I, Kandi S K, Raj K, Sun G, Yang X, Molina A D C, Ni N, Wang B, Rawat D S. Synthesis, antimalarial activity and cytotoxic potential of new monocarbonyl analogues of curcumin. *Bioorg. Med. Chem. Lett.*, 23: 112–116, 2013.

Manohar, S.; Khan, S. I.; Rawat, D. S. *Bioorg. Med. Chem. Lett.*, 20, 322, 2010.

Martinelli A, Rodrigues L A, Cravo P. *Plasmodium chabaudi*: Efficacy of artemisinin + curcumin combination treatment on a clone selected for artemisinin resistance in mice. *Exp. Parasitol.*, 119: 304-307, 2008.

Martins M, McCusker M, Amaral L and Fanning S, Mechanisms of antibiotic resistance in salmonella: efflux pumps, genetics, quorum sensing and biofilm formation, *Lett. Drug. Des. Discov.*, 8(2), 114-123, 2011.

Milewski S, Chmara H, Andruszkiewicz R, Borowski E, Zaremba M and Borowski J, Antifungal peptides with novel specific inhibitors of glucosamine 6-phosphate synthase, *Drugs Exp. Clin.Res.*, 14(7), 461-465, 1988.

Milewski S, Glucosamine-6-phosphatesynthase-the multi-facets enzyme, *Biochim. Biophys. Acta.*, 1597(2), 173-192, 2002.

- Mimche P N, Taramelli D, Vivas L. The plant-based immunomodulator curcumin as a potential candidate for the development of an adjunctive therapy for cerebral malaria. *Malar. J.*, 10, doi:10.1186/1475-2875-10-S1-S10, 2010.
- Minu M, Thangadurai A, Wakode S R, Agrawal S S, Narasimhan B. Synthesis, antimicrobial activity and QSAR studies of new 2,3-disubstituted-3,3a,4,5,6,7-hexahydro-2H-indazoles. *Bioorg. Med. Chem. Lett.*, 19: 2960-2964, 2009.
- Mishra K, Dash A P, Swain B K, Dey N. Anti-malarial activities of *Andrographis paniculata* and *Hedyotis corymbosa* extracts and their combination with curcumin, *Malaria J.*, 8, doi:10.1186/1475-2875-8-26, 2009.
- Mishra S, Karmodiya K, Surolia N and Surolia A, Synthesis and exploration of novel curcumin analogues as anti-malarial agents, *Bioorg Med Chem.*, 16, 2894-2902, 2008.
- Moghaddam K M, Iranshahi M, Yazdi M C, Shahverdi A R. The combination effect of curcumin with different antibiotics against *Staphylococcus aureus*. *Int J Green Pharm.*, 3(2): 141-143, 2009.
- Morris G. M., Goodsell DS, Huey R and Olson AJ, Distributed automated docking of flexible ligands to proteins: parallel applications of AutoDock 2.4, *J Comput Aided Mol Des.*, 10(4), 293–304, 1996.
- Morris GM, Goodsell DS, Halliday RS, Huey R, Hart WE, Belew RK and Olson AJ, Automated docking using a Lamarckian genetic algorithm and an empirical binding free energy function, *J Comput Chem.*, 19, 1639–1662, 1998.
- Morris, G. M.; Huey, R.; Lindstrom, W.; Sanner, M. F.; Belew, R. K.; Goodsell, D. S.; Olson, A. J. AutoDock4 and AutoDockTools4: Automated docking with selective receptor flexibility. *J. Comput. Chem.*, 30(16), 2785-2791, 2009.
- Mulabagal V, Calderon A I. Development of binding assays to screen ligands for *Plasmodium falciparum* thioredoxin and glutathione reductases by ultrafiltration and liquid chromatography/mass spectrometry. *J. Chromatogr. B. Analyt. Technol. Biomed. Life Sci.*, 878: 987-993, 2009.
- Nandakumar D N, Nagaraj V A, Vathsala P G, Rangarajan P, Padmanaban G. Curcumin-artemisinin combination therapy for malaria. *Antimicrob. Agents Chemother.*, 50: 1859-1860, 2006.

- Nantasenamat C, Isarankura-Na-Ayudhya C, Naenna T and Prachayasittikul V, A practical overview of quantitative structure-activity relationship, *Excli J.* 8, 74–88, 2009.
- Nayak A P, Tiyaboonchai W, Patankar S, Madhusudhan B, Souto E B. Curcuminoids-loaded lipid nanoparticles: Novel approach towards malaria treatment. *Colloids. Surf. B Biointerfaces.*, 81: 263-273, 2010.
- Naz S, Jabeen S, Ilyas S, Manzoor F, Aslam F, Ali A. Antibacterial activity of *Curcuma longa* varieties against different strains of bacteria. *Pak J Bot.*, 42(1): 455-462, 2010.
- Negi PS, Jayaprakasha GK, Rao JML, Sakariah KK, Antibacterial activity of turmeric oil: a byproduct from curcumin manufacture, *J Agric Food Chem.*, 47(10), 4297-4300, 1999.
- Oda Y. Inhibitory effect of curcumin on SOS functions induced by UV irradiation. *Mutat Res.*, 348(2): 67-73, 1995.
- Opong R A, Commandeur J N, van Vugt-Lussenburg B, Vermeulen N P. Inhibition of human recombinant cytochrome P450s by curcumin and curcumin decomposition products. *Toxicology*, 235(1-2): 83-91, 2007.
- Overalland CM, Lopez-Otin C, Strategies for MMP inhibition in cancer: innovations for the post-trialera, *Nature Reviews Cancer.*, 2, 657–672, 2002.
- Padmanaban Govindarajan Nagaraj, Arun, V Rangarajan and Pundi, N, Drugs and drug targets against malaria, *In: Current Science.*, 92(11), 1545-1555, 2007.
- Park B S, Kim J G, Kim M R, Lee S E, Takeoka G R, Oh K B, Kim J H. *Curcuma longa* L constituents inhibit sortase A and *Staphylococcus aureus* cell adhesion to fibronectin. *J Agric Food Chem.*, 53(23): 9005-9009, 2005.
- Rai D, Singh J K, Roy N, Panda D. Curcumin inhibits FtsZ assembly: an attractive mechanism for its antibacterial activity. *Biochem J.*, 410(1): 147-155, 2008.
- Rai N S, Kalluraya B, Lingappa B, Shenoy S, Puranic V G. Convenient access to 1, 3, 4-trisubstituted pyrazoles carrying 5-nitrothiophene moiety via 1,3-dipolar cycloaddition of sydnone with acetylenic ketones and their antimicrobial evaluation. *Eur J Med Chem.*, 43(8): 1715-1720, 2008.
- Rasmussen H B, Christensen S B, Kvist L P, Karazmi A. A simple and efficient separation of the curcumins, the antiprotozoal constituents of *curcuma longa*. *Planta Med.*, 64: 353-356, 1998.

- Rasoanaivo P, Wright C W, Willcox M L, Gilbert B. Whole plant extracts versus single compounds for the treatment of malaria: synergy and positive interactions. *Malaria J.*, 10 Suppl 1:S4. doi: 10.1186/1475-2875-10-S1-S4, 2011.
- Ravindran J, Prasad S and Aggarwal BB, Curcumin and cancer cells: how many ways can curry kill tumor cells selectively? *AAPS J.*, 11, 495-510, 2009.
- Reddy R C, Vatsala P G, Keshamouni V G, Padmanaban G, Rangarajan P N. Curcumin for malaria therapy. *Biochem. Biophys. Res. Commun.*, 326: 472-474, 2005.
- Rudrappa T and Bais HP, Curcumin, a known phenolic from *Curcuma longa*, attenuates the virulence of *Pseudomonas aeruginosa* PAO1 in whole plant and animal pathogenicity models, *J Agric Food Chem.*, 56(6), 1955-1962, 2008.
- Schmid MB, Seeing is believing: the impact of structural genomics on antimicrobial drug discovery, *Nat. Rev. Microbiol.*, 2(9), 739-746, 2004.
- Sharma P K, Chandak N, Kumar P, Sharma C, Aneja K R. Synthesis and biological evaluation of some 4-functionalized-pyrazoles as antimicrobial agents. *Eur J Med Chem.*, 46(4): 1425-1432, 2011.
- Shin H K, Kim J, Lee E J, Kim S H. Inhibitory effect of curcumin on motility of human oral squamous carcinoma YD-10B cells via suppression of ERK and NF- κ B activations. *Phytotherapy Research.*, 24(4): 577-582, 2010.
- Simmons KJ, Chopra I, Fishwick CW, Structure-based discovery of antibacterial drugs, *Nat. Rev. Microbiol.*, 8(7), 501-510, 2010.
- Singh N, Pandey J, Yadav A, Chaturvedi V, Bhatnagar S, Gaikwad A N, Sinha S K, Kumar A, Shukla P K, Tripathi R P. A facile synthesis of alpha,alpha'-(EE)-bis(benzylidene)-cycloalkanones and their antitubercular evaluations. *Eur J Med Chem.*, 44(4): 1705-1709, 2009.
- Singh R, Chandra R, Bose M, Luthra P M. Antibacterial activity of *Curcuma longa* rhizome extract on pathogenic bacteria. *Curr Sci.*, 83(6): 737-740, 2002.
- Singh RB, Das N, Jana S and Das A, Synthesis and in vitro antibacterial screening of some new 2, 4, 6-trisubstituted-1, 3, 5-triazine derivatives, *Lett. Drug. Des. Discov.*, 9(3), 316-321, 2012.
- Smith RJ, Milewski S, Brown AJ, Gooday GW. Isolation and characterization of the GFA1 gene encoding the glutamine:fructose-6-phosphate amidotransferase of

Candida albicans. *J Bacteriol.*, Apr;178(8):2320-7, 1996.

Sternlichtand MD, Werb Z, How matrix metalloproteinases regulate cell behaviour, *Annu. Rev. Cell. Dev. Biol.*, 17, 463–516, 2001.

Sugiyama Y, Kawakishi S and Osawa T, Involvement of the β -diketone moiety in the antioxidative mechanism of tetrahydrocurcumin, *Biochem Pharmacol.*, 52(4), 519-525, 1996.

Swarnakar S, Paul S. Curcumin arrests endometriosis by down regulation of matrix metalloproteinase-9 activity, *Indian Journal of Biochemistry & Biophysics.*, 46(1): 59-65, 2009.

T. Mosmann. Rapid colorimetric assay for cellular growth and survival: application to proliferation and cytotoxicity assays. *Journal of Immunological Methods*, 65, 1-2, 55-63, 1983.

Tajbakhsh S, Mohammadi K, Deilami I, Zandi K, Fouladvand M, Ramedani E, Asayesh G. Antibacterial activity of indium curcumin and indium diacetylcurcumin. *African J Biotech.*, 7(21): 3832-3835, 2008.

Talwar G P, Dar S A, Rai M K, Reddy K V, Mitra D, Kulkarni S V, Doncel G F, Buck C B, Schiller J T, Muralidhar S, Bala M, Agrawal S S, Bansal K, Verma J K. A novel polyherbal microbicide with inhibitory effect on bacterial, fungal and viral genital pathogens. *Int J Antimicrob Agents.*, 32(2): 180-185, 2008.

The National Drug Policy on Malaria (2013), Directorate of National vector borne disease control programme, Ministry of health and family welfare, Government of India. Retrived from www.nvbdc.gov.in/Doc/National-Drug-Policy-2013.pdf on 03/03/2014.

Thumar N J, Patel M P. Synthesis, characterization, and antimicrobial evaluation of carbostyryl derivatives of 1H-pyrazole. *Saudi Pharm J.*, 19(2): 75–83, 2011.

Timmerman H, Todeschini R, Consonni V, Mannhold R, Kubinyi H (2002). Handbook of Molecular Descriptors. Weinheim: Wiley-VCH. ISBN 3-527-29913-0.

Trager W, Jensen JB. Human malaria parasites in continuous culture. *Science*. Aug . 20;193(4254):673-5, 1976.

Varotti F P, Botelho C A, Andrade A, Paula R C, Fagundes E M S, Valverde A, Mayer L M U, Mendonça J S, Souza M V N, Boechat N, Krettli A U, Synthesis,

Antimalarial Activity, and Intracellular Targets of MEFAS, a New Hybrid Compound Derived from Mefloquine and Artesunate. *Antimicrobial Agents and Chemotherapy*, Nov., 52(11), 3868–3874, 2008.

Vermaand RP, Hansch C, Matrixmetalloproteinases(MMPs): Chemical biological functions and(Q)SARs, *Bioorg. Med. Chem.*, 15, 2223–2268, 2007.

Vijesh A M, Isloor A M, Telkar S, Peethambar S K, Rai S, Isloor N. Synthesis, characterization and antimicrobial studies of some new pyrazole incorporated imidazole derivatives. *Eur J Med Chem.*, 46(8): 3531-3536, 2011.

Walsh, J. P.; Yazdani, N.; Shiau, A. K.; Noble, S. A.; Rix, P.; Rao, T. S.; Hassig, C. A.; Smith, N. D. Discovery of inducible nitric oxide synthase (iNOS) inhibitor development candidate KD7332, part 1: Identification of a novel, potent, and selective series of quinolinone iNOS dimerization inhibitors that are orally active in rodent pain models. *J. Med. Chem.*, 52, 3047- 3062, 2009.

Wang Y, Lu Z, Wu H, Lv F. Study on the antibiotic activity of microcapsule curcumin against foodborne pathogens. *Int J Food Microbiol.*, 136(1): 71-74, 2009.

Wojciechowski M, Milewski S, Mazerski J, Borowski E. Glucosamine-6-phosphate synthase, a novel target for antifungal agents. Molecular modelling studies in drug design. *Acta Biochim Pol.*, 52(3): 647-653, 2005.

Yadav V S, Mishra K P, Singh D P, Mehrotra S, Singh V K. Immunomodulatory effects of curcumin. *Immunopharmacol. Immunotoxicol.*, 27: 485-497, 2005.

Zhao J, Yu S, Lin X, Zhao Y. Effect of curcumin on matrix metalloproteinase 9 and matrix metalloproteinase 2 induced by cerebral ischemia-reperfusion in rats. *Zhongfeng Yu Shenjing Jibing Zazhi.*,27(5): 392-394, 2010.