R. V. Omkumar
Complete List of Publications

1.Arunkumar, R. C., Steephan, M., Rajeevkumar, R., Suma Priya, S. D., Kumar, M., Paul, M., Mayadevi, M., and Omkumar, R. V. (2018) A Simple End-point Assay for Calcium Channel activity. **Cell Calcium**Vol. **74**, p73-85.https://doi.org/10.1016/j.ceca.2018.05.009***Impact factor:*** **3.7**

2. Chandran R, Kumar M, Lakshmi K, Jacob RS, Gunasekaran S, Lakshmi S, Sadasivan C, **Omkumar**RV.(2017)Cellular calcium signaling in the aging brain.**JChemNeuroanat.** (In Press) doi: 10.1016/j.jchemneu.2017.11.008.***Impact factor:*****2.52**

3. Reddy EK, Remya C, Mantosh K, Sajith AM, **Omkumar** RV, Sadasivan C, Anwar S. (2017)Novel tacrine derivatives exhibiting improved acetylcholinesterase inhibition: Design, synthesis and biological evaluation. **Eur J Med Chem.***139*, p367-377.***Impact factor:*****4.52**

4.Mayadevi, M., Lakshmi, K., SumaPriya, S., John, S. and **Omkumar, R. V.**(2016)Protection of α-CaMKII from dephosphorylation by GluN2B subunit of NMDA receptor is abolished by mutation of Glu96 or His282of α-CaMKII. **PlosOne***11*, e0162011***Impact factor:*** **3.534**

5.Anees, P., Sudheesh, K. V., Jayamurthy, P., Arunkumar R. C., **Omkumar, R. V.** and Ajayaghosh, A. (2016) A protein–dye hybrid system as a narrow range tunable intracellular pH sensor.**Chem. Sci.** 18;7(11):6808-6814 DOI: 10.1039/C6SC02659A ***Impact factor:*** **9.144**

6. Jose L, Ramachandran R, Bhagavat R, Gomez RL, Chandran A, Raghunandanan S, **Omkumar RV**, Chandra N, Mundayoor S, Kumar RA. (2016) Hypothetical protein Rv3423.1 of Mycobacterium tuberculosis is a histone acetyltransferase.**FEBS J.283**, p 265-81.***Impact factor:*** **3.902**

7.Ramasarma, T., Rao, A. V., Devi, M. M., **Omkumar, R. V**., Bhagyashree, K. S., Bhat, S. V. (2015) New insights of superoxide dismutase inhibition of pyrogallol autoxidation. ***Mol Cell Biochem.*** 2015 Feb;400(1-2):277-85***Impact factor:*****2.39**

8.PrabhuRamya. R, Suma Priya, S., Mayadevi, M. and**Omkumar, R. V.** (2012) Regulation of phosphorylation at Ser-1303 of GluN2B receptor in the post synaptic density. ***Neurochem.Int.*** 61(7). 981- 985 ***Impact factor:*****2.86**

9.Mayadevi, M.,Sherin, D. R, Keerthi, V. S., Rajasekharan, K. N., and **Omkumar, R.V.**(2012). Curcumin is an inhibitor of Calcium/calmodulin dependent protein kinase II. ***Biorg. Med. Chem.*** 20.6040-6047***Impact factor:*****2.92**

10. Cheriyan, J., Archana, G. M., Pradeep, K. K., Mayadevi, M., **Omkumar, R. V.** (2012) Effect of multimeric structure of CaMKII in the GluN2B-mediated modulation of kinetic parameters of ATP ***PLoS One*** 7.9.e45064***Impact factor:*****3.73**

11. Mayadevi, M., Archana, G. M., Ramya R. Prabhu, and **R. V. Omkumar** (2012) Molecular Mechanisms in Synaptic Plasticity. Chapter in "Neuroscience - Dealing With Frontiers" Ed. Dr. Carlos M. Contreras, ISBN 979-953-307-363-6 ***Impact factor:*****N. A.**

12. Cheriyan, J., Kumar P, Mayadevi, M.,Surolia A, and **Omkumar, R. V.** (2011) Calcium/calmodulin dependent protein kinase II bound to NMDA receptor 2B subunit exhibits increased ATP affinity and attenuated dephosphorylation.***PLoS One***6.3.e16495***Impact factor:*****4.09**

13. Biju, V., Mundayoor, S., **Omkumar R. V**., Anas, A., and Ishikawa, M. (2010) Bioconjugated quantum dots for cancer research: Present status, prospects and remaining issues.***Biotechnol. Adv.***, 28, p 199-213 ***Impact factor:*****7.6**

14. Muhammed, M. A., Verma, P. K., Pal, S. K., Kumar, R. C., Paul, S., **Omkumar, R. V.,** and Pradeep, T. (2009) Bright, NIR-emitting Au23 from Au25: characterization and applications including biolabeling.***Chemistry*** 15, p 10110-20 ***Impact factor:*****5.382**

15. Raveendran, R., Devi Suma Priya, S., Mayadevi, M., Steephan, M., Santhoshkumar, T. R., Cheriyan, J., Sanalkumar, R., Pradeep, K. K., James, J., **Omkumar, R. V.** (2009) Phosphorylation status of the NR2B subunit of NMDA receptor regulates its interaction with calcium/calmodulin-dependent protein kinase II.*J. Neurochem.*,**110,** p 92-105***Impact factor:*****3.999**

16. Pradeep, K. K., John Cheriyan, Suma Priya, S., Rajeevkumar, R., Mayadevi, M., Praseeda, M., and **Omkumar, R. V.** (2009) Modulation of catalysis of CaMKII by NMDA receptor subunit 2B. *Biochem. J.*, **419,** p123-32***Impact factor:*****5.155**

17. Anshup, J., Sai Venkataraman, ChandramouliSubramaniam, R. Rajeev Kumar, Suma Priya, T. R. Santhosh Kumar, **R. V. Omkumar**, Annie Johnand T. Pradeep (2005) Growth of Gold Nanoparticles in Human Cells. *Langmuir***21**, p 11562-7***Impact factor:*****4.097**

18. M. Praseeda, K. K. Pradeep, A. Krupa, S. Sri Krishna, S. Leena, R. Rajeev Kumar, John Cheriyan, M. Mayadevi, N. Srinivasan, and **R. V. Omkumar** (2004) Influence of a mutation in the ATP–binding domain of Calcium/Calmodulin dependent protein kinase II on its interaction with peptide substrates. *Biochem. J.***378,** p 391-397***Impact factor:*****4.371**

19. Praseeda, M, Mayadevi, M., and **Omkumar, R. V.** (2004) Interaction of Peptide substrate outside the active site influences catalysis by CaMKII. *Biochem.Biophys.Res.Commun.***313,** p 845-849***Impact factor:*****2.648**

20. Praseeda, M., Beena Mary K, Asha Sarah John, and **Omkumar, R. V.** (2004) The C-terminus of CaMKII is truncated when expressed in *E.coli*. *Protein Pept. Lett.***11,** p 175-179 ***Impact factor:*1.281**

21. Seetha, K., Banerjee, N. S., **Omkumar, R. V.** and Purushothama, M. G. (2004) Cloning and Characterization of Partial Promoter of HMGCoA Reductase from *Andrographispaniculata* (Burm.f.) Wall.exNees – A Tropical medicinal Plant. *J. Plant Biochem. Biotech.***14,** p 41-44***Impact factor:*0.143**

22. Mayadevi, M., Praseeda, M., Kumar, K. S., and **Omkumar, R. V.** (2002) Sequence determinants on the NR2A and NR2B subunits of NMDA receptor responsible for specificity of phosphorylation by CaMKII. *Biochem.Biophys.Acta.***1598,** p 40-45 ***Impact factor:*2.233**

23. Omkumar, R. V., Kiely, M. J., Rosenstein, A. J., Min, K-T, and Kennedy, M. B. (1996)Identification of a Phosphorylation Site for Calcium/Calmodulin-dependent Protein Kinase II in the NR2B Subunit of the N-Methyl-D-aspartate Receptor. *J. Biol. Chem.* **271**, p 31670 – 31678***Impact factor:*7.452**

24. Omkumar, R. V. and Rodwell, V. W. (1994) Phosphorylation of Ser^{871} Impairs the Function of His^{865} of Syrian Hamster 3-Hydroxy-3-methylglutaryl-CoA Reductase. *J. Biol. Chem*. **269**, p 16862 – 16866***Impact factor:*7.716**

25. Omkumar, R. V., Darnay, B. G. and Rodwell, V. W. (1994) Modulation of Syrian Hamster 3-Hydroxy-3-methylglutaryl-CoA Reductase Activity by Phosphorylation. Role of Serine 871. *J. Biol. Chem*. **269** , p 6810 – 6814***Impact factor:*7.716**

26. Omkumar, R. V., Kadam, S. M., Banerji, A., and Ramasarma, T. (1993) On the Involvement of Intramolecular Protein Disulfide in the Irreversible Inactivation of 3-Hydroxy-3-methylglutaryl-CoA Reductase by Diallyl Disulfide. *Biochim.Biophys. Acta***1164**, p 108-112***Impact factor:*2.467**

27. Omkumar, R. V., and Ramasarma, T. (1993) Irreversible Inactivation of 3-Hydroxy-3-methylglutaryl-CoA Reductase by H_2O_2. *Biochim.Biophys. Acta***1156**, p 267-274. ***Impact factor:*2.467**

28. Omkumar, R. V., Gaikwad, A. S., and Ramasarma, T. (1992) Feedback-type Inhibition of Activity of 3-Hydroxy-3-methylglutaryl Coenzyme A Reductase by Ubiquinone. *Biochim.Biophys. Res. Commun.***184**, p 1280-1287***Impact factor:*3.583**

29. Omkumar, R. V., Mehta, P. P., Ramakrishna Kurup, C. K., and Ramasarma, T. (1992) Preparation of a Soluble 58 kDa-3-hydroxy-3-methylglutaryl CoA Reductase from Liver Microsomes and its Inhibition by Ethoxysilatrane, a Hypocholesterolemic Compound. *Mol. Cell. Biochem.***110**, p 145-153***Impact factor:*1.377**

30. **Omkumar, R. V.**, Banerji, A., Kurup, C. K. R., and Ramasarma, T. (1991) The Nature of Inhibition of 3-Hydroxy-3-methylglutaryl CoA Reductase by Garlic-derived Diallyl Disulfide. *Biochim.Biophys. Acta***1078**, p 219-225***Impact factor:*****2.467**

31. Ushadevi, S., **Omkumar, R. V.**, and Ramasarma, T. (1988) Studies on the Distribution and Changes in Concentration of Iron and Iron-dependent Inhibitor Protein of Hydroxymethylglutaryl CoA Reductase. *Indian J. Biochem.Biophys*. **25**, p 664-673***Impact factor:*****0.328**