

Significant Research Publications of the Department (2016 onwards)

Sl. No.	Details of Publications	Impact factor
1.	Harsha Raj M, B Yashaswini, JochenRössler, Bharathi P Salimath, 2016, Combinatorial treatment with anacardic acid followed by TRAIL augments induction of apoptosis in TRAIL resistant cancer cells by the regulation of p53, MAPK and NFκβ pathways. <i>Apoptosis</i> 21, 578-93	4.1
2.	Gowtham HG, Hariprasad P, Nayak SC, Niranjana SR. 2016. Application of rhizobacteria antagonistic to <i>Fusarium oxysporum</i> f. sp. <i>lycopersici</i> for the management of Fusarium wilt in tomato. <i>Rhizosphere</i> 2, 72-74	2.079
3.	Gowtham HG, Hariprasad P, Singh SB, Niranjana SR. 2016. Biological control of Phomopsis leaf blight of brinjal (<i>Solanum melongena</i> L.) with combining phylloplane and rhizosphere colonizing beneficial Bacteria. <i>Biological control</i> 101, 123-129	3.092
4.	Mamatha Bhanu L. S, Nishimura S –I. and Aparna H S. 2016. Inhibitory potential of Buffalo (<i>Bubalus bubalis</i>) colostrum immunoglobulin G on <i>Klebsiella pneumoniae</i> . <i>International Journal of Biological Macromolecules</i> , 88:138-145.	4.784
5.	Shirin, M. and Umesha, S. 2016. Anti-inflammatory and antinociceptive effect of <i>Pachygone ovata</i> . <i>Pharmaceutical Biology</i> 54 (12): 3046-3054.	2.492
6.	Avinash, P. and Umesha, S. 2016. Biochemical and molecular variations of guaiacol peroxidase and total phenols in bacterial wilt pathogenesis of <i>Solanum melongena</i> . <i>Biochemistry and Analytical Biochemistry</i> 5(3): 292-298.	2.63
7.	Veena M., Melvin P., Prabhu SA., Shailasree S., Shetty HS. and Kini K. R. 2016. Molecular cloning of a coiled-coil-nucleotide-binding-site-leucine-rich repeat gene from pearl millet and its expression pattern in response to the downy mildew pathogen. <i>Molecular Biology Reports</i> , 43:117-128	2.017
8.	Balaji, K. S., Shivaprakash, P., Preethi, S. D., Chandrashekara, K. T., Lokesh, S. Rangappa, K. S. and Shankar, J. (2016). Angio suppressive effect of <i>Clitoria ternatea</i> flower extract is mediated by HIF-1 a and down regulation of VEGF in Murine carcinoma model. <i>Medicinal Chemistry</i> , 6(7), 515-520.	3.2
9.	Yashaswini.B and Bharathi P.Salimath 2017, Sensitization to TRAIL and radioprotective effect of N-Coumaroyl tyramine diacetate from <i>Tinospora cordifolia</i> induces apoptosis and inhibits neoangiogenesis to act as an anti-cancer compound, <i>Journal of Biotechnology and Biochemistry</i> , Vol 3(3), 70-77	3.2
10.	Rashmi KC, HS Atreya, MH Raj, BP Salimath, HS Aparna. 2017. A pyrrole-based natural small molecule mitigates HSP90 expression in MDA-MB-231 cells and inhibits tumor angiogenesis in mice by inactivating HSF-1. <i>Cell Stress and Chaperones</i> , 22(5):751-766.	2.571
11.	Shubha P., K. Namratha, H.S. Aparna, N.R. Ashok, M.S. Mustak, Jit Chatterjee, K. Byrappa. 2017. Facile Green Reduction of Graphene oxide using <i>Ocimum sanctum</i> Hydroalcoholic Extract and Evaluation of its Cellular Toxicity. <i>Materials Chemistry and Physics</i> , 198: 66-72.	2.781
12.	Brijesha N and Aparna H S. 2017.Comprehensive characterization of bioactive peptides from Buffalo (<i>Bubalus bubalis</i>) colostrum and milk fat globule membrane proteins. <i>Food Research International</i> , 97: 95–103	3.579
13.	Brijesha N, Nishimura S –I. and Aparna H S. 2017. A comparative glycomics of fat globule membrane glycoconjugates from Buffalo (<i>Bubalus bubalis</i>) milk & colostrum. <i>Journal of Agricultural and Food Chemistry</i> , 65: 1496-1506	3.571
14.	Arpitha A, Sebastin Santhosh M, Rohit A. C, Girish K. S, Vinod D and Aparna H. S. 2017. Inhibition of Snake Venom Metalloproteinase by β-Lactoglobulin Peptide from Buffalo (<i>Bubalus bubalis</i>) Colostrum. <i>Applied Biochemistry and Biotechnology</i> , 182: 1415–1432.	2.140
15.	Ashok N.R and Aparna H S. 2017. Empirical and bioinformatic characterization of buffalo (<i>Bubalus bubalis</i>) colostrum whey peptides & their angiotensin I- converting enzyme inhibition. <i>Food Chemistry</i> , 228: 582-594	5.399

16.	Manukumar, H. M., Chandrasekhar, B., Rakesh, K. P., Ananda, A. P., Nandhini, M., Lalitha, P., Sumathi, S., Hua-Li Qin and Umesha, S. 2017. Novel T-C@AgNPs mediated biocidal mechanism against biofilm associated methicillin-resistant <i>Staphylococcus aureus</i> 090, cytotoxicity and its molecular docking proofs. Medicinal Chemical Communications 8:2181-2194	2.394
17.	Manukumar, H. M. and Umesha, S. 2017. MALDI-TOF-MS based identification and molecular characterization of food associated methicillin-resistant <i>Staphylococcus aureus</i> . Scientific Reports 7: 11414. doi:10.1038/s41598-017-11597-z	4.122
18.	Avinash, P., Darren Grice., Vinay kumar, K.S., Sadashiva, M.P., Shankar, H.N and Umesha, S. (2017). Extracellular polysaccharides from <i>Ralstonia solanacearum</i> , a strong inducer of eggplant defense against bacterial wilt. Biological Control 110:107-116	3.092
19.	Manukumar, H. M., Shiva Kumar, J., Chandrashekar, B., Sri Raghava, and Umesha, S. 2017. Evidences for Diabetes and Insulin Mimetic Activity of Medicinal Plants: Present Status and Future Prospects. Cri. Rev. Food Sci. Nutrition 57(12):2712-2729	6.704
20.	Umesha, S., Manukumar, H. M., Chandrasekhar, B., Shivakumara, P., Shiva Kumar, J., Sri Raghava, Avinash, P., Shirin M., Bharathi, T. R., Rajini, S. B., Nandhini, M., Vinaya Rani, G., Shobha, M. and Prakash, H. S. 2017. Aflatoxins and Food Pathogens: Impact of Biologically Active Aflatoxins and their Control Strategies. J. Science of Food and Agriculture 97:1698-1707	2.422
21.	Nandini B., Hariprasad P., Prakash, H. S., Shetty, H. S. and Geetha, N. 2017. <i>Trichogenic</i> -selenium nanoparticles enhance disease suppressive ability of <i>Trichoderma</i> against downy mildew disease caused by <i>Sclerospora graminicola</i> in pearl millet. Scientific Reports, Nature Publications. 7: 2612	4.122
22.	Nandhini, M., Rajini, S.B., Udayashankar, A.C., Niranjana, S.R. Ole S. Lund, Shetty, H.S. and Prakash, H.S. 2018. Diversity, plant growth promoting and downy mildew disease suppression potential of cultivable endophytic fungal communities associated with pearl millet. Biological Control 127: 127-138.	3.092
23.	Gowtham HG, Murali M, Singh SB, Lakshmeesha TR, Murthy KN, Niranjana SR. 2018. Plant growth promoting rhizobacteria-Bacillus amyloliquefaciens improves plant growth and induces resistance in chilli against anthracnose disease. Biol. Control 126, 209-217	3.092
24.	Mbae, K. M., Umesha, S., and Manukumar, H. M. 2018. Therapeutic properties of lectins in herbal supplements. Phytochemistry Reviews 17:627-643	4.257
25.	Umesha, S. and Manukumar H.M. 2018. Advanced Molecular Diagnostic Techniques for Detection of Food-borne Pathogens; Current Applications and Future Challenges. Critical reviews in Food Science and Nutrition 58(1): 84-104	6.704
26.	Karthik, C. S., Manukumar, H. M., Ananda, A. P., Nagashree, S., Rakesh, K.P. Mallesha, L., Hua-Li Qin, Umesha, S., Mallu, P. and Krishnamurthy, N. B. 2018. Synthesis of novel benzodioxane midst piperazine moiety decorated chitosan silver nanoparticle against biohazard pathogens and as potential anti-inflammatory candidate: A molecular docking studies. International Journal of Biological Macromolecules 108: 489-502 (IF:	4.784
27.	Bajpe S N., Bharathi T R., Marulasiddaswamy K M., Kumara K K S., Prakash H. S. and Kini K R. 2018. Efficiency of RAPD, ISSR and ITS markers in detecting genetic variability among <i>Salacia</i> species sampled from the Western Ghats of Karnataka. Molecular Biology Reports: 45:931-941	2.017
28.	Sheyda A., Biazar E., Singh, V., Keshel, S.H., Geetha N. 2018. The effect of the carbodiimide cross-linker on the structural and biocompatibility properties of collagen–chondroitin sulfate electrospun mat. International Journal of Nanomedicine. 13. 4405–4416	4.37
29.	Rashmi KC, MH Raj, M Paul, KS Girish, BP Salimath, HS Aparna, 2019, A new pyrrole based small molecule from <i>Tinospora cordifolia</i> induces apoptosis in MDA-MB-231 breast cancer cells via ROS mediated mitochondrial damage and restoration of p53. Chemico-biological interactions, 299, 120-130	3.296
30.	Arpitha Ashok, Brijesha N., H.S. Aparna. 2019. Discovery, synthesis, and <i>in vitro</i> evaluation of a novel bioactive peptide for ACE and DPP-IV inhibitory activity. European Journal of Medicinal Chemistry, 180: 99-110	4.833

31.	Rashmi KC, Harsha Raj M, Paul M, Girish KS, Salimath BP, Aparna HS. 2019. A new pyrrole based small molecule from <i>Tinospora cordifolia</i> induces apoptosis in MDA-MB-231 breast cancer cells via ROS mediated mitochondrial damage and restoration of p53 activity. <i>Chemico-Biological Interactions</i> , 299:120-130	3.407
32.	Mazur MJ., Kwaaitaal M., Mateos M A., Maio F., Kini K R., Prins M. and van den Burg H A. 2019. The SUMO Conjugation Complex Self-Assembles into Nuclear Bodies Independent of SIZ1 and COP1. <i>Plant Physiology</i>	6.902
33.	Rabiya, Bi., H. C. Lohithashwa, Lokesh, S., Sunil kumar,K.R., Shilpa, H.B., Jyothi, K., Vinutha, K. and Shailaja Hittalmani (2019). Leveraging barrel medic genome sequence for the development and use of genomic resources for genetic analysis and breeding legumes. <i>Electronic Journal of Biotechnology</i> , 39:30-41	2.894
34.	Rabiya, Bi., H. C. Lohithashwa, Lokesh, S., Sunil kumar,K.R., Shilpa, H.B., Jyothi, K., Vinutha, K. and Shailaja Hittalmani (2019). Development and application of genomic resources for comparative and translational genomics in legumes through leveraging genomic sequence of <i>Medicago truncatula</i> . <i>Journal of Genetics</i> , 97: 17-38.	3.17
35.	Lakshmeesha TR,KalagaturNK, MudiliV, Mohan CD, Rangappa KS, Prasad BD, AshwiniBS, Hashem A, AlqarawiAA., Malik JA, Abd _AllahEF, Gupta VK, SiddaiahCN, Niranjana SR. 2019. Biofabrication of Zinc Oxide Nanoparticles With Syzygium aromaticum Flower Buds Extract and Finding Its Novel Application in Controlling the Growth and Mycotoxins of Fusarium graminearum. <i>Frontiers in Microbiology</i> 10:1244	4.076
36.	Srinivas., C., Nirmala Devi D., Narasimha Murthy K , Mohan cD., Lakshmeesha T.R. Singh BP., Kalagatur NK., Niranjana S.R., Hashem A., Alqarawi AA, Tabassum B., Allah E F A., Nayaka CS.2019, Fusarium oxysporum f. sp. lycopersici causal agent of vascular wilt disease of tomato: Biology to diversity–A review. <i>Saudi Journal of Biological Sciences</i> . 2019 Nov;26(7):1315-1324	2.802
37.	Nandhini, M., Rajini, S.B., Udayashankar, A.C., Niranjana, S.R. Ole S. Lund, Shetty, H.S. and Prakash, H.S. 2019. Biofabricated zinc oxide nanoparticles as an eco-friendly alternative for growth promotion and management of downy mildew of pearl millet. <i>Crop Protection</i> . 121:103-112	2.381
38.	Singh SB, Gowtham HG, M Murali, P Hariprasad, TR Lakshmeesha. 2019. Plant growth promoting ability of ACC deaminase producing rhizobacteria native to sunflower (<i>Helianthus annuus</i> L.). <i>Biocatalysis and Agricultural Biotechnology</i> , 18:101089	2.14
39.	Gowtham H.G., Brijesh Singh S., Murali M., Shilpa N., Melvin Prasad, Mohammed Aiyaz, Amruthesh K.N., Niranjana S.R.. 2020. Induction of drought tolerance in tomato upon the application of ACC deaminase producing plant growth promoting rhizobacterium <i>Bacillus subtilis</i> Rhizo SF 48. <i>Microbiological Research</i> , 248: 126422	3.970
40.	Ansari, M.A.; Murali, M.; Prasad, D.; Alzohairy, M.A.; Almatroudi, A.; Alomary, M.N.; Udayashankar, A.C.; Singh, S.B.; Asiri, S.M.M.; Ashwini, B.S.; Gowtham, H.G.; Kalegowda, N.; Amruthesh, K.N.; Lakshmeesha, T.R.; Niranjana, S.R. <i>Cinnamomum verum</i> Bark Extract Mediated Green Synthesis of ZnO Nanoparticles and Their Antibacterial potentiality. <i>Biomolecules</i> 2020, 10, 336	4.694
41.	Shobha, B.; Lakshmeesha, T.R.; Ansari, M.A.; Almatroudi, A.; Alzohairy, M.A.; Basavaraju, S.; Alurappa, R.; Niranjana, S.R.; Chowdappa, S. Mycosynthesis of ZnO Nanoparticles Using <i>Trichoderma</i> spp. Isolated from Rhizosphere Soils and Its Synergistic Antibacterial Effect against <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> . <i>J. Fungi</i> 2020, 6, 181.	4.621
42.	Lakshmeesha T.R., M. Murali, Mohammad Azam Ansari, Arakere C. Udayashankar, Mohammad A. Alzohairy, Ahmad Almatroudi, Mohammad N. Alomary, Sarah Mousa Maadi Asiri, B.S. Ashwini, Naveen Kumar Kalagatur, Chandra S. Nayak, S.R. Niranjana. Biofabrication of zinc oxide nanoparticles from <i>Melia azedarach</i> and its potential in controlling soybean seed-borne phytopathogenic fungi. <i>Saudi Journal of Biological Sciences</i> , 27, 2020: 1923-1930	2.802
43.	Sumanth, B., Lakshmeesha, T. R., Ansari, M. A., Alzohairy, M. A., Udayashankar, A. C., Shobha, B., Niranjana, S. R., Srinivas, C., & Almatroudi, A. (2020). Mycogenic Synthesis of Extracellular	5.115

	Zinc Oxide Nanoparticles from <i>Xylaria acuta</i> and Its Nanoantibiotic Potential. <i>International Journal of Nanomedicine</i> , 15, 8519–8536.	
44.	Naveen J, Hulikunte Mallikarjunaiah Navya, Gavirangappa Hithamani, Puttaswamy Hariprasad, Siddapura Ramachandrappa Niranjana. Pathological, biochemical and molecular variability of <i>Colletotrichum truncatum</i> incitant of anthracnose disease in chilli (<i>Capsicum annum</i> L.). <i>Microbial Pathogenesis</i> , 2020, 104611	2.914
45.	Rajini, SB, Nandhini, M, Udayashankar, AC, Niranjana, SR, Lund, OS, Prakash, HS. Diversity, plant growth-promoting traits, and biocontrol potential of fungal endophytes of <i>Sorghum bicolor</i> . <i>Plant Pathol.</i> 2020; 69: 642– 654	2.169
46.	Mbae, K. M. and Umesha, S., 2020. Physicochemical and antimicrobial properties of post-synthesis betanin and chitosan oligosaccharide functionalized silver Nanoparticles. <i>Journal of Nanoparticle Research</i> 22:346	2.132
47.	Hanumanthappa P, AshokA, Prakash I, Priya CI, Zinzala J, Marigowda VV, Aparna HS. 2020. In <i>silico</i> and <i>in vivo</i> evaluation of oxidative stress inhibitors against Parkinson's disease using the <i>C. elegans</i> model. <i>Combinatorial Chemistry and High Throughput Screening</i> , 23:814-826,	1.339
48.	Manukumar, H. M., Yashwanth, B., Umesha, S. and Venkateswara Rao, J. 2020. Biocidal mechanism of green synthesized thyme loaded silver nanoparticles (GTAgNPs) against immune evading tricky methicillin-resistant <i>Staphylococcus aureus</i> 090 (MRSA090) at a homeostatic environment. <i>Arabian Journal of Chemistry</i> 13:1179-97	4.762
49.	Gowtham H.G., P. Duraivadivel, S. Ayusman, D. Sayani, S.L. Gholap, S.R. Niranjana, P. Hariprasad. 2021. ABA analogue produced by <i>Bacillus marisflavi</i> modulates the physiological response of <i>Brassica juncea</i> L. under drought stress. <i>Applied Soil Ecology</i> , 159:103845,	3.187
50.	Sriraghava., Mbae, K.M. and Umesha, S. 2021. Green synthesis of silver nanoparticles by <i>Rivina humilis</i> leaf extract to tackle growth of <i>Brucella</i> species and other perilous pathogens. <i>Saudi Journal of Biological Sciences</i> 28:495-503	2.802
51.	Bhat S. K., Kavya P., Kini K R., and Rao AG (2021) Design of mutants of GH11 xylanase from <i>Bacillus pumilus</i> for enhanced stability by amino acid substitutions in the N-terminal region: an <i>in silico</i> analysis. <i>Journal of Biomolecular Structure and Dynamics</i> , DOI: 10.1080/07391102.2021.1899988	3.31
52.	Pradeep, H., Umme Najma, HS Aparna. 2021. Milk Peptides as Novel Multi-Targeted Therapeutic Candidates for SARS-CoV2. <i>Protein Journal</i> , 40:310-327.	2.371
53.	Ashok NR, Arpitha Ashok, Pradeep H, Aparanji SC, Monika K,Pratibha H, Vaishali Sharma, Aparna HS. 2021. Identification of Potential Peptide Inhibitors of ACE-2 Target of SARS-CoV-2 from Buckwheat & Quinoa. <i>International Journal of Peptide Research and Therapeutics</i> , 27: 1799-1813, 2021.	1.931