Ajay Pal

List of Publications by Citations

55 papers	1,821 citations	19 h-index	42 g-index
58 ext. papers	2,149 ext. citations	4 avg, IF	5.08 L-index

#	Paper	IF	Citations
55	Synthesis and in vitro antifungal efficacy of Cu-chitosan nanoparticles against pathogenic fungi of tomato. *International Journal of Biological Macromolecules*, **2015**, 75, 346-53	7.9	242
54	Synthesis of chitosan based nanoparticles and their in vitro evaluation against phytopathogenic fungi. *International Journal of Biological Macromolecules*, **2013**, 62, 677-83	7.9	229
53	Cu-chitosan nanoparticle boost defense responses and plant growth in maize (Zea mays L.). *Scientific Reports*, **2017**, 7, 9754	4.9	165
52	Cu-Chitosan Nanoparticle Mediated Sustainable Approach To Enhance Seedling Growth in Maize by Mobilizing Reserved Food. *Journal of Agricultural and Food Chemistry*, **2016**, 64, 6148-55	5.7	127
51	Covalent immobilization of xylanase on glutaraldehyde activated alginate beads using response surface methodology: Characterization of immobilized enzyme. *Process Biochemistry*, **2011**, 46, 1315-1322	4.8	118
50	Engineered chitosan based nanomaterials: Bioactivities, mechanisms and perspectives in plant protection and growth. *International Journal of Biological Macromolecules*, **2018**, 113, 494-506	7.9	113
49	Production and extraction optimization of xylanase from Aspergillus niger DFR-5 through solid-state-fermentation. *Bioresource Technology*, **2010**, 101, 7563-9	11	110
48	Zinc encapsulated chitosan nanoparticle to promote maize crop yield. *International Journal of Biological Macromolecules*, **2019**, 127, 126-135	7.9	78
47	Salicylic acid functionalized chitosan nanoparticle: A sustainable biostimulant for plant. *International Journal of Biological Macromolecules*, **2019**, 123, 59-69	7.9	66
46	Thymol nanoemulsion exhibits potential antibacterial activity against bacterial pustule disease and growth promotory effect on soybean. *Scientific Reports*, **2018**, 8, 6650	4.9	58
45	Neuroprotective effects of Cyperus rotundus on SIN-1 induced nitric oxide generation and protein nitration: ameliorative effect against apoptosis mediated neuronal cell damage. *NeuroToxicology*, **2013**, 34, 150-9	4.4	47
44	Purification of xylanase from Aspergillus niger DFR-5: Individual and interactive effect of temperature and pH on its stability. *Process Biochemistry*, **2011**, 46, 879-887	4.8	43
43	Chitosan nanofertilizer to foster source activity in maize. *International Journal of Biological Macromolecules*, **2020**, 145, 226-234	7.9	37
42	Improved Enzyme Catalytic Characteristics upon Glutaraldehyde Cross-Linking of Alginate Entrapped Xylanase Isolated from Aspergillus flavus MTCC 9390. *Enzyme Research*, **2015**, 2015, 210784	2.4	35
41	Efficacy of xylanase purified from Aspergillus niger DFR-5 alone and in combination with pectinase and cellulase to improve yield and clarity of pineapple juice. *Journal of Food Science and Technology*, **2011**, 48, 560-8	3.3	34
40	Chitosan-silicon nanofertilizer to enhance plant growth and yield in maize (Zea mays L.). *Plant Physiology and Biochemistry*, **2021**, 159, 53-66	5.4	31
39	PURIFICATION AND CHARACTERIZATION OF BACTERIOCIN FROM WEISSELLA PARAMESENTEROIDES DFR-8, AN ISOLATE FROM CUCUMBER (CUCUMIS SATIVUS). *Journal of Food Biochemistry*, **2010**, 34, 932-948	3.3	22

38	Purification, physico-chemico-kinetic characterization and thermal inactivation thermodynamics of milk clotting enzyme from Bacillus subtilis MTCC 10422. *LWT - Food Science and Technology*, **2016**, 65, 652-660	5.4	21
37	Bioactive compounds and medicinal properties of fruit juices. *Fruits*, **2014**, 69, 391-412	0.3	21
36	Combinatorial approaches for controlling pericarp browning in Litchi (Litchi chinensis) fruit. *Journal of Food Science and Technology*, **2015**, 52, 5418-26	3.3	19
35	Synthesis, Characterization, and Application of Chitosan Nanomaterials Loaded with Zinc and Copper for Plant Growth and Protection **2017**, 227-247		16
34	Biochemical characterization and kinetic comparison of encapsulated haze removing acidophilic xylanase with partially purified free xylanase isolated from Aspergillus flavus MTCC 9390. *Journal of Food Science and Technology*, **2015**, 52, 191-200	3.3	15
33	Isolation and preliminary characterization of a nonbacteriocin antimicrobial compound from Weissella paramesenteroides DFR-8 isolated from cucumber (Cucumis sativus). *Process Biochemistry*, **2009**, 44, 499-503	4.8	15
32	Cu-chitosan nano-net improves keeping quality of tomato by modulating physio-biochemical responses. *Scientific Reports*, **2020**, 10, 21914	4.9	15
31	Simplification and optimization of deMan Rogosa Sharpe (MRS) medium for enhanced production of bacteriocin by Weissella paramesenteroides DFR-8. *Journal of Food Science and Technology*, **2010** , 47, 258-65	3.3	14
30	Chitosan Based Nanomaterials in Plant Growth and Protection. *SpringerBriefs in Plant Science*, **2016**,	0.3	13
29	Phytochemical analysis and exercise enhancing effects of hydroalcoholic extract of Celastrus paniculatus Willd. *Industrial Crops and Products*, **2014**, 55, 217-224	5.9	13
28	ISOLATION, BIOCHEMICAL PROPERTIES AND APPLICATION OF BACTERIOCINS FROM PEDIOCOCCUS PENTOSACEOUS ISOLATES. *Journal of Food Processing and Preservation*, **2010**, 34, 1064-1079	2.1	9
27	Zinc-functionalized thymol nanoemulsion for promoting soybean yield. *Plant Physiology and Biochemistry*, **2019**, 145, 64-74	5.4	8
26	Physio-biochemical responses of wheat plant towards salicylic acid-chitosan nanoparticles. *Plant Physiology and Biochemistry*, **2021**, 162, 699-705	5.4	8
25	Celastrus paniculatus Willd. mitigates t-BHP induced oxidative and apoptotic damage in C2C12 murine muscle cells. *Cytotechnology*, **2015**, 67, 955-67	2.2	7
24	Viral, Fungal and Bacterial Disease Resistance in Transgenic Plants **2016**, 627-656		7
23	Inactivation thermodynamics and iso-kinetic profiling for evaluating operational suitability of milk clotting enzyme immobilized in composite polymer matrix. *International Journal of Biological Macromolecules*, **2016**, 91, 317-28	7.9	7
22	Nullifying phosphatidic acid effect and controlling phospholipase D associated browning in litchi pericarp through combinatorial application of hexanal and inositol. *Scientific Reports*, **2019**, 9, 2402	4.9	6
21	Genotype-Specific Antioxidant Responses and Assessment of Resistance Against Causing Sclerotinia Rot in Indian Mustard. *Pathogens*, **2020**, 9,	4.5	6

20	In-vitro studies on the antioxidant assay profiling of Withania somnifera L. (Ashwagandha) Dunal root: Part 1. *Pharmacognosy Journal*, **2011**, 3, 47-55	1.6	6
19	Ashwagandha Root Extract Inhibits Acetylcholine Esterase, Protein Modification and Ameliorates H2O2-Induced Oxidative Stress in Rat Lymphocytes. *Pharmacognosy Journal*, **2017**, 9, 302-309	1.6	5
18	Properties and Types of Chitosan-Based Nanomaterials. *SpringerBriefs in Plant Science*, **2016**, 23-32	0.3	5
17	Extraction and Evaluation of Antioxidant and Free Radical Scavenging Potential Correlated with Biochemical Components of Red Rose Petals **2018**, 42, 1027-1036		4
16	Nano-materials for plant protection with special reference to Nano-chitosan **2014**,		4
15	Characterization Methods for Chitosan-Based Nanomaterials. *Nanotechnology in the Life Sciences*, **2019**, 103-116	1.1	3
14	Current and Future Prospects of Chitosan-Based Nanomaterials in Plant Protection and Growth. *SpringerBriefs in Plant Science*, **2016**, 43-48	0.3	3
13	Antioxidant Activity Profiling of Acetonic Extract of Jamun (Syzygium cumini L.) Seeds in Different In-Vitro Models. *The Open Food Science Journal*, **2020**, 12, 3-8	0.6	2
12	Slow-release Zn application through Zn-chitosan nanoparticles in wheat to intensify source activity and sink strength. *Plant Physiology and Biochemistry*, **2021**, 168, 272-281	5.4	2
11	Biological Activities of Chitosan-Based Nanomaterials. *SpringerBriefs in Plant Science*, **2016**, 33-41	0.3	2
10	Simultaneous Estimation of Twenty Eight Phenolic Compounds by a Novel and Expeditious Method Developed on Quaternary Ultra-Performance Liquid Chromatography System with a Photodiode Array Detector. *Biomolecules*, **2019**, 10,	5.9	2
9	Genetic Analysis for Resistance to Sclerotinia Stem Rot, Yield and Its Component Traits in Indian Mustard [(L.) Czern & Coss.].. *Plants*, **2022**, 11,	4.5	2
8	Chitosan nanomaterials: A prelim of next-generation fertilizers; existing and future prospects.. *Carbohydrate Polymers*, **2022**, 288, 119356	10.3	2
7	Optimization of Upstream Process Parameters for Enhanced Production of Thermostable Milk Clotting Enzyme from Bacillus Subtilis MTCC 10422. *Journal of Food Process Engineering*, **2017**, 40, e12356	2.4	1
6	Early oxidative burst and anthocyanin-mediated antioxidant defense mechanism impart resistance against Sclerotinia sclerotiorum in Indian mustard. *Physiological and Molecular Plant Pathology*, **2022**, 101847	2.6	0
5	Antioxidant properties and free radicals scavenging activities of pomegranate (Punica granatum L.) peels: An in-vitro study. *Biocatalysis and Agricultural Biotechnology*, **2022**, 42, 102368	4.2	0
4	Chitosan Metal Nanocomposites: Synthesis, Characterization, and Applications **2017**, 451-464		
3	Smart Nano-Chitosan for Fungal Disease Control **2020**, 23-47		

2	Synthesis of Chitosan-Based Nanomaterials. *SpringerBriefs in Plant Science*, **2016**, 5-21	0.3
1	Differential stem reserve food mobilization and sink strength in rice cultivars grown under submerged and aerobic conditions. *Journal of Plant Biochemistry and Biotechnology*,1	1.6