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#### Selected Patents:

Invention	Countries of filing the patent	Application number	Publication number	Status	Grant Number
Withania somnifera plant extract and method of preparation thereof	USA	13/003,758	WO2010/013254	Granted	Patent No: US, 8,481,087 B2

#### Selected Publications:

Title	Journal	Year
Valuable Contributions and Lessons Learned from Proteomics and Metabolomics Studies of COVID-19	J Proteome Research	2024
Hypothalamic protein profiling from mice subjected to social defeat stress.	Molecular Brain	2024
Cancer stem cell research: A phosphoproteomic approach.	Elsevier, Academic Press	2023
Proteins and Metabolites fingerprints of Gestational Diabetes Mellitus forming Protein-Metabolite Interactomes are its potential biomarkers.	Proteomics	2023
Diverse vaccine platforms safeguarding against SARS-CoV-2 and its variants.	Expert Rev Vaccines	2022
SARS-CoV-2 Infection Triggers Phosphorylation: Potential Target for Anti-COVID-19 Therapeutics.	Front Immunol	2022
An insight into major signaling pathways and protein-protein interaction networks involved in the pathogenesis of gestational diabetes mellitus.	Proteomics	2022
Remdesivir and its combination with repurposed drugs as COVID-19 therapeutics.	Front Immunol	2022
Editorial: Proteomics and Its Applications in Cancer.	Front. Oncol	2021

Ageing of Hematopoietic Stem Cells: Insight into Mechanisms and Consequences.	Elsevier, Academic Press	2021
Proteomics and its application in endocrine disorders.	Biochim Biophys Acta Proteins Proteom,	2021
Proteomics and Its Application in Pandemic Diseases.	J Proteome Res	2020
ACE2 as a potential therapeutic target for pandemic COVID-19.	RSC Adv.	2020
Simultaneous Occurrence of Nanospheres and Nanofibers Self-Assembled from Achiral Tripeptides.	Chemistry Open	2019
Drug Repurposing for Retinoblastoma: Recent Advances.	Curr Top Med Chem	2019
Achievements in cancer research and its therapeutics in hundred years	Curr Top Med Chem	2019
Studies on the DNA binding and anticancer activity of Ru(II) polypyridyl complexes by using a (2-(4-(diethoxymethyl)-1H-imidazo[4,5-f][1,10] phenanthroline)) intercalative ligand.	New J. Chem	2018
Comparison of Nuclear Matrix and Mitotic Chromosome Scaffold proteins in Drosophila S2 cells - Transmission of hallmarks of nuclear organization through mitosis.	Mol Cell Proteomics	2018
Absence of Wdr13 Gene Predisposes Mice to Mild Social Isolation - Chronic Stress, Leading to Depression-Like Phenotype Associated With Differential Expression of Synaptic Proteins.	Front Mol Neurosci	2018
An Insight into Powdery Mildew-Infected, Susceptible, Resistant, and Immune Sunflower Genotypes.	Proteomics	2018
Investigation of post-translational modifications in type 2 diabetes.	Clinical Proteomics	2018
Single-run mass spectrometry analysis provides deep insight into E. coli proteome.	J Am Soc Mass Spectrom	2018
Extracellular region of epidermal growth factor receptor: a potential target for anti-EGFR drug discovery.	Oncogene	2017
Human PRE-PIK3C2B, an intronic cis-element with dual function of activation and repression.	Biochimica et BiophysicaActa (BBA) - Gene Regulatory Mechanisms	2017
Withaniasomniferahas potential to treat cancer.	Springer Press	2017
Proteomics in India: A Report on Brainstorming Meeting at Hyderabad, India.	Mol Cell Proteomics	2016
Identification of components of the SUMOylation machinery in Candida glabrata: role of the deSUMOylation peptidase CgUlp2 in virulence.	J Biol Chem	2016
Implication of Genetic Deletion of Wdr13 in Mice: Mild Anxiety, Better Performance in Spatial Memory Task, With Upregulation of Multiple Synaptic Proteins.	Front. Mol. Neurosci	2016
Withania somnifera Root Extract has Potent Cytotoxic Effect against Human Malignant Melanoma Cells.	PLoS ONE	2015
Lipopeptides from the Banyan Endophyte, Bacillus subtilis K1: Mass Spectrometric Characterization of a Library of Fengycins.	J Am Soc Mass Spectrom	2012
Withani asomnifera reverses Alzheimer's disease pathology by	Proc. Natl. Acad. Sci. U S A	2012

enhancing low-density lipoprotein receptor-related protein in liver.		
Mechanism of growth inhibition of intraerythrocytic stages of <i>Plasmodium falciparum</i> by 5-aminoimidazole-4-carboxamide ribonucleoside (AICAR).	Mol. Biochem. Parasitol	2011
Deep and highly sensitive proteome coverage by LC-MS/MS without pre-fractionation.	Mol Cell Proteomics	2011
Detection of the protein dimers, multiple monomeric states and hydrated forms of <i>Plasmodium falciparum</i> triosephosphate isomerase in the gas phase.	Protein Eng Des Sel	2009
Characterization of Alkali Induced Formation of Lanthionine, Trisulfides and Tetrasulfides from Peptide Disulfides using Positive and Negative Ion Mass Spectrometry.	J Am Soc Mass Spectrom	2009
Identification of alpha- and beta-hydroxy acid containing cyclodepsipeptides in natural peptide mixtures using negative ion mass spectrometry.	J Am Soc Mass Spectrom	2009
Role of 16S ribosomal RNA methylations in translation initiation in <i>Escherichia coli</i> .	EMBO J	2008
Fragmentation of peptide disulfides under conditions of negative ion mass spectrometry: studies of oxidized glutathione and contryphan.	J Am Soc Mass Spectrom	2008
Rapid mass spectral identification of contryphans. Detection of characteristic peptide ions by fragmentation of intact disulfide-bonded peptides in crude venom.	Rapid Commun Mass Spectrom	2007
De novo sequencing and disulfide mapping of a bromotryptophan-containing conotoxin by Fourier transform ion cyclotron resonance mass spectrometry.	Anal Chem	2006