Mohammad Hassan Baig

List of Publications by Year
in descending order

59 papers	2,730 citations	236925 25 h-index	189892 50 g-index
60 all docs	60 docs citations	60 times ranked	4209 citing authors

#	Article	IF	Citations
1	Mechanistic Insights into the Antimicrobial Actions of Metallic Nanoparticles and Their Implications for Multidrug Resistance. International Journal of Molecular Sciences, 2019, 20, 2468.	4.1	299
2	Computer Aided Drug Design: Success and Limitations. Current Pharmaceutical Design, 2016, 22, 572-581.	1.9	281
3	Biophysical Study on the Interaction between Eperisone Hydrochloride and Human Serum Albumin Using Spectroscopic, Calorimetric, and Molecular Docking Analyses. Molecular Pharmaceutics, 2017, 14, 1656-1665.	4.6	214
4	Binding of Tolperisone Hydrochloride with Human Serum Albumin: Effects on the Conformation, Thermodynamics, and Activity of HSA. Molecular Pharmaceutics, 2018, 15, 1445-1456.	4.6	201
5	Binding of erucic acid with human serum albumin using a spectroscopic and molecular docking study. International Journal of Biological Macromolecules, 2017, 105, 1572-1580.	7.5	178
6	Computer Aided Drug Design and its Application to the Development of Potential Drugs for Neurodegenerative Disorders. Current Neuropharmacology, 2018, 16, 740-748.	2.9	98
7	Peptide based therapeutics and their use for the treatment of neurodegenerative and other diseases. Biomedicine and Pharmacotherapy, 2018, 103, 574-581.	5.6	85
8	Inhibitory Effect of Metformin and Pyridoxamine in the Formation of Early, Intermediate and Advanced Glycation End-Products. PLoS ONE, 2013, 8, e72128.	2.5	81
9	Enzyme targeting strategies for prevention and treatment of cancer: Implications for cancer therapy. Seminars in Cancer Biology, 2019, 56, 1-11.	9.6	81
10	Comparative genome analysis of novel coronavirus (SARS-CoV-2) from different geographical locations and the effect of mutations on major target proteins: An in silico insight. PLoS ONE, 2020, 15, e0238344.	2.5	76
11	Fibromodulin: a master regulator of myostatin controlling progression of satellite cells through a myogenic program. FASEB Journal, 2016, 30, 2708-2719.	0.5	63
12	Antioxidant and α-Amylase Inhibitory Property of *Phyllanthus virgatus* L.: An *In Vitro* and Molecular Interaction Study. BioMed Research International, 2013, 2013, 1-12.	1.9	58
13	Insight into the Effect of Inhibitor Resistant S130G Mutant on Physico-Chemical Properties of SHV Type Beta-Lactamase: A Molecular Dynamics Study. PLoS ONE, 2014, 9, e112456.	2.5	56
14	Implication of Caspase-3 as a Common Therapeutic Target for Multineurodegenerative Disorders and Its Inhibition Using Nonpeptidyl Natural Compounds. BioMed Research International, 2015, 2015, 1-9.	1.9	53
15	Methylglyoxal and Advanced Glycation End products: Insight of the regulatory machinery affecting the myogenic program and of its modulation by natural compounds. Scientific Reports, 2017, 7, 5916.	3.3	50
16	Low Temperature Synthesis of Superparamagnetic Iron Oxide (Fe3O4) Nanoparticles and Their ROS Mediated Inhibition of Biofilm Formed by Food-Associated Bacteria. Frontiers in Microbiology, 2018, 9, 2567.	3.5	47
17	Protein-protein Interactions and their Role in Various Diseases and their Prediction Techniques. Current Protein and Peptide Science, 2018, 19, 948-957.	1.4	45
18	Eugenol inhibits quorum sensing and biofilm of toxigenic MRSA strains isolated from food handlers employed in Saudi Arabia. Biotechnology and Biotechnological Equipment, 2017, 31, 387-396.	1.3	43

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19	Fibromodulin and regulation of the intricate balance between myoblast differentiation to myocytes or adipocyte-like cells. FASEB Journal, 2018, 32, 768-781.	0.5	41
20	Commonalities in Biological Pathways, Genetics, and Cellular Mechanism between Alzheimer Disease and Other Neurodegenerative Diseases: An In Silico-Updated Overview. Current Alzheimer Research, 2017, 14, 1190-1197.	1.4	39
21	Multi-Spectroscopic Characterization of Human Serum Albumin Binding with Cyclobenzaprine Hydrochloride: Insights from Biophysical and In Silico Approaches. International Journal of Molecular Sciences, 2019, 20, 662.	4.1	37
22	Identification of High-Affinity Inhibitors of Cyclin-Dependent Kinase 2 Towards Anticancer Therapy. Molecules, 2019, 24, 4589.	3.8	37
23	Virtual screening, ADMET profiling, molecular docking and dynamics approaches to search for potent selective natural molecules based inhibitors against metallothionein-III to study Alzheimer's disease. Methods, 2015, 83, 105-110.	3.8	34
24	Matrix gla protein: An extracellular matrix protein regulates myostatin expression in the muscle developmental program. Life Sciences, 2017, 172, 55-63.	4.3	32
25	Broad-spectrum inhibition of AHL-regulated virulence factors and biofilms by sub-inhibitory concentrations of ceftazidime. RSC Advances, 2016, 6, 27952-27962.	3.6	30
26	Seed Extract of Psoralea corylifolia and Its Constituent Bakuchiol Impairs AHL-Based Quorum Sensing and Biofilm Formation in Food- and Human-Related Pathogens. Frontiers in Cellular and Infection Microbiology, 2018, 8, 351.	3.9	27
27	Gymnema sylvestre for Diabetes: From Traditional Herb to Future's Therapeutic. Current Pharmaceutical Design, 2017, 23, 1667-1676.	1.9	27
28	Biosynthesized Zinc Oxide Nanoparticles Disrupt Established Biofilms of Pathogenic Bacteria. Applied Sciences (Switzerland), 2022, 12, 710.	2.5	23
29	Improved efficiency and stability of secnidazole – An ideal delivery system. Saudi Journal of Biological Sciences, 2015, 22, 42-49.	3.8	22
30	Role of Azoles in Cancer Prevention and Treatment: Present and Future Perspectives. Anti-Cancer Agents in Medicinal Chemistry, 2018, 18, 46-56.	1.7	22
31	Impact of Citral and Phloretin, Alone and in Combination, on Major Virulence Traits of Streptococcus pyogenes. Molecules, 2019, 24, 4237.	3.8	22
32	Nanoparticle-Based Drugs: A Potential Armamentarium of Effective Anti-Cancer Therapies. Current Drug Metabolism, 2018, 19, 839-846.	1.2	22
33	BLAD: A comprehensive database of widely circulated beta-lactamases. Bioinformatics, 2013, 29, 2515-2516.	4.1	20
34	Deciphering the Role of Autophagy in Treatment of Resistance Mechanisms in Glioblastoma. International Journal of Molecular Sciences, 2021, 22, 1318.	4.1	19
35	Screening of drug databank against WT and mutant main protease of SARS-CoV-2: Towards finding potential compound for repurposing against COVID-19. Saudi Journal of Biological Sciences, 2021, 28, 3152-3159.	3.8	19
36	Is PF-00835231 a Pan-SARS-CoV-2 Mpro Inhibitor? A Comparative Study. Molecules, 2021, 26, 1678.	3.8	18

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37	AMDD: Antimicrobial Drug Database. Genomics, Proteomics and Bioinformatics, 2012, 10, 360-363.	6.9	17
38	A Neuroinformatics Study Describing Molecular Interaction of Cisplatin with Acetylcholinesterase: A Plausible Cause for Anticancer Drug Induced Neurotoxicity. CNS and Neurological Disorders - Drug Targets, 2014, 13, 265-270.	1.4	16
39	Transthyretin Maintains Muscle Homeostasis through the Novel Shuttle Pathway of Thyroid Hormones during Myoblast Differentiation. Cells, 2019, 8, 1565.	4.1	15
40	Silk Cocoon-Derived Protein Bioinspired Gold Nanoparticles as a Formidable Anticancer Agent. Journal of Biomedical Nanotechnology, 2021, 17, 615-626.	1.1	15
41	Efficacy of a novel bacteriocin isolated from Lysinibacillus sp. against Bacillus pumilus. LWT - Food Science and Technology, 2019, 102, 260-267.	5.2	14
42	Bio-fabrication of titanium oxide nanoparticles from Ochradenus arabicus to obliterate biofilms of drug-resistant Staphylococcus aureus and Pseudomonas aeruginosa isolated from diabetic foot infections. Applied Nanoscience (Switzerland), 2021, 11, 375-387.	3.1	14
43	NeuroMuscleDB: a Database of Genes Associated with Muscle Development, Neuromuscular Diseases, Ageing, and Neurodegeneration. Molecular Neurobiology, 2019, 56, 5835-5843.	4.0	13
44	Identification of Novel FNIN2 and FNIN3 Fibronectin-Derived Peptides That Promote Cell Adhesion, Proliferation and Differentiation in Primary Cells and Stem Cells. International Journal of Molecular Sciences, 2021, 22, 3042.	4.1	13
45	Impact of the Double Mutants on Spike Protein of SARS-CoV-2 B.1.617 Lineage on the Human ACE2 Receptor Binding: A Structural Insight. Viruses, 2021, 13, 2295.	3.3	13
46	Screening of inhibitors against SARS-CoV-2 spike protein and their capability to block the viral entry mechanism: A viroinformatics study. Saudi Journal of Biological Sciences, 2021, 28, 3262-3269.	3.8	12
47	Identification of common therapeutic targets for selected neurodegenerative disorders: An in silico approach. Journal of Computational Science, 2016, 17, 292-306.	2.9	11
48	The effect of Benzothiazoloneâ€2 on the expression of Metallothioneinâ€3 in modulating Alzheimer's disease. Brain and Behavior, 2017, 7, e00799.	2.2	11
49	Design and Synthesis of Bioinspired Benzocoumarinâ€Chalcones Chimeras as Potential Antiâ€Breast Cancer Agents. ChemistrySelect, 2021, 6, 8754-8765.	1.5	11
50	ASK1 and its role in cardiovascular and other disorders: available treatments and future prospects. Expert Review of Proteomics, 2019, 16, 857-870.	3.0	10
51	Design, Synthesis, Evaluation and Thermodynamics of 1-Substituted Pyridylimidazo[1,5-a]Pyridine Derivatives as Cysteine Protease Inhibitors. PLoS ONE, 2013, 8, e69982.	2.5	10
52	Computational screening of camostat and related compounds against human TMPRSS2: A potential treatment of COVID-19. Saudi Pharmaceutical Journal, 2022, 30, 217-224.	2.7	7
53	MIF1 and MIF2 Myostatin Peptide Inhibitors as Potent Muscle Mass Regulators. International Journal of Molecular Sciences, 2022, 23, 4222.	4.1	7
54	Virtual screening of natural anti-filarial compounds against glutathione-S-transferase of Brugia malayi and Wuchereria bancrofti. Cellular and Molecular Biology, 2018, 64, 69-73.	0.9	6

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55	Protein Modeling and Molecular Dynamics Simulation of Cloned Regucalcin (RGN) Gene from Bubalus bubalis. Combinatorial Chemistry and High Throughput Screening, 2017, 20, 186-192.	1.1	4
56	Interfering PLD1-PED/PEA15 interaction using self-inhibitory peptides: An in silico study to discover novel therapeutic candidates against type 2 diabetes. Saudi Journal of Biological Sciences, 2019, 26, 160-164.	3.8	4
57	Biophysical interactions, docking studies and cytotoxic potential of a novel propofol-linolenate: a multi-technique approach. Journal of Biomolecular Structure and Dynamics, 2020, 38, 2389-2401.	3.5	4
58	Homology modeling and docking study of recent SHV type Î²-lactamses with traditional and novel inhibitors: an in silico approach to combat problem of multiple drug resistance in various infections. Medicinal Chemistry Research, 2012, 21, 2229-2237.	2.4	2
59	Probing the interaction of Selonsertib with human serum albumin: In silico and in vitro approaches. Current Topics in Medicinal Chemistry, 2022, 22, .	2.1	1