Shyh-Horng Chiou

List of Publications by Year
in descending order

83 papers	2,164 citations	218381 26 h-index	264894 42 g-index
83 all docs	83 docs citations	83 times ranked	1938 citing authors

#	Article	IF	Citations
1	DNA- and Protein-Scission Activities of Ascorbate in the Presence of Copper Ion and a Copper-Peptide Complex. Journal of Biochemistry, 1983, 94, 1259-1267.	0.9	153
2	The antioxidant protein alkylhydroperoxide reductase of Helicobacter pylori switches from a peroxide reductase to a molecular chaperone function. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 2552-2557.	3.3	134
3	Rapid hydrolysis of proteins and peptides by means of microwave technology and its application to amino acid analysis. International Journal of Peptide and Protein Research, 1987, 30, 572-576.	0.1	89
4	Peptide and protein hydrolysis by microwave irradiation. Biomedical Applications, 1989, 491, 424-431.	1.7	79
5	Simplified protein hydrolysis with methanesulphonic acid at elevated temperature for the complete amino acid analysis of proteins. Journal of Chromatography A, 1988, 448, 404-410.	1.8	78
6	ISOLATION AND PHYSICAL CHARACTERIZATION OF BOVINE LENS CRYSTALLINS. International Journal of Peptide and Protein Research, 1979, 13, 409-417.	0.1	74
7	Physicochemical Characterization of a Crystallin from the Squid Lens and Its Comparison with Vertebrate Lens Crystallins. Journal of Biochemistry, 1984, 95, 75-82.	0.9	59
8	Preparative scale organic synthesis using a kitchen microwave oven. Journal of the Chemical Society Chemical Communications, 1990, , 807.	2.0	58
9	The lifespan-promoting effect of acetic acid and Reishi polysaccharide. Bioorganic and Medicinal Chemistry, 2009, 17, 7831-7840.	1.4	56
10	Enhancement of Chemical Reactions by Microwave Irradiation. Journal of the Chinese Chemical Society, 1991, 38, 85-91.	0.8	50
11	DNA-Scission Activities of Ascorbate in the Presence of Metal Chelates1. Journal of Biochemistry, 1984, 96, 1307-1310.	0.9	48
12	Characterization of Three Endogenous Peptide Inhibitors for Multiple Metalloproteinases with Fibrinogenolytic Activity from the Venom of Taiwan Habu (Trimeresurus mucrosquamatus). Biochemical and Biophysical Research Communications, 1998, 248, 562-568.	1.0	46
13	Proteomic analysis of upregulated proteins in Helicobacter pylori under oxidative stress induced byâ€‰hydrogen peroxide. Kaohsiung Journal of Medical Sciences, 2011, 27, 544-553.	0.8	46
14	Proteomic analysis of proteins expressed byHelicobacter pylori under oxidative stress. Proteomics, 2005, 5, 3895-3901.	1.3	42
15	Effect of Heat-Induced Structural Perturbation of Secondary and Tertiary Structures on the Chaperone Activity of Î±-Crystallin. Biochemical and Biophysical Research Communications, 1997, 237, 277-282.	1.0	37
16	Characterization of a Novel Allergen, a Major IgE-Binding Protein from Aspergillus flavus, as an Alkaline Serine Protease. Biochemical and Biophysical Research Communications, 1999, 261, 669-675.	1.0	37
17	Crystal structure of a platelet-agglutinating factor isolated from the venom of Taiwan habu (Trimeresurus mucrosquamatus). Biochemical Journal, 2004, 378, 399-407.	1.7	35
18	Determinants of the inhibition of a Taiwan habu venom metalloproteinase by its endogenous inhibitors revealed by X-ray crystallography and synthetic inhibitor analogues. FEBS Journal, 2002, 269, 3047-3056.	0.2	34

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19	Study of Structureâ€“Activity Correlation in Destruxins, a Class of Cyclodepsipeptides Possessing Suppressive Effect on the Generation of Hepatitis B Virus Surface Antigen in Human Hepatoma Cells. Biochemical and Biophysical Research Communications, 1996, 229, 65-72.	1.0	33
20	Onco-proteogenomics identifies urinary S100A9 and GRN as potential combinatorial biomarkers for early diagnosis of hepatocellular carcinoma. BBA Clinical, 2015, 3, 205-213.	4.1	33
21	Physiological Role of the Association Complexes of Î±-Crystallin and Its Substrates on the Chaperone Activity. Biochemical and Biophysical Research Communications, 1998, 244, 379-383.	1.0	32
22	Evaluation of commonly used electrophoretic methods for the analysis of proteins and peptides and their application to biotechnology. Analytica Chimica Acta, 1999, 383, 47-60.	2.6	32
23	Clinical proteomics: Current status, challenges, andâ€‰future perspectives. Kaohsiung Journal of Medical Sciences, 2011, 27, 1-14.	0.8	32
24	Phylogenetic comparison of lens crystallins from the vertebrate and invertebrate - convergent or divergent evolution?. FEBS Letters, 1986, 201, 69-73.	1.3	30
25	alpha-Crystallin acting as a molecular chaperonin against photodamage by UV irradiation. The Protein Journal, 1997, 16, 283-289.	1.1	28
26	Proteomic identification of biomarkers related to Helicobacter pyloriâ€associated gastroduodenal disease: Challenges and opportunities. Journal of Gastroenterology and Hepatology (Australia), 2008, 23, 1657-1661.	1.4	28
27	Specific peptide-bond cleavage by microwave irradiation in weak acid solution. The Protein Journal, 1992, 11, 45-50.	1.1	27
28	Carp gamma-crystallins with high methionine content: Cloning and sequencing of the complementary DNA. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1988, 951, 226-229.	2.4	26
29	Characterization of Î³-crystallin from the eye lens of bullfrog: Complexity of Î³-crystallin multigene family as revealed by sequence comparison among different amphibian species. The Protein Journal, 1996, 15, 103-113.	1.1	25
30	Distinct roles of Î±A- and Î±B-crystallins under thermal and UV stresses. Biochemical and Biophysical Research Communications, 2002, 295, 854-861.	1.0	25
31	The 1.35â€…Ã… structure of cadmium-substituted TM-3, a snake-venom metalloproteinase from Taiwan habu: elucidation of a TNFÎ±-converting enzyme-like active-site structure with a distorted octahedral geometry of cadmium. Acta Crystallographica Section D: Biological Crystallography, 2002, 58, 1118-1128.	2.5	25
32	Characterization of lens cyrstallins and their mRNA from the carp lenses. BBA - Proteins and Proteomics, 1986, 871, 324-328.	2.1	24
33	Î±B-Crystallin in clear cell renal cell carcinoma: Tumor progression and prognostic significance. Urologic Oncology: Seminars and Original Investigations, 2013, 31, 1367-1377.	0.8	24
34	Clinical Proteomics Identifies Urinary CD14 as a Potential Biomarker for Diagnosis of Stable Coronary Artery Disease. PLoS ONE, 2015, 10, e0117169.	1.1	24
35	Fibrinogenolytic Proteases Isolated from the Snake Venom of Taiwan Habu: Serine Proteases with Kallikrein-like and Angiotensin-Degrading Activities. Biochemical and Biophysical Research Communications, 2001, 281, 1012-1018.	1.0	23
36	Characterization, Cloning, and Expression of Porcine Î±B Crystallin. Biochemical and Biophysical Research Communications, 1998, 244, 131-137.	1.0	21

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37	Biochemical comparison of Î³-crystallins from duck and frog eye lenses. FEBS Letters, 1986, 196, 219-222.	1.3	20
38	C-terminal lysine truncation increases thermostability and enhances chaperone-like function of porcine Î±B-crystallin. Biochemical and Biophysical Research Communications, 2002, 297, 309-316.	1.0	20
39	Analysis of lifespan-promoting effect of garlic extract by an integrated metabolo-proteomics approach. Journal of Nutritional Biochemistry, 2015, 26, 808-817.	1.9	20
40	Phosphoproteomics characterization of novel phosphorylated sites of lens proteins from normal and cataractous human eye lenses. Molecular Vision, 2011, 17, 186-98.	1.1	20
41	Chemical mechanism of the endogenous argininosuccinate lyase activity of duck lens Î´2-crystallin. Biochemical Journal, 1998, 333, 327-334.	1.7	19
42	Characterization of Pen n 13, a Major Allergen from the Mold Penicillium notatum. Biochemical and Biophysical Research Communications, 2000, 269, 14-20.	1.0	19
43	Alkylhydroperoxide reductase of Helicobacter pylori as a biomarker for gastric patients with different pathological manifestations. Biochimie, 2011, 93, 1115-1123.	1.3	19
44	The amino-terminal sequences of four major carp Î³-crystallin polypeptides and their homology with frog and calf Î³-crystallins. FEBS Letters, 1986, 209, 107-110.	1.3	18
45	Sequence characterization of gamma-crystallins from lip shark (Chiloscyllium colax): existence of two cDNAs encoding gamma-crystallins of mammalian and teleostean classes. The Protein Journal, 1997, 16, 299-307.	1.1	18
46	Homology Modeling of Cephalopod Lens S-Crystallin: A Natural Mutant of Sigma-Class Glutathione Transferase with Diminished Endogenous Activity. Biophysical Journal, 1999, 76, 679-690.	0.2	18
47	Upregulation of a non-heme iron-containing ferritin with dual ferroxidase and DNA-binding activities in Helicobacter pylori under acid stress. Journal of Biochemistry, 2010, 147, 535-543.	0.9	18
48	Physicochemical characterization of ?-crystallins from bovine lens?Hydrodynamic and biochemical properties. The Protein Journal, 1988, 7, 67-80.	1.1	17
49	Sequence Analysis of Four Acidic Î²-Crystallin Subunits of Amphibian Lenses: Phylogenetic Comparison between Î²- and Î³-Crystallins. Biochemical and Biophysical Research Communications, 1996, 221, 219-228.	1.0	17
50	Biochemical characterization of crystallins from frog lenses. International Journal of Peptide and Protein Research, 1987, 30, 108-116.	0.1	17
51	Quantitative Proteomic Analysis of Differentially Expressed Protein Profiles Involved in Pancreatic Ductal Adenocarcinoma. Pancreas, 2016, 45, 71-83.	0.5	17
52	Kinetic mechanism of the endogenous lactate dehydrogenase activity of duck Ïµ-crystallin. Archives of Biochemistry and Biophysics, 1991, 284, 285-291.	1.4	16
53	Characterization of a protease with Î±- and Î²-fibrinogenase activity from the western diamondback rattlesnake, crotalus atrox. Biochemical and Biophysical Research Communications, 1992, 187, 389-396.	1.0	15
54	Isolation and Characterization of a Novel Proteinase Inhibitor from the Snake Serum of Taiwan Habu (Trimeresurus mucrosquamatus). Biochemical and Biophysical Research Communications, 1999, 263, 610-616.	1.0	15

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55	Proteomic analysis and translational perspective of hepatocellular carcinoma: Identification of diagnostic protein biomarkers by an oncoâ€proteogenomics approach. Kaohsiung Journal of Medical Sciences, 2016, 32, 535-544.	0.8	15
56	Identification of in vivo phosphorylation sites of lens proteins from porcine eye lenses by a gel-free phosphoproteomics approach. Molecular Vision, 2010, 16, 294-302.	1.1	15
57	Cloning and characterization of a thermostable catfish Î±B-crystallin with chaperone-like activity at high temperatures. Experimental Eye Research, 2004, 79, 249-261.	1.2	14
58	Characterization of site-specific mutants of alkylhydroperoxide reductase with dual functionality from Helicobacter pylori. Journal of Biochemistry, 2010, 147, 661-669.	0.9	14
59	Clinical proteomics identifies potential biomarkers inHelicobacter pylorifor gastrointestinal diseases. World Journal of Gastroenterology, 2014, 20, 1529.	1.4	14
60	Biochemical comparison of lens crystallins from three reptilian species. BBA - Proteins and Proteomics, 1988, 955, 1-9.	2.1	13
61	COOH-terminal truncations and site-directed mutations enhance thermostability and chaperone-like activity of porcine alphaB-crystallin. Molecular Vision, 2009, 15, 1429-44.	1.1	12
62	Comparison of Three Classes of Snake Neurotoxins by Homology Modeling and Computer Simulation Graphics. Biochemical and Biophysical Research Communications, 1999, 257, 500-510.	1.0	11
63	Predicted Secondary and Tertiary Structures of Carp Î³-Crystallins with High Methionine Content: Role of Methionine Residues in the Protein Stability1. Journal of Biochemistry, 1992, 112, 341-344.	0.9	9
64	Biochemical characterization of crystallins from pigeon lenses: structural and sequence analysis of pigeon Î΄-crystallin. BBA - Proteins and Proteomics, 1992, 1160, 317-324.	2.1	9
65	A RAPID AND NOVEL MEANS OF PROTEIN HYDROLYSIS BY MICROWAVE IRRADIATION USING TEFLON-PYREX TUBES. , 1990, , 3-10.		9
66	Kinetic comparison of caiman ?-crystallin and authentic lactate dehydrogenases of vertebrates. The Protein Journal, 1991, 10, 161-166.	1.1	7
67	Facile synthesis of chiral 2-hydroxy acids catalyzed by a stable duck Îµ-crystallin with endogenousl-lactate dehydrogenase activity. FEBS Letters, 1992, 301, 219-222.	1.3	7
68	Two novel alpha-neurotoxins isolated from Taiwan cobra: sequence characterization and phylogenetic comparison of homologous neurotoxins. The Protein Journal, 1998, 17, 107-114.	1.1	7
69	The protein sequence homology of ?-crystallins among major vertebrate classes and their DNA sequence homology to heat-shock protein genes. The Protein Journal, 1988, 7, 527-534.	1.1	5
70	Sequence analysis of pigeon Î΄-crystallin gene and its deduced primary structure Comparison of avian Î΄-crystallins with and without endogenous argininosuccinate lyase activity. FEBS Letters, 1992, 311, 276-280.	1.3	5
71	Characterization of Î³S-Crystallin Isoforms from Lip Shark (Chiloscyllium colax): Evolutionary Comparison between Î³S and Î²/Î³ Crystallins. Biochemical and Biophysical Research Communications, 1997, 240, 51-56.	1.0	5
72	Up-regulation of neutrophil activating protein in Helicobacter pylori under high-salt stress: Structural and phylogenetic comparison with bacterial iron-binding ferritins. Biochimie, 2013, 95, 1136-1145.	1.3	5

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73	Rapid Protein Hydrolysis by Microwave Irradiation Using Heatâ€Resistant Teflonâ€Pyrex Tubes. Journal of the Chinese Chemical Society, 1989, 36, 435-442.	0.8	4
74	Characterization of Î³S-Crystallin Isoforms from a Catfish: Evolutionary Comparison of Various Î³-, Î³S-, and Î²-Crystallins. Biochemical and Biophysical Research Communications, 1998, 252, 412-419.	1.0	4
75	Comparative proteomics analysis of degenerative eye lenses of nocturnal rice eel and catfish as compared to diurnal zebrafish. Molecular Vision, 2013, 19, 623-37.	1.1	4
76	CHARACTERIZATION OF TWO MAJOR FAMILIES OF FIBRINOGENOLYTIC PROTEASES FROM THE VENOM OF TAIWAN HABU WITH SPECIAL REFERENCE TO THEIR MEDICAL APPLICATIONS. Toxin Reviews, 2005, 24, 43-61.	1.5	3
77	Characterization and molecular cloning of one novel C-type lectin from the venom of Taiwan habu (Trimeresurus mucrosquamatus). Toxicon, 2010, 55, 762-772.	0.8	2
78	From Chemistry to Translational Medicine: The Application of Proteomics to Cancer Biomarker Discovery and Diagnosis. Journal of the Chinese Chemical Society, 2015, 62, 217-226.	0.8	1
79	Simple fractionation of phospholipase A2 analogues from snake venom by high-performance liquid chromatography. Biomedical Applications, 1990, 530, 129-136.	1.7	0
80	Structural Characterization of Lens Crystallins and the Perspectives on the Evolution and Biosynthetic Applications of Enzymatic Crystallins. Journal of the Chinese Chemical Society, 1992, 39, 721-730.	0.8	0
81	Purification and sequence characterization of various Î±-neurotoxins from the king cobra (Ophiophagus hannah) venom. The Protein Journal, 1992, 11, 403-404.	1.1	0
82	Structural Characterization of Venom Toxins by Physical Methods and the Perspectives on Structureâ€Function Correlation of Proteins. Journal of the Chinese Chemical Society, 1997, 44, 337-348.	0.8	0
83	Peptide and protein hydrolysis by microwave irradiation: Kinetics and refinement of hydrolysis conditions for peptide-bond cleavage. , 1990, , 56-63.		0