Paolo Tortora

List of Publications by Year
in descending order

95 papers	3,610 citations	117625 34 h-index	149698 56 g-index
101 all docs	101 docs citations	101 times ranked	4638 citing authors

#	Article	IF	Citations
1	Direct activation of cardiac pacemaker channels by intracellular cyclic AMP. Nature, 1991, 351, 145-147.	27.8	744
2	Negatively charged silver nanoparticles with potent antibacterial activity and reduced toxicity for pharmaceutical preparations. International Journal of Nanomedicine, 2017, Volume 12, 2517-2530.	6.7	108
3	Biotechnological approaches toward nanoparticle biofunctionalization. Trends in Biotechnology, 2014, 32, 11-20.	9.3	107
4	Targeting Amyloid Aggregation: An Overview of Strategies and Mechanisms. International Journal of Molecular Sciences, 2018, 19, 2677.	4.1	103
5	Protein nanocages for self-triggered nuclear delivery of DNA-targeted chemotherapeutics in Cancer Cells. Journal of Controlled Release, 2014, 196, 184-196.	9.9	99
6	Transcriptional and post-transcriptional control of polynucleotide phosphorylase during cold acclimation in Escherichia coli. Molecular Microbiology, 2002, 36, 1470-1480.	2.5	79
7	Single-Domain Protein A-Engineered Magnetic Nanoparticles: Toward a Universal Strategy to Site-Specific Labeling of Antibodies for Targeted Detection of Tumor Cells. ACS Nano, 2010, 4, 5693-5702.	14.6	77
8	The Role of Phenylalanine 31 in Maintaining the Conformational Stability of Ribonuclease P2 fromSulfolobus solfataricusunder Extreme Conditions of Temperature and Pressureâ€. Biochemistry, 1997, 36, 8733-8742.	2.5	73
9	Analysis of the Escherichia coli RNA degradosome composition by a proteomic approach. Biochimie, 2006, 88, 151-161.	2.6	73
10	Properties of Recombinant Human Cytosolic Sialidase HsNEU2. Journal of Biological Chemistry, 2004, 279, 3169-3179.	3.4	72
11	Glucose-dependent metabolic interconversion of fructose-1,6-bisphosphatase in yeast. Biochemical and Biophysical Research Communications, 1981, 100, 688-695.	2.1	68
12	Siteâ€Specific Conjugation of ScFvs Antibodies to Nanoparticles by Bioorthogonal Strainâ€Promoted Alkyneâ€“Nitrone Cycloaddition. Angewandte Chemie - International Edition, 2012, 51, 496-499.	13.8	66
13	Hsp70 Oligomerization Is Mediated by an Interaction between the Interdomain Linker and the Substrate-Binding Domain. PLoS ONE, 2013, 8, e67961.	2.5	66
14	Structural Instability and Fibrillar Aggregation of Non-expanded Human Ataxin-3 Revealed under High Pressure and Temperature. Journal of Biological Chemistry, 2003, 278, 31554-31563.	3.4	62
15	A Major Role for Side-Chain Polyglutamine Hydrogen Bonding in Irreversible Ataxin-3 Aggregation. PLoS ONE, 2011, 6, e18789.	2.5	57
16	A High Sensitivity Biosensor to detect the presence of perfluorinated compounds in environment. Talanta, 2018, 178, 955-961.	5.5	57
17	Glucose-stimulated cAMP increase may be mediated by intracellular acidification inSaccharomyces cerevisiae. FEBS Letters, 1985, 186, 75-79.	2.8	52
18	Genetic analysis of polynucleotide phosphorylase structure and functions. Biochimie, 2007, 89, 145-157.	2.6	47

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19	Inhibition of Î±-Synuclein Fibril Elongation by Hsp70 Is Governed by a Kinetic Binding Competition between Î±-Synuclein Species. Biochemistry, 2017, 56, 1177-1180.	2.5	47
20	Effect of Caffeine on Glucose-Induced Inactivation of Gluconeogenetic Enzymes in Saccharomyces cerevisiae. A Possible Role of Cyclic AMP. FEBS Journal, 1982, 126, 617-622.	0.2	46
21	Polynucleotide Phosphorylase and Mitochondrial ATP Synthase Mediate Reduction of Arsenate to the More Toxic Arsenite by Forming Arsenylated Analogues of ADP and ATP. Toxicological Sciences, 2010, 117, 270-281.	3.1	45
22	Uniform Lipopolysaccharide (LPS)â€Loaded Magnetic Nanoparticles for the Investigation of LPSâ€“TLR4 Signaling. Angewandte Chemie - International Edition, 2011, 50, 622-626.	13.8	44
23	Purification and characterization of a thermostable carboxypeptidase from the extreme thermophilic archaebacterium Sulfolobus solfataricus. FEBS Journal, 1992, 206, 349-357.	0.2	43
24	Investigating the structural biofunctionality of antibodies conjugated to magnetic nanoparticles. Nanoscale, 2011, 3, 387-390.	5.6	41
25	Purification of phosphoenolpyruvate carboxykinase from Saccharomyces cerevisiae and its use for bicarbonate assay. Analytical Biochemistry, 1985, 144, 179-185.	2.4	40
26	Extreme heat- and pressure-resistant 7-kDa protein P2 from the archaeonSulfolobus solfataricus is dramatically destabilized by a single-point amino acid substitution. Proteins: Structure, Function and Bioinformatics, 1997, 29, 381-390.	2.6	39
27	Temperature-Dependent, Irreversible Formation of Amyloid Fibrils by a Soluble Human Ataxin-3 Carrying a Moderately Expanded Polyglutamine Stretch (Q36)â€. Biochemistry, 2003, 42, 14626-14632.	2.5	39
28	Orientationâ€Controlled Conjugation of Haloalkane Dehalogenase Fused Homing Peptides to Multifunctional Nanoparticles for the Specific Recognition of Cancer Cells. Angewandte Chemie - International Edition, 2013, 52, 3121-3125.	13.8	39
29	Ribonucleases from the extreme thermophilic archaebacterium S. solfataricus. FEBS Journal, 1993, 211, 305-310.	0.2	37
30	Fourteen novel mucopolysaccharidosis IVA producing mutations in GALNS gene. Human Mutation, 1997, 10, 368-375.	2.5	37
31	A Single-Point Mutation in the Extreme Heat- and Pressure-Resistant Sso7d Protein fromSulfolobussolfataricusLeads to a Major Rearrangement of the Hydrophobic Coreâ€‚â€¡. Biochemistry, 1999, 38, 12709-12717.	2.5	37
32	Epigallocatechin-3-gallate and tetracycline differently affect ataxin-3 fibrillogenesis and reduce toxicity in spinocerebellar ataxia type 3 model. Human Molecular Genetics, 2014, 23, 6542-6552.	2.9	37
33	Highly efficient production of anti-HER2 scFv antibody variant for targeting breast cancer cells. Applied Microbiology and Biotechnology, 2011, 91, 613-621.	3.6	36
34	Site-Specific Mutation of Staphylococcus aureus VraS Reveals a Crucial Role for the VraR-VraS Sensor in the Emergence of Glycopeptide Resistance. Antimicrobial Agents and Chemotherapy, 2011, 55, 1008-1020.	3.2	36
35	The KH and S1 domains of Escherichia coli polynucleotide phosphorylase are necessary for autoregulation and growth at low temperature. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 2007, 1769, 194-203.	2.4	34
36	A mutation in polynucleotide phosphorylase from Escherichia coli impairing RNA binding and degradosome stability. Nucleic Acids Research, 2004, 32, 1006-1017.	14.5	32

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37	Exploring hyperthermophilic proteins under pressure: theoretical aspects and experimental findings. BBA - Proteins and Proteomics, 2002, 1595, 392-396.	2.1	30
38	Regulation of Escherichia coli Polynucleotide Phosphorylase by ATP. Journal of Biological Chemistry, 2008, 283, 27355-27359.	3.4	30
39	Differential Scanning Calorimetry Study of the Thermodynamic Stability of Some Mutants of Sso7d from Sulfolobus solfataricus. Biochemistry, 1998, 37, 10493-10498.	2.5	29
40	Various Cells Retrovirally Transduced withN-Acetylgalactosoamine-6-Sulfate Sulfatase Correct Morquio Skin FibroblastsIn Vitro. Human Gene Therapy, 2001, 12, 2007-2016.	2.7	29
41	Ataxin-3 is subject to autolytic cleavage. FEBS Journal, 2006, 273, 4277-4286.	4.7	27
42	Dependence on cyclic AMP of glucose-induced inactivation of yeast gluconeogenetic enzymes. FEBS Letters, 1983, 155, 39-42.	2.8	26
43	Studies on glucose-induced inactivation of gluconeogenetic enzymes in adenylate cyclase and cAMP-dependent protein kinase yeast mutants. FEBS Journal, 1984, 145, 543-548.	0.2	24
44	A Hydrophobic Gold Surface Triggers Misfolding and Aggregation of the Amyloidogenic Josephin Domain in Monomeric Form, While Leaving the Oligomers Unaffected. PLoS ONE, 2013, 8, e58794.	2.5	24
45	Photometric Assay for Polynucleotide Phosphorylase. Analytical Biochemistry, 1999, 269, 353-358.	2.4	23
46	The Sso7d DNA-binding protein fromSulfolobus solfataricushas ribonuclease activity. FEBS Letters, 2001, 497, 131-136.	2.8	22
47	Thermal Stability and DNA Binding Activity of a Variant Form of the Sso7d Protein from the Archeon Sulfolobus solfataricus Truncated at Leucine 54. Biochemistry, 2003, 42, 8362-8368.	2.5	22
48	Different ataxin-3 amyloid aggregates induce intracellular Ca 2+ deregulation by different mechanisms in cerebellar granule cells. Biochimica Et Biophysica Acta - Molecular Cell Research, 2013, 1833, 3155-3165.	4.1	22
49	The Vault Nanoparticle: A Gigantic Ribonucleoprotein Assembly Involved in Diverse Physiological and Pathological Phenomena and an Ideal Nanovector for Drug Delivery and Therapy. Cancers, 2021, 13, 707.	3.7	22
50	Expression of a synthetic gene encoding P2 ribonuclease from the extreme thermoacidophilic archaebacterium sulfolobus solfataricus in mesophylic hosts. Gene, 1995, 154, 99-103.	2.2	21
51	Proteomic and biochemical analyses unveil tight interaction of ataxin-3 with tubulin. International Journal of Biochemistry and Cell Biology, 2009, 41, 2485-2492.	2.8	21
52	Dependence of nanoparticle-cell recognition efficiency on the surface orientation of scFv targeting ligands. Biomaterials Science, 2013, 1, 728.	5.4	21
53	Epigallocatechin-3-gallate and related phenol compounds redirect the amyloidogenic aggregation pathway of ataxin-3 towards non-toxic aggregates and prevent toxicity in neural cells and Caenorhabditis elegans animal model. Human Molecular Genetics, 2017, 26, 3271-3284.	2.9	21
54	Destabilization of non-pathological variants of ataxin-3 by metal ions results in aggregation/fibrillogenesis. International Journal of Biochemistry and Cell Biology, 2007, 39, 966-977.	2.8	20

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55	The Relationship between Aggregation and Toxicity of Polyglutamine-Containing Ataxin-3 in the Intracellular Environment of Escherichia coli. PLoS ONE, 2012, 7, e51890.	2.5	20
56	Molecular cloning, nucleotide sequence and expression of aSulfolobus solfataricusgene encoding a class II fumarase. FEBS Letters, 1994, 337, 93-98.	2.8	19
57	3D Structure of Sulfolobus solfataricus Carboxypeptidase Developed by Molecular Modeling is Confirmed by Site-Directed Mutagenesis and Small Angle X-Ray Scattering. Biophysical Journal, 2003, 85, 1165-1175.	0.5	19
58	Avidin Decorated Coreâ€“Shell Nanoparticles for Biorecognition Studies by Elastic Light Scattering. ChemBioChem, 2007, 8, 1021-1028.	2.6	19
59	Interaction of selected divalent metal ions with human ataxin-3 Q36. Journal of Biological Inorganic Chemistry, 2009, 14, 1175-1185.	2.6	19
60	The role of the central flexible region on the aggregation and conformational properties of human ataxinâ€3. FEBS Journal, 2012, 279, 451-463.	4.7	19
61	Enhanced stability of carboxypeptidase from Sulfolobus solfataricus at high pressure. Biotechnology Letters, 1996, 18, 483-488.	2.2	18
62	Interactions of ataxin-3 with its molecular partners in the protein machinery that sorts protein aggregates to the aggresome. International Journal of Biochemistry and Cell Biology, 2014, 51, 58-64.	2.8	18
63	Glucose-induced degradation of yeast fructose-1,6-bisphosphatase requires additional triggering events besides protein phosphorylation. FEBS Letters, 1987, 216, 265-269.	2.8	17
64	How Epigallocatechinâ€3â€gallate and Tetracycline Interact with the Josephin Domain of Ataxinâ€3 and Alter Its Aggregation Mode. Chemistry - A European Journal, 2015, 21, 18383-18393.	3.3	17
65	Metabolic effects of benzoate and sorbate in the yeast Saccharomyces cerevisiae at neutral pH. Archives of Microbiology, 1993, 159, 220-224.	2.2	16
66	Peptide-Nanoparticle Ligation Mediated by Cutinase Fusion for the Development of Cancer Cell-Targeted Nanoconjugates. Bioconjugate Chemistry, 2015, 26, 680-689.	3.6	16
67	Regulation of maltose utilization in Saccharomyces cerevisiae by genes of the RAS/protein kinase A pathway 1. FEBS Letters, 1997, 402, 251-255.	2.8	15
68	Structure prediction and functional analysis of KdsD, an enzyme involved in lipopolysaccharide biosynthesis. Biochemical and Biophysical Research Communications, 2009, 388, 222-227.	2.1	15
69	Polynucleotide phosphorylase-based photometric assay for inorganic phosphate. Analytical Biochemistry, 2004, 327, 209-214.	2.4	14
70	The conformational ensemble of the disordered and aggregation-protective 182â€“291 region of ataxin-3. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 5236-5247.	2.4	14
71	Studies on the degradative mechanism of phosphoenolpyruvate carboxykinase from the yeast Saccharomyces cerevisiae. Biochimica Et Biophysica Acta - Molecular Cell Research, 1989, 1014, 153-161.	4.1	13
72	Immobilization of carboxypeptidase from Sulfolobus solfataricuson magnetic nanoparticles improves enzyme stability and functionality in organic media. BMC Biotechnology, 2014, 14, 82.	3.3	12

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73	A conserved loop in polynucleotide phosphorylase (PNPase) essential for both RNA and ADP/phosphate binding. Biochimie, 2014, 97, 49-59.	2.6	12
74	Pressure and temperature as tools for investigating the role of individual non-covalent interactions in enzymatic reactions. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2006, 1764, 563-572.	2.3	11
75	Multiple Presentation of Scfv800E6 on Silica Nanospheres Enhances Targeting Efficiency Toward HER-2 Receptor in Breast Cancer Cells. Bioconjugate Chemistry, 2011, 22, 2296-2303.	3.6	11
76	Guanidine-induced unfolding of the Sso7d protein from the hyperthermophilic archaeon Sulfolobus solfataricus. International Journal of Biological Macromolecules, 2004, 34, 195-201.	7.5	10
77	An 8.5-kDa ribonuclease from the extreme thermophilic archaebacteriumSulfolobus solfataricus. FEBS Letters, 1995, 360, 187-190.	2.8	9
78	The Toxic Effects of Pathogenic Ataxin-3 Variants in a Yeast Cellular Model. PLoS ONE, 2015, 10, e0129727.	2.5	9
79	Temperature profoundly affects ataxin-3 fibrillogenesis. Biochimie, 2012, 94, 1026-1031.	2.6	8
80	A fast and straightforward procedure for vault nanoparticle purification and the characterization of its endocytic uptake. Biochimica Et Biophysica Acta - General Subjects, 2018, 1862, 2254-2260.	2.4	8
81	1H-NMR and photo-CIDNP spectroscopies show a possible role for Trp23and Phe31in nucleic acid binding by P2 ribonuclease from the archaeonSulfolobus solfataricus. FEBS Letters, 1995, 372, 135-139.	2.8	7
82	The mechanism of the polynucleotide phosphorylase-catalyzed arsenolysis of ADP. Biochimie, 2011, 93, 624-627.	2.6	7
83	Impact of Tuning the Surface Charge Distribution on Colloidal Iron Oxide Nanoparticle Toxicity Investigated in Caenorhabditis elegans. Nanomaterials, 2021, 11, 1551.	4.1	7
84	A combined approach of mass spectrometry, molecular modeling, and siteâ€directed mutagenesis highlights key structural features responsible for the thermostability ofSulfolobus solfataricuscarboxypeptidase. Proteins: Structure, Function and Bioinformatics, 2008, 71, 1843-1852.	2.6	6
85	Pathological ATX3 Expression Induces Cell Perturbations in E. coli as Revealed by Biochemical and Biophysical Investigations. International Journal of Molecular Sciences, 2021, 22, 943.	4.1	6
86	Fourteen novel mucopolysaccharidosis IVA producing mutations in GALNS gene. Human Mutation, 1997, 10, 368-375.	2.5	4
87	Identification of a phosphorylated form of phosphoenolpyruvate carboxykinase from the yeast Saccharomyces cerevisiae. Biochimica Et Biophysica Acta - Molecular Cell Research, 1987, 930, 220-229.	4.1	3
88	Protein Environment: A Crucial Triggering Factor in Josephin Domain Aggregation: The Role of 2,2,2-Trifluoroethanol. International Journal of Molecular Sciences, 2018, 19, 2151.	4.1	3
89	Methacycline displays a strong efficacy in reducing toxicity in a SCA3 Caenorhabditis elegans model. Biochimica Et Biophysica Acta - General Subjects, 2019, 1863, 279-290.	2.4	3
90	Sulfolobus carboxypeptidase. , 2004, , 953-955.		3

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91	Occurrence of two phosphorylated forms of yeast fructose-1,6-bisphosphatase with different isoelectric points. Biochimica Et Biophysica Acta - Molecular Cell Research, 1988, 972, 353-356.	4.1	2
92	Occurrence of two phosphorylated forms of yeast fructose-1,6-bisphosphatase with different isoelectric points. Biochimica Et Biophysica Acta - Bioenergetics, 1988, 972, 353-356.	1.0	2
93	Structural prerequisites for the stability of Sso7d from the archaeonSulfolobus solfataricus versushigh pressure and temperature. High Pressure Research, 2000, 19, 311-316.	1.2	0
94	The polyglutamine protein ataxin-3 enables normal growth under heat shock conditions in the methylotrophic yeast Pichia pastoris. Scientific Reports, 2017, 7, 13417.	3.3	0
95	Carboxypeptidase Ss1. , 2013, , 1608-1611.		0