Danilo Milardi

List of Publications by Year
in descending order

118 papers	3,148 citations	117625 34 h-index	206112 48 g-index
120 all docs	120 docs citations	120 times ranked	3632 citing authors

#	Article	IF	Citations
1	Proteostasis of Islet Amyloid Polypeptide: A Molecular Perspective of Risk Factors and Protective Strategies for Type II Diabetes. Chemical Reviews, 2021, 121, 1845-1893.	47.7	129
2	Cations as Switches of Amyloid-Mediated Membrane Disruption Mechanisms: Calcium and IAPP. Biophysical Journal, 2013, 104, 173-184.	0.5	103
3	Amyloid growth and membrane damage: Current themes and emerging perspectives from theory and experiments on Aî² and hIAPP. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 1625-1638.	2.6	103
4	Lipid-Chaperone Hypothesis: A Common Molecular Mechanism of Membrane Disruption by Intrinsically Disordered Proteins. ACS Chemical Neuroscience, 2020, 11, 4336-4350.	3.5	101
5	Î±-Helical Structures Drive Early Stages of Self-Assembly of Amyloidogenic Amyloid Polypeptide Aggregate Formation in Membranes. Scientific Reports, 2013, 3, 2781.	3.3	91
6	Thermodynamics of the thermal unfolding of azurin. The Journal of Physical Chemistry, 1995, 99, 14864-14870.	2.9	77
7	Carnosine Inhibits Aî²₄₂ Aggregation by Perturbing the Hâ€Bond Network in and around the Central Hydrophobic Cluster. ChemBioChem, 2013, 14, 583-592.	2.6	76
8	The Role of Cholesterol in Driving IAPP-Membrane Interactions. Biophysical Journal, 2016, 111, 140-151.	0.5	74
9	Multiple functions of insulin-degrading enzyme: a metabolic crosslight?. Critical Reviews in Biochemistry and Molecular Biology, 2017, 52, 554-582.	5.2	73
10	Inhibition of Aî² Amyloid Growth and Toxicity by Silybins: The Crucial Role of Stereochemistry. ACS Chemical Neuroscience, 2017, 8, 1767-1778.	3.5	72
11	Insulin Has Multiple Antiamyloidogenic Effects on Human Neuronal Cells. Endocrinology, 2013, 154, 375-387.	2.8	71
12	Determination of the Conformation of the Human VDAC1 N-Terminal Peptide, a Protein Moiety Essential for the Functional Properties of the Pore. ChemBioChem, 2007, 8, 744-756.	2.6	66
13	Phospholipids Critical Micellar Concentrations Trigger Different Mechanisms of Intrinsically Disordered Proteins Interaction with Model Membranes. Journal of Physical Chemistry Letters, 2018, 9, 5125-5129.	4.6	66
14	The proteasome as a druggable target with multiple therapeutic potentialities: Cutting and non-cutting edges. , 2020, 213, 107579.		62
15	Cationic Porphyrins Are Reversible Proteasome Inhibitors. Journal of the American Chemical Society, 2012, 134, 10451-10457.	13.7	60
16	Extended theoretical analysis of irreversible protein thermal unfolding. Biophysical Chemistry, 1994, 52, 183-189.	2.8	52
17	The role of copper(<scp>ii</scp>) in the aggregation of human amylin. Metallomics, 2014, 6, 1841-1852.	2.4	51
18	The role of aromatic side-chains in amyloid growth and membrane interaction of the islet amyloid polypeptide fragment LANFLVH. European Biophysics Journal, 2011, 40, 1-12.	2.2	50

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19	Extracellular truncated tau causes early presynaptic dysfunction associated with Alzheimerâ€™s disease and other tauopathies. Oncotarget, 2017, 8, 64745-64778.	1.8	49
20	A Spectroscopic and Calorimetric Investigation on the Thermal Stability of the Cys3Ala/Cys26Ala Azurin Mutant. Biophysical Journal, 1999, 77, 1052-1063.	0.5	48
21	Resveratrol interferes with the aggregation of membrane-bound human-IAPP: A molecular dynamics study. European Journal of Medicinal Chemistry, 2015, 92, 876-881.	5.5	47
22	Ubiquitin binds the amyloid Î² peptide and interferes with its clearance pathways. Chemical Science, 2019, 10, 2732-2742.	7.4	46
23	Analytical model and multiscale simulations of AÎ² peptide aggregation in lipid membranes: towards a unifying description of conformational transitions, oligomerization and membrane damage. Physical Chemistry Chemical Physics, 2013, 15, 8940.	2.8	45
24	Amino- and chloro-8-hydroxyquinolines and their copper complexes as proteasome inhibitors and antiproliferative agents. Metallomics, 2017, 9, 1439-1446.	2.4	43
25	Structural Zn(II) Implies a Switch from Fully Cooperative to Partly Downhill Folding in Highly Homologous Proteins. Journal of the American Chemical Society, 2013, 135, 5220-5228.	13.7	41
26	Calcium-activated membrane interaction of the islet amyloid polypeptide: Implications in the pathogenesis of type II diabetes mellitus. Archives of Biochemistry and Biophysics, 2008, 477, 291-298.	3.0	40
27	The double faced role of copper in AÎ² homeostasis: A survey on the interrelationship between metal dyshomeostasis, UPS functioning and autophagy in neurodegeneration. Coordination Chemistry Reviews, 2017, 347, 1-22.	18.8	39
28	Repurposing of Copper(II)-chelating Drugs for the Treatment of Neurodegenerative Diseases. Current Medicinal Chemistry, 2018, 25, 525-539.	2.4	38
29	Environmental Factors Differently Affect Human and Rat IAPP: Conformational Preferences and Membrane Interactions of IAPP17â€“29 Peptide Derivatives. Chemistry - A European Journal, 2007, 13, 10204-10215.	3.3	37
30	Membrane Interactions and Conformational Preferences of Human and Avian Prion N-Terminal Tandem Repeats: The Role of Copper(II) Ions, pH, and Membrane Mimicking Environments. Journal of Physical Chemistry B, 2010, 114, 13830-13838.	2.6	37
31	Zinc to cadmium replacement in the prokaryotic zinc-finger domain. Metallomics, 2014, 6, 96-104.	2.4	37
32	Ubiquitin Stability and the Lysâ€‰63â€Linked Polyubiquitination Site Are Compromised on Copper Binding. Angewandte Chemie - International Edition, 2007, 46, 7993-7995.	13.8	36
33	The insulin-degrading enzyme is an allosteric modulator of the 20S proteasome and a potential competitor of the 19S. Cellular and Molecular Life Sciences, 2018, 75, 3441-3456.	5.4	36
34	A blend of two resveratrol derivatives abolishes hIAPP amyloid growth and membrane damage. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 1793-1802.	2.6	36
35	Environmental Effects on a Prion's Helix II Domain: Copper(II) and Membrane Interactions with PrP180â€“193 and Its Analogues. Chemistry - A European Journal, 2006, 12, 537-547.	3.3	35
36	Zinc(II) Complexes of Ubiquitin: Speciation, Affinity and Binding Features. Chemistry - A European Journal, 2011, 17, 11596-11603.	3.3	34

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37	Copper(II) ions affect the gating dynamics of the 20S proteasome: a molecular and in cell study. Scientific Reports, 2016, 6, 33444.	3.3	34
38	Thermodynamics and kinetics of the thermal unfolding of plastocyanin. European Biophysics Journal, 1998, 27, 273-282.	2.2	33
39	DSC study of the interaction of the prion peptide PrP106â€“126 with artificial membranes. New Journal of Chemistry, 2001, 25, 1543-1548.	2.8	31
40	Phase behaviour of polymer-grafted DPPC membranes for drug delivery systems design. Journal of Thermal Analysis and Calorimetry, 2005, 80, 413-418.	3.6	28
41	Symmetry-breaking transitions in the early steps of protein self-assembly. European Biophysics Journal, 2020, 49, 175-191.	2.2	28
42	Experimental model for the thermal denaturation of azurin: a kinetic study. Biophysical Chemistry, 1996, 60, 29-38.	2.8	27
43	Cationic porphyrins are tunable gatekeepers of the 20S proteasome. Chemical Science, 2016, 7, 1286-1297.	7.4	27
44	An alternative approach in the structure-based predictions of the thermodynamics of protein unfolding. Biophysical Chemistry, 1997, 69, 43-51.	2.8	26
45	Solvent Isotope Effects on Azurin Thermal Unfolding. Journal of Physical Chemistry B, 1998, 102, 1021-1028.	2.6	26
46	The insulin degrading enzyme activates ubiquitin and promotes the formation of K48 and K63 diubiquitin. Chemical Communications, 2015, 51, 15724-15727.	4.1	26
47	Deciphering the zinc coordination properties of the prokaryotic zinc finger domain: The solution structure characterization of Ros87 H42A functional mutant. Journal of Inorganic Biochemistry, 2014, 131, 30-36.	3.5	25
48	The active role of Ca²⁺ ions in Aî²-mediated membrane damage. Chemical Communications, 2018, 54, 3629-3631.	4.1	25
49	Inorganic Stressors of Ubiquitin. Inorganic Chemistry, 2013, 52, 9567-9573.	4.0	24
50	Molecular and cytotoxic properties of hIAPP17â€“29 and rIAPP17â€“29 fragments: A comparative study with the respective full-length parent polypeptides. European Journal of Medicinal Chemistry, 2014, 81, 442-455.	5.5	24
51	The effects of scan rate and protein concentration on DSC thermograms of bovine superoxide dismutase. Thermochimica Acta, 1995, 265, 163-175.	2.7	23
52	Synthesis, biophysical characterization and anti-HIV activity of d(TG3AG) Quadruplexes bearing hydrophobic tails at the 5â€²-end. Bioorganic and Medicinal Chemistry, 2014, 22, 960-966.	3.0	23
53	A neglected modulator of insulin-degrading enzyme activity and conformation: The pH. Biophysical Chemistry, 2015, 203-204, 33-40.	2.8	22
54	New comprehensive studies of a gold(III) Dithiocarbamate complex with proven anticancer properties: Aqueous dissolution with cyclodextrins, pharmacokinetics and upstream inhibition of the ubiquitin-proteasome pathway. European Journal of Medicinal Chemistry, 2017, 138, 115-127.	5.5	22

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55	The role of the Cys2-Cys7 disulfide bridge in the early steps of Islet amyloid polypeptide aggregation: A molecular dynamics study. Chemical Physics Letters, 2008, 463, 396-399.	2.6	21
56	Evaluation of thermodynamic properties of irreversible protein thermal unfolding measured by DSC. Journal of Thermal Analysis and Calorimetry, 2005, 80, 263-270.	3.6	20
57	Trehalose Conjugates of Silybin as Prodrugs for Targeting Toxic AÎ² Aggregates. ACS Chemical Neuroscience, 2020, 11, 2566-2576.	3.5	20
58	Are fibrilgrowth and membrane damage linked processes? An experimental and computational study of IAPP12â€“18and IAPP21â€“27peptides. New Journal of Chemistry, 2010, 34, 200-207.	2.8	19
59	Modulating AÎ² aggregation by tyrosol-based ligands: The crucial role of the catechol moiety. Biophysical Chemistry, 2020, 265, 106434.	2.8	19
60	A model for the thermal unfolding of amicyanin. European Biophysics Journal, 2002, 30, 559-570.	2.2	18
61	Steered molecular dynamics studies reveal different unfolding pathways of prions from mammalian and non-mammalian species. New Journal of Chemistry, 2007, 31, 901.	2.8	18
62	Folding mechanisms steer the amyloid fibril formation propensity of highly homologous proteins. Chemical Science, 2018, 9, 3290-3298.	7.4	18
63	Sequential Application of Ligand and Structure Based Modeling Approaches to Index Chemicals for Their hH4R Antagonism. PLoS ONE, 2014, 9, e109340.	2.5	17
64	The Role of Calcium, Lipid Membranes and Islet Amyloid Polypeptide in the Onset of Type 2 Diabetes: Innocent Bystanders or Partners in a Crime?. Frontiers in Endocrinology, 2014, 5, 216.	3.5	16
65	The interplay between lipid and AÎ² amyloid homeostasis in Alzheimerâ€™s Disease: risk factors and therapeutic opportunities. Chemistry and Physics of Lipids, 2021, 236, 105072.	3.2	16
66	Unveiling the unfolding pathway of FALS associated G37R SOD1 mutant: a computational study. Molecular BioSystems, 2010, 6, 1032.	2.9	15
67	Stabilization vs. destabilization of G-quadruplex superstructures: the role of the porphyrin derivative having spermine arms. Physical Chemistry Chemical Physics, 2017, 19, 17404-17410.	2.8	15
68	Pyrazolones Activate the Proteasome by Gating Mechanisms and Protect Neuronal Cells from Î²â€Amyloid Toxicity. ChemMedChem, 2020, 15, 302-316.	3.2	15
69	Amyloid-Mediated Mechanisms of Membrane Disruption. Biophysica, 2021, 1, 137-156.	1.4	14
70	Interactions of two O-phosphorylresveratrol derivatives with model membranes. Archives of Biochemistry and Biophysics, 2012, 521, 111-116.	3.0	13
71	Copper(ii) and zinc(ii) dependent effects on AÎ²42 aggregation: a CD, Th-T and SFM study. New Journal of Chemistry, 2013, 37, 1206.	2.8	13
72	Computational Comparison of Imidazoline Association with the I2 Binding Site in Human Monoamine Oxidases. Journal of Chemical Information and Modeling, 2014, 54, 1200-1207.	5.4	13

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73	Molecular dynamics: New advances in drug discovery. European Journal of Medicinal Chemistry, 2015, 91, 1-3.	5.5	12
74	Copper, differently from zinc, affects the conformation, oligomerization state and activity of bradykinin. Metallomics, 2016, 8, 750-761.	2.4	11
75	Site directed mutagenesis of insulin-degrading enzyme allows singling out the molecular basis of peptidase versus E1-like activity: the role of metal ions. Metallomics, 2019, 11, 278-281.	2.4	11
76	Defective proteasome biogenesis into skin fibroblasts isolated from Rett syndrome subjects with MeCP2 non-sense mutations. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165793.	3.8	11
77	Interaction of prion peptide PrP 180-193 with DPPC model membranes: a thermodynamic study. New Journal of Chemistry, 2003, 27, 359-364.	2.8	10
78	A molecular dynamics study on the conformational stability of PrP 180â€“193 helix II prion fragment. Chemical Physics Letters, 2004, 390, 511-516.	2.6	10
79	Role of electrostatics in the thermal stability of ubiquitin. Journal of Thermal Analysis and Calorimetry, 2006, 86, 311-314.	3.6	10
80	Long range Trp-Trp interaction initiates the folding pathway of a pro-angiogenic Î²-hairpin peptide. Scientific Reports, 2015, 5, 16651.	3.3	10
81	Electrostatic Map Of Proteasome Î±-Rings Encodes The Design of Allosteric Porphyrin-Based Inhibitors Able To Affect 20S Conformation By Cooperative Binding. Scientific Reports, 2017, 7, 17098.	3.3	10
82	Silybins inhibit human IAPP amyloid growth and toxicity through stereospecific interactions. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2022, 1870, 140772.	2.3	10
83	Theoretical basis for differential scanning calorimetric analysis of multimeric proteins. Biophysical Chemistry, 1996, 62, 95-108.	2.8	9
84	Thermodynamic analysis of the contributions of the copper ion and the disulfide bridge to azurin stability: synergism among multiple depletions. Archives of Biochemistry and Biophysics, 2003, 414, 121-127.	3.0	9
85	The different role of Cu++ and Zn++ ions in affecting the interaction of prion peptide PrP106-126 with model membranes. Chemical Communications, 2004, , 246.	4.1	9
86	The Role Played by the Î±â€Helix in the Unfolding Pathway and Stability of Azurin: Switching Between Hierarchic and Nonhierarchic Folding. ChemBioChem, 2007, 8, 1941-1949.	2.6	9
87	Thermodynamics of azurin folding. Journal of Thermal Analysis and Calorimetry, 2008, 93, 575-581.	3.6	8
88	Substitution of the Native Zn(II) with Cd(II), Co(II) and Ni(II) Changes the Downhill Unfolding Mechanism of Ros87 to a Completely Different Scenario. International Journal of Molecular Sciences, 2020, 21, 8285.	4.1	8
89	Differential scanning calorimetry of the irreversible denaturation of bovine superoxide dismutase. Thermochimica Acta, 1994, 246, 183-191.	2.7	7
90	Homology-based Modeling of Rhodopsin-like Family Members in the Inactive State: Structural Analysis and Deduction of Tips for Modeling and Optimization. Molecular Informatics, 2017, 36, 1700014.	2.5	7

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91	Cooperative Binding of the Cationic Porphyrin Tris-T4 Enhances Catalytic Activity of 20S Proteasome Unveiling a Complex Distribution of Functional States. International Journal of Molecular Sciences, 2020, 21, 7190.	4.1	7
92	Tau/AÎ² chimera peptides: Evaluating the dual function of metal coordination and membrane interaction in one sequence. Journal of Inorganic Biochemistry, 2020, 205, 110996.	3.5	7
93	Endogenous and artificial miRNAs explore a rich variety of conformations: a potential relationship between secondary structure and biological functionality. Scientific Reports, 2020, 10, 453.	3.3	7
94	Synthesis of New Tyrosolâ€Based Phosphodiester Derivatives: Effect on Amyloid Î² Aggregation and Metal Chelation Ability. ChemMedChem, 2021, 16, 1172-1183.	3.2	7
95	A combined scanning dilatometric and differential scanning calorimetric study of the thermal unfolding of bovine serum albumin. Thermochimica Acta, 1994, 235, 231-237.	2.7	6
96	Tau/AÎ² chimera peptides: A Thioflavin-T and MALDI-TOF study of AÎ² amyloidosis in the presence of Cu(II) or Zn(II) ions and total lipid brain extract (TLBE) vesicles. Chemistry and Physics of Lipids, 2021, 237, 105085.	3.2	6
97	Free energy perturbation and molecular dynamics calculations of copper binding to azurin. Journal of Computational Chemistry, 2003, 24, 779-785.	3.3	5
98	The effect of copper/zinc replacement on the folding free energy of wild type and Cys3Ala/Cys26Ala azurin. International Journal of Biological Macromolecules, 2003, 31, 163-170.	7.5	5
99	Ubiquitin Associates with the Nâ€Terminal Domain of Nerve Growth Factor: The Role of Copper(II) Ions. Chemistry - A European Journal, 2016, 22, 17767-17775.	3.3	5
100	The change of conditions does not affect Ros87 downhill folding mechanism. Scientific Reports, 2020, 10, 21067.	3.3	5
101	The Ionophoric Activity of a Pro-Apoptotic VEGF165 Fragment on HUVEC Cells. International Journal of Molecular Sciences, 2020, 21, 2866.	4.1	5
102	The interaction of a peptide with a scrambled hydrophobic/hydrophilic sequence (Pro-Asp-Ala-Asp-Ala-His-Ala-His-Ala-His-Ala-Ala-Ala-His-Gly) (PADH) with DPPC model membranes: a DSC study. Thermochimica Acta, 2002, 390, 73-78.	2.7	3
103	Molecular mechanism of the inhibition of cytochrome c aggregation by Phe-Gly. Archives of Biochemistry and Biophysics, 2005, 435, 182-189.	3.0	3
104	Interaction of Human Amylin with Phosphatidylcholine and Phosphatidylserine Membranes. Molecular Crystals and Liquid Crystals, 2009, 500, 73-81.	0.9	3
105	Probing the helical stability in a VEGF-mimetic peptide. Bioorganic Chemistry, 2021, 116, 105379.	4.1	3
106	Insulin-Degrading Enzyme Is a Non Proteasomal Target of Carfilzomib and Affects the 20S Proteasome Inhibition by the Drug. Biomolecules, 2022, 12, 315.	4.0	3
107	Silybins are stereospecific regulators of the 20S Proteasome. Bioorganic and Medicinal Chemistry, 2022, 66, 116813.	3.0	3
108	Dipyridamole for tracking amyloidogenic proteins aggregation and enhancing polyubiquitination. Archives of Biochemistry and Biophysics, 2022, 728, 109354.	3.0	3

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109	Calorimetric evidence for different structural roles of Glu132 and Glu133 residues in human superoxide dismutase. Thermochimica Acta, 1996, 273, 25-30.	2.7	2
110	Calorimetric Evidences for Copper(II)-Regulated Chiral Recognition Between Decanucleotide 5â€²d(CTGGATCCAG)₂and ALA-TRP Dipeptides. Nucleosides & Nucleotides, 1997, 16, 1847-1854.	0.5	2
111	Strategy to discover full-length amyloid-beta peptide ligands using high-efficiency microarray technology. Beilstein Journal of Nanotechnology, 2017, 8, 2446-2453.	2.8	2
112	Contributions of polar and apolar groups to the thermodynamic stability of azurin. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1996, 18, 1347-1354.	0.4	1
113	Pores Versus Fibrils: Calcium Ions Regulate Different IAPP-Mediated Membrane Damage Mechanisms. Biophysical Journal, 2013, 104, 395a.	0.5	1
114	Metal Binding to Prion Protein. , 2003, , 21-39.		1
115	Investigation on the solid-phase synthesis of silybin prodrugs and their timed-release. Bioorganic and Medicinal Chemistry, 2021, 50, 116478.	3.0	1
116	Conformational Properties and Functional Role of VDAC N-Terminal Peptide. , 2006, , 625-626.		0
117	Structural characterization of the thermal unfolding pathway of human VEGFR1 D2 domain. FEBS Journal, 2022, 289, 1591-1602.	4.7	0
118	Modulation of the 20S Proteasome Activity by Porphyrin Derivatives Is Steered through Their Charge Distribution. Biomolecules, 2022, 12, 741.	4.0	0