Alvaro Ortega

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1534043/publications.pdf

Version: 2024-02-01

63 papers	2,807 citations	201674 27 h-index	182427 51 g-index
66 all docs	66 docs citations	66 times ranked	3975 citing authors

#	Article	IF	Citations
1	The role of solute binding proteins in signal transduction. Computational and Structural Biotechnology Journal, 2021, 19, 1786-1805.	4.1	34
2	Bacterial Sirtuins Overview: An Open Niche to Explore. Frontiers in Microbiology, 2021, 12, 744416.	3.5	10
3	Chemoreceptors with C-terminal pentapeptides for CheR and CheB binding are abundant in bacteria that maintain host interactions. Computational and Structural Biotechnology Journal, 2020, 18, 1947-1955.	4.1	4
4	How Bacterial Chemoreceptors Evolve Novel Ligand Specificities. MBio, 2020, 11, .	4.1	52
5	Determination of Ligand Profiles for Pseudomonas aeruginosa Solute Binding Proteins. International Journal of Molecular Sciences, 2019, 20, 5156.	4.1	19
6	The Molecular Mechanism of Nitrate Chemotaxis via Direct Ligand Binding to the PilJ Domain of McpN. MBio, 2019, 10, .	4.1	40
7	The activity of the C4-dicarboxylic acid chemoreceptor of Pseudomonas aeruginosa is controlled by chemoattractants and antagonists. Scientific Reports, 2018, 8, 2102.	3.3	35
8	High-Throughput Screening to Identify Chemoreceptor Ligands. Methods in Molecular Biology, 2018, 1729, 291-301.	0.9	20
9	Functional Annotation of Bacterial Signal Transduction Systems: Progress and Challenges. International Journal of Molecular Sciences, 2018, 19, 3755.	4.1	19
10	Structural Basis for Polyamine Binding at the dCACHE Domain of the McpU Chemoreceptor from Pseudomonas putida. Journal of Molecular Biology, 2018, 430, 1950-1963.	4.2	33
11	Methylation of Proteins: Biochemistry and Functional Consequences. , 2018, , 571-584.		0
12	Crystallohydrodynamics of IgG. , 2018, , 1-8.		0
13	Sensory Repertoire of Bacterial Chemoreceptors. Microbiology and Molecular Biology Reviews, 2017, 81, .	6.6	158
14	Purification and characterization of Pseudomonas aeruginosa LasR expressed in acyl-homoserine lactone free Escherichia coli cultures. Protein Expression and Purification, 2017, 130, 107-114.	1.3	12
15	Metabolic Value Chemoattractants Are Preferentially Recognized at Broad Ligand Range Chemoreceptor of Pseudomonas putida KT2440. Frontiers in Microbiology, 2017, 8, 990.	3.5	34
16	Hydrophobic Modifications of Biomolecules: An Introduction. , 2017, , 1-10.		0
17	Identification of a Chemoreceptor in Pseudomonas aeruginosa That Specifically Mediates Chemotaxis Toward Î±-Ketoglutarate. Frontiers in Microbiology, 2016, 7, 1937.	3.5	35
18	<scp>McpQ</scp> is a specific citrate chemoreceptor that responds preferentially to citrate/metal ion complexes. Environmental Microbiology, 2016, 18, 3284-3295.	3.8	39

#	Article	IF	Citations
19	Two different mechanisms mediate chemotaxis to inorganic phosphate in Pseudomonas aeruginosa. Scientific Reports, 2016, 6, 28967.	3.3	62
20	So different and still so similar: The plant compound rosmarinic acid mimics bacterial homoserine lactone quorum sensing signals. Communicative and Integrative Biology, 2016, 9, e1156832.	1.4	11
21	Rosmarinic acid is a homoserine lactone mimic produced by plants that activates a bacterial quorum-sensing regulator. Science Signaling, 2016, 9, ra1.	3.6	106
22	Identification of ligands for bacterial sensor proteins. Current Genetics, 2016, 62, 143-147.	1.7	8
23	Multiple signals modulate the activity of the complex sensor kinase <scp>T</scp>od<scp>S</scp>. Microbial Biotechnology, 2015, 8, 103-115.	4.2	12
24	FAK dimerization controls its kinase-dependent functions at focal adhesions. EMBO Journal, 2014, 33, 356-370.	7.8	101
25	Influence of ionic strength on the flexibility of alginate studied by size exclusion chromatography. Carbohydrate Polymers, 2014, 102, 223-230.	10.2	28
26	The HBM domain: Introducing bimodularity to bacterial sensing. Protein Science, 2014, 23, 332-336.	7.6	27
27	Analytical ultracentrifugation studies of oligomerization and DNA-binding of TtCarH, a Thermus thermophilus coenzyme B12-based photosensory regulator. European Biophysics Journal, 2013, 42, 463-476.	2.2	31
28	Mechanisms of Site-Specific Functions of Focal Adhesion Kinase. Biophysical Journal, 2013, 104, 609a.	0.5	1
29	Prediction of Hydrodynamic and Other Solution Properties of Partially Disordered Proteins with a Simple, Coarse-Grained Model. Journal of Chemical Theory and Computation, 2013, 9, 1678-1685.	5.3	23
30	Paralogous chemoreceptors mediate chemotaxis towards protein amino acids and the nonâ€protein amino acid gammaâ€aminobutyrate (<scp>GABA</scp>). Molecular Microbiology, 2013, 88, 1230-1243.	2.5	87
31	HYDRO Suite of Computer Programs for Solution Properties of Rigid Macromolecules. , 2013, , 1002-1006.		1
32	Crystallohydrodynamics of IgG. , 2013, , 397-403.		0
33	HYDFIT and Related Packages for Linear Molecules. , 2013, , 998-1002.		0
34	Characterization of low molecular mass thermosensitive diblock copolymers and their self-assembly by means of analytical ultracentrifugation. Colloid and Polymer Science, 2012, 290, 297-306.	2.1	4
35	Hydrodynamic Properties of Wormlike Macromolecules: Monte Carlo Simulation and Global Analysis of Experimental Data. Macromolecules, 2011, 44, 5788-5797.	4.8	38
36	Prediction of Hydrodynamic and Other Solution Properties of Rigid Proteins from Atomic- and Residue-Level Models. Biophysical Journal, 2011, 101, 892-898.	0.5	569

#	Article	IF	Citations
37	Global fit and structure optimization of flexible and rigid macromolecules and nanoparticles from analytical ultracentrifugation and other dilute solution properties. Methods, 2011, 54, 115-123.	3.8	11
38	Brownian dynamics simulation of analytical ultracentrifugation experiments. BMC Biophysics, 2011, 4, 6.	4.4	10
39	Multi-scale calculation and global-fit analysis of hydrodynamic properties of biological macromolecules: determination of the overall conformation of antibody IgG molecules. European Biophysics Journal, 2010, 39, 361-370.	2.2	12
40	Intrinsic viscosity of bead models for macromolecules and nanoparticles. European Biophysics Journal, 2010, 39, 381-388.	2.2	20
41	Methods and Tools for the Prediction of Hydrodynamic Coefficients and Other Solution Properties of Flexible Macromolecules in Solution. A Tutorial Minireview. Macromolecular Bioscience, 2010, 10, 721-730.	4.1	9
42	Analytical Ultracentrifugation Studies of Phage Ï•29 Protein p6 Binding to DNA. Journal of Molecular Biology, 2009, 385, 1616-1629.	4.2	11
43	SIMUFLEX: Algorithms and Tools for Simulation of the Conformation and Dynamics of Flexible Molecules and Nanoparticles in Dilute Solution. Journal of Chemical Theory and Computation, 2009, 5, 2606-2618.	5.3	30
44	Molecular Flexibility of Methylcelluloses of Differing Degree of Substitution by Combined Sedimentation and Viscosity Analysis. Macromolecular Bioscience, 2008, 8, 1108-1115.	4.1	33
45	Global hydrodynamic analysis of the molecular flexibility of galactomannans. Carbohydrate Polymers, 2008, 72, 356-360.	10.2	44
46	Global conformation analysis of irradiated xyloglucans. Carbohydrate Polymers, 2008, 74, 845-851.	10.2	49
47	Molecular flexibility of citrus pectins by combined sedimentation and viscosity analysis. Food Hydrocolloids, 2008, 22, 1435-1442.	10.7	78
48	Characterization of the Control Catabolite Protein of Gluconeogenic Genes Repressor by Fluorescence Cross-Correlation Spectroscopy and Other Biophysical Approaches. Biophysical Journal, 2008, 95, 4403-4415.	0.5	15
49	Improved Calculation of Rotational Diffusion and Intrinsic Viscosity of Bead Models for Macromolecules and Nanoparticles. Journal of Physical Chemistry B, 2007, 111, 955-961.	2.6	141
50	Equivalent Radii and Ratios of Radii from Solution Properties as Indicators of Macromolecular Conformation, Shape, and Flexibility. Biomacromolecules, 2007, 8, 2464-2475.	5.4	86
51	Fructose-1,6-bisphosphate Acts Both as an Inducer and as a Structural Cofactor of the Central Glycolytic Genes Repressor (CggR). Biochemistry, 2007, 46, 14996-15008.	2.5	25
52	Inducer-Modulated Cooperative Binding of the Tetrameric CggR Repressor to Operator DNA. Biophysical Journal, 2007, 92, 3215-3227.	0.5	30
53	Solution Conformation of Wild-Type and Mutant IgG3 and IgG4 Immunoglobulins Using Crystallohydrodynamics: Possible Implications for Complement Activation. Biophysical Journal, 2007, 93, 3733-3744.	0.5	59
54	Crystallohydrodynamics of Protein Assemblies: Combining Sedimentation, Viscometry, and X-Ray Scattering. Biophysical Journal, 2006, 91, 1688-1697.	0.5	17

#	Article	IF	Citations
55	MULTIHYDRO and MONTEHYDRO: Conformational search and Monte Carlo calculation of solution properties of rigid or flexible bead models. Biophysical Chemistry, 2005, 116, 121-128.	2.8	27
56	Efficient, Accurate Calculation of Rotational Diffusion and NMR Relaxation of Globular Proteins from Atomic-Level Structures and Approximate Hydrodynamic Calculations. Journal of the American Chemical Society, 2005, 127, 12764-12765.	13.7	26
57	Studying Antibody Conformations by Ultracentrifugation and Hydrodynamic Modeling. , 2004, 248, 93-114.		7
58	Calculation of the solution properties of flexible macromolecules: methods and applications. European Biophysics Journal, 2003, 32, 477-486.	2.2	35
59	Estimating domain orientation of two human antibody IgG4 chimeras by crystallohydrodynamics. European Biophysics Journal, 2003, 32, 503-510.	2.2	13
60	Hydrodynamic properties of rodlike and disklike particles in dilute solution. Journal of Chemical Physics, 2003, 119, 9914-9919.	3.0	279
61	Multiple Linear Least-Squares Fits with a Common Intercept: Determination of the Intrinsic Viscosity of Macromolecules in Solution. Journal of Chemical Education, 2003, 80, 1036.	2.3	13
62	Calculation of hydrodynamic properties of small nucleic acids from their atomic structure. Nucleic Acids Research, 2002, 30, 1782-1788.	14.5	73
63	Use of the sedimentation coefficient for modelling antibodies. Refinements to the crystallohydrodynamics approach. , 0, , 113-118.		1