Oscar Millet

List of Publications by Year in descending order

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85541 159585 5,612 110 30 71 citations h-index g-index papers 116 116 116 6809 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Intrinsic dynamics of an enzyme underlies catalysis. Nature, 2005, 438, 117-121.	27.8	1,018
2	Effects of Systematic Prone Positioning in Hypoxemic Acute Respiratory Failure. JAMA - Journal of the American Medical Association, 2004, 292, 2379.	7.4	508
3	The Static Magnetic Field Dependence of Chemical Exchange Linebroadening Defines the NMR Chemical Shift Time Scale. Journal of the American Chemical Society, 2000, 122, 2867-2877.	13.7	316
4	Diagnostic accuracy of non-invasive tests for advanced fibrosis in patients with NAFLD: an individual patient data meta-analysis. Gut, 2022, 71, 1006-1019.	12.1	195
5	Metabolomics and lipidomics in NAFLD: biomarkers and non-invasive diagnostic tests. Nature Reviews Gastroenterology and Hepatology, 2021, 18, 835-856.	17.8	183
6	Deuterium Spin Probes of Side-Chain Dynamics in Proteins. 1. Measurement of Five Relaxation Rates per Deuteron in 13C-Labeled and Fractionally 2H-Enriched Proteins in Solution. Journal of the American Chemical Society, 2002, 124, 6439-6448.	13.7	180
7	SARS-CoV-2 Infection Dysregulates the Metabolomic and Lipidomic Profiles of Serum. IScience, 2020, 23, 101645.	4.1	157
8	Structural Basis for the Aminoacid Composition of Proteins from Halophilic Archea. PLoS Biology, 2009, 7, e1000257.	5.6	152
9	Diagnostic accuracy of elastography and magnetic resonance imaging in patients with NAFLD: A systematic review and meta-analysis. Journal of Hepatology, 2021, 75, 770-785.	3.7	149
10	Dynamic NMR studies of supramolecular complexes. Progress in Nuclear Magnetic Resonance Spectroscopy, 2001, 38, 267-324.	7.5	132
11	Macromolecular Crowding Fails To Fold a Globular Protein in Cells. Journal of the American Chemical Society, 2011, 133, 8082-8085.	13.7	132
12	An NMR Experiment for the Accurate Measurement of Heteronuclear Spin-Lock Relaxation Rates. Journal of the American Chemical Society, 2002, 124, 10743-10753.	13.7	130
13	Deuterium Spin Probes of Side-Chain Dynamics in Proteins. 2. Spectral Density Mapping and Identification of Nanosecond Time-Scale Side-Chain Motions. Journal of the American Chemical Society, 2002, 124, 6449-6460.	13.7	129
14	The energetic cost of domain reorientation in maltose-binding protein as studied by NMR and fluorescence spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 12700-12705.	7.1	103
15	Protein Stabilization and the Hofmeister Effect: The Role of Hydrophobic Solvation. Biophysical Journal, 2009, 97, 2595-2603.	0.5	93
16	Structural Characterization of Nâ€Linked Glycans in the Receptor Binding Domain of the SARSâ€CoVâ€2 Spike Protein and their Interactions with Human Lectins. Angewandte Chemie - International Edition, 2020, 59, 23763-23771.	13.8	81
17	Side chain to main chain hydrogen bonds stabilize a polyglutamine helix in a transcription factor. Nature Communications, 2019, 10, 2034.	12.8	78
18	Influence of the Hofmeister Anions on Protein Stability As Studied by Thermal Denaturation and Chemical Shift Perturbationâ€. Biochemistry, 2007, 46, 917-923.	2.5	72

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19	The Effects of Mutations on Motions of Side-chains in Protein L Studied by 2H NMR Dynamics and Scalar Couplings. Journal of Molecular Biology, 2003, 329, 551-563.	4.2	59
20	Hydration Dynamics of a Halophilic Protein in Folded and Unfolded States. Journal of Physical Chemistry B, 2012, 116, 3436-3444.	2.6	52
21	Halophilic Protein Adaptation Results from Synergistic Residue-Ion Interactions in the Folded and Unfolded States. Chemistry and Biology, 2015, 22, 1597-1607.	6.0	48
22	Metabolic Characterization of Advanced Liver Fibrosis in HCV Patients as Studied by Serum 1H-NMR Spectroscopy. PLoS ONE, 2016, 11, e0155094.	2.5	44
23	Measurement of One Bond Dipolar Couplings through Lanthanide-Induced Orientation of a Calcium-Binding Protein. Journal of the American Chemical Society, 1999, 121, 8947-8948.	13.7	41
24	Halophilic enzyme activation induced by salts. Scientific Reports, 2011, 1, 6.	3.3	41
25	Directional coupling of oligodendrocyte connexinâ€47 and astrocyte connexinâ€43 gap junctions. Glia, 2018, 66, 2340-2352.	4.9	41
26	Repurposing ciclopirox as a pharmacological chaperone in a model of congenital erythropoietic porphyria. Science Translational Medicine, 2018, 10, .	12.4	38
27	Carbohydrate Affinity for the Glucose–Galactose Binding Protein Is Regulated by Allosteric Domain Motions. Journal of the American Chemical Society, 2012, 134, 19869-19876.	13.7	36
28	O-GlcNAcylated p53 in the liver modulates hepatic glucose production. Nature Communications, 2021, 12, 5068.	12.8	36
29	Synthesis of aryl 3-0-β-cellobiosyl-β-d-glucopyranosides for reactivity studies of 1,3-1,4-β-glucanases. Carbohydrate Research, 1998, 310, 53-64.	2.3	34
30	An Epoxide Intermediate in Glycosidase Catalysis. ACS Central Science, 2020, 6, 760-770.	11.3	34
31	Structural and functional analyses of the interaction of archaeal RNA polymerase with DNA. Nucleic Acids Research, 2012, 40, 9941-9952.	14.5	33
32	Diagnostic Potential of the Plasma Lipidome in Infectious Disease: Application to Acute SARS-CoV-2 Infection. Metabolites, 2021, 11, 467.	2.9	33
33	Therapeutic potential of proteasome inhibitors in congenital erythropoietic porphyria. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18238-18243.	7.1	32
34	Uneven metabolic and lipidomic profiles in recovered COVIDâ€19 patients as investigated by plasma NMR metabolomics. NMR in Biomedicine, 2022, 35, e4637.	2.8	32
35	Uroporphyrinogen III Synthase Mutations Related to Congenital Erythropoietic Porphyria Identify a Key Helix for Protein Stability. Biochemistry, 2009, 48, 454-461.	2.5	31
36	Glycoprofile Analysis of an Intact Glycoprotein As Inferred by NMR Spectroscopy. ACS Central Science, 2019, 5, 1554-1561.	11.3	31

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37	Integrative Modeling of Plasma Metabolic and Lipoprotein Biomarkers of SARS-CoV-2 Infection in Spanish and Australian COVID-19 Patient Cohorts. Journal of Proteome Research, 2021, 20, 4139-4152.	3.7	31
38	Inhibition of carnitine palmitoyltransferase 1A in hepatic stellate cells protects against fibrosis. Journal of Hepatology, 2022, 77, 15-28.	3.7	31
39	Metabolic subtypes of patients with NAFLD exhibit distinctive cardiovascular risk profiles. Hepatology, 2022, 76, 1121-1134.	7.3	31
40	<scp>LDL</scp> receptor/lipoprotein recognition: endosomal weakening of ApoB and ApoE binding to the convex face of the <scp>LR</scp> 5 repeat. FEBS Journal, 2014, 281, 1534-1546.	4.7	30
41	Structural basis of pyrrole polymerization in human porphobilinogen deaminase. Biochimica Et Biophysica Acta - General Subjects, 2018, 1862, 1948-1955.	2.4	29
42	Pivoting between Calmodulin Lobes Triggered by Calcium in the Kv7.2/Calmodulin Complex. PLoS ONE, 2014, 9, e86711.	2.5	29
43	NMR-based newborn urine screening for optimized detection of inherited errors of metabolism. Scientific Reports, 2019, 9, 13067.	3.3	28
44	Structural basis and energy landscape for the Ca2+ gating and calmodulation of the Kv7.2 K+ channel. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2395-2400.	7.1	27
45	Abnormal concentration of porphyrins in serum from COVIDâ€19 patients. British Journal of Haematology, 2020, 190, e265-e267.	2.5	27
46	NMR measurement of the off rate from the first calcium-binding site of the synaptotagmin I C2A domain. FEBS Letters, 2002, 516, 93-96.	2.8	26
47	Dissecting the Microscopic Steps of the Cyclophilin A Enzymatic Cycle on the Biological HIV-1 Capsid Substrate by NMR. Journal of Molecular Biology, 2010, 403, 723-738.	4.2	25
48	Unraveling the Conformational Landscape of Ligand Binding to Glucose/Galactose-Binding Protein by Paramagnetic NMR and MD Simulations. ACS Chemical Biology, 2016, 11, 2149-2157.	3.4	25
49	Missense UROS mutations causing congenital erythropoietic porphyria reduce UROS homeostasis that can be rescued by proteasome inhibition. Human Molecular Genetics, 2017, 26, 1565-1576.	2.9	25
50	On the Origin of the Thermostabilization of Proteins Induced by Sodium Phosphate. Journal of the American Chemical Society, 2005, 127, 9690-9691.	13.7	24
51	Fluorinated Carbohydrates as Lectin Ligands: Simultaneous Screening of a Monosaccharide Library and Chemical Mapping by ¹⁹ F NMR Spectroscopy. Journal of Organic Chemistry, 2020, 85, 16072-16081.	3.2	24
52	¹⁵ N Relaxation NMR Studies of Prolyl Oligopeptidase, an 80 kDa Enzyme, Reveal a Preâ€existing Equilibrium between Different Conformational States. ChemBioChem, 2011, 12, 2737-2739.	2.6	23
53	A Metabolomics Signature Linked To Liver Fibrosis In The Serum Of Transplanted Hepatitis C Patients. Scientific Reports, 2017, 7, 10497.	3.3	23
54	Modulation of the potassium channel KcsA by anionic phospholipids: Role of arginines at the non-annular lipid binding sites. Biochimica Et Biophysica Acta - Biomembranes, 2019, 1861, 183029.	2.6	22

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55	Unravelling the Time Scale of Conformational Plasticity and Allostery in Glycan Recognition by Human Galectinâ€1. Chemistry - A European Journal, 2020, 26, 15643-15653.	3.3	22
56	A molecular signature for the metabolic syndrome by urine metabolomics. Cardiovascular Diabetology, 2021, 20, 155.	6.8	22
57	1H NMR-Based Urine Metabolomics Reveals Signs of Enhanced Carbon and Nitrogen Recycling in Prostate Cancer. Journal of Proteome Research, 2020, 19, 2419-2428.	3.7	21
58	Tuning intracellular homeostasis of human uroporphyrinogen III synthase by enzyme engineering at a single hotspot of congenital erythropoietic porphyria. Human Molecular Genetics, 2014, 23, 5805-5813.	2.9	20
59	Increased serum miR-193a-5p during non-alcoholic fatty liver disease progression: Diagnostic and mechanistic relevance. JHEP Reports, 2022, 4, 100409.	4.9	20
60	Intracellular Rescue of the Uroporphyrinogen III Synthase Activity in Enzymes Carrying the Hotspot Mutation C73R. Journal of Biological Chemistry, 2011, 286, 13127-13133.	3.4	19
61	The Use of Dansyl-Calmodulin to Study Interactions with Channels and Other Proteins. Methods in Molecular Biology, 2013, 998, 217-231.	0.9	19
62	<i>In Vitro</i> Approach To Identify Key Amino Acids in Low Susceptibility of Rabbit Prion Protein to Misfolding. Journal of Virology, 2017, 91, .	3.4	19
63	Thermodynamics of proteinâ€cation interaction: Ca ⁺² and Mg ⁺² binding to the fifth binding module of the LDL receptor. Proteins: Structure, Function and Bioinformatics, 2010, 78, 950-961.	2.6	18
64	A Three-protein Charge Zipper Stabilizes a Complex Modulating Bacterial Gene Silencing. Journal of Biological Chemistry, 2015, 290, 21200-21212.	3.4	18
65	Depletion of mitochondrial methionine adenosyltransferase $\hat{l}\pm 1$ triggers mitochondrial dysfunction in alcohol-associated liver disease. Nature Communications, 2022, 13, 557.	12.8	18
66	A New Method for Measuring Diffusion Coefficients by 2D NMR using Accordion Spectroscopy. Journal of Magnetic Resonance, 1998, 131, 166-169.	2.1	17
67	Contribution of Shape and Charge to the Inhibition of a Family GH99 <i>endo</i> -α-1,2-Mannanase. Journal of the American Chemical Society, 2017, 139, 1089-1097.	13.7	17
68	Transmembrane and Juxtamembrane Structure of αL Integrin in Bicelles. PLoS ONE, 2013, 8, e74281.	2.5	17
69	Molecular Determinants of Chronic Liver Disease as Studied by NMR-Metabolomics. Current Topics in Medicinal Chemistry, 2017, 17, 2752-2766.	2.1	17
70	J-Edited DIffusional Proton Nuclear Magnetic Resonance Spectroscopic Measurement of Glycoprotein and Supramolecular Phospholipid Biomarkers of Inflammation in Human Serum. Analytical Chemistry, 2022, 94, 1333-1341.	6.5	17
71	Protein Tyrosine Phosphatase Oligomerization Studied by a Combination of 15N NMR Relaxation and 129Xe NMR. Effect of Buffer Containing Arginine and Glutamic Acid. Journal of the American Chemical Society, 2007, 129, 5946-5953.	13.7	16
72	Diagonal-Free 3D/4D HN,HN-TROSY-NOESY-TROSY. Journal of the American Chemical Society, 2010, 132, 2138-2139.	13.7	16

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73	The Mitochondrial Intermembrane Space Oxireductase Mia40 Funnels the Oxidative Folding Pathway of the Cytochrome c Oxidase Assembly Protein Cox19. Journal of Biological Chemistry, 2014, 289, 9852-9864.	3.4	16
74	De Novo Designed Library of Linear Helical Peptides: An Exploratory Tool in the Discovery of Protein–Protein Interaction Modulators. ACS Combinatorial Science, 2014, 16, 250-258.	3.8	16
75	Sensitive detection of SARS-CoV-2 seroconversion by flow cytometry reveals the presence of nucleoprotein-reactive antibodies in unexposed individuals. Communications Biology, 2021, 4, 486.	4.4	15
76	Protein Functional Dynamics in Multiple Timescales as Studied by NMR Spectroscopy. Advances in Protein Chemistry and Structural Biology, 2013, 92, 219-251.	2.3	14
77	Activeâ€Siteâ€Directed Inhibitors of Prolyl Oligopeptidase Abolish Its Conformational Dynamics. ChemBioChem, 2016, 17, 913-917.	2.6	14
78	Disulfide driven folding for a conditionally disordered protein. Scientific Reports, 2017, 7, 16994.	3.3	14
79	Bioengineered PBGD variant improves the therapeutic index of gene therapy vectors for acute intermittent porphyria. Human Molecular Genetics, 2018, 27, 3688-3696.	2.9	14
80	Structural, thermodynamic, and mechanistical studies in uroporphyrinogen III synthase:Molecular basis of congenital erythropoietic porphyria. Advances in Protein Chemistry and Structural Biology, 2011, 83, 43-74.	2.3	13
81	Hereditary tyrosinemia type l–associated mutations in fumarylacetoacetate hydrolase reduce the enzyme stability and increase its aggregation rate. Journal of Biological Chemistry, 2019, 294, 13051-13060.	3.4	13
82	Metabolic Landscape of the Mouse Liver by Quantitative 31P Nuclear Magnetic Resonance Analysis of the Phosphorome. Hepatology, 2021, 74, 148-163.	7.3	13
83	NMR of glycoproteins: profiling, structure, conformation and interactions. Current Opinion in Structural Biology, 2021, 68, 9-17.	5.7	13
84	Exploration of Human Serum Lipoprotein Supramolecular Phospholipids Using Statistical Heterospectroscopy in <i>n</i> -Dimensions (SHY- <i>n</i>): Identification of Potential Cardiovascular Risk Biomarkers Related to SARS-CoV-2 Infection. Analytical Chemistry, 2022, 94, 4426-4436.	6.5	13
85	A New Spin Probe of Protein Dynamics:Â Nitrogen Relaxation in15Nâ^'2H Amide Groups. Journal of the American Chemical Society, 2005, 127, 3220-3229.	13.7	12
86	Anion modulation of the ¹ H/ ² H exchange rates in backbone amide protons monitored by NMR spectroscopy. Protein Science, 2007, 16, 2733-2740.	7.6	12
87	Probing nucleotide-binding effects on backbone dynamics and folding of the nucleotide-binding domain of the sarcoplasmic/endoplasmic-reticulum Ca2+-ATPase. Biochemical Journal, 2004, 379, 235-242.	3.7	11
88	Synthesis, Dihydrofolate Reductase Inhibition, Anti-proliferative Testing, and Saturation Transfer Difference 1H-NMR Study of Some New 2-Substituted-4,6-diaminopyrimidine Derivatives. Chemical and Pharmaceutical Bulletin, 2012, 60, 70-78.	1.3	11
89	From 1,4-Disaccharide to 1,3-Glycosyl Carbasugar: Synthesis of a Bespoke Inhibitor of Family GH99 Endo-α-mannosidase. Organic Letters, 2018, 20, 7488-7492.	4.6	11
90	Structural Characterization of Nâ€Linked Glycans in the Receptor Binding Domain of the SARS oVâ€2 Spike Protein and their Interactions with Human Lectins. Angewandte Chemie, 2020, 132, 23971-23979.	2.0	9

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91	Study of the Metabolomics of Equine Preovulatory Follicular Fluid: A Way to Improve Current In Vitro Maturation Media. Animals, 2020, 10, 883.	2.3	9
92	Clicked bis-PEG-peptide conjugates for studying calmodulin-Kv7.2 channel binding. Organic and Biomolecular Chemistry, 2014, 12, 8877-8887.	2.8	8
93	Conformation-sensitive antibody reveals an altered cytosolic PAS/CNBh assembly during hERG channel gating. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	8
94	Mutation of Ser-50 and Cys-66 in Snapin Modulates Protein Structure and Stability. Biochemistry, 2012, 51, 3470-3484.	2.5	6
95	Measurement of Relaxation Rates of NH and $\hat{\text{Hl}}\pm$ Backbone Protons in Proteins with Tailored Initial Conditions. Journal of Magnetic Resonance, 1999, 139, 434-438.	2.1	5
96	Identification of novel UROS mutations in a patient with congenital erythropoietic porphyria and efficient treatment by phlebotomy. Molecular Genetics and Metabolism Reports, 2021, 27, 100722.	1.1	5
97	Congenital Erythropoietic Porphyria. Handbook of Porphyrin Science, 2013, , 151-217.	0.8	3
98	Therapeutic Targeting of Fumaryl Acetoacetate Hydrolase in Hereditary Tyrosinemia Type I. International Journal of Molecular Sciences, 2021, 22, 1789.	4.1	3
99	A graphical method for the analysis of anisotropic rotational diffusion in proteins. Journal of Biomolecular NMR, 2001, 19, 181-185.	2.8	2
100	Backbone chemical shifts assignments of d-allose binding protein in the free form and in complex with d-allose. Biomolecular NMR Assignments, 2011, 5, 31-34.	0.8	2
101	Scientific Response to the Coronavirus Crisis in Spain: Collaboration and Multidisciplinarity. ACS Chemical Biology, 2020, 15, 1722-1723.	3.4	2
102	Improving the Pharmacological Properties of Ciclopirox for Its Use in Congenital Erythropoietic Porphyria. Journal of Personalized Medicine, 2021, 11, 485.	2.5	2
103	Cosolute modulation of protein oligomerization reactions in the homeostatic timescale. Biophysical Journal, 2021, 120, 2067-2077.	0.5	2
104	An easy NMR method to study the formation of parallel \hat{l}^2 -sheets in peptide aggregates. International Journal of Peptide Research and Therapeutics, 1999, 6, 247-253.	0.1	1
105	Unravelling the molecular determinants of metabolic syndrome thanks to NMR-metabolomics of urine and serum samples. Journal of Hepatology, 2020, 73, S288-S289.	3.7	1
106	Chapter 3. Receptor-based NMR Techniques in Drug Discovery. RSC Drug Discovery Series, 0, , 44-66.	0.3	1
107	Assessing the Mobility of Severe Acute Respiratory Syndrome Coronavirus-2 Spike Protein Glycans by Structural and Computational Methods. Frontiers in Microbiology, 2022, 13, 870938.	3.5	1
108	An easy NMR method to study the formation of parallel \hat{l}^2 -sheets in peptide aggregates. International Journal of Peptide Research and Therapeutics, 1999, 6, 247-253.	0.1	0

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109	Natural and pharmacological chaperones against accelerated protein degradation: uroporphyrinogen III synthase and congenital erythropoietic porphyria. , 2020, , 389-413.		O
110	Self-assembly of synthetic peptides: Formation of amphipathic surfaces and head-to-tail self-assembly., 2002, , 316-317.		0