

# Maria Vilanova BruguÃ©s

## List of Publications by Year in descending order

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69  
papers

1,442  
citations

331670

21  
h-index

361022

35  
g-index

70  
all docs

70  
docs citations

70  
times ranked

1034  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bovine pancreatic ribonuclease A as a model of an enzyme with multiple substrate binding sites. BBA - Proteins and Proteomics, 1995, 1253, 16-24.	2.1	89
2	Pressure versus Heat-Induced Unfolding of Ribonuclease A: The Case of Hydrophobic Interactions within a Chain-Folding Initiation Site. Biochemistry, 1999, 38, 15952-15961.	2.5	80
3	The contribution of noncatalytic phosphate-binding subsites to the mechanism of bovine pancreatic ribonuclease A. Cellular and Molecular Life Sciences, 1998, 54, 766-774.	5.4	69
4	On the track of antitumour ribonucleases. Molecular BioSystems, 2005, 1, 294.	2.9	69
5	NMR Spectroscopy Reveals that RNase A is Chiefly Denatured in 40% Acetic Acid: Implications for Oligomer Formation by 3D Domain Swapping. Journal of the American Chemical Society, 2010, 132, 1621-1630.	13.7	69
6	The severed activation segment of porcine pancreatic procarboxypeptidase a is a powerful inhibitor of the active enzyme Isolation and characterisation of the activation peptide. BBA - Proteins and Proteomics, 1982, 707, 74-80.	2.1	61
7	A Nuclear Localization Sequence Endows Human Pancreatic Ribonuclease with Cytotoxic Activity. Biochemistry, 2004, 43, 2167-2177.	2.5	55
8	Intracellular pathway of Onconase that enables its delivery to the cytosol. Journal of Cell Science, 2007, 120, 1405-1411.	2.0	55
9	Analysis of the thermal unfolding of porcine procarboxypeptidase A and its functional pieces by differential scanning calorimetry. FEBS Journal, 1988, 176, 225-230.	0.2	47
10	Pressure versus temperature unfolding of ribonuclease A: An FTIR spectroscopic characterization of 10 variants at the carboxy-terminal site. Protein Science, 2001, 10, 725-734.	7.6	47
11	The Structure of an Engineered Domain-Swapped Ribonuclease Dimer and Its Implications for the Evolution of Proteins toward Oligomerization. Structure, 2001, 9, 967-976.	3.3	45
12	A human ribonuclease induces apoptosis associated with p21WAF1/CIP1 induction and JNK inactivation. BMC Cancer, 2011, 11, 9.	2.6	40
13	Pancreatic Ribonucleases. , 1997, , 271-304.		37
14	Carbodiimide EDC Induces Cross-Links That Stabilize RNase A C-Dimer against Dissociation: EDC Adducts Can Affect Protein Net Charge, Conformation, and Activity. Bioconjugate Chemistry, 2009, 20, 1459-1473.	3.6	34
15	Three-dimensional structure of a human pancreatic ribonuclease variant, a step forward in the design of cytotoxic ribonucleases. Journal of Molecular Biology, 2000, 303, 49-59.	4.2	30
16	Purification of Engineered Human Pancreatic Ribonuclease. Methods in Enzymology, 2001, 341, 221-234.	1.0	27
17	Urea-gradient gel electrophoresis studies on the association of procarboxypeptidases A and B, proproteinase E, and their tryptic activation products. FEBS Letters, 1985, 191, 273-277.	2.8	26
18	Formation, Structure, and Dissociation of the Ribonuclease S Three-dimensional Domain-swapped Dimer. Journal of Biological Chemistry, 2006, 281, 9400-9406.	3.4	26

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19	Pressure as a tool to study protein-unfolding/refolding processes: The case of ribonuclease A. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2006, 1764, 461-469.	2.3	25
20	Pressure-Jump-Induced Kinetics Reveals a Hydration Dependent Folding/Unfolding Mechanism of Ribonuclease A. <i>Biophysical Journal</i> , 2006, 91, 2264-2274.	0.5	24
21	Crowding agents and osmolytes provide insight into the formation and dissociation of RNase A oligomers. <i>Archives of Biochemistry and Biophysics</i> , 2011, 506, 123-129.	3.0	23
22	Production of Engineered Human Pancreatic Ribonucleases, Solving Expression and Purification Problems, and Enhancing Thermostability. <i>Protein Expression and Purification</i> , 1999, 17, 169-181.	1.3	22
23	A Cytotoxic Ribonuclease Variant with a Discontinuous Nuclear Localization Signal Constituted by Basic Residues Scattered Over Three Areas of the Molecule. <i>Journal of Molecular Biology</i> , 2006, 360, 548-557.	4.2	22
24	The use of pressure-jump relaxation kinetics to study protein folding landscapes. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2006, 1764, 489-496.	2.3	22
25	Distinct Unfolding and Refolding Pathways of Ribonuclease A Revealed by Heating and Cooling Temperature Jumps. <i>Biophysical Journal</i> , 2008, 94, 4056-4065.	0.5	22
26	Quantitative analysis, using MALDI-TOF mass spectrometry, of the N-terminal hydrolysis and cyclization reactions of the activation process of onconase. <i>FEBS Journal</i> , 2004, 271, 1163-1171.	0.2	20
27	Activating transcription factor 3 is crucial for antitumor activity and to strengthen the antiviral properties of Onconase. <i>Oncotarget</i> , 2017, 8, 11692-11707.	1.8	20
28	The activation segment of procarboxypeptidase A from porcine pancreas constitutes a folded structural domain. <i>FEBS Letters</i> , 1982, 149, 257-260.	2.8	19
29	A cytotoxic ribonuclease reduces the expression level of P-glycoprotein in multidrug-resistant cell lines. <i>Investigational New Drugs</i> , 2012, 30, 880-888.	2.6	19
30	Valine 108, a Chain-Folding Initiation Site-Belonging Residue, Crucial for the Ribonuclease A Stability. <i>Biochemical and Biophysical Research Communications</i> , 1999, 265, 356-360.	2.1	18
31	Intracellular Routing of Cytotoxic Pancreatic-Type Ribonucleases. <i>Current Pharmaceutical Biotechnology</i> , 2008, 9, 169-179.	1.6	18
32	The contribution of the residues from the main hydrophobic core of ribonuclease A to its pressure-folding transition state. <i>Protein Science</i> , 2006, 15, 1000-1009.	7.6	17
33	Pressure- and temperature-induced unfolding studies: thermodynamics of core hydrophobicity and packing of ribonuclease A. <i>Biological Chemistry</i> , 2006, 387, 285-296.	2.5	16
34	The Structural Determinants that Lead to the Formation of Particular Oligomeric Structures in the Pancreatic-Type Ribonuclease Family. <i>Current Protein and Peptide Science</i> , 2008, 9, 370-393.	1.4	16
35	Thermal unfolding of eosinophil cationic protein/ribonuclease 3: A nonreversible process. <i>Protein Science</i> , 2006, 15, 2816-2827.	7.6	15
36	A nuclear-directed human pancreatic ribonuclease (PE5) targets the metabolic phenotype of cancer cells. <i>Oncotarget</i> , 2016, 7, 18309-18324.	1.8	15

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37	The nuclear transport capacity of a human-pancreatic ribonuclease variant is critical for its cytotoxicity. <i>Investigational New Drugs</i> , 2011, 29, 811-817.	2.6	13
38	Asymmetric Kinetics of Protein Structural Changes. <i>Accounts of Chemical Research</i> , 2009, 42, 778-787.	15.6	12
39	Stabilization of human pancreatic ribonuclease through mutation at its N-terminal edge. <i>Protein Engineering, Design and Selection</i> , 2002, 15, 887-893.	2.1	11
40	Destabilizing Mutations Alter the Hydrogen Exchange Mechanism in Ribonuclease A. <i>Biophysical Journal</i> , 2008, 94, 2297-2305.	0.5	11
41	Generation of New Cytotoxic Human Ribonuclease Variants Directed to the Nucleus. <i>Molecular Pharmaceutics</i> , 2012, 9, 2894-2902.	4.6	11
42	Transcriptional profiling of NCI/ADR-RES cells unveils a complex network of signaling pathways and molecular mechanisms of drug resistance. <i>OncoTargets and Therapy</i> , 2018, Volume 11, 221-237.	2.0	11
43	Characterization of the dimerization process of a domain-swapped dimeric variant of human pancreatic ribonuclease. <i>FEBS Journal</i> , 2006, 273, 1166-1176.	4.7	9
44	Apoptin, A Versatile Protein with Selective Antitumor Activity. <i>Current Medicinal Chemistry</i> , 2018, 25, 3540-3559.	2.4	9
45	A family of manganese complexes containing heterocyclic-based ligands with cytotoxic properties. <i>Journal of Inorganic Biochemistry</i> , 2018, 182, 124-132.	3.5	8
46	Human pancreatic ribonuclease presents higher endonucleolytic activity than ribonuclease A. <i>Archives of Biochemistry and Biophysics</i> , 2008, 471, 191-197.	3.0	7
47	Contribution of the C30/C75 disulfide bond to the biological properties of onconase. <i>Biological Chemistry</i> , 2008, 389, 1127-1136.	2.5	7
48	X-ray crystallographic studies of RNase A variants engineered at the most destabilizing positions of the main hydrophobic core: Further insight into protein stability. <i>Proteins: Structure, Function and Bioinformatics</i> , 2009, 77, 658-669.	2.6	7
49	Towards Tricking a Pathogen's Protease into Fighting Infection: The 3D Structure of a Stable Circularly Permuted Onconase Variant Cleaved by HIV-1 Protease. <i>PLoS ONE</i> , 2013, 8, e54568.	2.5	7
50	Structural investigation of ribonuclease A conformational preferences using high pressure protein crystallography. <i>Chemical Physics</i> , 2016, 468, 53-62.	1.9	7
51	Strengths and Challenges of Secretory Ribonucleases as AntiTumor Agents. <i>Pharmaceutics</i> , 2021, 13, 82.	4.5	7
52	Bactericidal Activity Engineered on Human Pancreatic Ribonuclease and Onconase. <i>Molecular Pharmaceutics</i> , 2009, 6, 531-542.	4.6	6
53	A truncated apoptin protein variant selectively kills cancer cells. <i>Investigational New Drugs</i> , 2017, 35, 260-268.	2.6	6
54	Mapping the stability clusters in bovine pancreatic ribonuclease A. <i>Biopolymers</i> , 2009, 91, 1038-1047.	2.4	5

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55	Antitumor Ribonucleases. <i>Nucleic Acids and Molecular Biology</i> , 2011, , 55-88.	0.2	5
56	Structural Insights into Subunits Assembly and the Oxyester Splicing Mechanism of Neq pol Split Intein. <i>Cell Chemical Biology</i> , 2018, 25, 871-879.e2.	5.2	5
57	Conformational predictive studies on the activation segment of pancreatic procarboxypeptidases. <i>Biochemical and Biophysical Research Communications</i> , 1987, 149, 729-734.	2.1	3
58	Interactions Crucial for Three-Dimensional Domain Swapping in the HP-RNase Variant PM8. <i>Biophysical Journal</i> , 2011, 101, 459-467.	0.5	3
59	Insights into the mechanism of Apoptin's exquisitely selective anti-tumor action from atomic level characterization of its conformation and dynamics. <i>Archives of Biochemistry and Biophysics</i> , 2017, 614, 53-64.	3.0	3
60	A scanning microcalorimetric study of procarboxypeptidase A and its tryptic pieces carboxypeptidase A and activation segment. <i>Biochemical Society Transactions</i> , 1985, 13, 343-344.	3.4	2
61	Construction of Highly Stable Cytotoxic Nuclear-Directed Ribonucleases. <i>Molecules</i> , 2018, 23, 3273.	3.8	2
62	A Nuclear-Directed Ribonuclease Variant Targets Cancer Stem Cells and Inhibits Migration and Invasion of Breast Cancer Cells. <i>Cancers</i> , 2021, 13, 4350.	3.7	2
63	<sup>1</sup> H, <sup>13</sup> C and <sup>15</sup> N resonance assignments of the Onconase FL-G zymogen. <i>Biomolecular NMR Assignments</i> , 2013, 7, 13-15.	0.8	1
64	Investigating the effects of double mutation C30A/C75A on onconase structure: Studies at atomic resolution. <i>Biopolymers</i> , 2014, 101, 454-460.	2.4	1
65	Approaches to Endow Ribonucleases with Antitumor Activity: Lessons Learned from the Native Cytotoxic Ribonucleases. , 0, , .		1
66	The Selectivity for Tumor Cells of Nuclear-Directed Cytotoxic RNases Is Mediated by the Nuclear/Cytoplasmic Distribution of p27KIP1. <i>Molecules</i> , 2021, 26, 1319.	3.8	1
67	Ribonucleases directed to the nucleus as a novel proapoptotic anticancer strategy. <i>New Biotechnology</i> , 2009, 25, S8-S9.	4.4	0
68	Exploring the Energy Landscape of Protein Unfolding under High Pressure. , 2003, , 55-59.		0
69	Contribution of the C30/C75 disulfide bond to the biological properties of onconase. <i>Biological Chemistry</i> , 2008, .	2.5	0