Tomoshisa Ogawa

List of Publications by Year
in descending order

130 papers	4,100 citations	101543 36 h-index	133252 59 g-index
131 all docs	131 docs citations	131 times ranked	3539 citing authors

#	Article	IF	Citations
1	Antioxidative Properties of Tripeptide Libraries Prepared by the Combinatorial Chemistry. Journal of Agricultural and Food Chemistry, 2003, 51, 3668-3674.	5.2	317
2	Accelerated evolution of crotalinae snake venom gland serine proteases. FEBS Letters, 1996, 397, 83-88.	2.8	153
3	Molecular diversity and accelerated evolution of C-type lectin-like proteins from snake venom. Toxicon, 2005, 45, 1-14.	1.6	151
4	Target-Specific Chemical Acylation of Lectins by Ligand-Tethered DMAP Catalysts. Journal of the American Chemical Society, 2008, 130, 245-251.	13.7	131
5	Isolation and Characterization of Rhamnose-binding Lectins from Eggs of Steelhead Trout (Oncorhynchus mykiss) Homologous to Low Density Lipoprotein Receptor Superfamily. Journal of Biological Chemistry, 1998, 273, 19190-19197.	3.4	114
6	Diversified Carbohydrate-Binding Lectins from Marine Resources. Journal of Amino Acids, 2011, 2011, 1-20.	5.8	92
7	Isolation and characterization of protein fractions from deoiled rice bran. European Food Research and Technology, 2009, 228, 391-401.	3.3	89
8	Molecular evolution of myotoxic phospholipases A2 from snake venom. Toxicon, 2003, 42, 841-854.	1.6	87
9	Purification and characterization of antioxidative peptides derived from rice bran protein hydrolysates. European Food Research and Technology, 2009, 228, 553-563.	3.3	83
10	The function of rhamnose-binding lectin in innate immunity by restricted binding to Gb3. Developmental and Comparative Immunology, 2009, 33, 187-197.	2.3	83
11	Rhamnose-binding Lectins from Steelhead Trout (Oncorhynchus mykiss) Eggs Recognize Bacterial Lipopolysaccharides and Lipoteichoic Acid. Bioscience, Biotechnology and Biochemistry, 2002, 66, 604-612.	1.3	78
12	Lectin microarray analysis of pluripotent and multipotent stem cells. Genes To Cells, 2011, 16, 1-11.	1.2	77
13	Functional and structural characterization of multiple galectins from the skin mucus of conger eel, Conger myriaster. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 1999, 123, 33-45.	1.6	70
14	Bradykinin-potentiating peptides and C-type natriuretic peptides from snake venom. Immunopharmacology, 1999, 44, 129-135.	2.0	67
15	Structural characterization of a rhamnose-binding glycoprotein (lectin) from Spanish mackerel (Scomberomorous niphonius) eggs. Biochimica Et Biophysica Acta - General Subjects, 2007, 1770, 617-629.	2.4	66
16	Accelerated evolution of snake venom phospholipase A2 isozymes for acquisition of diverse physiological functions. Toxicon, 1996, 34, 1229-1236.	1.6	62
17	Isolation and characterization of L-rhamnose-binding lectins from chum salmon (Oncorhynchus keta) eggs. Fisheries Science, 2002, 68, 1352-1366.	1.6	62
18	Characterization of the Yam Tuber Storage Proteins from Dioscorea batatas Exhibiting Unique Lectin Activities. Journal of Biological Chemistry, 2004, 279, 26028-26035.	3.4	62

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19	Isolation, characterization and molecular evolution of a novel pearl shell lectin from a marine bivalve, Pteria penguin. Molecular Diversity, 2006, 10, 607-618.	3.9	62
20	Isolation and Characterization of a Mannan-Binding Lectin from the Freshwater Cyanobacterium (Blue-Green Algae) Microcystis viridis. Biochemical and Biophysical Research Communications, 1999, 265, 703-708.	2.1	61
21	Isolation and characterization of l-rhamnose-binding lectin, which binds to microsporidian Glugea plecoglossi, from ayu (Plecoglossus altivelis) eggs. Developmental and Comparative Immunology, 2008, 32, 487-499.	2.3	61
22	Purification and characterisation of antioxidative peptides from unfractionated rice bran protein hydrolysates. International Journal of Food Science and Technology, 2008, 43, 35-43.	2.7	60
23	Accelerated evolution of Trimeresurus okinavensis venom gland phospholipase A2 isozyme-encoding genes. Gene, 1996, 172, 267-272.	2.2	59
24	Accelerated Evolution in the Protein-coding Region of Galectin cDNAs, Congerin I and Congerin II, from Skin Mucus of Conger Eel (Conger myriaster). Bioscience, Biotechnology and Biochemistry, 1999, 63, 1203-1208.	1.3	59
25	A Novel Rhamnose-binding Lectin Family from Eggs of Steelhead Trout (Oncorhynchus mykiss) with Different Structures and Tissue Distribution. Bioscience, Biotechnology and Biochemistry, 2001, 65, 1328-1338.	1.3	59
26	Structure of Rhamnose-binding Lectin CSL3: Unique Pseudo-tetrameric Architecture of a Pattern Recognition Protein. Journal of Molecular Biology, 2009, 391, 390-403.	4.2	59
27	The habu genome reveals accelerated evolution of venom protein genes. Scientific Reports, 2018, 8, 11300.	3.3	58
28	Molecular evolution of group II phospholipases A2. Journal of Molecular Evolution, 1995, 41, 867-77.	1.8	56
29	Regional evolution of venom-gland phospholipase A2 isoenzymes of Trimeresurus flavoviridis snakes in the southwestern islands of Japan. Biochemical Journal, 2000, 347, 491-499.	3.7	50
30	Urinary Fetuin-A Is a Novel Marker for Diabetic Nephropathy in Type 2 Diabetes Identified by Lectin Microarray. PLoS ONE, 2013, 8, e77118.	2.5	50
31	High-resolution structure of the conger eel galectin, congerin I, in lactose-liganded and ligand-free forms: emergence of a new structure class by accelerated evolution. Structure, 1999, 7, 1223-1233.	3.3	49
32	Interisland Evolution of Trimeresurus flavoviridis Venom Phospholipase A 2 Isozymes. Journal of Molecular Evolution, 2003, 56, 286-293.	1.8	48
33	Characterization and Evolution of a Gene Encoding a Trimeresums flavoviridis Serum Protein that Inhibits Basic Phospholipase A2 Isozymes in the Snake's Venom. FEBS Journal, 1997, 249, 838-845.	0.2	47
34	Distribution and Molecular Evolution of Rhamnose-binding Lectins inSalmonidae: Isolation and Characterization of Two Lectins from White-spotted Charr (Salvelinus leucomaenis) Eggs. Bioscience, Biotechnology and Biochemistry, 2002, 66, 1356-1365.	1.3	45
35	Mannose-Binding Lectin from Yam (Dioscorea batatas) Tubers with Insecticidal Properties againstHelicoverpa armigera(Lepidoptera: Noctuidae). Journal of Agricultural and Food Chemistry, 2009, 57, 2896-2902.	5.2	43
36	Cloning and Sequence Analysis of cDNA for Trimeresurus flavoviridis Phospholipase A2, and Consequent Revision of the Amino Acid Sequence1. Journal of Biochemistry, 1990, 108, 816-821.	1.7	36

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37	Long-sarafotoxins: characterization of a new family of endothelin-like peptides. Peptides, 2004, 25, 1243-1251.	2.4	36
38	Crystal Structure of a Conger Eel Galectin (Congerin II) at 1.45Ã... Resolution: Implication for the Accelerated Evolution of a New Ligand-binding Site Following Gene Duplication. Journal of Molecular Biology, 2002, 321, 879-889.	4.2	35
39	Rice bran proteinâ€based edible films. International Journal of Food Science and Technology, 2008, 43, 476-483.	2.7	35
40	Regional evolution of venom-gland phospholipase A2 isoenzymes of Trimeresurus flavoviridis snakes in the southwestern islands of Japan. Biochemical Journal, 2000, 347, 491.	3.7	34
41	Characterization, primary structure and molecular evolution of anticoagulant protein from Agkistrodon actus venom. Toxicon, 2002, 40, 803-813.	1.6	34
42	Interisland Mutation of a Novel Phospholipase A 2 from Trimeresurus flavoviridis Venom and Evolution of Crotalinae Group II Phospholipases A 2. Journal of Molecular Evolution, 2003, 57, 546-554.	1.8	34
43	Transient expression of an IL-23R extracellular domain Fc fusion protein in CHO vs. HEK cells results in improved plasma exposure. Protein Expression and Purification, 2010, 71, 96-102.	1.3	34
44	Structures of genes encoding phospholipase A2 inhibitors from the serum of Trimeresurus flavoviridis snake. Gene, 1997, 191, 31-37.	2.2	33
45	Effect of Lectins on the Transport of Food Factors in Caco-2 Cell Monolayers. Journal of Agricultural and Food Chemistry, 2006, 54, 548-553.	5.2	33
46	Regional and accelerated molecular evolution in group I snake venom gland phospholipase A2 isozymes. Toxicon, 2000, 38, 449-462.	1.6	29
47	Novel Matrix Proteins of Pteria penguin Pearl Oyster Shell Nacre Homologous to the Jacalin-Related Î²-Prism Fold Lectins. PLoS ONE, 2014, 9, e112326.	2.5	29
48	Propionibacterium acnes catalase induces increased Th1 immune response in sarcoidosis patients. Respiratory Investigation, 2015, 53, 161-169.	1.8	29
49	Purification, sequencing and characterization of single amino acid-substituted phospholipase A2 isozymes from Trimeresurus Gramineus (green habu snake) venom. Toxicon, 1993, 31, 957-967.	1.6	28
50	Structures of genes encoding TATA â˜•binding proteins from trimeresurus gramineus and t. flavoviridis snakes. Gene, 1995, 152, 209-213.	2.2	27
51	Characterization, amino acid sequence and evolution of edema-inducing, basic phospholipase A 2 from Trimeresurus flavoviridis venom. Toxicon, 2001, 39, 1069-1076.	1.6	26
52	Preparation and characterization of high-quality rice bran proteins. Journal of the Science of Food and Agriculture, 2007, 87, 1219-1227.	3.5	26
53	Autophagy Induced by Intracellular Infection of Propionibacterium acnes. PLoS ONE, 2016, 11, e0156298.	2.5	25
54	Complete amino-acid sequence of the Î²-subunit of VTX from venom of the stonefish (Synanceia) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6	2.1	24

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55	Enzyme inhibition by dipeptides containing 2,3-methanophenylalanine, a sterically constrained amino acid. FEBS Letters, 1989, 250, 227-230.	2.8	23
56	Discovery of novel [Arg49]phospholipase A2 isozymes from Protobothrops elegans venom and regional evolution of Crotalinae snake venom phospholipase A2 isozymes in the southwestern islands of Japan and Taiwan. Toxicon, 2006, 48, 672-682.	1.6	23
57	Purification and primary structure of a myotoxic Lysine-49 phospholipase A2 with low lipolytic activity from Trimeresurus gramineus venom. Toxicon, 1995, 33, 1469-1478.	1.6	22
58	Chymotrypsin inhibitory conformation induced by amino acid side chainâ€"side chain intramolecular CH/Ï€ interaction. Journal of the Chemical Society Perkin Transactions 1, 1996, , 2479-2485.	0.9	22
59	Alternative mRNA Splicing in Three Venom Families Underlying a Possible Production of Divergent Venom Proteins of the Habu Snake, Protobothrops flavoviridis. Toxins, 2019, 11, 581.	3.4	22
60	Acid Hydrolysis of Protein in a Microcapillary Tube for the Recovery of Tryptophan. Bioscience, Biotechnology and Biochemistry, 2005, 69, 255-257.	1.3	21
61	Galectins in the abdominal cavity of the conger eel Conger myriaster participate in the cellular encapsulation of parasitic nematodes by host cells. Fish and Shellfish Immunology, 2012, 33, 780-787.	3.6	21
62	Isolation and Biochemical Characterization of Apios Tuber Lectin. Molecules, 2015, 20, 987-1002.	3.8	21
63	Sequence determination and characterization of a phospholipase A2 isozyme from Trimeresurus gramineus (green habu snake) venom. Toxicon, 1992, 30, 1331-1341.	1.6	20
64	Retrotransposable CR1-like elements in crotalinae snake genomes. Toxicon, 1998, 36, 915-920.	1.6	20
65	Tissue-specific Expression of Rhamnose-binding Lectins in the Steelhead Trout (Oncorhynchus mykiss). Bioscience, Biotechnology and Biochemistry, 2002, 66, 1427-1430.	1.3	20
66	Modulating effect of acorn barnacle C-type lectins on the crystallization of calcium carbonate. Fisheries Science, 2008, 74, 418-424.	1.6	20
67	Antioxidant Properties of Tripeptides Revealed by a Comparison of Six Different Assays. Food Science and Technology Research, 2015, 21, 695-704.	0.6	20
68	An S-like ribonuclease gene is used to generate a trap-leaf enzyme in the carnivorous plantDrosera adelae. FEBS Letters, 2005, 579, 5729-5733.	2.8	19
69	Effects of Alkaline Deamidation on the Chemical Properties of Rice Bran Protein. Food Science and Technology Research, 2017, 23, 697-704.	0.6	19
70	Diverse Sugar-Binding Specificities of Marine Invertebrate C-Type Lectins. Bioscience, Biotechnology and Biochemistry, 2007, 71, 513-519.	1.3	16
71	Production of transgenic rice plants expressing Dioscorea batatas tuber lectin 1 to confer resistance against brown planthopper. Plant Biotechnology, 2012, 29, 501-504.	1.0	16
72	Effects of Food Lectins on the Transport System of Human Intestinal Caco-2 Cell Monolayers. Bioscience, Biotechnology and Biochemistry, 2013, 77, 1917-1924.	1.3	16

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73	Tracing Protein Evolution through Ancestral Structures of Fish Galectin. Structure, 2011, 19, 711-721.	3.3	15
74	Allosteric Regulation of the Carbohydrate-binding Ability of a Novel Conger Eel Galectin by d-Mannoside. Journal of Biological Chemistry, 2012, 287, 31061-31072.	3.4	15
75	SDS-induced oligomerization of Lys49-phospholipase A2 from snake venom. Scientific Reports, 2019, 9, 2330.	3.3	15
76	Complementary DNA Cloning and Molecular Evolution of Opine Dehydrogenases in Some Marine Invertebrates. Marine Biotechnology, 2004, 6, 493-502.	2.4	14
77	Reconstruction of a Probable Ancestral Form of Conger Eel Galectins Revealed Their Rapid Adaptive Evolution Process for Specific Carbohydrate Recognition. Molecular Biology and Evolution, 2007, 24, 2504-2514.	8.9	14
78	In Vitro Evolutionary Thermostabilization of Congerin II: A Limited Reproduction of Natural Protein Evolution by Artificial Selection Pressure. Journal of Molecular Biology, 2005, 347, 385-397.	4.2	13
79	CHAC1 overexpression in human gastric parietal cells with Helicobacter pylori infection in the secretory canaliculi. Helicobacter, 2019, 24, e12598.	3.5	13
80	Encapsulation of biomacromolecules by soaking and co-crystallization into porous protein crystals of hemocyanin. Biochemical and Biophysical Research Communications, 2019, 509, 577-584.	2.1	13
81	Protein engineering of conger eel galectins by tracing of molecular evolution using probable ancestral mutants. BMC Evolutionary Biology, 2010, 10, 43.	3.2	12
82	Isolation of Rice Bran Lectins and Characterization of Their Unique Behavior in Caco-2 Cells. International Journal of Molecular Sciences, 2017, 18, 1052.	4.1	12
83	High-level Expression and Characterization of Fully Active Recombinant Conger Eel Galectins inEschericia coli. Bioscience, Biotechnology and Biochemistry, 2002, 66, 476-480.	1.3	11
84	The speciation of conger eel galectins by rapid adaptive evolution. Glycoconjugate Journal, 2002, 19, 451-458.	2.7	11
85	Expression of gene for Dioscorea batatas tuber lectin 1 in transgenic tobacco confers resistance to green-peach aphid. Plant Biotechnology, 2010, 27, 141-145.	1.0	11
86	Trimeresurus flavoviridis venom gland phospholipase A2 isozymes genes have evolved via accelerated substitutions. Journal of Molecular Recognition, 1995, 8, 40-46.	2.1	10
87	Inhibitory Effect of Protein Hydrolysates on Calcium Carbonate Crystallization. Journal of Agricultural and Food Chemistry, 2000, 48, 5450-5454.	5.2	10
88	Molecular diversity of proteins in biological offense and defense systems. Molecular Diversity, 2006, 10, 511-514.	3.9	10
89	Purification and characterization of ostrich prothrombin. International Journal of Biochemistry and Cell Biology, 2000, 32, 1151-1159.	2.8	9
90	Effect of Chum Salmon Egg Lectin on Tight Junctions in Caco-2 Cell Monolayers. Molecules, 2015, 20, 8094-8106.	3.8	9

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91	Protein encapsulation in the hollow space of hemocyanin crystals containing a covalently conjugated ligand. Biochemical and Biophysical Research Communications, 2019, 514, 31-36.	2.1	9
92	The amino acid sequence of pancreatic Î±-amylase from the ostrich, Struthio camelus. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2000, 127, 481-490.	1.6	8
93	Amino acid sequence of a basic aspartate-49-phospholipase A2 from Trimeresurus flavoviridis venom and phylogenetic analysis of Crotalinae venom phospholipases A2. Toxicon, 2005, 46, 185-195.	1.6	8
94	Purification and partial characterization of ostrich skeletal muscle cathepsin D and its activity during meat maturation. Meat Science, 2011, 87, 196-201.	5.5	8
95	Biochemical characterization ofAcacia schweinfurthiiserine proteinase inhibitor. Journal of Enzyme Inhibition and Medicinal Chemistry, 2014, 29, 633-638.	5.2	8
96	Regulation of axon arborization pattern in the developing chick ciliary ganglion: Possible involvement of caspase 3. Development Growth and Differentiation, 2017, 59, 115-128.	1.5	8
97	Structures of jacalinâ€related lectin PPL3 regulating pearl shell biomineralization. Proteins: Structure, Function and Bioinformatics, 2018, 86, 644-653.	2.6	8
98	Microfluidic Long-Term Gradient Generator with Axon Separation Prototyped by 185 nm Diffused Light Photolithography of SU-8 Photoresist. Micromachines, 2019, 10, 9.	2.9	8
99	Chymotrypsin inhibitory conformation of dipeptides constructed by side chain-side chain hydrophobic interactions. Journal of Molecular Recognition, 1993, 6, 95-100.	2.1	7
100	Comparison of the amino acid sequences of acorn barnacle lectins showing different inhibitory activities toward the crystal growth of calcium carbonate. Fisheries Science, 2001, 67, 703-709.	1.6	7
101	A novel recombinant system for functional expression of myonecrotic snake phospholipase A2 in Escherichia coli using a new fusion affinity tag. Protein Expression and Purification, 2008, 58, 194-202.	1.3	7
102	Microstructure and Orientation Distribution of Aragonite Crystals in Nacreous Layer of Pearl Shells. Materials Transactions, 2004, 45, 999-1004.	1.2	6
103	Structure based studies of the adaptive diversification process of congerins. Molecular Diversity, 2006, 10, 567-573.	3.9	6
104	Specific inhibitory conformation of dipeptides for chymotrypsin. Biochemical and Biophysical Research Communications, 1990, 166, 1460-1466.	2.1	5
105	Localization and expression of phospholipases A2 in Trimeresurus flavoviridis (habu snake) venom gland. Toxicon, 1995, 33, 1645-1652.	1.6	5
106	Effects of culture conditions on the expression level of lectin in Microcystis aeruginosa (freshwater) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.6	5
107	Structure and possible function of N-glycans of an invertebrate C-type lectin from the acorn barnacle Megabalanus rosa. Fisheries Science, 2005, 71, 931-940.	1.6	5
108	Focused Proteomics Analysis of Habu Snake (Protobothrops flavoviridis) Venom Using Antivenom-Based Affinity Chromatography Reveals Novel Myonecrosis-Enhancing Activity of Thrombin-Like Serine Proteases. Frontiers in Pharmacology, 2021, 12, 766406.	3.5	5

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109	Specific Mutations in Aph1 Cause Î³-Secretase Activation. International Journal of Molecular Sciences, 2022, 23, 507.	4.1	5
110	Dipeptide Side Chainâ€"Side Chain Hydrophobic Interactions as Conformational Core for Chymotrypsin Inhibition. Bulletin of the Chemical Society of Japan, 1991, 64, 2519-2523.	3.2	4
111	Isolation and Biochemical Characterization of Mucus Proteins in Japanese Bunching Onion (<i>Allium fistulosum</i>) Green Leaves. Food Science and Technology Research, 2016, 22, 235-243.	0.6	4
112	Glycan Binding Profiling of Jacalin-Related Lectins from the Pteria Penguin Pearl Shell. International Journal of Molecular Sciences, 2019, 20, 4629.	4.1	4
113	Tracing Ancestral Specificity of Lectins: Ancestral Sequence Reconstruction Method as a New Approach in Protein Engineering. Methods in Molecular Biology, 2014, 1200, 539-551.	0.9	4
114	Polymorphisms ofTrimeresurus flavoviridisVenom Gland Phospholipase A2Isozyme Genes. Bioscience, Biotechnology and Biochemistry, 1994, 58, 1510-1511.	1.3	3
115	Lectins of Marine Origin and Their Clinical Applications. , 2013, , 33-54.		3
116	Roles of lysine-69 in dimerization and activity ofTrimeresurus flavoviridis venom aspartate-49-phospholipase A2. , 1996, 9, 23-30.		2
117	UV Irradiation Promotes the Accumulation of Triglyceride inLipomyces lipofer. Bioscience, Biotechnology and Biochemistry, 2009, 73, 2474-2477.	1.3	2
118	Experimental Molecular Archeology: Reconstruction of Ancestral Mutants and Evolutionary History of Proteins as a New Approach in Protein Engineering. , 2013, , .		2
119	Changes of Functional Components and Antioxidative Activity in the Process of Fermentation of Soybeans. ACS Symposium Series, 2010, , 155-169.	0.5	2
120	Refolding ofTrimeresurus flavoviridisPhospholipases A2. Bulletin of the Chemical Society of Japan, 1992, 65, 2655-2659.	3.2	1
121	Rhamnose-binding lectins induce respiratory burst activity in macrophage cells from rainbow trout. Fisheries Science, 2013, 79, 513-519.	1.6	1
122	A microfluidic static gradient generator using limited diffusuon through T-shaped narrow channels. , 2014, , .		1
123	Biochemical properties of CumA multicopper oxidase from plant pathogen, Pseudomonas syringae. Bioscience, Biotechnology and Biochemistry, 2021, 85, 1995-2002.	1.3	1
124	Diversified Biomineralization Roles of Pteria penguin Pearl Shell Lectins as Matrix Proteins. International Journal of Molecular Sciences, 2021, 22, 1081.	4.1	1
125	Chimeric mutants of staphylococcal hemolysin, which act as both oneâ€component and twoâ€component hemolysin, created by grafting the stem domain. FEBS Journal, 2022, 289, 3505-3520.	4.7	1
126	Active Expression of Genes for Protein Modification Enzymes in Habu Venom Glands. Toxins, 2022, 14, 300.	3.4	1

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127	Cover Image, Volume 86, Issue 6. Proteins: Structure, Function and Bioinformatics, 2018, 86, C1-C1.	2.6	0
128	Proteomic Analysis of Venomous Fang Matrix Proteins of Protobothrops flavoviridis (Habu) Snake. , 2018, , 39-54.		0
129	Venomics Study of Protobothrops flavoviridis Snake: How Venom Proteins Have Evolved and Diversified?. , 0, , .		0
130	Enhancement of Protein Thermostability by Accelerated Evolution. Seibutsu Butsuri, 2006, 46, 201-208.	0.1	0