Michael R Ladisch

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Combined Sugarcane Pretreatment for the Generation of Ethanol and Value-Added Products. Frontiers in Energy Research, 2022, 10, .	1.2	5
2	Addressing academic researcher priorities through science and technology entrepreneurship education. Journal of Technology Transfer, 2021, 46, 288-318.	2.5	30
3	Phase-Sensitive Intracellular Doppler Fluctuation Spectroscopy. Physical Review Applied, 2021, 15, .	1.5	4
4	Doppler imaging detects bacterial infection of living tissue. Communications Biology, 2021, 4, 178.	2.0	6
5	Protective effects of nonâ€catalytic proteins on endoglucanase activity at air and lignin interfaces. Biotechnology Progress, 2021, 37, e3134.	1.3	1
6	Multi-Electrode Array of Sensory Neurons as an In Vitro Platform to Identify the Nociceptive Response to Pharmaceutical Buffer Systems of Injectable Biologics. Pharmaceutical Research, 2021, 38, 1179-1186.	1.7	4
7	Cellulolytic enzymes production guided by morphology engineering. Enzyme and Microbial Technology, 2021, 149, 109833.	1.6	5
8	Rheology of enzyme liquefied corn stover slurries: The effect of solids concentration on yielding and flow behavior. Biotechnology Progress, 2021, 37, e3216.	1.3	8
9	Severity factor kinetic model as a strategic parameter of hydrothermal processing (steam explosion) Tj ETQq1 2021, 342, 125961.	1 0.784314 4.8	rgBT /Overlo 83
10	New strategy for liquefying corn stover pellets. Bioresource Technology, 2021, 341, 125773.	4.8	11
11	Lattice: A Vision for Machine Learning, Data Engineering, and Policy Considerations for Digital Agriculture at Scale. IEEE Open Journal of the Computer Society, 2021, 2, 227-240.	5.2	12
12	Moving from residual lignocellulosic biomass into highâ€value products: Outcomes from a longâ€ŧerm international cooperation. Biofuels, Bioproducts and Biorefining, 2021, 15, 563-573.	1.9	12
13	Process Analytical Technologies and Data Analytics for the Manufacture of Monoclonal Antibodies. Trends in Biotechnology, 2020, 38, 1169-1186.	4.9	52
14	Analysis, Impacts, and Solutions to Biomass Variability for Production of Fuels and Value-Added Products. ACS Sustainable Chemistry and Engineering, 2020, 8, 15375-15377.	3.2	4
15	Effect of using a nitrogen atmosphere on enzyme hydrolysis at high corn stover loadings in an agitated reactor. Biotechnology Progress, 2020, 36, e3059.	1.3	11
16	Enzyme interactions on lignocellulosic biomass structure. , 2020, , 33-59.		1
17	Construction and operation of a multiplexed microfiltration device to facilitate rapid pathogen detection. Biotechnology Progress, 2019, 35, e2889.	1.3	2
18	Microbial enrichment and multiplexed microfiltration for accelerated detection of <i>Salmonella</i> in spinach. Biotechnology Progress, 2019, 35, e2874.	1.3	9

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19	Adaptive laboratory evolution of nanocelluloseâ€producing bacterium. Biotechnology and Bioengineering, 2019, 116, 1923-1933.	1.7	24
20	Impact of protein blocking on enzymatic saccharification of bagasse from sugarcane clones. Biotechnology and Bioengineering, 2019, 116, 1584-1593.	1.7	16
21	Industrial Challenges of Recombinant Proteins. Advances in Biochemical Engineering/Biotechnology, 2019, 171, 1-22.	0.6	5
22	Lignin–Enzyme Interactions in the Hydrolysis of Lignocellulosic Biomass. Trends in Biotechnology, 2019, 37, 518-531.	4.9	183
23	Accelerated Sample Preparation for Fast Salmonella Detection in Poultry Products. Methods in Molecular Biology, 2019, 1918, 3-20.	0.4	6
24	Temperature dependent cellulase adsorption on lignin from sugarcane bagasse. Bioresource Technology, 2018, 252, 143-149.	4.8	37
25	Foodborne pathogens in horticultural production systems: Ecology and mitigation. Scientia Horticulturae, 2018, 236, 192-206.	1.7	40
26	Deactivation and activation of lignocellulose degrading enzymes in the presence of laccase. Enzyme and Microbial Technology, 2018, 109, 25-30.	1.6	44
27	Human pathogens in plant biofilms: Formation, physiology, and detection. Biotechnology and Bioengineering, 2017, 114, 1403-1418.	1.7	18
28	Protein particulate retention and microorganism recovery for rapid detection of <i>Salmonella</i> . Biotechnology Progress, 2017, 33, 687-695.	1.3	10
29	Hydrothermal Pretreatment of Lignocellulosic Biomass for Bioethanol Production. , 2017, , 181-205.		12
30	Proteins at heterogeneous (lignocellulose) interfaces. Current Opinion in Chemical Engineering, 2017, 18, 45-54.	3.8	4
31	Enhanced Antimicrobial Efficacy of Bimetallic Porous CuO Microspheres Decorated with Ag Nanoparticles. ACS Applied Materials & Interfaces, 2017, 9, 39165-39173.	4.0	41
32	Ligninâ€derived Phenols: A New Frontier. Biofuels, Bioproducts and Biorefining, 2017, 11, 769-770.	1.9	1
33	Cellulose conversion of corn pericarp without pretreatment. Bioresource Technology, 2017, 245, 511-517.	4.8	29
34	Acetic acid removal from corn stover hydrolysate using ethyl acetate and the impact on <i>Saccharomyces cerevisiae</i> bioethanol fermentation. Biotechnology Progress, 2016, 32, 929-937.	1.3	20
35	Microfiltration of enzyme treated egg whites for accelerated detection of viable <i>Salmonella</i> . Biotechnology Progress, 2016, 32, 1464-1471.	1.3	10
36	Secretome analysis of Trichoderma reesei and Aspergillus niger cultivated by submerged and sequential fermentation processes: Enzyme production for sugarcane bagasse hydrolysis. Enzyme and Microbial Technology, 2016, 90, 53-60.	1.6	86

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37	Fiber-based monolithic columns for liquid chromatography. Analytical and Bioanalytical Chemistry, 2016, 408, 6871-6883.	1.9	11
38	Maleic acid treatment of biologically detoxified corn stover liquor. Bioresource Technology, 2016, 216, 437-445.	4.8	25
39	Secretome data from Trichoderma reesei and Aspergillus niger cultivated in submerged and sequential fermentation methods. Data in Brief, 2016, 8, 588-598.	0.5	15
40	Effect of phenolic compounds from pretreated sugarcane bagasse on cellulolytic and hemicellulolytic activities. Bioresource Technology, 2016, 199, 275-278.	4.8	87
41	Accelerating sample preparation through enzymeâ€assisted microfiltration of <i>Salmonella</i> in chicken extract. Biotechnology Progress, 2015, 31, 1551-1562.	1.3	21
42	Hydrolysisâ€determining substrate characteristics in liquid hot water pretreated hardwood. Biotechnology and Bioengineering, 2015, 112, 677-687.	1.7	116
43	Bioabatement with hemicellulase supplementation to reduce enzymatic hydrolysis inhibitors. Bioresource Technology, 2015, 190, 412-415.	4.8	44
44	Manipulation of Guaiacyl and Syringyl Monomer Biosynthesis in an Arabidopsis Cinnamyl Alcohol Dehydrogenase Mutant Results in Atypical Lignin Biosynthesis and Modified Cell Wall Structure. Plant Cell, 2015, 27, 2195-2209.	3.1	136
45	Effect of liquid hot water pretreatment severity on properties of hardwood lignin and enzymatic hydrolysis of cellulose. Biotechnology and Bioengineering, 2015, 112, 252-262.	1.7	283
46	Adsorption of enzyme onto lignins of liquid hot water pretreated hardwoods. Biotechnology and Bioengineering, 2015, 112, 447-456.	1.7	207
47	Severity factor coefficients for subcritical liquid hot water pretreatment of hardwood chips. Biotechnology and Bioengineering, 2014, 111, 254-263.	1.7	99
48	Nano/Micro and Spectroscopic Approaches to Food Pathogen Detection. Annual Review of Analytical Chemistry, 2014, 7, 65-88.	2.8	42
49	Disruption of Mediator rescues the stunted growth of a lignin-deficient Arabidopsis mutant. Nature, 2014, 509, 376-380.	13.7	313
50	Reaction mechanisms and kinetics of xyloâ€oligosaccharide hydrolysis by dicarboxylic acids. AICHE Journal, 2013, 59, 188-199.	1.8	48
51	Biological abatement of cellulase inhibitors. Bioresource Technology, 2013, 146, 604-610.	4.8	49
52	Fractionation of cellulase and fermentation inhibitors from steam pretreated mixed hardwood. Bioresource Technology, 2013, 135, 30-38.	4.8	132
53	Rapid Sample Processing for Detection of Food-Borne Pathogens via Cross-Flow Microfiltration. Applied and Environmental Microbiology, 2013, 79, 7048-7054.	1.4	46
54	Tissueâ€specific biomass recalcitrance in corn stover pretreated with liquid hotâ€water: SEM imaging (part 2). Biotechnology and Bioengineering, 2012, 109, 398-404.	1.7	40

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55	Tissueâ€specific biomass recalcitrance in corn stover pretreated with liquid hotâ€water: Enzymatic hydrolysis (part 1). Biotechnology and Bioengineering, 2012, 109, 390-397.	1.7	69
56	Cassava Starch Pearls as a Desiccant for Drying Ethanol. Industrial & Engineering Chemistry Research, 2011, 50, 8678-8685.	1.8	25
57	Surface and ultrastructural characterization of raw and pretreated switchgrass. Bioresource Technology, 2011, 102, 11097-11104.	4.8	62
58	Comparative study on enzymatic digestibility of switchgrass varieties and harvests processed by leading pretreatment technologies. Bioresource Technology, 2011, 102, 11089-11096.	4.8	93
59	Comparative data on effects of leading pretreatments and enzyme loadings and formulations on sugar yields from different switchgrass sources. Bioresource Technology, 2011, 102, 11052-11062.	4.8	121
60	Soluble inhibitors/deactivators of cellulase enzymes from lignocellulosic biomass. Enzyme and Microbial Technology, 2011, 48, 408-415.	1.6	398
61	Deactivation of cellulases by phenols. Enzyme and Microbial Technology, 2011, 48, 54-60.	1.6	436
62	Effect of compositional variability of distillers' grains on cellulosic ethanol production. Bioresource Technology, 2010, 101, 5385-5393.	4.8	39
63	Inhibition of cellulases by phenols. Enzyme and Microbial Technology, 2010, 46, 170-176.	1.6	403
64	Lignin monomer composition affects Arabidopsis cell-wall degradability after liquid hot water pretreatment. Biotechnology for Biofuels, 2010, 3, 27.	6.2	178
65	Enzymatic digestion of liquid hot water pretreated hybrid poplar. Biotechnology Progress, 2009, 25, 340-348.	1.3	142
66	Comparative sugar recovery and fermentation data following pretreatment of poplar wood by leading technologies. Biotechnology Progress, 2009, 25, 333-339.	1.3	269
67	Summary of findings from the Biomass Refining Consortium for Applied Fundamentals and Innovation (CAFI): corn stover pretreatment. Cellulose, 2009, 16, 649-659.	2.4	98
68	Liquid Hot Water Pretreatment of Cellulosic Biomass. Methods in Molecular Biology, 2009, 581, 93-102.	0.4	73
69	Ethanol Production from Maize. Biotechnology in Agriculture and Forestry, 2009, , 347-364.	0.2	25
70	Enzyme hydrolysis and ethanol fermentation of liquid hot water and AFEX pretreated distillers' grains at high-solids loadings. Bioresource Technology, 2008, 99, 5206-5215.	4.8	131
71	Process simulation of modified dry grind ethanol plant with recycle of pretreated and enzymatically hydrolyzed distillers' grains. Bioresource Technology, 2008, 99, 5177-5192.	4.8	44
72	Cellulose conversion in dry grind ethanol plants. Bioresource Technology, 2008, 99, 5157-5159.	4.8	15

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73	Distillers grains: On the pathway to cellulose conversion. Bioresource Technology, 2008, 99, 5155-5156.	4.8	7
74	Composition of corn dry-grind ethanol by-products: DDGS, wet cake, and thin stillage. Bioresource Technology, 2008, 99, 5165-5176.	4.8	287
75	PCR-based detection in a micro-fabricated platform. Lab on A Chip, 2008, 8, 1130.	3.1	44
76	Molecular Breeding to Enhance Ethanol Production from Corn and Sorghum Stover. Crop Science, 2007, 47, S-142.	0.8	154
77	Microscopic examination of changes of plant cell structure in corn stover due to hot water pretreatment and enzymatic hydrolysis. Biotechnology and Bioengineering, 2007, 97, 265-278.	1.7	210
78	Loosening lignin's grip on biofuel production. Nature Biotechnology, 2007, 25, 746-748.	9.4	155
79	Enzyme production by industrially relevant fungi cultured on coproduct from corn dry grind ethanol plants. Applied Biochemistry and Biotechnology, 2007, 137-140, 171-183.	1.4	18
80	Surface-Directed Boundary Flow in Microfluidic Channels. Langmuir, 2006, 22, 6429-6437.	1.6	12
81	Introduction to Session 6. Applied Biochemistry and Biotechnology, 2006, 132, 909-910.	1.4	0
82	Surface engineering of microchannel walls for protein separation and directed microfluidic flow. Journal of Separation Science, 2006, 29, 1733-1742.	1.3	18
83	Features of promising technologies for pretreatment of lignocellulosic biomass. Bioresource Technology, 2005, 96, 673-686.	4.8	5,057
84	Coordinated development of leading biomass pretreatment technologies. Bioresource Technology, 2005, 96, 1959-1966.	4.8	1,199
85	Optimization of pH controlled liquid hot water pretreatment of corn stover. Bioresource Technology, 2005, 96, 1986-1993.	4.8	462
86	Comparative sugar recovery data from laboratory scale application of leading pretreatment technologies to corn stover. Bioresource Technology, 2005, 96, 2026-2032.	4.8	470
87	Industrial Scale-Up of pH-Controlled Liquid Hot Water Pretreatment of Corn Fiber for Fuel Ethanol Production. Applied Biochemistry and Biotechnology, 2005, 125, 077-098.	1.4	158
88	Mechanistic study of membrane concentration and recovery ofListeria monocytogenes. Biotechnology and Bioengineering, 2005, 89, 263-273.	1.7	22
89	Microfiber-Directed Boundary Flow in Press-Fit Microdevices Fabricated from Self-Adhesive Hydrophobic Surfaces. Analytical Chemistry, 2005, 77, 3671-3675.	3.2	12
90	Plug-Flow Reactor for Continuous Hydrolysis of Glucans and Xylans from Pretreated Corn Fiber. Energy & Fuels, 2005, 19, 2189-2200.	2.5	58

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91	Rapid chromatography for evaluating adsorption characteristics of cellulase binding domain mimetics. Biotechnology and Bioengineering, 2004, 86, 756-764.	1.7	13
92	Model for temperature profiles in large diameter electrochromatography columns. AICHE Journal, 2003, 49, 402-410.	1.8	6
93	Composite surface for blocking bacterial adsorption on protein biochips. Biotechnology and Bioengineering, 2003, 81, 618-624.	1.7	81
94	Micro-assembly of functionalized particulate monolayer on C18-derivatized SiO2 surfaces. Biotechnology and Bioengineering, 2003, 83, 416-427.	1.7	16
95	Lysozyme for capture of microorganisms on protein biochips. Enzyme and Microbial Technology, 2003, 33, 958-966.	1.6	18
96	Biotextiles — Monoliths with Rolled Geometrics. Journal of Chromatography Library, 2003, 67, 235-253.	0.1	1
97	Removal of Fermentation Inhibitors Formed during Pretreatment of Biomass by Polymeric Adsorbents. Industrial & Engineering Chemistry Research, 2002, 41, 6132-6138.	1.8	181
98	Microfabricated Device for Impedance-Based Detection of Bacterial Metabolism. Materials Research Society Symposia Proceedings, 2002, 729, 461.	0.1	7
99	Characterization of acid catalytic domains for cellulose hydrolysis and glucose degradation. Biotechnology and Bioengineering, 2002, 79, 610-618.	1.7	221
100	Optimal Packing Characteristics of Rolled, Continuous Stationary-Phase Columns. Biotechnology Progress, 2002, 18, 309-316.	1.3	22
101	Adsorption of Water from Liquid-Phase Ethanolâ^'Water Mixtures at Room Temperature Using Starch-Based Adsorbents. Industrial & Engineering Chemistry Research, 2001, 40, 2112-2115.	1.8	42
102	Characterization of Dicarboxylic Acids for Cellulose Hydrolysis. Biotechnology Progress, 2001, 17, 474-480.	1.3	128
103	New system for preparative electrochromatography of proteins. Biotechnology and Bioengineering, 2000, 70, 72-81.	1.7	17
104	Rolled Stationary Phases:Â Dimensionally Structured Textile Adsorbents for Rapid Liquid Chromatography of Proteins. Industrial & Engineering Chemistry Research, 1999, 38, 865-872.	1.8	31
105	Reaction Kinetics, Molecular Action, and Mechanisms of Cellulolytic Proteins. Advances in Biochemical Engineering/Biotechnology, 1999, 65, 23-40.	0.6	46
106	Title is missing!. Adsorption, 1998, 4, 321-335.	1.4	11
107	Transport Properties of Rolled, Continuous Stationary Phase Columns. Biotechnology Progress, 1998, 14, 21-30.	1.3	27
108	Pretreatment of corn fiber by pressure cooking in water. Applied Biochemistry and Biotechnology, 1998, 73, 1-17.	1.4	110

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109	Continuous pH monitoring during pretreatment of yellow poplar wood sawdust by pressure cooking in water. Applied Biochemistry and Biotechnology, 1998, 70-72, 99-111.	1.4	73
110	Pretreatment of yellow poplar sawdust by pressure cooking in water. Applied Biochemistry and Biotechnology, 1997, 68, 21-40.	1.4	134
111	An unstructured mathematical model for growth ofPleurotus ostreatus on lignocellulosic material in solid-state fermentation systems. Applied Biochemistry and Biotechnology, 1997, 62, 71-85.	1.4	15
112	Mechanism and potential applications of bio-ligninolytic systems in a CELSS. Applied Biochemistry and Biotechnology, 1997, 62, 131-149.	1.4	21
113	Sorptive recovery of dilute ethanol from distillation column bottoms stream. Applied Biochemistry and Biotechnology, 1996, 57-58, 103-119.	1.4	10
114	Assessment of ethanol production options for corn products. Bioresource Technology, 1996, 58, 253-264.	4.8	103
115	Chromatography for Rapid Buffer Exchange and Refolding of Secretory Leukocyte Protease Inhibitor. Biotechnology Progress, 1996, 12, 184-189.	1.3	38
116	Simulation of diauxic production of cephalosporin C by Cephalosporium acremonium: lag model for fed-batch fermentation. Biotechnology Progress, 1995, 11, 626-631.	1.3	20
117	Simultaneous concentration and purification through gradient deformation chromatography. AICHE Journal, 1995, 41, 1184-1193.	1.8	8
118	Cellulose pretreaments of lignocellulosic substrates. Enzyme and Microbial Technology, 1994, 16, 1002-1004.	1.6	133
119	Characterization of buffers for electrokinetic separations. Applied Biochemistry and Biotechnology, 1994, 44, 243-261.	1.4	8
120	Protein chromatography using a continuous stationary phase. Journal of Chromatography A, 1992, 598, 169-180.	1.8	52
121	Recombinant human insulin. Biotechnology Progress, 1992, 8, 469-478.	1.3	130
122	Ion-exchange and affinity chromatography costs in ?-galactosidase purification. Biotechnology and Bioengineering, 1992, 39, 717-724.	1.7	8
123	Effect of modulator sorption in gradient elution chromatography: gradient deformation. Chemical Engineering Science, 1992, 47, 233-239.	1.9	11
124	Fermentation-derived butanol and scenarios for its uses in energy-related applications. Enzyme and Microbial Technology, 1991, 13, 280-283.	1.6	59
125	Ethanol production and the cost of fermentable sugars from biomass. Bioresource Technology, 1991, 36, 83-95.	4.8	51
126	Ion exchange and affinity chromatography in the scaleup of the purification of ?-galactosidase from soybean seeds. Biotechnology and Bioengineering, 1991, 37, 356-363.	1.7	16

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127	Water and ethanol sorption phenomena on starch. AICHE Journal, 1991, 37, 1187-1195.	1.8	40
128	Mechanisms of Protein Retention in Hydrophobic Interaction Chromatography. ACS Symposium Series, 1990, , 80-92.	0.5	3
129	Characterization of the swelling of a size-exclusion gel. Biotechnology Progress, 1990, 6, 376-382.	1.3	2
130	Large-Scale Protein Purification. ACS Symposium Series, 1990, , 1-13.	0.5	4
131	Adsorption Phenomena in Hydrophobic Interaction Chromatography. Biotechnology Progress, 1989, 5, 79-88.	1.3	50
132	Scale-Up of Bioseparations for Microbial and Biochemical Technology. ACS Symposium Series, 1988, , 72-101.	0.5	3
133	Cause and correction of baseline interruptions observed for small-bore liquid chromatography columns packed with cation exchange resin in the H+ form. Biotechnology and Bioengineering, 1987, 30, 331-333.	1.7	Ο
134	Engineering and economics of cellulose saccharification systems. Enzyme and Microbial Technology, 1986, 8, 66-69.	1.6	24
135	Symposium on fuels and chemicals from biomass. Biotechnology and Bioengineering, 1983, 25, 1-2.	1.7	11
136	Separation ofmeso andracemic 2,3-butanediol by aqueous liquid chromatography. Biotechnology and Bioengineering, 1981, 23, 1289-1296.	1.7	5
137	Combined product and substrate inhibition equation for cellobiase. Biotechnology and Bioengineering, 1981, 23, 2779-2788.	1.7	65
138	Production of ethanol from wood hemicellulose hydrolyzates by a xylose-fermenting yeast mutant, Candida sp. XF 217. Biotechnology Letters, 1981, 3, 657-662.	1.1	30
139	Cellulase Kinetics. , 1981, 18, 55-83.		14
140	New approach to aqueous gel permeation chromatography of nonderivatized cellulose. Journal of Applied Polymer Science, 1980, 25, 263-275.	1.3	23
141	Cellobiose hydrolysis by endoglucanase (glucan glucanhydrolase) fromTrichoderma reesie: Kinetics and mechanism. Biotechnology and Bioengineering, 1980, 22, 1107-1126.	1.7	40
142	Measurement of Cellulolytic Activity by Low Pressure Liquid Chromatography. Journal of Liquid Chromatography and Related Technologies, 1979, 2, 745-760.	0.9	11
143	Biosynthesis, Purification, and Mode of Action of Cellulases of <i>Trichoderma reesei</i> . Advances in Chemistry Series, 1979, , 261-287.	0.6	70
144	Theory and practise of rapid liquid chromatography at moderate pressures using water as eluent. Journal of Chromatography A, 1978, 166, 85-100.	1.8	91

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145	Protein determination in the presence of cellulose. Biotechnology and Bioengineering, 1978, 20, 461-462.	1.7	3
146	Preparation of cellodextrins: An engineering approach. Biotechnology and Bioengineering, 1978, 20, 1669-1677.	1.7	31
147	Fermentation Substrates from Cellulosic Materials: Production of Fermentable Sugars from Cellulosic Materials. Plant, Cell and Environment, 1978, 2, 1-21.	2.8	38
148	Economic Implications of Purfication of Glucose Isomerase prior to Immobilization. Industrial & Engineering Chemistry Process Design and Development, 1977, 16, 309-313.	0.6	9
149	Cellobiase fromTrichoderma viride: Purification, properties, kinetics, and mechanism. Biotechnology and Bioengineering, 1977, 19, 959-981.	1.7	172