Andrew Gonzalez

List of Publications by Year
in descending order

157 papers	28,969 citations	17776 65 h-index	8212 153 g-index
191 all docs	191 docs citations	191 times ranked	33076 citing authors

#	Article	IF	Citations
1	Expert perspectives on global biodiversity loss and its drivers and impacts on people. Frontiers in Ecology and the Environment, 2023, 21, 94-103.	1.9	49
2	Coding for Life: Designing a Platform for Projecting and Protecting Global Biodiversity. BioScience, 2022, 72, 91-104.	2.2	23
3	Multiâ€trophic metacommunity interactions mediate asynchrony and stability in fluctuating environments. Ecological Monographs, 2022, 92, e1484.	2.4	12
4	Contrasting responses of soybean aphids, primary parasitoids, and hyperparasitoids to forest fragments and agricultural landscape structure. Agriculture, Ecosystems and Environment, 2022, 326, 107752.	2.5	5
5	Genotype diversity promotes the persistence of Daphnia populations exposed to severe copper stress. Journal of Evolutionary Biology, 2022, 35, 265-277.	0.8	7
6	A Glyphosate-Based Herbicide Cross-Selects for Antibiotic Resistance Genes in Bacterioplankton Communities. MSystems, 2022, 7, e0148221.	1.7	12
7	Missing Interactions: The Current State of Multispecies Connectivity Analysis. Frontiers in Ecology and Evolution, 2022, 10, .	1.1	12
8	Landscape modification and nutrientâ€driven instability at a distance. Ecology Letters, 2021, 24, 398-414.	3.0	30
9	Ecosystem services and the resilience of agricultural landscapes. Advances in Ecological Research, 2021, , 1-43.	1.4	33
10	Scaling up biodiversityâ€“ecosystem functioning relationships: the role of environmental heterogeneity in space and time. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20202779.	1.2	24
11	Refining analyses of existing data sets is valuable for macrogenetics: a response to Pazâ€Vinas, Jensen et al., (2021). Ecology Letters, 2021, 24, 1285-1286.	3.0	2
12	Prior exposure to stress allows the maintenance of an ecosystem cycle following severe acidification. Oikos, 2021, 130, 1062-1073.	1.2	3
13	Biodiversity as insurance: from concept to measurement and application. Biological Reviews, 2021, 96, 2333-2354.	4.7	101
14	Biodiversityâ€“productivity relationships are key to nature-based climate solutions. Nature Climate Change, 2021, 11, 543-550.	8.1	77
15	Resistance, resilience, and functional redundancy of freshwater bacterioplankton communities facing a gradient of agricultural stressors in a mesocosm experiment. Molecular Ecology, 2021, 30, 4771-4788.	2.0	12
16	Widespread agrochemicals differentially affect zooplankton biomass and community structure. Ecological Applications, 2021, 31, e02423.	1.8	12
17	A roadmap towards predicting species interaction networks (across space and time). Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20210063.	1.8	33
18	Monitoring socialâ€“ecological networks for biodiversity and ecosystem services in human-dominated landscapes. Facets, 2021, 6, 1670-1692.	1.1	6

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19	Grand challenges in biodiversityâ€“ecosystem functioning research in the era of scienceâ€“policy platforms require explicit consideration of feedbacks. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210783.	1.2	8
20	No consistent effects of humans on animal genetic diversity worldwide. Ecology Letters, 2020, 23, 55-67.	3.0	55
21	Research gaps in knowledge of the impact of urban growth on biodiversity. Nature Sustainability, 2020, 3, 16-24.	11.5	267
22	Environmental fluctuations can promote evolutionary rescue in high-extinction-risk scenarios. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20201144.	1.2	11
23	Evolutionary Rescue Is Mediated by the History of Selection and Dispersal in Diversifying Metacommunities. Frontiers in Ecology and Evolution, 2020, 8, .	1.1	4
24	Life in fluctuating environments. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190454.	1.8	81
25	Breaking ecological barriers: Anthropogenic disturbance leads to habitat transitions, hybridization, and high genetic diversity. Science of the Total Environment, 2020, 740, 140046.	3.9	13
26	Tropical forest fragmentation and isolation: Is community decay a random process?. Global Ecology and Conservation, 2020, 23, e01168.	1.0	12
27	Community rescue in experimental phytoplankton communities facing severe herbicide pollution. Nature Ecology and Evolution, 2020, 4, 578-588.	3.4	45
28	Scalingâ€up biodiversityâ€ecosystem functioning research. Ecology Letters, 2020, 23, 757-776.	3.0	270
29	Converting Ecological Currencies: Energy, Material, and Information Flows. Trends in Ecology and Evolution, 2020, 35, 1068-1077.	4.2	15
30	Understanding Maladaptation by Uniting Ecological and Evolutionary Perspectives. American Naturalist, 2019, 194, 495-515.	1.0	60
31	Causes of maladaptation. Evolutionary Applications, 2019, 12, 1229-1242.	1.5	85
32	The geography of biodiversity change in marine and terrestrial assemblages. Science, 2019, 366, 339-345.	6.0	385
33	Trophic structure modulates community rescue following acidification. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20190856.	1.2	22
34	Species richness change across spatial scales. Oikos, 2019, 128, 1079-1091.	1.2	160
35	Ecological Data Should Not Be So Hard to Find and Reuse. Trends in Ecology and Evolution, 2019, 34, 494-496.	4.2	52
36	Mixed evidence for adaptation to environmental pollution. Evolutionary Applications, 2019, 12, 1259-1273.	1.5	28

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37	Spatial evolutionary dynamics produce a negative cooperationâ€“population size relationship. Theoretical Population Biology, 2019, 125, 94-101.	0.5	7
38	The overlooked impact of rising glyphosate use on phosphorus loading in agricultural watersheds. Frontiers in Ecology and the Environment, 2019, 17, 48-56.	1.9	97
39	The MontÃ©rÃ©gie Connection: Understanding How Ecosystems Can Provide Resilience to the Risk of Ecosystem Service Change. , 2019, , 291-300.		0
40	Quantifying effects of biodiversity on ecosystem functioning across times and places. Ecology Letters, 2018, 21, 763-778.	3.0	157
41	Complementary crops and landscape features sustain wild bee communities. Ecological Applications, 2018, 28, 1093-1105.	1.8	43
42	Is local biodiversity declining or not? A summary of the debate over analysis of species richness time trends. Biological Conservation, 2018, 219, 175-183.	1.9	127
43	Moving forward in implementing green infrastructures: Stakeholder perceptions of opportunities and obstacles in a major North American metropolitan area. Cities, 2018, 81, 61-70.	2.7	43
44	Multiscale change in reef coral species diversity and composition in the Tropical Eastern Pacific. Coral Reefs, 2018, 37, 105-120.	0.9	5
45	Reproductive traits and their relationship with water temperature in three common octocoral (Anthozoa: Octocoralia) species from the tropical eastern Pacific. Bulletin of Marine Science, 2018, 94, 1527-1541.	0.4	6
46	Embracing Urban Complexity. , 2018, , 45-67.		19
47	Selecting surrogate species for connectivity conservation. Biological Conservation, 2018, 227, 326-334.	1.9	56
48	Urban tinkering. Sustainability Science, 2018, 13, 1549-1564.	2.5	40
49	Is habitat fragmentation good for biodiversity?. Biological Conservation, 2018, 226, 9-15.	1.9	430
50	The strength of the biodiversityâ€“ecosystem function relationship depends on spatial scale. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20180038.	1.2	82
51	Stability and dynamic properties of octocoral communities in the Tropical Eastern Pacific. Marine Ecology - Progress Series, 2018, 588, 71-84.	0.9	4
52	The Genetic Signature of Range Expansion in a Disease Vectorâ€”The Black-Legged Tick. Journal of Heredity, 2017, 108, esw073.	1.0	9
53	Dispersal governs the reorganization of ecological networks under environmental change. Nature Ecology and Evolution, 2017, 1, 162.	3.4	92
54	Linking the influence and dependence of people on biodiversity across scales. Nature, 2017, 546, 65-72.	13.7	474

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55	Applying network theory to prioritize multispecies habitat networks that are robust to climate and landâ€use change. Conservation Biology, 2017, 31, 1383-1396.	2.4	194
56	Effects of network modularity on the spread of perturbation impact in experimental metapopulations. Science, 2017, 357, 199-201.	6.0	169
57	Rapid morphological divergence in two closely related and co-occurring species over the last 50Âyears. Evolutionary Ecology, 2017, 31, 847-864.	0.5	27
58	Functional connectivity of the white-footed mouse in Southern Quebec, Canada. Landscape Ecology, 2017, 32, 1987-1998.	1.9	9
59	Signatures of the collapse and incipient recovery of an overexploited marine ecosystem. Royal Society Open Science, 2017, 4, 170215.	1.1	57
60	Defector clustering is linked to cooperation in a pathogenic bacterium. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20172001.	1.2	12
61	Patterns of pollinator turnover and increasing diversity associated with urban habitats. Urban Ecosystems, 2017, 20, 1359-1371.	1.1	77
62	Loss of habitat and connectivity erodes species diversity, ecosystem functioning, and stability in metacommunity networks. Ecography, 2017, 40, 98-108.	2.1	190
63	Experimental evidence does not support the Habitat Amount Hypothesis. Ecography, 2017, 40, 48-55.	2.1	145
64	A general biodiversityâ€“function relationship is mediated by trophic level. Oikos, 2017, 126, 18-31.	1.2	112
65	Spatial ecological networks: planning for sustainability in the long-term. Current Opinion in Environmental Sustainability, 2017, 29, 187-197.	3.1	46
66	Ecosystem multifunctionality in metacommunities. Ecology, 2016, 97, 2867-2879.	1.5	45
67	A network approach reveals surprises about the history of the niche. Ecosphere, 2016, 7, e01266.	1.0	5
68	Landscape structure affects the provision of multiple ecosystem services. Environmental Research Letters, 2016, 11, 124017.	2.2	94
69	Improving the forecast for biodiversity under climate change. Science, 2016, 353, .	6.0	780
70	Biotic nitrogen fixation in the bryosphere is inhibited more by drought than warming. Oecologia, 2016, 181, 1243-1258.	0.9	18
71	Estimating local biodiversity change: a critique of papers claiming no net loss of local diversity. Ecology, 2016, 97, 1949-1960.	1.5	224
72	Multipurpose habitat networks for shortâ€range and longâ€range connectivity: a new method combining graph and circuit connectivity. Methods in Ecology and Evolution, 2016, 7, 222-231.	2.2	112

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73	The impacts of urban sprawl on ecological connectivity in the Montreal Metropolitan Region. Environmental Science and Policy, 2016, 58, 61-73.	2.4	110
74	Multi-taxa integrated landscape genetics for zoonotic infectious diseases: deciphering variables influencing disease emergence. Genome, 2016, 59, 349-361.	0.9	16
75	Management of vegetation under electric distribution lines will affect the supply of multiple ecosystem services. Land Use Policy, 2016, 51, 66-75.	2.5	17
76	Predicting the outcome of competition when fitness inequality is variable. Royal Society Open Science, 2015, 2, 150274.	1.1	9
77	Strong and nonlinear effects of fragmentation on ecosystem service provision at multiple scales. Environmental Research Letters, 2015, 10, 094014.	2.2	93
78	The MontÃ©rÃ©gie Connection: linking landscapes, biodiversity, and ecosystem services to improve decision making. Ecology and Society, 2015, 20, .	1.0	34
79	Ecosystem Functions across Trophic Levels Are Linked to Functional and Phylogenetic Diversity. PLoS ONE, 2015, 10, e0117595.	1.1	60
80	Towards the Establishment of a Green Infrastructure in the Region of Montreal (Quebec, Canada). Planning Practice and Research, 2015, 30, 355-375.	0.8	20
81	Warming induces synchrony and destabilizes experimental pond zooplankton metacommunities. Oikos, 2015, 124, 1171-1180.	1.2	24
82	Dispersal, environmental forcing, and parasites combine to affect metapopulation synchrony and stability. Ecology, 2015, 96, 284-290.	1.5	19
83	Population decline and the effects of disturbances on the structure and recovery of octocoral communities (Coelenterata: Octocorallia) in Pacific Panama. Journal of the Marine Biological Association of the United Kingdom, 2015, 95, 81-90.	0.4	3
84	Local densities connect spatial ecology to game, multilevel selection and inclusive fitness theories of cooperation. Journal of Theoretical Biology, 2015, 380, 414-425.	0.8	10
85	Patchiness in a microhabitat chip affects evolutionary dynamics of bacterial cooperation. Lab on A Chip, 2015, 15, 3723-3729.	3.1	6
86	Act to staunch loss of research data. Nature, 2015, 520, 436-436.	13.7	16
87	Habitat fragmentation and its lasting impact on Earthâ€™s ecosystems. Science Advances, 2015, 1, e1500052.	4.7	2,541
88	Community rescue in experimental metacommunities. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14307-14312.	3.3	65
89	Pollination services are mediated by bee functional diversity and landscape context. Agriculture, Ecosystems and Environment, 2015, 200, 12-20.	2.5	184
90	Survival, growth, and recruitment of octocoral species (Coelenterata: Octocorallia) in Coiba National Park, Pacific Panama. Bulletin of Marine Science, 2014, 90, 623-650.	0.4	15

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91	Climate change and habitat fragmentation drive the occurrence of <scp>B</scp>orrelia burgdorferi, the agent of Lyme disease, at the northeastern limit of its distribution. Evolutionary Applications, 2014, 7, 750-764.	1.5	122
92	Forest fragments modulate the provision of multiple ecosystem services. Journal of Applied Ecology, 2014, 51, 909-918.	1.9	128
93	Agricultural landscape structure affects arthropod diversity and arthropod-derived ecosystem services. Agriculture, Ecosystems and Environment, 2014, 192, 144-151.	2.5	58
94	The negative relationship between mammal host diversity and Lyme disease incidence strengthens through time. Ecology, 2014, 95, 3244-3250.	1.5	31
95	Temperate forest fragments maintain aboveground carbon stocks out to the forest edge despite changes in community composition. Oecologia, 2014, 176, 893-902.	0.9	38
96	Landscape resistance and habitat combine to provide an optimal model of genetic structure and connectivity at the range margin of a small mammal. Molecular Ecology, 2014, 23, 3983-3998.	2.0	34
97	Linking Biodiversity and Ecosystem Services: Current Uncertainties and the Necessary Next Steps. BioScience, 2014, 64, 49-57.	2.2	285
98	Synchronous dynamics of zooplankton competitors prevail in temperate lake ecosystems. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20140633.	1.2	50
99	Species Richness and the Temporal Stability of Biomass Production: A New Analysis of Recent Biodiversity Experiments. American Naturalist, 2014, 183, 1-12.	1.0	309
100	The Potential Connectivity of Waterhole Networks and the Effectiveness of a Protected Area under Various Drought Scenarios. PLoS ONE, 2014, 9, e95049.	1.1	23
101	Linking Landscape Connectivity and Ecosystem Service Provision: Current Knowledge and Research Gaps. Ecosystems, 2013, 16, 894-908.	1.6	299
102	The ecological deficit. Nature, 2013, 503, 206-207.	13.7	5
103	Evolutionary rescue and adaptation to abrupt environmental change depends upon the history of stress. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120079.	1.8	115
104	Functional diversity and management mediate aboveground carbon stocks in small forest fragments. Ecosphere, 2013, 4, 1-21.	1.0	54
105	Stochastic environmental fluctuations drive epidemiology in experimental hostâ€“parasite metapopulations. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131747.	1.2	31
106	Evolutionary rescue: an emerging focus at the intersection between ecology and evolution. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120404.	1.8	306
107	Evolutionary rescue can maintain an oscillating community undergoing environmental change. Interface Focus, 2013, 3, 20130036.	1.5	23
108	How Humans Influence Evolution on Adaptive Landscapes. , 2013, , 180-202.		1

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109	Unifying sources and sinks in ecology andÂ<scp>E</scp>arth sciences. Biological Reviews, 2013, 88, 365-379.	4.7	85
110	Evolution of Dispersal in a Predator-Prey Metacommunity. American Naturalist, 2012, 179, 204-216.	1.0	24
111	Effective dispersal of large seeds by Baird's tapir: a large-scale field experiment. Journal of Tropical Ecology, 2012, 28, 119-122.	0.5	10
112	A global synthesis reveals biodiversity loss as a major driver of ecosystem change. Nature, 2012, 486, 105-108.	13.7	1,750
113	Biodiversity loss and its impact on humanity. Nature, 2012, 486, 59-67.	13.7	4,969
114	Traits explain community disassembly and trophic contraction following experimental environmental change. Global Change Biology, 2012, 18, 2448-2457.	4.2	73
115	Metacommunity theory explains the emergence of food web complexity. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19293-19298.	3.3	149
116	The functional role of producer diversity in ecosystems. American Journal of Botany, 2011, 98, 572-592.	0.8	991
117	Extinction Debt in Source-Sink Metacommunities. PLoS ONE, 2011, 6, e17567.	1.1	24
118	The maximal body mass-area relationship in island mammals. Journal of Biogeography, 2011, 38, 2278-2285.	1.4	5
119	Metacommunity diversity depends on connectivity and patch arrangement in heterogeneous habitat networks. Ecography, 2011, 34, 415-424.	2.1	105
120	Adaptation and Evolutionary Rescue in Metapopulations Experiencing Environmental Deterioration. Science, 2011, 332, 1327-1330.	6.0	331
121	Origin and deposition sites influence seed germination and seedling survival of Manilkara zapota: implications for long-distance, animal-mediated seed dispersal. Seed Science Research, 2011, 21, 305-313.	0.8	12
122	The disentangled bank: How loss of habitat fragments and disassembles ecological networks. American Journal of Botany, 2011, 98, 503-516.	0.8	119
123	Ecological Systems as Complex Systems: Challenges for an Emerging Science. Diversity, 2010, 2, 395-410.	0.7	98
124	The Bryosphere: An Integral and Influential Component of the Earthâ€™s Biosphere. Ecosystems, 2010, 13, 612-627.	1.6	210
125	A patch-dynamic framework for food web metacommunities. Theoretical Ecology, 2010, 3, 223-237.	0.4	59
126	Connectivity, nonâ€random extinction and ecosystem function in experimental metacommunities. Ecology Letters, 2010, 13, 543-552.	3.0	132

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127	Synchrony and Stability of Food Webs in Metacommunities. American Naturalist, 2010, 175, E16-E34.	1.0	107
128	Evolutionary rescue can prevent extinction following environmental change. Ecology Letters, 2009, 12, 942-948.	3.0	450
129	A Crossâ€National Analysis of How Economic Inequality Predicts Biodiversity Loss. Conservation Biology, 2009, 23, 1304-1313.	2.4	81
130	The Causes and Consequences of Compensatory Dynamics in Ecological Communities. Annual Review of Ecology, Evolution, and Systematics, 2009, 40, 393-414.	3.8	388
131	Biodiversity as spatial insurance: the effects of habitat fragmentation and dispersal on ecosystem functioning. , 2009, , 134-146.		45
132	Whither adaptation?. Biology and Philosophy, 2008, 23, 673-699.	0.7	59
133	When does ecosystem engineering cause invasion and species replacement?. Oikos, 2008, 117, 1247-1257.	1.2	32
134	The rate of environmental change drives adaptation to an antibiotic sink. Journal of Evolutionary Biology, 2008, 21, 1724-1731.	0.8	75
135	Scale Dependence of Speciesâ€Energy Relationships: Evidence from Fishes in Thousands of Lakes. American Naturalist, 2008, 171, 800-815.	1.0	27
136	Sourceâ€“sink dynamics shape the evolution of antibiotic resistance and its pleiotropic fitness cost. Proceedings of the Royal Society B: Biological Sciences, 2007, 274, 2351-2356.	1.2	117
137	Changes in nestedness in experimental communities of soil fauna undergoing extinction. Pedobiologia, 2007, 50, 497-503.	0.5	35
138	THE INFLATIONARY EFFECTS OF ENVIRONMENTAL FLUCTUATIONS ENSURE THE PERSISTENCE OF SINK METAPOPULATIONS. Ecology, 2007, 88, 2848-2856.	1.5	83
139	Economic Inequality Predicts Biodiversity Loss. PLoS ONE, 2007, 2, e444.	1.1	106
140	Environmental Variability Modulates the Insurance Effects of Diversity in Non-equilibrium Communities. , 2007, , 159-177.		14
141	Plant Biodiversity and Responses to Elevated Carbon Dioxide. Global Change - the IGBP Series, 2007, , 103-112.	2.1	2
142	POPULATION SYNCHRONY INDUCED BY RESOURCE FLUCTUATIONS AND DISPERSAL IN AN AQUATIC MICROCOSM. Ecology, 2005, 86, 1463-1471.	1.5	46
143	STABLE COEXISTENCE IN A FLUCTUATING ENVIRONMENT: AN EXPERIMENTAL DEMONSTRATION. Ecology, 2005, 86, 2815-2824.	1.5	184
144	The metacommunity concept: a framework for multi-scale community ecology. Ecology Letters, 2004, 7, 601-613.	3.0	4,069

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145	Population and community variability in randomly fluctuating environments. Oikos, 2004, 106, 105-116.	1.2	87
146	Are natural microcosms useful model systems for ecology?. Trends in Ecology and Evolution, 2004, 19, 379-384.	4.2	331
147	Impacts of environmental variability in open populations and communities: â€œinflationâ€•in sink environments. Theoretical Population Biology, 2003, 64, 315-330.	0.5	51
148	Biodiversity as spatial insurance in heterogeneous landscapes. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 12765-12770.	3.3	805
149	The inflationary effects of environmental fluctuations in source-sink systems. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14872-14877.	3.3	128
150	Heterotroph species extinction, abundance and biomass dynamics in an experimentally fragmented microecosystem. Journal of Animal Ecology, 2002, 71, 594-602.	1.3	172
151	Community relaxation in fragmented landscapes: the relation between species richness, area and age. Ecology Letters, 2000, 3, 441-448.	3.0	109
152	Spectral mimicry: A method of synthesizing matching time series with different Fourier spectra. Circuits, Systems, and Signal Processing, 1999, 18, 431-442.	1.2	29
153	Metapopulation Dynamics, Abundance, and Distribution in a Microecosystem. , 1998, 281, 2045-2047.		391
154	A novel experimental apparatus to study the impact of white noise and 1/f noise on animal populations. Proceedings of the Royal Society B: Biological Sciences, 1998, 265, 11-15.	1.2	33
155	Corridors maintain species richness in the fragmented landscapes of a microecosystem. Proceedings of the Royal Society B: Biological Sciences, 1998, 265, 577-582.	1.2	198
156	Effects on population persistence: the interaction between environmental noise colour, intraspecific competition and space. Proceedings of the Royal Society B: Biological Sciences, 1997, 264, 1841-1847.	1.2	142
157	Flower choice by honey bees (Apis mellifera L.): sex-phase of flowers and preferences among nectar and pollen foragers. Oecologia, 1995, 101, 258-264.	0.9	42