

Ralph A Catalano

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1072187/publications.pdf>

Version: 2024-02-01

153
papers

6,696
citations

71102

41
h-index

71685

76
g-index

159
all docs

159
docs citations

159
times ranked

4132
citing authors

#	ARTICLE	IF	CITATIONS
1	The Health Effects of Economic Decline. Annual Review of Public Health, 2011, 32, 431-450.	17.4	429
2	Gaps in Service Utilization by Mexican Americans With Mental Health Problems. American Journal of Psychiatry, 1999, 156, 928-934.	7.2	300
3	Economic Predictors of Depressed Mood and Stressful Life Events in a Metropolitan Community. Journal of Health and Social Behavior, 1977, 18, 292.	4.8	250
4	Economic change as a cause of behavioral disorder.. Psychological Bulletin, 1980, 87, 450-468.	6.1	228
5	Depression and unemployment: Panel findings from the Epidemiologic Catchment Area study. American Journal of Community Psychology, 1994, 22, 745-765.	2.5	223
6	Exogenous shocks to the human sex ratio: the case of September 11, 2001 in New York City. Human Reproduction, 2006, 21, 3127-3131.	0.9	184
7	Job Loss and Alcohol Abuse: A Test Using Data from the Epidemiologic Catchment Area Project. Journal of Health and Social Behavior, 1993, 34, 215.	4.8	173
8	Sex ratios in the two Germanies: a test of the economic stress hypothesis. Human Reproduction, 2003, 18, 1972-1975.	0.9	163
9	Earthquake Preparedness: Predictors in a Community Survey ¹ . Journal of Applied Social Psychology, 1992, 22, 451-470.	2.0	152
10	Stress Transmission: The Effects of Husbands' Job Stressors on the Emotional Health of Their Wives. Journal of Marriage and Family, 1991, 53, 165.	2.6	146
11	Personal and Aggregate Unemployment and Psychological Symptoms. Journal of Social Issues, 1988, 44, 107-123.	3.3	145
12	Health Effects of Economic Instability: A Test of Economic Stress Hypothesis. Journal of Health and Social Behavior, 1983, 24, 46.	4.8	142
13	Low birthweight in New York city and upstate New York following the events of September 11th. Human Reproduction, 2007, 22, 3013-3020.	0.9	140
14	Sex ratios in California following the terrorist attacks of September 11, 2001. Human Reproduction, 2005, 20, 1221-1227.	0.9	136
15	TIME SERIES DESIGNS OF POTENTIAL INTEREST TO EPIDEMIOLOGISTS. American Journal of Epidemiology, 1987, 126, 724-731.	3.4	132
16	Fetal death sex ratios: a test of the economic stress hypothesis. International Journal of Epidemiology, 2005, 34, 944-948.	1.9	129
17	Communal Bereavement and the Incidence of Very Low Birthweight in Sweden. Journal of Health and Social Behavior, 2001, 42, 333.	4.8	117
18	Unemployment and alcohol disorder in 1910 and 1990: Drift versus social causation. Journal of Occupational and Organizational Psychology, 1992, 65, 277-290.	4.5	115

#	ARTICLE	IF	CITATIONS
19	Recent Research on the Psychological Effects of Unemployment. <i>Journal of Social Issues</i> , 1988, 44, 1-12.	3.3	114
20	Male fetal loss in the U.S. following the terrorist attacks of September 11, 2001. <i>BMC Public Health</i> , 2010, 10, 273.	2.9	114
21	Secondary sex ratios and male lifespan: Damaged or culled cohorts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 1639-1643.	7.1	112
22	Association of Preterm Births Among US Latina Women With the 2016 Presidential Election. <i>JAMA Network Open</i> , 2019, 2, e197084.	5.9	112
23	Health, Medical Care, and Economic Crisis. <i>New England Journal of Medicine</i> , 2009, 360, 749-751.	27.0	107
24	Economic, life, and disorder changes: Time-series analyses. <i>American Journal of Community Psychology</i> , 1979, 7, 381-396.	2.5	103
25	Ambient temperature predicts sex ratios and male longevity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 2244-2247.	7.1	98
26	Economic Loss and Alcohol Consumption and Problems During the 2008 to 2009 U.S. Recession. <i>Alcoholism: Clinical and Experimental Research</i> , 2014, 38, 1026-1034.	2.4	89
27	Job and non-job stressors and their moderators. <i>Journal of Occupational Psychology</i> , 1987, 60, 115-132.	1.5	79
28	Contending with rival hypotheses in correlation of aggregate time-series (CATS): An overview for community psychologists. <i>American Journal of Community Psychology</i> , 1981, 9, 667-679.	2.5	75
29	The interaction of stressful life events and chronic strains on community mental health. <i>American Journal of Community Psychology</i> , 1987, 15, 23-34.	2.5	74
30	The Ecological Effect of Unemployment on the Incidence of Very Low Birthweight in Norway and Sweden. <i>Journal of Health and Social Behavior</i> , 1999, 40, 422.	4.8	72
31	Economic antecedents of the Swedish sex ratio. <i>Social Science and Medicine</i> , 2005, 60, 537-543.	3.8	69
32	Cold summer weather, constrained restoration, and the use of antidepressants in Sweden. <i>Journal of Environmental Psychology</i> , 2007, 27, 107-116.	5.1	68
33	The epidemiology of economic stress. <i>American Journal of Community Psychology</i> , 1984, 12, 387-409.	2.5	65
34	Selection in utero and population health: Theory and typology of research. <i>SSM - Population Health</i> , 2018, 5, 101-113.	2.7	63
35	A model of the net effect of job loss on violence.. <i>Journal of Personality and Social Psychology</i> , 1997, 72, 1440-1447.	2.8	60
36	Economic Antecedents of Help Seeking: Reformulation of Time-Series Tests. <i>Journal of Health and Social Behavior</i> , 1985, 26, 141.	4.8	56

#	ARTICLE	IF	CITATIONS
37	Commentary: If economic expansion threatens public health, should epidemiologists recommend recession?. <i>International Journal of Epidemiology</i> , 2005, 34, 1212-1213.	1.9	54
38	Selecting a time-series strategy.. <i>Psychological Bulletin</i> , 1983, 94, 506-523.	6.1	52
39	Spontaneous Pregnancy Loss in Denmark Following Economic Downturns. <i>American Journal of Epidemiology</i> , 2016, 183, 701-708.	3.4	51
40	The timing of major life events: Effects of departing from the social clock. <i>American Journal of Community Psychology</i> , 1989, 17, 233-258.	2.5	50
41	The sex ratio and age-specific male mortality: Evidence for culling <i>in utero</i> . <i>American Journal of Human Biology</i> , 2007, 19, 763-773.	1.6	48
42	Excess Mortality in California During the Coronavirus Disease 2019 Pandemic, March to August 2020. <i>JAMA Internal Medicine</i> , 2021, 181, 705.	5.1	47
43	Air pollution and depressive symptomatology: Exploratory analyses of intervening psychosocial factors. <i>Population and Environment</i> , 1984, 7, 260-272.	3.0	42
44	Layoffs and violence revisited. <i>Aggressive Behavior</i> , 2002, 28, 233-247.	2.4	42
45	Psychiatric Emergency Services and the System of Care. <i>Psychiatric Services</i> , 2003, 54, 351-355.	2.0	41
46	Population stress and the Swedish sex ratio. <i>Paediatric and Perinatal Epidemiology</i> , 2005, 19, 413-420.	1.7	41
47	Natural selection <i>in utero</i> : Evidence from the great East Japan earthquake. <i>American Journal of Human Biology</i> , 2013, 25, 555-559.	1.6	38
48	Selection in utero: A biological response to mass layoffs. <i>American Journal of Human Biology</i> , 2010, 22, 396-400.	1.6	37
49	Gender-specific selection <i>in utero</i> among contemporary human birth cohorts. <i>Paediatric and Perinatal Epidemiology</i> , 2009, 23, 273-278.	1.7	36
50	Selection against small males in utero: a test of the Wells hypothesis. <i>Human Reproduction</i> , 2012, 27, 1202-1208.	0.9	35
51	A sex-specific test of selection in utero. <i>Journal of Theoretical Biology</i> , 2009, 257, 475-479.	1.7	34
52	A time-series analysis of the effect of increased copayments on the prescription of antidepressants, anxiolytics, and sedatives in Sweden from 1990 to 1999. <i>Clinical Therapeutics</i> , 2003, 25, 1262-1275.	2.5	31
53	Child mortality and cohort lifespan: a test of diminished entelechy. <i>International Journal of Epidemiology</i> , 2006, 35, 1264-1269.	1.9	30
54	Money and mental disorder: Toward behavioral cost accounting for primary prevention. <i>American Journal of Community Psychology</i> , 1977, 5, 217-227.	2.5	29

#	ARTICLE	IF	CITATIONS
55	The effect of unemployment on disability caseloads in California. <i>Journal of Community and Applied Social Psychology</i> , 1998, 8, 137-144.	2.4	29
56	Vacation, Collective Restoration, and Mental Health in a Population. <i>Society and Mental Health</i> , 2013, 3, 221-236.	2.2	29
57	The Economy As Stressor: A Sectoral Aanalysisâ—. <i>Review of Social Economy</i> , 1979, 37, 175-187.	1.1	28
58	Changes in preterm birth and caesarean deliveries in the United States during the SARSâ€CoVâ€2 pandemic. <i>Paediatric and Perinatal Epidemiology</i> , 2022, 36, 485-489.	1.7	28
59	Evaluating a campaign to detect early stage breast tumors in the United States. <i>European Journal of Epidemiology</i> , 2002, 18, 545-550.	5.7	27
60	The Muslim Ban and preterm birth: Analysis of U.S. vital statistics data from 2009 to 2018. <i>Social Science and Medicine</i> , 2020, 265, 113544.	3.8	27
61	Improved asthma outcomes observed in the vicinity of coal power plant retirement, retrofit and conversion to natural gas. <i>Nature Energy</i> , 2020, 5, 398-408.	39.5	27
62	A test of reciprocal risk between undesirable economic and noneconomic life events. <i>American Journal of Community Psychology</i> , 1987, 15, 633-651.	2.5	26
63	Using ECA Survey Data to Examine the Effect of Job Layoffs on Violent Behavior. <i>Psychiatric Services</i> , 1993, 44, 874-879.	2.0	26
64	Unemployment and the Detection of Early Stage Breast Tumors Among African Americans and Non-Hispanic Whites. <i>Annals of Epidemiology</i> , 2003, 13, 8-15.	1.9	26
65	The Effect of Communityâ€Level Unemployment on Preventive Oral Health Care Utilization. <i>Health Services Research</i> , 2009, 44, 162-181.	2.0	26
66	Maternal Exposure to Unexpected Economic Contraction and Birth Weight for Gestational Age. <i>Epidemiology</i> , 2011, 22, 855-858.	2.7	26
67	Income Gains and Very Low-Weight Birth among Low-Income Black Mothers in California. <i>Biodemography and Social Biology</i> , 2013, 59, 141-156.	1.0	24
68	Group Interventions and the Limits of Behavioral Medicine. <i>Behavioral Medicine</i> , 2000, 26, 116-128.	1.9	23
69	Introduction to Underemployment and Its Social Costs. <i>American Journal of Community Psychology</i> , 2003, 32, 1-7.	2.5	23
70	Psychiatric Emergencies: The Check Effect Revisited. <i>Journal of Health and Social Behavior</i> , 1999, 40, 79.	4.8	22
71	Cold summer weather, constrained restoration, and very low birth weight in Sweden. <i>Health and Place</i> , 2013, 22, 68-74.	3.3	22
72	Association between Oklahoma earthquakes and anxiety-related Google search episodes. <i>Environmental Epidemiology</i> , 2018, 2, e016.	3.0	21

#	ARTICLE	IF	CITATIONS
73	Unemployment and civil commitment: a test of the intolerance hypothesis. <i>Aggressive Behavior</i> , 2007, 33, 272-280.	2.4	20
74	Smoking among construction workers: The nonlinear influence of the economy, cigarette prices, and antismoking sentiment. <i>Social Science and Medicine</i> , 2012, 75, 1379-1386.	3.8	20
75	An emerging theory of the effect of economic contraction on alcohol abuse in the United States. <i>Social Justice Research</i> , 1997, 10, 191-201.	1.1	19
76	Twinning in Norway Following the Oslo Massacre: Evidence of a "Bruce Effect"™ in Humans. <i>Twin Research and Human Genetics</i> , 2016, 19, 485-491.	0.6	19
77	Rates of Unemployment and Incidence of Police-Initiated Examinations for Involuntary Hospitalization in Florida. <i>Psychiatric Services</i> , 2006, 57, 1435-1439.	2.0	18
78	Male lifespan and the secondary sex ratio. <i>American Journal of Human Biology</i> , 2006, 18, 783-790.	1.6	18
79	Natural selection in utero induced by mass layoffs: the hCG evidence. <i>Evolutionary Applications</i> , 2012, 5, 796-805.	3.1	18
80	Very low birthweight: Dysregulated gestation versus evolutionary adaptation. <i>Social Science and Medicine</i> , 2014, 108, 237-242.	3.8	18
81	Social Ecology: An Emerging Multidiscipline. <i>Journal of Environmental Education</i> , 1975, 7, 32-43.	1.8	16
82	Neonatal Mortality and the Economy Revisited. <i>International Journal of Health Services</i> , 1992, 22, 275-286.	2.5	16
83	The effect of deviations from trends in national income on mortality: the Danish and USA data revisited. , 1997, 13, 737-743.		16
84	Labor market conditions and employment of the mentally ill. , 1999, 2, 51-54.		16
85	Impact of Capacity Reductions in Acute Public-Sector Inpatient Psychiatric Services. <i>Psychiatric Services</i> , 2012, 63, 135-141.	2.0	16
86	Psychiatric Emergencies After the Terrorist Attacks of September 11, 2001. <i>Psychiatric Services</i> , 2004, 55, 163-166.	2.0	14
87	Involuntary Psychiatric Examinations for Danger to Others in Florida After the Attacks of September 11, 2001. <i>Psychiatric Services</i> , 2005, 56, 858-862.	2.0	14
88	Economic Antecedents of Sudden Infant Death Syndrome. <i>Annals of Epidemiology</i> , 2006, 16, 415-422.	1.9	14
89	The relation of economic conditions, social support, and life events to depression. <i>Journal of Community Psychology</i> , 1986, 14, 103-119.	1.8	13
90	Twins Less Frequent Than Expected Among Male Births in Risk Averse Populations. <i>Twin Research and Human Genetics</i> , 2015, 18, 314-320.	0.6	13

#	ARTICLE	IF	CITATIONS
91	Separating the Bruce and Trivers-Willard effects in theory and in human data. <i>American Journal of Human Biology</i> , 2018, 30, e23074.	1.6	13
92	Increased motor vehicle crashes following induced earthquakes in Oklahoma, USA. <i>Science of the Total Environment</i> , 2019, 650, 2974-2979.	8.0	13
93	THE BEHAVIORAL COSTS OF ECONOMIC INSTABILITY*. <i>Policy Studies Journal</i> , 1981, 10, 338-349.	5.1	11
94	Economic Antecedents of Mortality Among the Very Old. <i>Epidemiology</i> , 2002, 13, 133-137.	2.7	10
95	The Impact of Capitated Financing on Psychiatric Emergency Services. <i>Psychiatric Services</i> , 2005, 56, 685-690.	2.0	10
96	The 2016 presidential election and periviable births among Latina women. <i>Early Human Development</i> , 2020, 151, 105203.	1.8	10
97	Patterned Outcomes, Unpatterned Counterfactuals, and Spurious Results: Perinatal Health Outcomes Following COVID-19. <i>American Journal of Epidemiology</i> , 2022, 191, 1837-1841.	3.4	10
98	Economic Antecedents of Foster Care. <i>American Journal of Community Psychology</i> , 2003, 32, 47-56.	2.5	9
99	Infant mortality and diminished entelechy in three European countries. <i>Social Science and Medicine</i> , 2009, 68, 1617-1624.	3.8	9
100	The contribution of attenuated selection in utero to small-for-gestational-age (SGA) among term African American male infants. <i>Social Science and Medicine</i> , 2013, 88, 83-89.	3.8	9
101	Ambient temperature during gestation and cold-related adult mortality in a Swedish cohort, 1915-2002. <i>Social Science and Medicine</i> , 2014, 119, 191-197.	3.8	9
102	Do macroeconomic contractions induce or "harvest" suicides? A test of competing hypotheses. <i>Journal of Epidemiology and Community Health</i> , 2015, 69, 1071-1076.	3.7	9
103	Hormonal evidence of selection in utero revisited. <i>American Journal of Human Biology</i> , 2015, 27, 426-431.	1.6	9
104	Selected birth defects among males following the United States terrorist attacks of 11 September 2001. <i>Birth Defects Research</i> , 2017, 109, 1277-1283.	1.5	9
105	Cohort Variation in Selection During Pregnancy and Risk of Selected Birth Defects Among Males. <i>Epidemiology</i> , 2017, 28, 580-586.	2.7	9
106	Male-to-Female Ratios, Race/Ethnicity, and Spontaneous Preterm Birth among 11 Million California Infants. <i>American Journal of Perinatology</i> , 2021, 38, 683-689.	1.4	9
107	Twinning during the pandemic. <i>Evolution, Medicine and Public Health</i> , 2021, 9, 374-382.	2.5	9
108	Transient cultural influences on infant mortality: Firehorse daughters in Japan. <i>American Journal of Human Biology</i> , 2011, 23, 586-591.	1.6	8

#	ARTICLE	IF	CITATIONS
109	Temperature oscillations may shorten male lifespan via natural selection in utero. <i>Climatic Change</i> , 2012, 110, 697-707.	3.6	8
110	Shared risk aversion in spontaneous and induced abortion. <i>Human Reproduction</i> , 2016, 31, 1113-1119.	0.9	8
111	Timing of birth: Parsimony favors strategic over dysregulated parturition. <i>American Journal of Human Biology</i> , 2016, 28, 31-35.	1.6	8
112	Recent declines in cancer incidence: related to the Great Recession?. <i>Cancer Causes and Control</i> , 2017, 28, 145-154.	1.8	8
113	A test of oscillation in the human secondary sex ratio. <i>Evolution, Medicine and Public Health</i> , 2020, 2020, 225-233.	2.5	8
114	The community psychologist as social planner. <i>American Journal of Community Psychology</i> , 1975, 3, 327-334.	2.5	7
115	Comment: Housing Policy and Health. <i>Journal of Social Issues</i> , 2003, 59, 637-649.	3.3	7
116	Life Expectancy during the Great Depression in Eleven European Countries. <i>Population and Development Review</i> , 2013, 39, 57-74.	2.1	7
117	Coal-fired power plant closures and retrofits reduce asthma morbidity in the local population. <i>Nature Energy</i> , 2020, 5, 365-366.	39.5	7
118	Collective Optimism and Selection Against Male Twins in Utero. <i>Twin Research and Human Genetics</i> , 2020, 23, 45-50.	0.6	7
119	Estimating the Health Effects of Macrosocial Shocks: A Collaborative Approach. , 2007, , 375-397.		7
120	Commentary: Political epidemiology, Republican presidents and dog food. <i>International Journal of Epidemiology</i> , 2014, 43, 829-831.	1.9	6
121	Post-term birth as a response to environmental stress: The case of September 11, 2001. <i>Evolution, Medicine and Public Health</i> , 2015, 2015, 13-20.	2.5	6
122	Non-COVID-19 deaths after social distancing in Norway. <i>European Journal of Epidemiology</i> , 2020, 35, 1021-1024.	5.7	6
123	Managing the Local Economy: Implications for Medical Care. <i>Medical Care Review</i> , 1993, 50, 305-325.	0.9	5
124	Economic predictors of admissions to inpatient psychiatric treatment in Sweden. <i>Social Psychiatry and Psychiatric Epidemiology</i> , 2004, 39, 305-310.	3.1	5
125	Selection in utero contributes to the male longevity deficit. <i>Social Science and Medicine</i> , 2011, 72, 999-1003.	3.8	5
126	Stroke-attributable death among older persons during the great recession. <i>Economics and Human Biology</i> , 2016, 21, 56-63.	1.7	5

#	ARTICLE	IF	CITATIONS
127	Clear and simple: no association between the Great Recession and period life expectancy at birth in the USA. <i>International Journal of Epidemiology</i> , 2016, 45, 1681-1683.	1.9	5
128	Wildfire particulate matter in Shasta County, California and respiratory and circulatory disease-related emergency department visits and mortality, 2013–2018. <i>Environmental Epidemiology</i> , 2021, 5, e124.	3.0	5
129	Exposure to the early COVID-19 pandemic and early, moderate and overall preterm births in the United States : A conception cohort approach. <i>Paediatric and Perinatal Epidemiology</i> , 0, , .	1.7	5
130	Measuring Community Preferences for Public Mental Health Services: Pilot Test of a Mail Survey Method. <i>Community Mental Health Journal</i> , 2004, 40, 281-295.	2.0	4
131	Reproductive suppression, birth defects, and periviable birth. <i>Evolutionary Applications</i> , 2018, 11, 762-767.	3.1	4
132	Sun Smoke in Sweden. <i>Epidemiology</i> , 2019, 30, 330-333.	2.7	4
133	Understanding periviable birth: A microeconomic alternative to the dysregulation narrative. <i>Social Science and Medicine</i> , 2019, 233, 281-284.	3.8	4
134	Stillbirths and live births in the periviable period. <i>Annals of Epidemiology</i> , 2020, 49, 8-12.	1.9	4
135	Sheltering in Place and the Likelihood of Nonnatural Death. <i>American Journal of Epidemiology</i> , 2021, 190, 1075-1080.	3.4	4
136	Economic antecedents of temporal variation in the incidence of ocular trauma. <i>Ophthalmic Epidemiology</i> , 2004, 11, 279-289.	1.7	3
137	A test of famine-induced developmental programming <i>in utero</i> . <i>Journal of Developmental Origins of Health and Disease</i> , 2019, 10, 368-375.	1.4	3
138	Stillbirth as left truncation for early neonatal death in California, 1989–2015: a time-series study. <i>BMC Pregnancy and Childbirth</i> , 2021, 21, 478.	2.4	3
139	Toward the safety society: Police agencies and environmental planning. <i>Journal of Criminal Justice</i> , 1976, 4, 1-7.	2.3	2
140	Urban Planning, Public Health, and the Human Costs of Economic Change. <i>Journal of Planning Education and Research</i> , 1984, 3, 110-117.	2.7	2
141	Chapter 5: Economic Development and Community Mental Health. <i>Journal of Prevention and Intervention in the Community</i> , 1987, 5, 91-115.	0.2	2
142	African American Unemployment and the Disparity in Periviable Births. <i>Journal of Racial and Ethnic Health Disparities</i> , 2022, 9, 840-848.	3.2	2
143	Cohort Selection In Utero against Male Twins and Childhood Cancers: A Population-Based Register Study. <i>Cancer Epidemiology Biomarkers and Prevention</i> , 2021, 30, 1834-1840.	2.5	2
144	Devising an Environmental Impact Assessment Curriculum. <i>Journal of Environmental Education</i> , 1975, 6, 36-42.	1.8	1

#	ARTICLE	IF	CITATIONS
145	Reconstructing dose: A commentary on McEniry. <i>Social Science and Medicine</i> , 2011, 72, 1016-1017.	3.8	1
146	Sex-specific deaths in Norway and Sweden during the COVID-19 pandemic: Did mandates make a difference?. <i>Scandinavian Journal of Public Health</i> , 2021, , 140349482110100.	2.3	1
147	Reply: The human sex ratio in New York City did not change after 11 September 2001. <i>Human Reproduction</i> , 2007, 22, 1193-1194.	0.9	0
148	Natural Selection In Utero Contributes to the Male Longevity Deficit in Contemporary Human Populations. <i>Nature Precedings</i> , 2009, , .	0.1	0
149	Ad hominen or ad rem? Good autocorrelation or bad?. <i>International Journal of Epidemiology</i> , 2014, 43, 1342-1343.	1.9	0
150	Bruckner et al. Respond to "Preventable Pregnancy Loss Is a Public Health Problem". <i>American Journal of Epidemiology</i> , 2016, 183, 713-714.	3.4	0
151	Do post-reproductive aged females promote maternal health? Preliminary evidence from historical populations. <i>Evolution, Medicine and Public Health</i> , 2017, 2017, 136-143.	2.5	0
152	Reproductive suppression and longevity in human birth cohorts. <i>American Journal of Human Biology</i> , 2020, 32, e23353.	1.6	0
153	Sildenafil and suicide in Sweden. <i>European Journal of Epidemiology</i> , 2021, 36, 531-537.	5.7	0