Kam-biu Liu

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2412731/publications.pdf

Version: 2024-02-01

139 papers	9,447 citations	46984 47 h-index	93 g-index
142	142	142	7123 citing authors
all docs	docs citations	times ranked	

#	Article	IF	CITATIONS
1	Linking backbarrier lacustrine stratigraphy with spatial dynamics of shoreline retreat in a rapidly subsiding region of the Mississippi River Delta. Geomorphology, 2022, 397, 108008.	1.1	4
2	Temporal variability in the relative strength of external drivers controlling ecosystem succession in a coastal wetland near Bayou Lafourche, southeast Louisiana, USA. Quaternary Science Reviews, 2022, 276, 107292.	1.4	7
3	Testing XRF identification of marine washover sediment beds in a Coastal Lake in Southeastern Texas, USA. Marine Geology, 2022, 443, 106705.	0.9	5
4	The use of multivariate PCA dataset in identifying the underlying drivers of critical stressors, looking at global problems through a local lens. Data in Brief, 2022, 41, 107946.	0.5	2
5	A 4000-year paleoenvironmental reconstruction and extreme event record from Laguna Nuxco, Guerrero, Mexico. Palaeogeography, Palaeoclimatology, Palaeoecology, 2022, 594, 110933.	1.0	5
6	Sedimentary records of microplastic pollution from coastal Louisiana and their environmental implications. Journal of Coastal Conservation, 2022, 26, 1.	0.7	9
7	A Late-Holocene palynological record of coastal ecological change and climate variability from Apalachicola, Florida, U.S.A. Climate Change Ecology, 2022, 3, 100056.	0.9	3
8	Nature versus Humans in Coastal Environmental Change: Assessing the Impacts of Hurricanes Zeta and Ida in the Context of Beach Nourishment Projects in the Mississippi River Delta. Remote Sensing, 2022, 14, 2598.	1.8	9
9	Mangrove expansion at poleward range limits in North and South America: Late-Holocene climate variability or anthropocene global warming?. Catena, 2022, 216, 106413.	2.2	12
10	Testing XRF Discrimination of Marine and Terrestrial Flood Deposits in Southeastern Texas Coastal Marshes. Journal of Coastal Research, 2021, 37, .	0.1	2
11	Holocene environmental history of a freshwater wetland in southern Louisiana: a sedimentary record of delta development, coastal evolution and human activity. Journal of Quaternary Science, 2021, 36, 980-990.	1.1	5
12	The effect of global warming on the establishment of mangroves in coastal Louisiana during the Holocene. Geomorphology, 2021, 381, 107648.	1.1	24
13	Effects of Beach Nourishment Project on Coastal Geomorphology and Mangrove Dynamics in Southern Louisiana, USA. Remote Sensing, 2021, 13, 2688.	1.8	17
14	Modern Pollen Rain in the Tibetan Plateau. Frontiers in Earth Science, 2021, 9, .	0.8	13
15	Historical flooding regime along the Amur River and its links to East Asia summer monsoon circulation. Geomorphology, 2021, 388, 107782.	1.1	12
16	Differentiating hurricane deposits in coastal sedimentary records: two storms, one layer, but different processes. Environmental Research Communications, 2021, 3, 101001.	0.9	6
17	Effects of the 2017–2018 winter freeze on the northern limit of the American mangroves, Mississippi River delta plain. Geomorphology, 2021, , 107968.	1.1	9
18	A multi-proxy record of hurricanes, tsunami, and post-disturbance ecosystem changes from coastal southern Baja California. Science of the Total Environment, 2021, 796, 149011.	3.9	11

#	Article	IF	Citations
19	Identifying forcing agents of environmental change and ecological response on the Mississippi River Delta, Southeastern Louisiana. Science of the Total Environment, 2021, 794, 148730.	3.9	10
20	Poleward Shift in Tropical Cyclone Tracks in the Northwest Pacific During Warm Periods: Past and Future. Paleoceanography and Paleoclimatology, 2021, 36, e2021PA004367.	1.3	6
21	Hurricane Harvey Storm Sedimentation in the San Bernard National Wildlife Refuge, Texas: Fluvial Versus Storm Surge Deposition. Estuaries and Coasts, 2020, 43, 971-983.	1.0	15
22	Hydrological regime responses to Holocene East Asian summer monsoon circulation in marshes of the Sanjiang Plain, NE China. Land Degradation and Development, 2020, 31, 240-250.	1.8	6
23	A Geochemical Record of Lateâ€Holocene Hurricane Events From the Florida Everglades. Water Resources Research, 2020, 56, e2019WR026857.	1.7	16
24	A 5200-year paleoecological and geochemical record of coastal environmental changes and shoreline fluctuations in southwestern Louisiana: Implications for coastal sustainability. Geomorphology, 2020, 365, 107284.	1.1	13
25	Potential pollen evidence for the 1933 M 7.5 Diexi earthquake and implications for post-seismic landscape recovery. Environmental Research Letters, 2020, 15, 094043.	2.2	9
26	Contrasting Hurricane Ike washover sedimentation and Hurricane Harvey flood sedimentation in a Southeastern Texas coastal marsh. Marine Geology, 2019, 417, 106011.	0.9	7
27	Position and orientation of the westerly jet determined Holocene rainfall patterns in China. Nature Communications, 2019, 10, 2376.	5.8	112
28	Collaboration Across Boundaries: Reflections on Studying the Sustainability of the Mississippi River Delta as a Coupled Natural-Human System., 2019, , 361-393.		0
29	A multi-proxy quantitative record of Holocene hydrological regime on the Heixiazi Island (NE China): indications for the evolution of East Asian summer monsoon. Climate Dynamics, 2019, 52, 6773-6786.	1.7	8
30	Diatom Evidence of a Paleohurricane-Induced Coastal Flooding Event in Weeks Bay, Alabama, USA. Journal of Coastal Research, 2019, 35, 499.	0.1	12
31	The mid-Holocene decline of the East Asian summer monsoon indicated by a lake-to-wetland transition in the Sanjiang Plain, Northeast China. Holocene, 2018, 28, 246-253.	0.9	10
32	How Could a Freshwater Swamp Produce a Chemical Signature Characteristic of a Saltmarsh?. ACS Earth and Space Chemistry, 2018, 2, 9-20.	1,2	19
33	The Effects of Tropical Cyclone-Generated Deposition on the Sustainability of the Pearl River Marsh, Louisiana: The Importance of the Geologic Framework. Frontiers in Ecology and Evolution, 2018, 6, .	1.1	9
34	Assessing Resilience and Sustainability of the Mississippi River Delta as a Coupled Natural-Human System. Water (Switzerland), 2018, 10, 1317.	1,2	9
35	Hurricanes as a Major Driver of Coastal Erosion in the Mississippi River Delta: A Multi-Decadal Analysis of Shoreline Retreat Rates at Bay Champagne, Louisiana (USA). Water (Switzerland), 2018, 10, 1480.	1.2	10
36	Understanding the Mississippi River Delta as a Coupled Natural-Human System: Research Methods, Challenges, and Prospects. Water (Switzerland), 2018, 10, 1054.	1,2	22

#	Article	IF	CITATIONS
37	Palynological and Geochemical Records of Environmental Changes in a Taxodium Swamp near Lake Pontchartrain in Southern Louisiana (USA) during the Last 150 Years. Journal of Coastal Research, 2018, 85, 381-385.	0.1	14
38	Past and future global transformation of terrestrial ecosystems under climate change. Science, 2018, 361, 920-923.	6.0	307
39	Changes in Modern Pollen Assemblages and Soil Geochemistry along Coastal Environmental Gradients in the Everglades of South Florida. Frontiers in Ecology and Evolution, 2018, 5, .	1.1	14
40	Multi-proxy Characterization of Hurricanes Rita and Ike Storm Deposits in the Rockefeller Wildlife Refuge, Southwestern Louisiana. Journal of Coastal Research, 2018, 85, 841-845.	0.1	25
41	A 7000-year history of coastal environmental changes from Mexico's Pacific coast: A multi-proxy record from Laguna Mitla, Guerrero. Holocene, 2017, 27, 1214-1226.	0.9	11
42	Verification of tropical cyclone deposits with oxygen isotope analyses of coeval ostracod valves. Journal of Paleolimnology, 2017, 57, 245-255.	0.8	12
43	Holocene vegetation dynamics in response to climate change and human activities derived from pollen and charcoal records from southeastern China. Palaeogeography, Palaeoclimatology, Palaeoecology, 2017, 485, 644-660.	1.0	56
44	Linking hurricane landfalls, precipitation variability, fires, and vegetation response over the past millennium from analysis of coastal lagoon sediments, southwestern Dominican Republic. Journal of Paleolimnology, 2017, 58, 135-150.	0.8	9
45	The primacy of multidecadal to centennial variability over late-Holocene forced change of the Asian Monsoon on the southern Tibetan Plateau. Earth and Planetary Science Letters, 2017, 458, 337-348.	1.8	23
46	Dynamics of marsh-mangrove ecotone since the mid-Holocene: A palynological study of mangrove encroachment and sea level rise in the Shark River Estuary, Florida. PLoS ONE, 2017, 12, e0173670.	1.1	49
47	Wetland Accretion Rates Along Coastal Louisiana: Spatial and Temporal Variability in Light of Hurricane Isaac's Impacts. Water (Switzerland), 2016, 8, 1.	1.2	331
48	Distribution and provenance of modern pollen and spores in the surface sediments of Liaodong Bay, China. Marine Geology, 2016, 376, 1-14.	0.9	13
49	Persistent northward North Atlantic tropical cyclone track migration over the past five centuries. Scientific Reports, 2016, 6, 37522.	1.6	53
50	Assessing pollen distribution patterns and provenance based on palynological investigation on surface sediments from Laizhou Bay, China: an aid to palaeoecological interpretation. Palaeogeography, Palaeoclimatology, Palaeoecology, 2016, 457, 209-220.	1.0	13
51	Investigation of peat sediments from Daiyun Mountain in southeast China: late Holocene vegetation, climate and human impact. Vegetation History and Archaeobotany, 2016, 25, 359-373.	1.0	20
52	Pollen–spore distribution in the surface sediments of the western Bohai Sea, China. Quaternary International, 2016, 392, 213-223.	0.7	21
53	Re-Evaluating the Geological Evidence for Late Holocene Marine Incursion Events along the Guerrero Seismic Gap on the Pacific Coast of Mexico. PLoS ONE, 2016, 11, e0161568.	1.1	16
54	Geological and Sedimentological Evidence of a Large Tsunami Occurring ~1100 Year BP from a Small Coastal Lake along the Bay of La Paz in Baja California Sur, Mexico. Journal of Marine Science and Engineering, 2015, 3, 1544-1567.	1.2	15

#	Article	IF	CITATIONS
55	Palynological reconstruction of environmental changes in coastal wetlands of the Florida Everglades since the mid-Holocene. Quaternary Research, 2015, 83, 449-458.	1.0	43
56	Mapping and assessing coastal resilience in the Caribbean region. Cartography and Geographic Information Science, 2015, 42, 315-322.	1.4	53
57	Hurricane Isaac storm surge deposition in a coastal wetland along Lake Pontchartrain, southern Louisiana. Journal of Coastal Research, 2014, 70, 266-271.	0.1	27
58	Tropical Cyclone Impacts on Coastal Regions: the Case of the Yucatán and the Baja California Peninsulas, Mexico. Estuaries and Coasts, 2014, 37, 1388-1402.	1.0	46
59	Assessment of vulnerability and adaptive capacity to coastal hazards in the Caribbean Region. Journal of Coastal Research, 2014, 70, 473-478.	0.1	30
60	Storm deposition induced by hurricanes in a rapidly subsiding coastal zone. Journal of Coastal Research, 2014, 70, 308-313.	0.1	22
61	Vegetation changes and associated climate variations during the past $\hat{a}^1/438,000$ years reconstructed from the Shaamar eolian-paleosol section, northern Mongolia. Quaternary International, 2013, 311, 25-35.	0.7	22
62	Dust and temperature influences on glaciofluvial sediment deposition in southwestern Tibet during the last millennium. Global and Planetary Change, 2013, 107, 132-144.	1.6	10
63	A 7000 year record of paleohurricane activity from a coastal wetland in Belize. Holocene, 2013, 23, 278-291.	0.9	47
64	Sedimentary History of Mangrove Cays in Turneffe Islands, Belize: Evidence for Sudden Environmental Reversals. Journal of Coastal Research, 2013, 289, 971-983.	0.1	17
65	Track Patterns of Landfalling and Coastal Tropical Cyclones in the Atlantic Basin, Their Relationship with the North Atlantic Oscillation (NAO), and the Potential Effect of Global Warming. American Journal of Climate Change, 2013, 02, 12-22.	0.5	20
66	A sedimentary-based history of hurricane strikes on the southern Caribbean coast of Nicaragua. Quaternary Research, 2012, 78, 454-464.	1.0	33
67	A prolonged dry mid-Holocene climate revealed by pollen and diatom records from Lake Ugii Nuur in central Mongolia. Quaternary International, 2011, 229, 74-83.	0.7	62
68	Modern pollen distributions in Qinghai-Tibetan Plateau and the development of transfer functions for reconstructing Holocene environmental changes. Quaternary Science Reviews, 2011, 30, 947-966.	1.4	173
69	Vegetation and Climate Changes in Central Asia during over the Last 28,000 YRS: A High-Resolution Pollen Record from Valikhanov Section, Kazakhstan. , 2011, , 787-791.		0
70	Phytoliths Analysis for the Discrimination of Foxtail Millet (Setaria italica) and Common Millet (Panicum miliaceum). PLoS ONE, 2009, 4, e4448.	1.1	190
71	Some fundamental misconceptions about paleotempestology. Quaternary Research, 2009, 71, 253-254.	1.0	14
72	Pollen-inferred vegetation and environmental changes in the central Tibetan Plateau since 8200 yr BP. Science in China Series D: Earth Sciences, 2009, 52, 1104-1114.	0.9	37

#	Article	IF	Citations
73	Tropical Storm Gamma and the Mosquitia of eastern Honduras: a littleâ€known story from the 2005 hurricane season. Area, 2009, 41, 425-434.	1.0	11
74	Palynological evidence of climate change and land degradation in the Lake Baringo area, Kenya, East Africa, since AD 1650. Palaeogeography, Palaeoclimatology, Palaeoecology, 2009, 279, 60-72.	1.0	67
75	Earliest domestication of common millet (<i>Panicum miliaceum (i>) in East Asia extended to 10,000 years ago. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 7367-7372.</i>	3.3	614
76	Paleoenvironmental Changes in the Lake Baringo Basin, Kenya, East Africa Since AD 1650: Evidence from the Paleorecordâ^—. Professional Geographer, 2009, 61, 438-458.	1.0	13
77	Perspectives on the linkage between typhoon activity and global warming from recent research advances in paleotempestology. Science Bulletin, 2008, 53, 2907-2922.	4.3	26
78	A survey of modern pollen and vegetation along a south–north transect in Mongolia. Journal of Biogeography, 2008, 35, 1512-1532.	1.4	99
79	A 1200-year proxy record of hurricanes and fires from the Gulf of Mexico coast: Testing the hypothesis of hurricane–fire interactions. Quaternary Research, 2008, 69, 29-41.	1.0	100
80	Citation of research in journals of interest to applied geographers. Applied Geography, 2008, 28, 151-167.	1.7	8
81	Numerical Analysis of Modern and Fossil Pollen Data from the Tibetan Plateau. Annals of the American Association of Geographers, 2008, 98, 755-772.	3.0	30
82	Comparison of Hurricane Return Levels Using Historical and Geological Records. Journal of Applied Meteorology and Climatology, 2008, 47, 368-374.	0.6	53
83	ECOTONE SHIFT AND MAJOR DROUGHTS DURING THE MID–LATE HOLOCENE IN THE CENTRAL TIBETAN PLATEAU. Ecology, 2008, 89, 1079-1088.	1.5	74
84	Phytoliths as quantitative indicators for the reconstruction of past environmental conditions in China II: palaeoenvironmental reconstruction in the Loess Plateau. Quaternary Science Reviews, 2007, 26, 759-772.	1.4	191
85	Eolian environmental changes in the Northern Mongolian Plateau during the past â^¼35,000Âyr. Palaeogeography, Palaeoclimatology, Palaeoecology, 2007, 245, 505-517.	1.0	43
86	Vegetation variations and associated environmental changes during marine isotope stage 3 in the western part of the Chinese Loess Plateau. Palaeogeography, Palaeoclimatology, Palaeoecology, 2007, 246, 278-291.	1.0	44
87	A potential pollen proxy for ENSO derived from the Sajama ice core. Geophysical Research Letters, 2007, 34, .	1.5	20
88	Numerical modeling and field evidence of coastal overwash in southern New England from Hurricane Bob and implications for paleotempestology. Journal of Geophysical Research, 2007, 112, .	3.3	33
89	Perspective: coordinating paleoclimate research on tropical cyclones with hurricane-climate theory and modelling. Tellus, Series A: Dynamic Meteorology and Oceanography, 2007, 59, 529-537.	0.8	54
90	Uncovering Prehistoric Hurricane Activity. American Scientist, 2007, 95, 126.	0.1	41

#	Article	IF	CITATIONS
91	Late Quaternary paleoenvironmental changes in East Africa: a review of multiproxy evidence from palynology, lake sediments, and associated records. Progress in Physical Geography, 2006, 30, 633-658.	1.4	104
92	Phytoliths as quantitative indicators for the reconstruction of past environmental conditions in China I: phytolith-based transfer functions. Quaternary Science Reviews, 2006, 25, 945-959.	1.4	203
93	Holocene vegetation variations and the associated environmental changes in the western part of the Chinese Loess Plateau. Palaeogeography, Palaeoclimatology, Palaeoecology, 2006, 241, 440-456.	1.0	67
94	Variations in typhoon landfalls over China. Advances in Atmospheric Sciences, 2006, 23, 665-677.	1.9	27
95	Holocene variations in the Asian monsoon inferred from the geochemistry of lake sediments in central Tibet. Quaternary Research, 2006, 65, 232-243.	1.0	199
96	Quantitative relationships between modern pollen rain and climate in the Tibetan Plateau. Review of Palaeobotany and Palynology, 2006, 140, 61-77.	0.8	181
97	A modern pollen rain study from the central Andes region of South America. Journal of Biogeography, 2005, 32, 709-718.	1.4	56
98	Millet noodles in Late Neolithic China. Nature, 2005, 437, 967-968.	13.7	171
99	Interannual Variability in Pollen Dispersal and Deposition on the Tropical Quelccaya Ice Cap. Professional Geographer, 2005, 57, 185-197.	1.0	17
100	Ice-Core Pollen Record of Climatic Changes in the Central Andes during the last 400 yr. Quaternary Research, 2005, 64, 272-278.	1.0	71
101	Pollen records and time scale for the RM core of the Zoige Basin, northeastern Qinghai-Tibetan Plateau. Science Bulletin, 2005, 50, 553-562.	1.7	7
102	Phytolith assemblages as indicators of coastal environmental changes and hurricane overwash deposition. Holocene, 2005, 15, 965-972.	0.9	44
103	Paleotempestology: Geographic Solutions to Hurricane Hazard Assessment and Risk Prediction. , 2004, , 443-448.		8
104	Phytoliths of common grasses in the coastal environments of southeastern USA. Estuarine, Coastal and Shelf Science, 2003, 58, 587-600.	0.9	120
105	Earliest historical records of typhoons in China. Journal of Historical Geography, 2003, 29, 299-316.	0.3	27
106	Pollen Dispersal and Deposition on the Ice Cap of Volćan Parinacota, Southwestern Bolivia. Arctic, Antarctic, and Alpine Research, 2003, 35, 469-474.	0.4	16
107	Examining the ENSO-typhoon hypothesis. Climate Research, 2003, 25, 43-54.	0.4	219
108	Pollen Dispersal and Deposition on the Quelccaya Ice Cap, Peru. Physical Geography, 2002, 23, 44-58.	0.6	21

#	Article	IF	CITATIONS
109	Morphological variations of lobate phytoliths from grasses in China and the south-eastern United States. Diversity and Distributions, 2002, 9, 73-87.	1.9	115
110	Lake Sediment Evidence of Coastal Geologic Evolution and Hurricane History from Western Lake, Florida: Reply to Otvos. Quaternary Research, 2002, 57, 429-431.	1.0	17
111	A 1,000-Year History of Typhoon Landfalls in Guangdong, Southern China, Reconstructed from Chinese Historical Documentary Records. Annals of the American Association of Geographers, 2001, 91, 453-464.	3.0	148
112	Spatial Variations in Major U.S. Hurricane Activity: Statistics and a Physical Mechanism. Journal of Climate, 2000, 13, 2293-2305.	1.2	156
113	Palaeovegetation of China: a pollen data-based synthesis for the mid-Holocene and last glacial maximum. Journal of Biogeography, 2000, 27, 635-664.	1.4	382
114	Reconstruction of Prehistoric Landfall Frequencies of Catastrophic Hurricanes in Northwestern Florida from Lake Sediment Records. Quaternary Research, 2000, 54, 238-245.	1.0	341
115	Model estimates hurricane wind speed probabilities. Eos, 2000, 81, 433.	0.1	28
116	A pollen record of Holocene climatic changes from the Dunde ice cap, Qinghai-Tibetan Plateau. Geology, 1998, 26, 135.	2.0	197
117	Identification of Maize Pollen: Reply to Eubanks. American Antiquity, 1997, 62, 146-148.	0.6	6
118	Use of Space-Filling Curves in Generating a National Rural Sampling Frame for HIV/AIDS Researchâ^—. Professional Geographer, 1996, 48, 321-332.	1.0	45
119	Temperature depression in the lowland tropics in glacial times. Climatic Change, 1996, 32, 19-33.	1.7	118
120	Spatialâ€Temporal Spread of the AIDS Epidemic, 1982–1990: A Correlogram Analysis of Four Regions of the United States. Geographical Analysis, 1996, 28, 93-107.	1.9	34
121	Late Glacial Stage and Holocene Tropical Ice Core Records from Huascaran, Peru. Science, 1995, 269, 46-50.	6.0	772
122	Maize Pollen of 3500 B.P. from Southern Alabama. American Antiquity, 1995, 60, 109-117.	0.6	21
123	Late-Holocene Pollen Records of Vegetational Changes in China:Climate or Human Disturbance ?. Terrestrial, Atmospheric and Oceanic Sciences, 1994, 5, 393.	0.3	24
124	Lake-sediment record of late Holocene hurricane activities from coastal Alabama. Geology, 1993, 21, 793.	2.0	291
125	Environmental Change in the Yangtze River Delta Since 12,000 Years B.P Quaternary Research, 1992, 38, 32-45.	1.0	128
126	Late Pleistocene Temperature Depression and Vegetation Change in Ecuadorian Amazonia. Quaternary Research, 1990, 34, 330-345.	1.0	216

#	Article	IF	CITATIONS
127	Holocene Paleoecology of the Boreal Forest and Great Lakesâ€St. Lawrence Forest in Northern Ontario. Ecological Monographs, 1990, 60, 179-212.	2.4	134
128	Pollen in the lower Mississippi River. Review of Palaeobotany and Palynology, 1990, 64, 253-261.	0.8	50
129	Pre-Incan agricultural activity recorded in dust layers in two tropical ice cores. Nature, 1988, 336, 763-765.	13.7	105
130	Three pollen diagrams of forest disturbance in the western amazon basin. Review of Palaeobotany and Palynology, 1988, 55, 73-81.	0.8	50
131	Late-glacial and holocene pollen diagrams from two endorheic lakes of the inte-andean plateau of ecuador. Review of Palaeobotany and Palynology, 1988, 55, 83-99.	0.8	52
132	Quaternary history of the temperate forests of China. Quaternary Science Reviews, 1988, 7, 1-20.	1.4	132
133	A 5200-Year History of Amazon Rain Forest. Journal of Biogeography, 1988, 15, 231.	1.4	85
134	The Late-Quaternary Climate of the Western Amazon Basin., 1987,, 113-122.		10
135	Paleovegetational Reconstruction Based on Modern and Fossil Pollen Data: An Application of Discriminant Analysis. Annals of the American Association of Geographers, 1985, 75, 115-130.	3.0	91
136	Discovery of permanent Amazon lakes and hydraulic disturbance in the upper Amazon Basin. Nature, 1985, 313, 42-45.	13.7	62
137	Forest changes in the Amazon Basin during the last glacial maximum. Nature, 1985, 318, 556-557.	13.7	217
138	Environmental History of Mangrove Vegetation in Pacific West-Central Mexico during the Last 1300 Years. Frontiers in Ecology and Evolution, 0, 4, .	1.1	5
139	Scale effects on land loss modeling in the Mississippi River Delta. Abstracts of the ICA, 0, 1, 1-1.	0.0	O