William L Hylander

List of Publications by Year
in descending order

61 papers	6,342 citations	81900 39 h-index	175258 52 g-index
63 all docs	63 docs citations	63 times ranked	1500 citing authors

#	Article	IF	Citations
1	The functional significance of primate mandibular form. Journal of Morphology, 1979, 160, 223-239.	1.2	407
2	Stress and strain in the mandibular symphysis of primates: A test of competing hypotheses. American Journal of Physical Anthropology, 1984, 64, 1-46.	2.1	365
3	Mandibular function inGalago crassicaudatus andMacaca fascicularis: An in vivo approach to Stress Analysis of the mandible. Journal of Morphology, 1979, 159, 253-296.	1.2	342
4	Mandibular Function and Biomechanical Stress and Scaling. American Zoologist, 1985, 25, 315-330.	0.7	321
5	An experimental analysis of temporomandibular joint reaction force in macaques. American Journal of Physical Anthropology, 1979, 51, 433-456.	2.1	253
6	Loading patterns and jaw movements during mastication inMacaca fascicularis: A bone-strain, electromyographic, and cineradiographic analysis. American Journal of Physical Anthropology, 1987, 72, 287-314.	2.1	248
7	The human mandible: Lever or link?. American Journal of Physical Anthropology, 1975, 43, 227-242.	2.1	247
8	The feeding biomechanics and dietary ecology of Australopithecus africanus. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 2124-2129.	7.1	232
9	Effect of bone strain on cortical bone structure in macaques (Macaca mulatta). Journal of Morphology, 1981, 167, 1-12.	1.2	207
10	Masticatory-stress hypotheses and the supraorbital region of primates. American Journal of Physical Anthropology, 1991, 86, 1-36.	2.1	206
11	Comparative functional analysis of skull morphology of tree-gouging primates. American Journal of Physical Anthropology, 2003, 120, 153-170.	2.1	206
12	Symphyseal fusion and jaw-adductor muscle force: An EMG study. American Journal of Physical Anthropology, 2000, 112, 469-492.	2.1	200
13	In vivo bone strain patterns in the zygomatic arch of macaques and the significance of these patterns for functional interpretations of craniofacial form. , 1997, 102, 203-232.		178
14	Jaw muscle function and wishboning of the mandible during mastication in macaques and baboons. American Journal of Physical Anthropology, 1994, 94, 523-547.	2.1	165
15	Masticatory stress, orbital orientation and the evolution of the primate postorbital bar. Journal of Human Evolution, 2000, 38, 667-693.	2.6	162
16	Mandibular corpus strain in primates: Further evidence for a functional link between symphyseal fusion and jaw-adductor muscle force. American Journal of Physical Anthropology, 1998, 107, 257-271.	2.1	154
17	The effect of dietary consistency on gross and histologic morphology in the craniofacial region of young rats. American Journal of Anatomy, 1984, 170, 117-126.	1.0	140
18	Elastic properties and masticatory bone stress in the Macaque mandible. American Journal of Physical Anthropology, 2000, 112, 553-574.	2.1	124

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19	In vivo bone strain in the mandible ofGalago crassicaudatus. American Journal of Physical Anthropology, 1977, 46, 309-326.	2.1	116
20	In vivo and in vitro bone strain in the owl monkey circumorbital region and the function of the postorbital septum. , 1996, 101, 183-215.		108
21	The Adaptive Significance of Eskimo Craniofacial Morphology. , 1977, , 129-170.		103
22	Incisal bite force direction in humans and the functional significance of mammalian mandibular translation. American Journal of Physical Anthropology, 1978, 48, 1-7.	2.1	99
23	Muscle force recruitment and biomechanical modeling: An analysis of masseter muscle function during mastication inMacaca fascicularis. American Journal of Physical Anthropology, 1992, 88, 365-387.	2.1	99
24	the mechanical or metabolic function of secondary osteonal bone in the monkey macaca fascicularis. Archives of Oral Biology, 1996, 41, 941-950.	1.8	99
25	Experimental observation, theoretical models, and biomechanical inference in the study of mandibular form. American Journal of Physical Anthropology, 2000, 112, 541-551.	2.1	96
26	Strain in the Galago facial skull. Journal of Morphology, 2000, 245, 51-66.	1.2	94
27	Biomechanics of torsion in the human mandible. American Journal of Physical Anthropology, 1998, 105, 73-88.	2.1	91
28	Temporalis function in anthropoids and strepsirrhines: An EMG study. American Journal of Physical Anthropology, 2005, 128, 35-56.	2.1	79
29	Modulation of intra-oral processing in mammals and lepidosaurs. Integrative and Comparative Biology, 2007, 47, 118-136.	2.0	79
30	Modulation of mandibular loading and bite force in mammals during mastication. Journal of Experimental Biology, 2007, 210, 1046-1063.	1.7	74
31	Patterns of variation across primates in jaw-muscle electromyography during mastication. Integrative and Comparative Biology, 2008, 48, 294-311.	2.0	71
32	A Biomechanical Analysis of Skull Form in Gum-Harvesting Galagids. Folia Primatologica, 2002, 73, 197-209.	0.7	70
33	Temporalis and masseter muscle function during incision in macaques and humans. International Journal of Primatology, 1985, 6, 289-322.	1.9	65
34	Functional links between canine height and jaw gape in catarrhines with special reference to early hominins. American Journal of Physical Anthropology, 2013, 150, 247-259.	2.1	64
35	Phase II jaw movements and masseter muscle activity during chewing inPapio anubis. American Journal of Physical Anthropology, 2006, 129, 215-224.	2.1	60
36	Function and Fusion of the Mandibular Symphysis in Primates. , 1994, , 447-468.		54

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37	Occlusal forces and mandibular bone strain: Is the primate jaw â€œoverdesignedâ€?. Journal of Human Evolution, 1997, 33, 705-717.	2.6	48
38	Modelling relative masseter force from surface electromyograms during mastication in non-human primates. Archives of Oral Biology, 1993, 38, 233-240.	1.8	47
39	Masseter electromyography during chewing in ring-tailed lemurs (Lemur catta). American Journal of Physical Anthropology, 2006, 130, 85-95.	2.1	47
40	Electromyography of the anterior temporalis and masseter muscles of owl monkeys (Aotus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 T 2000, 112, 455-468.	2.1	46
41	Stressed out: Masticatory forces and primate circumorbital form. The Anatomical Record, 2000, 261, 173-175.	1.8	45
42	Influence of teeth, alveoli, and periodontal ligaments on torsional rigidity in human mandibles. American Journal of Physical Anthropology, 1992, 89, 59-72.	2.1	43
43	Jaw adductor force and symphyseal fusion. , 2004, , 229-257.		42
44	Jaw-muscle electromyography during chewing in Belanger's treeshrews (Tupaia belangeri). American Journal of Physical Anthropology, 2005, 127, 26-45.	2.1	41
45	Jaw-muscle architecture and mandibular morphology influence relative maximum jaw gapes in the sexually dimorphic Macaca fascicularis. Journal of Human Evolution, 2015, 82, 145-158.	2.6	35
46	Masticatory motor patterns in ungulates: a quantitative assessment of jaw-muscle coordination in goats, alpacas and horses. Journal of Experimental Zoology, 2007, 307A, 226-240.	1.2	33
47	Functional and Evolutionary significance of the recruitment and firing patterns of the jaw adductors during chewing in verreaux's sifaka (Propithecus verreauxi). American Journal of Physical Anthropology, 2011, 145, 531-547.	2.1	33
48	The relationship between split-line orientation and in vivo bone strain in galago(G. crassicaudatus) and macaque(Macaca mulatta andM. fascicularis) Mandibles. American Journal of Physical Anthropology, 1981, 56, 147-156.	2.1	31
49	Endo's stress analysis of the primate skull and the functional significance of the supraorbital region. American Journal of Physical Anthropology, 1989, 79, 393-398.	2.1	31
50	Symphyseal Fusion in Selenodont Artiodactyls: New Insights from~In Vivo and Comparative Data. , 2008, , 39-61.		23
51	Functional significance of an ossified mandibular symphysis: A reply. American Journal of Physical Anthropology, 1993, 90, 509-512.	2.1	22
52	Mandibular corpus bone strain in goats and alpacas: Implications for understanding the biomechanics of mandibular form in selenodont artiodactyls. Journal of Anatomy, 2009, 214, 65-78.	1.5	18
53	A Preliminary Analysis of Correlated Evolution in Mammalian Chewing Motor Patterns. Integrative and Comparative Biology, 2011, 51, 247-259.	2.0	18
54	Nonlever action of the mandible: The return of the hydra. American Journal of Physical Anthropology, 1987, 74, 305-307.	2.1	13

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55	A Preliminary Analysis of Correlations between Chewing Motor Patterns and Mandibular Morphology across Mammals. Integrative and Comparative Biology, 2011, 51, 260-270.	2.0	13
56	What Else Is the Tall Mandibular Ramus of the Robust Australopiths Good For?. , 2008, , 431-442.		13
57	Regional variation in IIM myosin heavy chain expression in the temporalis muscle of female and male baboons (Papio anubis). Archives of Oral Biology, 2013, 58, 435-443.	1.8	8
58	Functional Morphology and In Vivo Bone Strain Patterns in the Craniofacial Region of Primates: Beware of Biomechanical Stories about Fossil Bones. , 2002, , 43-72.		8
59	A comment on: The instantaneous center of rotation during human jaw opening and its significance in interpreting the functional meaning of condylar translation (Chen, x., 1998, Am J Phys Anthropol) Tj ETQq1 1 0.784314 rgBT /Overloc		
60	Biomechanics of torsion in the human mandible. American Journal of Physical Anthropology, 1998, 105, 73-88.	2.1	1
61	Mandibular corpus strain in primates: Further evidence for a functional link between symphyseal fusion and jaw-adductor muscle force. , 1998, 107, 257.		1