Axel Munnecke

List of Publications by Year
in descending order

118 papers	4,363 citations	136740 32 h-index	114278 63 g-index
120 all docs	120 docs citations	120 times ranked	2261 citing authors

#	Article	IF	Citations
1	Ordovician and Silurian seaâ€“water chemistry, sea level, and climate: A synopsis. Palaeogeography, Palaeoclimatology, Palaeoecology, 2010, 296, 389-413.	1.0	296
2	Questioning carbonate diagenetic paradigms: evidence from the Neogene of the Bahamas. Marine Geology, 2002, 185, 27-53.	0.9	233
3	Calcium isotope record of Phanerozoic oceans: Implications for chemical evolution of seawater and its causative mechanisms. Geochimica Et Cosmochimica Acta, 2007, 71, 5117-5134.	1.6	211
4	The Ireviken Event in the lower Silurian of Gotland, Sweden â€“ relation to similar Palaeozoic and Proterozoic events. Palaeogeography, Palaeoclimatology, Palaeoecology, 2003, 195, 99-124.	1.0	180
5	Revised correlation of Silurian Provincial Series of North America with global and regional chronostratigraphic units and Î´¹³ C _{carb} chemostratigraphy. Lethaia, 2011, 44, 185-202.	0.6	176
6	The Ordovician Biodiversification: revolution in the oceanic trophic chain. Lethaia, 2008, 41, 99-109.	0.6	175
7	Paleoenvironmental changes in the Silurian indicated by stable isotopes in brachiopod shells from Gotland, Sweden. Geochimica Et Cosmochimica Acta, 1997, 61, 2717-2730.	1.6	156
8	The formation of micritic limestones and the development of limestone-marl alternations in the Silurian of Gotland, Sweden. Facies, 1996, 34, 159-176.	0.7	134
9	Understanding the Great Ordovician Biodiversification Event (GOBE): Influences of paleogeography, paleoclimate, or paleoecology. GSA Today, 2009, 19, 4.	1.1	129
10	The onset of the â€˜Ordovician Plankton Revolutionâ€™ in the late Cambrian. Palaeogeography, Palaeoclimatology, Palaeoecology, 2016, 458, 12-28.	1.0	116
11	Microspar development during early marine burial diagenesis: a comparison of Pliocene carbonates from the Bahamas with Silurian limestones from Gotland (Sweden). Sedimentology, 1997, 44, 977-990.	1.6	112
12	Stable carbon isotope stratigraphy in the Ordovician of South China. Palaeogeography, Palaeoclimatology, Palaeoecology, 2011, 307, 17-43.	1.0	103
13	Development of facies and C/O-isotopes in transects through the Ludlow of Gotland: Evidence for global and local influences on a shallow-marine environment. Facies, 2000, 43, 1-38.	0.7	102
14	Graptoloid evolutionary rates track Ordovicianâ€“Silurian global climate change. Geological Magazine, 2014, 151, 349-364.	0.9	91
15	An assessment of the suitability of individual rhythmic carbonate successions for astrochronological application. Earth-Science Reviews, 2010, 99, 19-30.	4.0	68
16	Differential Diagenesis of Rhythmic Limestone Alternations Supported by Palynological Evidence. Journal of Sedimentary Research, 2000, 70, 715-725.	0.8	67
17	Shell succession, assemblage and species dependent effects on the C/O-isotopic composition of brachiopods â€” examples from the Silurian of Gotland. Chemical Geology, 2001, 175, 61-107.	1.4	67
18	Metal-induced malformations in early Palaeozoic plankton are harbingers of mass extinction. Nature Communications, 2015, 6, 7966.	5.8	66

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19	Ordovician stable carbon isotope stratigraphy in the Tarim Basin, NW China. Palaeogeography, Palaeoclimatology, Palaeoecology, 2016, 458, 154-175.	1.0	66
20	The mineralogical composition of precursor sediments of calcareous rhythmites: a new approach. International Journal of Earth Sciences, 2001, 90, 795-812.	0.9	57
21	Î´13C records across the late Silurian Lau event: New data from middle palaeo-latitudes of northern peri-Gondwana (Prague Basin, Czech Republic). Palaeogeography, Palaeoclimatology, Palaeoecology, 2007, 245, 227-244.	1.0	56
22	Assessing mechanisms of environmental change: Palynological signals across the Late Ludlow (Silurian) positive isotope excursion (Î´13C, Î´18O) on Gotland, Sweden. Palaeogeography, Palaeoclimatology, Palaeoecology, 2006, 230, 1-31.	1.0	54
23	Possible oceanic circulation patterns, surface water currents and upwelling zones in the Early Palaeozoic. Gff, 2014, 136, 229-233.	0.4	54
24	Acritarch distribution along an inshoreâ€“offshore transect in the Gorstian (lower Ludlow) of Gotland, Sweden. Review of Palaeobotany and Palynology, 2004, 130, 195-216.	0.8	48
25	Phytoplankton dynamics across the Ordovician/Silurian boundary at low palaeolatitudes: Correlations with carbon isotopic and glacial events. Palaeogeography, Palaeoclimatology, Palaeoecology, 2011, 312, 79-97.	1.0	47
26	Limestone-marl alternations: A warm-water phenomenon?. Geology, 2003, 31, 263.	2.0	46
27	NEW SEM OBSERVATIONS OF KERIOTHECAL WALLS: IMPLICATIONS FOR THE EVOLUTION OF FUSULINIDA. Journal of Foraminiferal Research, 2004, 34, 232-242.	0.1	46
28	Stratigraphical and Î´13C records of Permo-Carboniferous platform carbonates, South China: Responses to late Paleozoic icehouse climate and icehouseâ€“greenhouse transition. Palaeogeography, Palaeoclimatology, Palaeoecology, 2017, 474, 113-129.	1.0	39
29	Shallow-water aragonite recorded in bundles of limestoneâ€“marl alternationsâ€”the Upper Jurassic of SW Germany. Sedimentary Geology, 2004, 164, 191-202.	1.0	38
30	Palaeozoic calcareous plankton: evidence from the Silurian of Gotland. Lethaia, 2008, 41, 185-194.	0.6	36
31	A DISCUSSION AND PROPOSAL CONCERNING THE USE OF THE TERM CALCISPHERES. Palaeontology, 2009, 52, 343-348.	1.0	36
32	Multiproxy approach to understanding the origin of Cretaceous pelagic limestone-marl alternations (DSDP site 391, Blake-Bahama Basin). Sedimentology, 2004, 51, 109-126.	1.6	33
33	Mechanical compaction versus early cementation in fine-grained limestones: differentiation by the preservation of organic microfossils. Sedimentary Geology, 1997, 112, 33-42.	1.0	32
34	Diagenesis of plattenkalk: examples from the Solnhofen area (Upper Jurassic, southern Germany). Sedimentology, 2008, 55, 1931-1946.	1.6	32
35	Paleobiogeography, high-resolution stratigraphy, and the future of Paleozoic biostratigraphy: Fine-scale diachroneity of the Wenlock (Silurian) conodont Kockelella walliseri. Palaeogeography, Palaeoclimatology, Palaeoecology, 2010, 294, 232-241.	1.0	30
36	Scanning electron microscopy of polished, slightly etched rock surfaces: A method to observe palynomorphs<i>in situ</i>. Palynology, 1996, 20, 163-176.	0.7	28

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37	Understanding Palaeozoic stromatoporoid growth. Earth-Science Reviews, 2018, 187, 53-76.	4.0	28
38	Variations in primary aragonite, calcite, and clay in fine-grained calcareous rhythmites of Cambrian to Jurassic ageâ€" an environmental archive?. Facies, 2005, 51, 592-607.	0.7	26
39	A Giant Boring in a Silurian Stromatoporoid Analysed by Computer Tomography. Acta Palaeontologica Polonica, 2008, 53, 149-160.	0.4	26
40	The Paleozoic problematica Wetheredella and Allonema are two aspects of the same organism. Facies, 2014, 60, 651-662.	0.7	26
41	A Revised⁸⁷Sr/⁸⁶Sr Curve for the Silurian: Implications for Global Ocean Chemistry and the Silurian Timescale. Journal of Geology, 2011, 119, 335-349.	0.7	25
42	Systematic occurrences of malformed (teratological) acritarchs in the run-up of Early Palaeozoic Î´13C isotope excursions. Palaeogeography, Palaeoclimatology, Palaeoecology, 2012, 367-368, 137-146.	1.0	25
43	Marine Sepiolite in Middle Permian Carbonates of South China: Implications for Secular Variation of Phanerozoic Seawater Chemistry. Journal of Sedimentary Research, 2005, 75, 328-338.	0.8	24
44	Stable carbon isotope development and sea-level changes during the Late Ludlow (Silurian) of the Å•ysogÃ³ry region (Rzepin section, Holy Cross Mountains, Poland). Facies, 2010, 56, 615-633.	0.7	24
45	The nature of Ordovician limestone-marl alternations in the Oslo-Asker District (Norway): witnesses of primary glacio-eustasy or diagenetic rhythms?. Scientific Reports, 2016, 6, 18787.	1.6	24
46	Reconstructing the environmental conditions around the Silurian Ireviken Event using the carbon isotope composition of bulk and palynomorph organic matter. Geochemistry, Geophysics, Geosystems, 2013, 14, 86-101.	1.0	22
47	Dissecting Calathium-microbial frameworks: The significance of calathids for the Middle Ordovician reefs in the Tarim Basin, northwestern China. Palaeogeography, Palaeoclimatology, Palaeoecology, 2017, 474, 66-78.	1.0	22
48	Prevailing anoxia in the Kungurian (Permian) of South China: Possible response to divergent climate trends between the tropics and Gondwana. Gondwana Research, 2017, 49, 81-93.	3.0	20
49	A Hirnantian (latest Ordovician) reefal bryozoan fauna from Anticosti Island, eastern Canada: taxonomy and chemostratigraphy. Canadian Journal of Earth Sciences, 2009, 46, 207-229.	0.6	19
50	Microfacies and carbon isotope records of Mississippian carbonates from the isolated Bama Platform of Youjiang Basin, South China: Possible responses to climate-driven upwelling. Palaeogeography, Palaeoclimatology, Palaeoecology, 2015, 438, 96-112.	1.0	19
51	Faunal and facies changes through the mid Homerian (late Wenlock, Silurian) positive carbon isotope excursion in Podolia, western Ukraine. Lethaia, 2016, 49, 170-198.	0.6	19
52	Late Wenlock carbon isotope excursions and associated conodont fauna in the Podlasie Depression, eastern Poland: a notâ€•soâ€•big crisis?. Geological Journal, 2016, 51, 683-703.	0.6	19
53	A major anomaly in the carbon cycle during the late Cisuralian (Permian): Timing, underlying triggers and implications. Palaeogeography, Palaeoclimatology, Palaeoecology, 2018, 491, 112-122.	1.0	19
54	Late Ordovician microbial reefs in the Lianglitag Formation (Bachu, Tarim, NW China). Facies, 2014, 60, 663-684.	0.7	18

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55	Sem-observation of calcareousmicro- and nannofossils incertae sedis from the Silurian of Gotland, Sweden: Preliminary results. Geobios, 1999, 32, 307-314.	0.7	17
56	A New Family Of Calcareous Microfossils From The Silurian Of Gotland, Sweden. Palaeontology, 2000, 43, 1153-1172.	1.0	17
57	Early Silurian positive<i>Î´</i>¹³C excursions and their relationship to glaciations, seaâ€level changes and extinction events: discussion. Geological Journal, 2008, 43, 517-519.	0.6	17
58	Abnormal forms of acritarchs (phytoplankton) in the upper Hirnantian (Upper Ordovician) of Anticosti Island, Canada. Review of Palaeobotany and Palynology, 2012, 173, 46-56.	0.8	17
59	Ramp morphology controlling the facies differentiation of a Late Ordovician reef complex at Bachu, Tarim Block, NW China. Lethaia, 2015, 48, 509-521.	0.6	16
60	REVEALING THE GENESIS OF LIMESTONE-MARL ALTERNATIONS: A TAPHONOMIC APPROACH. Palaios, 2018, 34, 15-31.	0.6	16
61	Effects of diagenesis on the astrochronological approach of defining stratigraphic boundaries in calcareous rhythmites: The Tortonian GSSP. Lethaia, 2008, 41, 461-476.	0.6	15
62	Osmium and lithium isotope evidence for weathering feedbacks linked to orbitally paced organic carbon burial and Silurian glaciations. Earth and Planetary Science Letters, 2022, 577, 117260.	1.8	15
63	End-Wenlock terminal Mulde carbon isotope excursion in Gotland, Sweden: Integration of stratigraphy and taphonomy for correlations across restricted facies and specialized faunas. Palaeogeography, Palaeoclimatology, Palaeoecology, 2016, 457, 304-322.	1.0	14
64	Concluding IGCP 503: Towards a holistic view of Ordovician and Silurian Earth systems. Episodes, 2011, 34, 32-38.	0.8	14
65	Silurian calcispheres (Calcitarcha) of Gotland (Sweden): Comparisons with calcareous dinoflagellates. Comptes Rendus - Palevol, 2009, 8, 527-534.	0.1	12
66	Exceptional bryozoan assemblage of a microbial-dominated reef from the early Wenlock of Gotland, Sweden. Gff, 2015, 137, 102-125.	0.4	11
67	Diagenesis makes the impossible come true: intersecting beds in calcareous turbidites. Facies, 2015, 61, 1.	0.7	11
68	Windward and leeward margins of an Upper Ordovician carbonate platform in the Central Tarim Uplift, Xinjiang, northwestern China. Palaeogeography, Palaeoclimatology, Palaeoecology, 2017, 474, 79-88.	1.0	11
69	An unusual microbial-rostroconch assemblage from the Mulde Event (Homerian, middle Silurian) in Podolia, Western Ukraine. Gff, 2014, 136, 120-124.	0.4	10
70	First documentation of Middle Ordovician warm-water carbonates in the Mount Jolmo Lungma (Mount Everest) area, southern Xizang (Tibet), China, and its paleogeographic implications. Palaeogeography, Palaeoclimatology, Palaeoecology, 2019, 530, 136-151.	1.0	10
71	What caused the Ordovician biodiversification?. Palaeogeography, Palaeoclimatology, Palaeoecology, 2007, 245, 1-4.	1.0	9
72	Conodonts in Silurian hypersaline environments: Specialized and unexpectedly diverse. Geology, 2017, 45, 3-6.	2.0	9

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73	Oxygen isotope analysis of the eyes of pelagic trilobites: Testing the application of sea temperature proxies for the Ordovician. Gondwana Research, 2018, 57, 157-169.	3.0	9
74	Harnessing stratigraphic bias at the section scale: conodont diversity in the Homerian (Silurian) of the Midland Platform, England. Palaeontology, 2018, 61, 57-76.	1.0	9
75	Hydrocarbon-seep deposits in the lower Permian Angie Formation, Central Lhasa Block, Tibet. Gondwana Research, 2021, 90, 258-272.	3.0	9
76	Biostratigraphic and Chemostratigraphic Correlation for the Base of the Middle Ordovician between Yichang and Western Zhejiang Areas, South China. Acta Geologica Sinica, 2011, 85, 320-329.	0.8	8
77	Microfacies, depositional environments and meter-scale cycles of the middle jurassic Tuwaiq Mountain formation, central Saudi Arabia. Journal of African Earth Sciences, 2018, 145, 80-101.	0.9	8
78	Bryozoanâ€rich stromatolites (bryostromatolites) from the Silurian of Gotland and their relation to climateâ€related perturbations of the global carbon cycle. Sedimentology, 2022, 69, 162-198.	1.6	8
79	Halysis HÃ¸eg, 1932 - a problematic Cyanophyceae: new evidence from the Silurian of Gotland (Sweden). Neues Jahrbuch FÃ¼r Geologie Und PalÃontologie, 2001, 2001, 21-42.	0.3	8
80	Carbon isotope development in the Ordovician of the Yangtze Gorges region (South China) and its implication for stratigraphic correlation and paleoenvironmental change. Journal of Earth Science (Wuhan, China), 2010, 21, 70-74.	1.1	7
81	Silurian carbonate high-energy deposits of potential tsunami origin: Distinguishing lateral redeposition and time averaging using carbon isotope chemostratigraphy. Sedimentary Geology, 2015, 315, 14-28.	1.0	7
82	Chitinozoan biostratigraphy and carbon isotope stratigraphy from the Upper Ordovician Skogerholmen Formation in the Oslo Region. A new perspective for the Hirnantian lower boundary in Baltica. Review of Palaeobotany and Palynology, 2017, 246, 109-119.	0.8	7
83	Distinguishing Biologically Controlled Calcareous Biomineralization in Fossil Organisms Using Electron Backscatter Diffraction (EBSD). Frontiers in Earth Science, 2018, 6, .	0.8	7
84	Microbially induced wrinkle structures in Middle Devonian siliciclastics from the Prague Basin, Czech Republic. Lethaia, 2019, 52, 149-164.	0.6	7
85	Palaeozoic stromatoporoid diagenesis: a synthesis. Facies, 2021, 67, 1.	0.7	7
86	Interplay of Autogenic and Allogenic Processes On the Formation of Shallow Carbonate Cycles in a Synrift Setting (Lower Pliensbachian, Traras Mountains, NW Algeria). Journal of Sedimentary Research, 2019, 89, 784-807.	0.8	6
87	Carbonate concretions in Miocene mudrocks in NW Algeria: types, geochemistry, and origins. Facies, 2019, 65, 1.	0.7	6
88	Fabric transitions from shell accumulations to reefs: an introduction with Palaeozoic examples. Geological Society Special Publication, 2007, 275, 1-16.	0.8	5
89	Tubes or cell sheet? A 3-D reconstruction of Halysis HÃ¸eg, 1932, from the Upper Ordovician of South China. Facies, 2013, 59, 113-132.	0.7	5
90	Evidence for Palaeozoic orthoconic cephalopods with bimineralic shells. Palaeontology, 2018, 61, 173-181.	1.0	5

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91	Lithological dependence of aragonite preservation in monospecific gastropod deposits of the Miocene Mainz Basin: Implications for the (dia-)genesis of limestoneâ€"marl alternations. Journal of Sedimentary Research, 2020, 90, 1500-1509.	0.8	5
92	Mass occurrence of the large solitary rugose coral <i>Phaulactis angusta</i> at the boundary Lower/Upper Visby Formation in the Silurian of Gotland, Sweden: palaeoecology and depositional implications. Gff, 2016, 138, 393-409.	0.4	4
93	The oldest deep-boring bivalves? Evidence from the Silurian of Gotland (Sweden). Facies, 2019, 65, 1.	0.7	4
94	Algae, calcitarchs and the Late Ordovician Baltic limestone facies of the Baltic Basin. Facies, 2020, 66, 1.	0.7	4
95	Late Jurassic (Oxfordianâ€'Kimmeridgian) brachiopods of the El Bayadh Area (Central Saharan Atlas,) Tj ETQq1 1 0.784314 rgBT /Overlo Biology, 2021, 33, 3260-3280.	0.7	4
96	Morphological variability of peteinoid acritarchs from the Middle Ordovician of Ã–land, Sweden, and implications for acritarch classification. Palynology, 0, , 1-15.	0.7	4
97	First record of the Middle Darriwilian Î´13C excursion (MDICE) in southern Xizang (Tibet), China, and its implications. Carbonates and Evaporites, 2021, 36, 1.	0.4	4
98	Modern brackish bryostromatolites (â€œbryolithsâ€) from Zeeland (Netherlands). Palaeobiodiversity and Palaeoenvironments, 2022, 102, 89-101.	0.6	4
99	Paleoenvironment of the Lowerâ€"Middle Cambrian Evaporite Series in the Tarim Basin and Its Impact on the Organic Matter Enrichment of Shallow Water Source Rocks. Minerals (Basel, Switzerland), 2021, 11, 659.	0.8	4
100	Gypsum evaporites in a patch reef of the upper Slite Group in the Silurian (Wenlock) of Gotland, Sweden. Gff, 2014, 136, 75-79.	0.4	3
101	Coralline red algae from the Silurian of Gotland indicate that the order Corallinales (Corallinophycidae, Rhodophyta) is much older than previously thought. Palaeontology, 2019, 62, 599-613.	1.0	3
102	Coralline red algae from the Silurian of Gotland indicate that the order Corallinales (Corallinophycidae, Rhodophyta) is much older than previously thought. Palaeontology, 2019, 62, 599-613.	1.0	3
103	Remarks on the Permian dasycladalean alga Sinoporella leei Yabe, 1949. Geobios, 2009, 42, 221-231.	0.7	2
104	Early Silurian (Telychian) bryozoan reefs in the epeiric sea of South China: Are heterotrophic metazoan buildups promoted by internal waves?. Sedimentary Geology, 2018, 376, 50-59.	1.0	2
105	High-resolution correlation of the Homerian carbon isotope excursion (Silurian) across the interior of the Midland Platform (Avalonia), UK. Geological Magazine, 2020, 157, 603-620.	0.9	2
106	New findings and stratigraphical distribution of the Ovummuridae (Palaeozoic calcareous) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 Td De La Terre Et Des PlanÃ¨tes =, 2001, 333, 179-185.	0.2	1
107	First report of<i>Archaeoscyphia rectilinearis</i>(Porifera) from the Wenlock of Gotland, Sweden. Gff, 2016, 138, 424-429.	0.4	1
108	Bryozoans from the lower Silurian (Telychian) Hanchiatien Formation from southern Chongqing, South China. Journal of Paleontology, 2021, 95, 252-267.	0.5	1

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109	Givetian/Frasnian (Middle/Upper Devonian) transition in the eastern Taurides, Turkey. Turkish Journal of Earth Sciences, 2019, 28, 207-231.	0.4	1
110	Coralline red algae from the Silurian of Gotland indicate that the order Corallinales (Corallinophycidae, Rhodophyta) is much older than previously thought. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 599-613.	1.0	0
111	Coralline red algae from the Silurian of Gotland indicate that the order Corallinales (Corallinophycidae, Rhodophyta) is much older than previously thought. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 599-613.	1.0	0
112	Coralline red algae from the Silurian of Gotland indicate that the order Corallinales (Corallinophycidae, Rhodophyta) is much older than previously thought. Angewandte Chemie, 1888, 1, 599-613.	1.6	0
113	Coralline red algae from the Silurian of Gotland indicate that the order Corallinales (Corallinophycidae, Rhodophyta) is much older than previously thought. Angewandte Chemie, 1888, 1, 599-613.	1.6	0
114	Coralline red algae from the Silurian of Gotland indicate that the order Corallinales (Corallinophycidae, Rhodophyta) is much older than previously thought. Palaeontology, 2019, 62, 599-613.	1.0	0
115	Coralline red algae from the Silurian of Gotland indicate that the order Corallinales (Corallinophycidae, Rhodophyta) is much older than previously thought. Art History, 1978, 1, 599-613.	0.3	0
116	Coralline red algae from the Silurian of Gotland indicate that the order Corallinales (Corallinophycidae, Rhodophyta) is much older than previously thought. Art History, 1978, 1, 599-613.	0.3	0
117	Coralline red algae from the Silurian of Gotland indicate that the order Corallinales (Corallinophycidae, Rhodophyta) is much older than previously thought. Journal of Microscopy, 1969, 89, 599-613.	0.8	0
118	Coralline red algae from the Silurian of Gotland indicate that the order Corallinales (Corallinophycidae, Rhodophyta) is much older than previously thought. Journal of Microscopy, 1969, 89, 599-613.	0.8	0