

Liao Chang

List of Publications by Year in descending order

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61
papers

2,486
citations

201674

27
h-index

197818

49
g-index

61
all docs

61
docs citations

61
times ranked

2203
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic properties of sedimentary greigite (Fe ₃ S ₄): An update. <i>Reviews of Geophysics</i> , 2011, 49, .	23.0	318
2	Characterization of hematite (Î±-Fe ₂ O ₃), goethite (Î±-FeOOH), greigite (Fe ₃ S ₄), and pyrrhotite (Fe ₇ S ₈) using first-order reversal curve diagrams. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	155
3	Magnetotactic bacterial abundance in pelagic marine environments is limited by organic carbon flux and availability of dissolved iron. <i>Earth and Planetary Science Letters</i> , 2011, 310, 441-452.	4.4	150
4	Searching for single domain magnetite in the "pseudo-single-domain" sedimentary haystack: Implications of biogenic magnetite preservation for sediment magnetism and relative paleointensity determinations. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	143
5	Fundamental magnetic parameters from pure synthetic greigite (Fe ₃ S ₄). <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	110
6	High-Purity Fe ₃ S ₄ Greigite Microcrystals for Magnetic and Electrochemical Performance. <i>Chemistry of Materials</i> , 2014, 26, 5821-5829.	6.7	97
7	Magnetic properties of pelagic marine carbonates. <i>Earth-Science Reviews</i> , 2013, 127, 111-139.	9.1	84
8	Magnetostratigraphic age of the Xiantai Paleolithic site in the Nihewan Basin and implications for early human colonization of Northeast Asia. <i>Earth and Planetary Science Letters</i> , 2006, 244, 336-348.	4.4	69
9	A 500,000 year record of Indian summer monsoon dynamics recorded by eastern equatorial Indian Ocean upper water-column structure. <i>Quaternary Science Reviews</i> , 2013, 77, 167-180.	3.0	69
10	Discrimination of biogenic and detrital magnetite through a double Verwey transition temperature. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 3-14.	3.4	69
11	Continental-scale geographic change across Zealandia during Paleogene subduction initiation. <i>Geology</i> , 2020, 48, 419-424.	4.4	69
12	Magnetotactic bacterial response to Antarctic dust supply during the Palaeocene-Eocene thermal maximum. <i>Earth and Planetary Science Letters</i> , 2012, 333-334, 122-133.	4.4	67
13	Widespread occurrence of silicate-hosted magnetic mineral inclusions in marine sediments and their contribution to paleomagnetic recording. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 8415-8431.	3.4	65
14	Identification and environmental interpretation of diagenetic and biogenic greigite in sediments: A lesson from the Messinian Black Sea. <i>Geochemistry, Geophysics, Geosystems</i> , 2014, 15, 3612-3627.	2.5	63
15	A new magnetostratigraphic framework for the Lower Miocene (Burdigalian/Ottangian, Karpatian) in the North Alpine Foreland Basin. <i>Swiss Journal of Geosciences</i> , 2013, 106, 309-334.	1.2	57
16	Coupled microbial bloom and oxygenation decline recorded by magnetofossils during the Palaeocene-Eocene Thermal Maximum. <i>Nature Communications</i> , 2018, 9, 4007.	12.8	56
17	Giant magnetofossils and hyperthermal events. <i>Earth and Planetary Science Letters</i> , 2012, 351-352, 258-269.	4.4	54
18	Characterizing magnetofossils from first-order reversal curve (FORC) central ridge signatures. <i>Geochemistry, Geophysics, Geosystems</i> , 2014, 15, 2170-2179.	2.5	51

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19	Low-temperature magnetic properties of pelagic carbonates: Oxidation of biogenic magnetite and identification of magnetosome chains. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 6049-6065.	3.4	50
20	Ionic liquid-modulated synthesis of ferrimagnetic Fe ₃ S ₄ hierarchical superstructures. <i>Chemical Communications</i> , 2010, 46, 5006.	4.1	45
21	Low-temperature magnetic properties of greigite (Fe ₃ S ₄). <i>Geochemistry, Geophysics, Geosystems</i> , 2009, 10, .	2.5	44
22	Quantifying magnetite magnetofossil contributions to sedimentary magnetizations. <i>Earth and Planetary Science Letters</i> , 2013, 382, 58-65.	4.4	44
23	Magnetic detection and characterization of biogenic magnetic minerals: A comparison of ferromagnetic resonance and first-order reversal curve diagrams. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 6136-6158.	3.4	42
24	Remanence acquisition efficiency in biogenic and detrital magnetite and recording of geomagnetic paleointensity. <i>Geochemistry, Geophysics, Geosystems</i> , 2017, 18, 1435-1450.	2.5	37
25	Insolation driven biomagnetic response to the Holocene Warm Period in semi-arid East Asia. <i>Scientific Reports</i> , 2015, 5, 8001.	3.3	35
26	Magnetic structure of greigite (Fe ₃ S ₄) probed by neutron powder diffraction and polarized neutron diffraction. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	29
27	Magnetic characteristics of synthetic pseudo-single-domain and multi-domain greigite (Fe ₃ S ₄). <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	28
28	Preparation and magnetic properties of CoWO ₄ nanocrystals. <i>Crystal Research and Technology</i> , 2012, 47, 1004-1007.	1.3	27
29	The Blake Event recorded near the Eemian type locality "A diachronic onset of the Eemian in Europe. <i>Quaternary Geochronology</i> , 2015, 28, 12-28.	1.4	26
30	Environmental magnetic implications of magnetofossil occurrence during the Middle Eocene Climatic Optimum (MECO) in pelagic sediments from the equatorial Indian Ocean. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2016, 441, 212-222.	2.3	26
31	On the magnetocrystalline anisotropy of greigite (Fe ₃ S ₄). <i>Geochemistry, Geophysics, Geosystems</i> , 2014, 15, 1558-1579.	2.5	24
32	Mind the gap: Towards a biogenic magnetite palaeoenvironmental proxy through an extensive finite-element micromagnetic simulation. <i>Earth and Planetary Science Letters</i> , 2020, 532, 116010.	4.4	23
33	Asian monsoon modulation of nonsteady state diagenesis in hemipelagic marine sediments offshore of Japan. <i>Geochemistry, Geophysics, Geosystems</i> , 2016, 17, 4383-4398.	2.5	22
34	Micromagnetic simulation of magnetofossils with realistic size and shape distributions: Linking magnetic proxies with nanoscale observations and implications for magnetofossil identification. <i>Earth and Planetary Science Letters</i> , 2019, 527, 115790.	4.4	22
35	Critical single domain grain sizes in chains of interacting greigite particles: Implications for magnetosome crystals. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 5430-5441.	2.5	19
36	High-resolution enviromagnetic records of the last deglaciation from Dali Lake, Inner Mongolia. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2016, 454, 1-11.	2.3	16

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37	Ferromagnetic resonance characterization of greigite (Fe_3S_4), monoclinic pyrrhotite (Fe_7S_8), and non-interacting titanomagnetite (Fe_3TiO_4). <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .	2.5	15
38	Waiting for Forcot: Accelerating FORC Processing 100Å— Using a Fast Fourier Transform Algorithm. <i>Geochemistry, Geophysics, Geosystems</i> , 2019, 20, 6223-6233.	2.5	15
39	Tectonic, climatic, and diagenetic control of magnetic properties of sediments from Kumano Basin, Nankai margin, southwestern Japan. <i>Marine Geology</i> , 2017, 391, 1-12.	2.1	14
40	Can the magnetic susceptibility record of Chinese Red Clay sequence be used for palaeomonsoon reconstructions?. <i>Geophysical Journal International</i> , 2016, 204, 1421-1429.	2.4	13
41	Detrital remanent magnetization of single-crystal silicates with magnetic inclusions: constraints from deposition experiments. <i>Geophysical Journal International</i> , 2020, 224, 2001-2015.	2.4	11
42	A Generic 1D Forward Modeling and Inversion Algorithm for TEM Sounding with an Arbitrary Horizontal Loop. <i>Pure and Applied Geophysics</i> , 2016, 173, 2869-2883.	1.9	10
43	Magnetic mineral tracing of sediment provenance in the central Bengal Fan. <i>Marine Geology</i> , 2019, 415, 105955.	2.1	10
44	Progressive Dissolution of Titanomagnetite in High-Temperature Hydrothermal Vents Dramatically Reduces Magnetization of Basaltic Ocean Crust. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087578.	4.0	10
45	ENIGMATIC X-RAY MAGNETIC CIRCULAR DICHROISM IN GREIGITE (Fe_3S_4). <i>Canadian Mineralogist</i> , 2012, 50, 667-674.	1.0	9
46	Seafloor Magnetism Under Hydrothermal Alteration: Insights From Magnetomineralogy and Magnetic Properties of the Southwest Indian Ridge Basalts. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, .	3.4	8
47	Time-Asymmetric FORC Diagrams: A New Protocol for Visualizing Thermal Fluctuations and Distinguishing Magnetic Mineral Mixtures. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 3056-3070.	2.5	7
48	Paleomagnetic Recording Efficiency of Sedimentary Magnetic Mineral Inclusions: Implications for Relative Paleointensity Determinations. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 6267-6279.	3.4	7
49	Discovery of giant magnetofossils within and outside of the Palaeocene-Eocene Thermal Maximum in the North Atlantic. <i>Earth and Planetary Science Letters</i> , 2022, 584, 117417.	4.4	7
50	Multi-protocol palaeointensity determination from middle Brunhes Chron volcanics, Datong Volcanic Province, China. <i>Physics of the Earth and Planetary Interiors</i> , 2011, 187, 188-198.	1.9	6
51	Growth of flower-like CdSe dendrites from a Brønsted acid-base ionic liquid precursor. <i>RSC Advances</i> , 2012, 2, 5944.	3.6	6
52	Micromagnetic Calculations of the Effect of Magnetostatic Interactions on Isothermal Remanent Magnetization Curves: Implications for Magnetic Mineral Identification. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB022335.	3.4	6
53	A long-term increasing aridification and cooling trend at the Chinese Loess Plateau during the Pliocene. <i>Quaternary International</i> , 2013, 306, 121-128.	1.5	5
54	Theory of stable multi-domain thermoviscous remanence based on repeated domain-wall jumps. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 10,399.	3.4	5

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55	Bending and Collapse: Magnetic Recording Fidelity of Magnetofossils From Micromagnetic Simulation. <i>Journal of Geophysical Research: Solid Earth</i> , 2022, 127, .	3.4	4
56	Magnetic Biosignatures of Magnetosomal Greigite From Micromagnetic Calculation. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	4
57	Paleomagnetic Secular Variations During the Past 40,000 Years From the Bay of Bengal. <i>Geochemistry, Geophysics, Geosystems</i> , 2019, 20, 2559-2571.	2.5	2
58	Early Eocene to early Miocene magnetostratigraphic framework for IODP Expedition 371 (Tasman) Tj ETQq0 0 0 rgBTj/Overlock 10 Tf 50	1.2	2
59	Rock Magnetic Signatures of Hydrothermal Mineralization in the Trans-Atlantic Geotraverse (TAG) Hydrothermal Field. <i>Geochemistry, Geophysics, Geosystems</i> , 2022, 23, .	2.5	2
60	MagNet: Automated Magnetic Mineral Grain Morphometry Using Convolutional Neural Network. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	2
61	Experimental test of the cooling rate effect on blocking temperatures in stepwise thermal demagnetization. <i>Geophysical Journal International</i> , 2020, 224, 1116-1126.	2.4	1