Andrew G Tomkins

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8516246/publications.pdf

Version: 2024-02-01

82 papers	3,454 citations	126907 33 h-index	144013 57 g-index
82 all docs	82 docs citations	82 times ranked	2163 citing authors

#	Article	IF	Citations
1	Windows of metamorphic sulfur liberation in the crust: Implications for gold deposit genesis. Geochimica Et Cosmochimica Acta, 2010, 74, 3246-3259.	3.9	293
2	PARTIAL MELTING OF SULFIDE ORE DEPOSITS DURING MEDIUM- AND HIGH-GRADE METAMORPHISM. Canadian Mineralogist, 2002, 40, 1-18.	1.0	183
3	Bimodal Distribution of Gold in Pyrite and Arsenopyrite: Examples from the Archean Boorara and Bardoc Shear Systems, Yilgarn Craton, Western Australia. Economic Geology, 2008, 103, 599-614.	3.8	163
4	Gold remobilisation and formation of high grade ore shoots driven by dissolution-reprecipitation replacement and Ni substitution into auriferous arsenopyrite. Geochimica Et Cosmochimica Acta, 2016, 178, 143-159.	3.9	146
5	On the source of orogenic gold. Geology, 2013, 41, 1255-1256.	4.4	143
6	The Hemlo Gold Deposit, Ontario: An Example of Melting and Mobilization of a Precious Metal-Sulfosalt Assemblage during Amphibolite Facies Metamorphism and Deformation. Economic Geology, 2004, 99, 1063-1084.	3.8	130
7	On the Initiation of Metamorphic Sulfide Anatexis. Journal of Petrology, 2006, 48, 511-535.	2.8	122
8	The relationship between subduction zone redox budget and arc magma fertility. Earth and Planetary Science Letters, 2011, 308, 401-409.	4.4	102
9	Fate of gold and base metals during metamorphic devolatilization of a pelite. Geochimica Et Cosmochimica Acta, 2015, 171, 338-352.	3.9	97
10	Upper Temperature Limits of Orogenic Gold Deposit Formation: Constraints from the Granulite-Hosted Griffin's Find Deposit, Yilgarn Craton. Economic Geology, 2009, 104, 669-685.	3.8	89
11	Magmatic Sulfide Formation by Reduction of Oxidized Arc Basalt. Journal of Petrology, 2012, 53, 1537-1567.	2.8	89
12	Separate zones of sulfate and sulfide release from subducted mafic oceanic crust. Earth and Planetary Science Letters, 2015, 428, 73-83.	4.4	86
13	Arsenic evolution as a tool for understanding formation of pyritic gold ores. Geology, 2019, 47, 335-338.	4.4	83
14	Mobilization of Gold as a Polymetallic Melt during Pelite Anatexis at the Challenger Deposit, South Australia: A Metamorphosed Archean Gold Deposit. Economic Geology, 2002, 97, 1249-1271.	3.8	82
15	Insights into subduction zone sulfur recycling from isotopic analysis of eclogite-hosted sulfides. Chemical Geology, 2014, 365, 1-19.	3.3	73
16	Gold in the oceans through time. Earth and Planetary Science Letters, 2015, 428, 139-150.	4.4	72
17	Implications of pyrite geochemistry for gold mineralisation and remobilisation in the Jiaodong gold district, northeast China. Ore Geology Reviews, 2015, 71, 150-168.	2.7	68
18	Multiple crustâ€“mantle interactions for the destruction of the North China Craton: Geochemical and Srâ€“Ndâ€“Pbâ€“Hf isotopic evidence from the Longbaoshan alkaline complex. Lithos, 2011, 122, 87-106.	1.4	64

#	Article	IF	Citations
19	Insights into the Liquid Bismuth Collector Model Through Analysis of the Bi-Au Stormont Skarn Prospect, Northwest Tasmania. Economic Geology, 2012, 107, 667-682.	3.8	61
20	Redistribution of Gold within Arsenopyrite and Lollingite during Pro- and Retrograde Metamorphism: Application to Timing of Mineralization. Economic Geology, 2001, 96, 525-534.	3.8	60
21	What metalâ€troilite textures can tell us about postâ€impact metamorphism in chondrite meteorites. Meteoritics and Planetary Science, 2009, 44, 1133-1149.	1.6	60
22	A Biogeochemical Influence on the Secular Distribution of Orogenic Gold. Economic Geology, 2013, 108, 193-197.	3.8	54
23	REE-Y, Ti, and P Remobilization in Magmatic Rocks by Hydrothermal Alteration during Cu-Au Deposit Formation. Economic Geology, 2010, 105, 763-776.	3.8	53
24	Pyrite-Pyrrhotite Stability in a Metamorphic Aureole: Implications for Orogenic Gold Genesis. Economic Geology, 2017, 112, 661-674.	3.8	49
25	ARSENOPYRITE MELTING DURING METAMORPHISM OF SULFIDE ORE DEPOSITS. Canadian Mineralogist, 2006, 44, 1045-1062.	1.0	48
26	The role of fluorine in hydrothermal mobilization and transportation of Fe, U and REE and the formation of IOCG deposits. Chemical Geology, 2019, 504, 158-176.	3.3	46
27	Ancient micrometeorites suggestive of an oxygen-rich Archaean upper atmosphere. Nature, 2016, 533, 235-238.	27.8	45
28	Disequilibrium melting and melt migration driven by impacts: Implications for rapid planetesimal core formation. Geochimica Et Cosmochimica Acta, 2013, 100, 41-59.	3.9	41
29	Three mechanisms of ore re-mobilisation during amphibolite facies metamorphism at the Montauban Znâ€“Pbâ€“Auâ€“Ag deposit. Mineralium Deposita, 2007, 42, 627-637.	4.1	40
30	Generation of metal-rich felsic magmas during crustal anatexis. Geology, 2003, 31, 765.	4.4	39
31	Aseismic Refinement of Orogenic Gold Systems. Economic Geology, 2020, 115, 33-50.	3.8	38
32	Recycling of Proterozoic crust in Pleistocene juvenile magma and rapid formation of the Ok Tedi porphyry Cuâ€“Au deposit, Papua New Guinea. Lithos, 2010, 114, 282-292.	1.4	37
33	Mobilization of Gold as a Polymetallic Melt during PeliteAnatexis at the Challenger Deposit, South Australia: A MetamorphosedArchean Gold Deposit. Economic Geology, 2002, 97, 1249-1271.	3.8	36
34	The mineralogy and petrology of I-type cosmic spherules: Implications for their sources, origins and identification in sedimentary rocks. Geochimica Et Cosmochimica Acta, 2017, 218, 167-200.	3.9	36
35	Wetting facilitates late-stage segregation of precious metalâ€“enriched sulfosalt melt in magmatic sulfide systems. Geology, 2010, 38, 951-954.	4.4	35
36	Investigation of the H7 ordinary chondrite, Watson 012: Implications for recognition and classification of Type 7 meteorites. Geochimica Et Cosmochimica Acta, 2014, 134, 175-196.	3.9	34

#	Article	IF	Citations
37	Geochronological constraints on the polymetamorphic evolution of the granulite-hosted Challenger gold deposit: implications for assembly of the northwest Gawler Craton*. Australian Journal of Earth Sciences, 2004, 51, 1-14.	1.0	32
38	Restriction of parent body heating by metalâ€troilite melting: Thermal models for the ordinary chondrites. Meteoritics and Planetary Science, 2014, 49, 636-651.	1.6	30
39	Sulfur isotope and PGE systematics of metasomatised mantle wedge. Earth and Planetary Science Letters, 2018, 497, 181-192.	4.4	30
40	Sulfur isotope evolution in sulfide ores from Western Alps: Assessing the influence of subduction-related metamorphism. Geochemistry, Geophysics, Geosystems, 2014, 15, 3808-3829.	2.5	28
41	Recognizing hydrothermal alteration through a granulite facies metamorphic overprint at the challenger Au deposit, South Australia. Chemical Geology, 2007, 243, 64-89.	3.3	27
42	Anomalously silver-rich vein-hosted mineralisation in disseminated-style gold deposits, Jiaodong gold district, China. Ore Geology Reviews, 2015, 68, 127-141.	2.7	26
43	Mobility of iron and nickel at low temperatures: Implications for 60Feâ€“60Ni systematics of chondrules from unequilibrated ordinary chondrites. Geochimica Et Cosmochimica Acta, 2016, 178, 87-105.	3.9	25
44	Release of uranium from highly radiogenic zircon through metamictization: The source of orogenic uranium ores. Geology, 2016, 44, 15-18.	4.4	24
45	Cobalt concentration in a sulfidic sea and mobilization during orogenesis: Implications for targeting epigenetic sediment-hosted Cu-Co deposits. Geochimica Et Cosmochimica Acta, 2021, 305, 1-18.	3.9	24
46	Fluorine and chlorine behaviour during progressive dehydration melting: Consequences for granite geochemistry and metallogeny. Journal of Metamorphic Geology, 2017, 35, 739-757.	3.4	22
47	Microbial Populations of Stony Meteorites: Substrate Controls on First Colonizers. Frontiers in Microbiology, 2017, 8, 1227.	3.5	22
48	Evaporite-bearing orogenic belts produce ligand-rich and diverse metamorphic fluids. Geochimica Et Cosmochimica Acta, 2020, 275, 163-187.	3.9	22
49	Trace element catalyses mineral replacement reactions and facilitates ore formation. Nature Communications, 2021, 12, 1388.	12.8	19
50	New insights into the size and timing of the Lawn Hill impact structure: relationship to the Century ZnÂâ€“ÂPb deposit. Australian Journal of Earth Sciences, 2008, 55, 587-603.	1.0	17
51	Preferential magma extraction from K- and metal-enriched source regions in the crust. Mineralium Deposita, 2009, 44, 171-181.	4.1	17
52	A review of the chondriteâ€“achondrite transition, and a metamorphic facies series for equilibrated primitive stony meteorites. Meteoritics and Planetary Science, 2020, 55, 857-885.	1.6	16
53	Fe-carbide and Fe-sulfide liquid immiscibility in IAB meteorite, Campo del Cielo: Implications for iron meteorite chemistry and planetesimal core compositions. Geochimica Et Cosmochimica Acta, 2013, 117, 80-98.	3.9	14
54	The Lawn Hill annulus: An Ordovician meteorite impact into waterâ€saturated dolomite. Meteoritics and Planetary Science, 2016, 51, 2416-2440.	1.6	14

#	Article	IF	Citations
55	Garnet peridotites reveal spatial and temporal changes in the oxidation potential of subduction. Scientific Reports, 2018, 8, 16411.	3.3	14
56	Smoking gun for thallium geochemistry in volcanic arcs: Nataliyamalikite, TlI, a new thallium mineral from an active fumarole at Avacha Volcano, Kamchatka Peninsula, Russia. American Mineralogist, 2017, 102, 1736-1746.	1.9	13
57	Tiny particles building huge ore deposits â€“ Particle-based crystallisation in banded iron formation-hosted iron ore deposits (Hamersley Province, Australia). Ore Geology Reviews, 2019, 104, 160-174.	2.7	13
58	Extreme Silver Isotope Variation in Orogenic Gold Systems Implies Multistaged Metal Remobilization During Ore Genesis. Economic Geology, 2019, 114, 233-242.	3.8	12
59	Insights into salty metamorphic fluid evolution from scapolite in the Trans-North China Orogen: Implication for ore genesis. Geochimica Et Cosmochimica Acta, 2021, 293, 256-276.	3.9	12
60	Evaluation of meteorites as habitats for terrestrial microorganisms: Results from the Nullarbor Plain, Australia, a Mars analogue site. Geochimica Et Cosmochimica Acta, 2017, 215, 1-16.	3.9	10
61	High Survivability of Micrometeorites on Mars: Sites With Enhanced Availability of Limiting Nutrients. Journal of Geophysical Research E: Planets, 2019, 124, 1802-1818.	3.6	10
62	The variability of ruthenium in chromite from chassignite and olivineâ€phyric shergottite meteorites: New insights into the behavior of <scp>PGE</scp> and sulfur in Martian magmatic systems. Meteoritics and Planetary Science, 2017, 52, 333-350.	1.6	7
63	Atmospheric entry heating of micrometeorites at Earth and Mars: Implications for the survival of organics. Meteoritics and Planetary Science, 2019, 54, 1-19.	1.6	7
64	Analysis of a Telescoped Orogenic Gold System: Insights from the Fosterville Deposit. Economic Geology, 2020, 115, 1645-1664.	3.8	7
65	Deformation-induced silica redistribution in banded iron formation, Hamersley Province, Australia. Lithos, 2016, 266-267, 87-97.	1.4	6
66	Bi/Te control on gold mineralizing processes in the North China Craton: Insights from the Wulong gold deposit. Mineralium Deposita, 2023, 58, 263-286.	4.1	6
67	GRADE DISTRIBUTION OF THE GIANT OK TEDI Cu-Au DEPOSIT, PAPUA NEW GUINEA. Economic Geology, 2013, 108, 1773-1781.	3.8	4
68	Displacement of the Proterozoic Century Ore Deposit at the Edge of an Ordovician Meteorite Impact Crater, Queensland. Economic Geology, 2019, 114, 427-440.	3.8	4
69	A model for evolving crust on 4 Vesta through combined compositional and thermal modelling. Earth and Planetary Science Letters, 2021, 571, 117105.	4.4	4
70	Ore shoots in folded and fractured rocks â€“ Insights from 3D modelling of the Fosterville gold deposit (Victoria, Australia). Ore Geology Reviews, 2020, 118, 103272.	2.7	3
71	Deformation Mechanisms in Orogenic Gold Systems During Aseismic Periods: Microstructural Evidence from the Central Victorian Gold Deposits, Southeast Australia. Economic Geology, 2021, 116, 1849-1864.	3.8	3
72	Release of uranium from highly radiogenic zircon through metamictization: The source of orogenic uranium ores: REPLY. Geology, 2016, 44, e404-e404.	4.4	2

#	Article	IF	Citations
73	On the source of diogenites and olivine diogenites: Compositional diversity from variable fO2. Geochimica Et Cosmochimica Acta, 2019, 258, 37-49.	3.9	2
74	A small S-MIF signal in Martian regolith pyrite: Implications for the atmosphere. Geochimica Et Cosmochimica Acta, 2020, 290, 59-75.	3.9	2
75	CHOS gas/fluidâ€induced reduction in ureilites. Meteoritics and Planetary Science, 2021, 56, 2062.	1.6	2
76	Preservation of Terrestrial Microorganisms and Organics Within Alteration Products of Chondritic Meteorites from the Nullarbor Plain, Australia. Astrobiology, 2022, 22, 399-415.	3.0	2
77	Century Zn depositâ€“the worldâ€™s largest meteorite impacted orebody. ASEG Extended Abstracts, 2019, 2019, 1-6.	0.1	1
78	Arsenic evolution as a tool for understanding formation of pyritic gold ores: REPLY. Geology, 2019, 47, e492-e492.	4.4	1
79	Eukaryotic Colonization of Micrometer-Scale Cracks in Rocks: A â€œMicrofluidicsâ€•Experiment Using Naturally Weathered Meteorites from the Nullarbor Plain, Australia. Astrobiology, 2020, 20, 364-374.	3.0	1
80	GRADE DISTRIBUTION OF THE GIANT OK TEDI Cu-Au DEPOSIT, PAPUA NEW GUINEA–A REPLY. Economic Geology, 2014, 109, 1493-1494.	3.8	0
81	Sulfide Minerals. Encyclopedia of Earth Sciences Series, 2017, , 1-3.	0.1	0
82	Sulfide Minerals. Encyclopedia of Earth Sciences Series, 2018, , 1394-1396.	0.1	0