

Burnett's August Links from the UK - 2021

Case Study: Electronics, mining and urban mining A case study for the Dutch Fair Bank and Insurance Guide

https://eerlijkegeldwijzer.nl/media/60507/cs_electronics_recycling_and_metals_mining_fbg_fig_150109_report.pdf

Extractive Industries: The Management of Resources as a driver of Sustainable Development

<http://fdslive.oup.com/www.oup.com/academic/pdf/openaccess/9780198817369.pdf>

Top 18 Mobile Apps for Geologists in 2021

<https://www.linkedin.com/pulse/top-18-mobile-apps-geologists-2021-spencer-dormer/?trackingId=vyP1wFLUp5MZtpwotoxzg%3D%3D>

Simplified World Geology Map, Topography etc.

<http://portal.onegeology.org/OnegeologyGlobal/>

The New Great Game: Securing critical minerals today for a clean energy system tomorrow

<https://hcss.nl/report/the-new-great-gamesecuring-critical-minerals-todayfor-a-clean-energy-system-tomorrow/>

AR6 Climate Change 2021: The Physical Science Basis

https://www.ipcc.ch/report/ar6/wg1/?_cf_chl_jschl_tk=_pmd_dbaa81ed69542ade6ed056a710c3f4e89ec13126-1628507196-0-ggNtZGzNAeKjcnBszQkQ

Tools and Workflows for Grassroots Li–Cs–Ta (LCT) Pegmatite Exploration

https://www.researchgate.net/publication/335315162_Tools_and_Workflows_for_Grassroots_Li-Cs-Ta_LCT_Pegmatite_Exploration

First International Conference: Mineral Resources for Future Generations

<http://publications.rwth-aachen.de/record/786983/files/786983.pdf>

Reporting Exploration Results and Mineral Resources for Lithium Mineralised Pegmatites

https://www.researchgate.net/publication/311671265_Reporting_Exploration_Results_and_Mineral_Resources_for_Lithium_Mineralised_Pegmatites

Mapping of innovation-critical metals and minerals

https://www.sgu.se/globalassets/mineralnaring/mineralinformation/pdac-2021/mapping-of-innovation-critical-metals-and-minerals.pdf?_t_tags=language%3Asv%2Csiteid%3Ad78b016e-2a51-437d-a75a-657400cdd11c&_t_hit.id=SGU_Models_Media_Media_GenericMedia/_fc70320e-5459-4143-ac94-042bd6e9207c&_t_hit.pos=7

Major Gold Deposit Types and Exploration process

<https://www.ijser.org/researchpaper/Major-Gold-Deposit-Types-and-Exploration-process.pdf>

Remote Sensing & GIS Techniques for Gold exploration

<https://iicbe.org/upload/2234C0815061.pdf>

2020 Innovation in Mineral Exploration

<https://www.pdac.ca/docs/default-source/priorities/access-to-land/geosciences/pdac-2020-innovation-in-mineral-exploration-v10.pdf>

July - 2021

Some audio- visual links:

Raglan Drilling Geology lecture series – Australian focussed:

<https://www.raglangeology.com.au/video>

EGRU - Economic Geology Research Centre

https://www.youtube.com/channel/UCloYMaOq_XngDSGLWu6jeHg

Geohug

<https://www.youtube.com/channel/UCbdDhGkISDED2JrD7ox5Rjg>

Sprott EDU

<https://www.youtube.com/channel/UCvTUbe96QQfPkMhIF5yu9w/videos>

IRIS Earthquake Science

<https://www.youtube.com/channel/UCo7diqNFmYbm8nrVUEPtTsQ>

And some articles:

Gold dispersion in transported cover sequences especially in chemical (palaeoredox front) and physical (unconformity) interfaces linked to the landscape history of Western Australia

<https://www.appliedgeochemists.org/sites/default/files/documents/Explore%20issues/EXPLORE%20183-June2019.pdf>

Mineral exploration in regolith-dominated terrains: Global considerations and challenges

<https://zarmesh.com/wp-content/uploads/2017/04/Mineral-exploration-in-regolith-dominated-terrains-Global-considerations-and-challenges.pdf>

Pointing the way. Using new indicator minerals in the nickel hunt (web page article)

<https://www.csiro.au/en/work-with-us/industries/mining-resources/Resourceful-magazine/Issue-23/New-indicator-minerals-in-the-nickel-hunt>

Toward the circular economy

<https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Ellen-MacArthur-Foundation-Towards-the-Circular-Economy-vol.1.pdf>

<https://www.ellenmacarthurfoundation.org/publications>

THE FUTURE OF URBAN MINING

<https://copperalliance.org/wp-content/uploads/2021/04/Future-Urban-Mining.pdf>

<https://copperalliance.org/2020/11/17/the-promise-and-limits-of-urban-mining/>

June 2021

Porphyry Copper Assessment of Western Central Asia

<https://pubs.usgs.gov/sir/2010/5090/n/pdf/sir2010-5090-N.pdf>

Australia Uncovered: Unlocking Australia's hidden potential

<https://www.uncoveraustralia.org.au/wp-content/uploads/2019/02/UNCOVER-Roadmap-Unlocking-Australias-Hidden-Potential.pdf>

Analysis of Finnish battery mineral deposits with special emphasis on cobalt

https://tupa.gtk.fi/raportti/arkisto/29_2021.pdf

Geometry and genesis of the giant Obuasi gold deposit, Ghana

https://research-repository.uwa.edu.au/files/8984129/Fougerouse_Denis_2015.pdf

Porphyry Copper Deposit Model

<https://pubs.usgs.gov/sir/2010/5070/b/>

Exploring for porphyry copper deposits

<https://www.geolsoc.org.uk/~media/shared/documents/education%20and%20careers/Resources/Presentations%20and%20activity%20sheets/Mineral%20exploration%20ESW17/Copper%20exploration%20A3%20data%20sheets.pdf?la=en>

State of the art: Italian carbonatites and their potential for critical-metal deposits

https://www.researchgate.net/publication/305394118_State_of_the_art_Italian_carbonatites_and_their_potential_for_critical-metal_deposits

The mineralisation, alteration paragenesis and hydrothermal fluids at the Geita Hill gold deposits

<https://core.ac.uk/download/pdf/327045889.pdf>W Tanzania

Valorisation of mine waste - Part I: Characteristics of, and sampling methodology for, consolidated mineralised tailings by using Witwatersrand gold mines (South Africa) as an example

<https://www.sciencedirect.com/science/article/pii/S0301479721010756>

National Mineral Waste Databases as an Information Source for Assessing Material Recovery Potential from Mine Waste, Tailings and Metallurgical Waste

<https://uwe-repository.worktribe.com/OutputFile/5997768>

Geochemical Characterization and Ore Dressing Potential of Sokoto Phosphate Rock, Northwestern Nigeria

https://www.researchgate.net/publication/270571417_Geochemical_Characterization_and_Ore_Dressing_Potential_of_Sokoto_Phosphate_Rock_Northwestern_Nigeria

Growth in global materials use, GDP and population during the 20th century

https://www.researchgate.net/publication/222430349_Growth_in_global_materials_use_GDP_and_population_during_the_20th_century

February 2021:

Geology is at a Crossroads

<https://www.discovermagazine.com/planet-earth/geology-is-at-a-crossroads?fbclid=IwAR3hgJRIFWwhQ3UMQkkmgyibnllfLt7ypJ50-d8OgCRN4647G0wVwiclX4rs>

Cognitive Bias, the Elephant in the Living Room of Science and Professionalism

https://higherlogicdownload.s3.amazonaws.com/SPE/75da272d-1add-4984-8e9f-81c4f1bbdfe1/UploadedImages/AAPG_DL_2015-17_PRESENTATION_COGNITIVE_BIAS_NOV_2015.pdf

January 2021:

Preliminary Compilation of Descriptive Geoenvironmental Mineral Deposit Models

<https://pubs.usgs.gov/of/1995/ofr-95-0831/>

Gold leaching from oxide ores in alkaline glycine solutions in the presence of permanganate

https://www.sciencedirect.com/science/article/abs/pii/S0304386X20308999?dgcid=rss_sd_all (not a free download)

Adsorption of Gold and Copper from Alkaline Glycine-based Leach Solutions using Activated Carbon

<https://espace.curtin.edu.au/bitstream/handle/20.500.11937/78006/Tauetsile%20P%202019%20part.pdf?sequence=1>

World Development Report 2020, Trading for Development in the Age of Global Value Chains

<https://www.worldbank.org/en/publication/wdr2020>

World Uranium Mining Production

<https://www.world-nuclear.org/information-library/nuclear-fuel-cycle/mining-of-uranium/world-uranium-mining-production.aspx>

Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition

<http://pubdocs.worldbank.org/en/961711588875536384/Minerals-for-Climate-Action-The-Mineral-Intensity-of-the-Clean-Energy-Transition.pdf>

Resources for freedom: A report to the President (1952)

<https://babel.hathitrust.org/cgi/pt?id=mdp.39015028172412&view=1up&seq=9>

Critical mineral resources of the United States—Economic and environmental geology and prospects for future supply

<https://pubs.er.usgs.gov/publication/pp1802>

Forty Years of Uranium Resources, Production and Demand in Perspective “The Red Book Retrospective”

<https://www.oecd-nea.org/ndd/pubs/2006/6096-40-years-uranium.pdf>

Unified Materials Information System (UMIS): An Integrated Material Stocks and Flows Data Structure

https://www.research.ed.ac.uk/portal/files/52074055/UMIS_nofigures_rev8_all_changes_accepted.pdf

Mining anthropogenic and geological deposits: evaluating the accessibility of scarce metals from End-of-Life products and the Earth’s Crust under sustainability considerations

<https://eprints.soton.ac.uk/430408/>

January 2020

How the world economy has changed (Davos 1973 to 2020)

https://www.weforum.org/agenda/2019/12/how-has-global-economy-changed-50-years-davos-1973-to-2020-world-economic-forum/?utm_source=sfmc&utm_medium=email&utm_campaign=2707520_Agenda_weekly-6December2019-20191204_094335&utm_term=&emailType=Newsletter

Mines of Tomorrow: Evaluating and Classifying Anthropogenic Resources: A New Methodology

https://publik.tuwien.ac.at/files/PubDat_250851.pdf

Managing mining for sustainable development

<https://www.undp.org/content/dam/undp/library/Sustainable%20Development/Extractives/UNDP-MMFSD-LowResolution.pdf>

International Economics of Resource Productivity

https://epub.wupperinst.org/frontdoor/deliver/index/docId/3540/file/3540_Bleischwitz.pdf

Mine waste or future resource?

https://espace.library.uq.edu.au/data/UQ_b078796/s4361683_final_thesis.pdf?Expires=1575543121&Key-Pair-Id=APKAJKNBJ4MJBNC6NLQ&Signature=hW7ReMfi24gQZdh29iBDeFHyKUcCeVSuiu02csdxkKaN8c7HTz9SOG9JnAYIj3ma9Svoy16vqWEgQpa8e-Nqp-Vkklh9MI1PSqgmLPeEhlHguhzhJ6FQZnSQwdxOx4MDkYgdeXdp7QoJazEUPZE7awtNDhQzCQMSP6yE1PqMiU1c2No64tL6bQDOdzGGLjp-u2MvBfQsJjUMIm4qlf2EaGO--AW42M-rbS9vqr-ARpLzcGSCwee~23oM298QNm27zBVp-HdfhBNTfqnsWPkSYWczPRpxCs3deK0Hm3i-jUWqD8zoCQBwKNRX3cNTkVlwbmNbPg-dXGU1wY~6guUvQ

An interesting read (or I thought so) on the development lead time for mining projects in low income countries:

<https://www.worldbank.org/content/dam/Worldbank/GEP/GEP2016a/Global-Economic-Prospect-2016-From-commodity-discovery-to-production.pdf>

Multivariate geostatistical analysis with application to a Western Australian nickel laterite deposit

http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=1337&context=theses_hons

Mineralization of Nickel in saprolitic ore of New Caledonia:

<https://hal.univ-lorraine.fr/tel-01909333/document>

Lithium Recovery from Aqueous Resources and Batteries: A Brief Review

<https://www.technology.matthey.com/pdf/161-176-imtr-apr18.pdf>

The use of EO Techniques for Lithium Exploration in Cornwall

<https://www.grsg.org.uk/wp-content/uploads/2019/01/Wrathall.pdf>

December 2019

Structural Control of Mineral Deposits: Theory and Reality

<https://www.mdpi.com/books/pdfview/book/1238>

Open Access Journal (have a look at the books page as well)

<https://www.mdpi.com/journal/minerals>

USE OF STRUCTURAL GEOLOGY IN EXPLORATION FOR AND MINING OF SEDIMENTARY ROCKHOSTED AU DEPOSITS

<https://pubs.usgs.gov/of/2001/0151/pdf/of01-151.pdf>

Cycles of Critical Metals

<https://elib.suub.uni-bremen.de/edocs/00104959-1.pdf>

The impact of plastics on life cycle energy consumption and greenhouse gas emissions in Europe

<https://www.plasticseurope.org/application/files/9015/1310/4686/september-2010-the-impact-of-plastic.pdf>

Sustaining our urbanizing planet. New roles for vital 'green metals'

https://www.ivanhoemines.com/site/assets/files/4550/november_25-2019_mines_and_money_presentation.pdf

Something controversial...

<https://fee.org/articles/41-inconvenient-truths-on-the-new-energy-economy/>

The Spatial and Temporal Distribution of the Metal Mineralisation in Eastern Australia and the Relationship of the Observed Patterns to Giant Ore Deposits (This is a repeat, but worth reminding people...)

https://espace.library.uq.edu.au/data/UQ_158588/ljr_phd_8_07a.pdf?Expires=1575467881&Key-Pair-Id=APKAJKNB4MJBNC6NLQ&Signature=HYFx5WKdb9Bkmkq7uXGbEuoKVjRtaS1Ej6S9bWtvHMq5qz6kAangGxo~JUfjzm4VCldNri02A9GSq0y0yYvbL0itGzcdLu0GVqadqiSf407lcKXP~OAiXQVImx2vyyz-HCSgUEa~iseE5Twuh5AlmFlvgM~wy157Sb5M-ZDpPEo~r5Vrlu7MZq7YBzAHpXfDLb6dZuhlsh4KMpLgiwiYWd~c~wzaZNV0tWGGMjfx5Eq13MG2taSOzgvxwYDv8pESQLZHNClYJE4ptNS7Fh-RNhZCuBQ8k9bnIBhDR6Nk4pL3NvVFaoDoVt7x2kF~X008a8xBswgQRJRM8m5ycOkSYw

A Structural and Ore Geological study of the Palaeoproterozoic Stratabound Sala Zn-Pb-Ag deposit, Bergslagen, Sweden

https://www.ltu.se/cms_fs/1.394351/nils%20jansson%20examensarbete.pdf

Geo-ethics

http://www.icog.es/iageth/files/Nikitina_Geoethics.pdf

Analytical Tools to Constrain the Origin of Gold from Conflict-affected and High-Risk Areas

https://www.bgr.bund.de/EN/Themen/Min_rohstoffe/Downloads/studie_analytical_tools_high_risk.pdf?__blob=publicationFile&v=3

Geosciences: Teaching and History

http://www.ige.unicamp.br/geoscied2018/wp-content/uploads/sites/38/2018/10/2018_ProceedingsGeoSciEdFinal.pdf

The Production of Critical Materials

https://pdfs.semanticscholar.org/cda1/e376acc8ab47bb88ae04d9f773586856a8db.pdf?_ga=2.189083694.445831793.1574951020-487248501.1574951020

Critical Metals in Porphyry Copper

https://eprints.soton.ac.uk/412122/1/Katie_McFall_Thesis_corrected.pdf

Early Neoproterozoic rare metal (Sn, Ta, W) and gold metallogeny of the Central Africa Region: a review

https://www.ielf.tu-clausthal.de/fileadmin/user_upload/Lagerstaetten_und_Rohstoffe/pdf/Pohl_et_al_2013.pdf

Deep-ocean mineral deposits as a source of critical metals for high-and green-technology applications: Comparison with land-based resources

<https://www.oceanfdn.org/sites/default/files/Deep-ocean%2Bmineral%2Bdeposits%2Bas%2Ba%2Bsource%2Bof%2Bcritical%2Bmetals%2Bfor%2Bhigh-%2Band%2Bgreen-technology%2Bapplication-%2BComparison%2Bwith%2Bland%2Bbased%2Bresources.compressed.pdf>

Mines and Money 2017 presentations

<https://london.minesandmoney.com/2017-presentations/>

Geological Map of Columbia (PDF)

<https://www2.sgc.gov.co/ProgramasDeInvestigacion/Geociencias/Paginas/MGC.aspx>

Geological Map of South America (multiple download formats available)

<https://www2.sgc.gov.co/ProgramasDeInvestigacion/Geociencias/Paginas/GMSA.aspx>

November 2019

New Insights on Mineral Exploration Concepts and Guidelines; Government of India (focus is on Indian examples).

<https://employee.gsi.gov.in/cs/groups/public/documents/document/b3zp/mje0/~edisp/dcport1gsigovi214027.pdf>

Transfer Pricing in Mining with a Focus on Africa

<https://www.extractiveshub.org/servefile/getFile/id/6647>

The web site contains a lot of information (<https://www.extractiveshub.org/>) on topics including climate change, artisanal and small scale mining, commodity life cycles etc.

Drilling for Geology (Australia focussed, but has a lot of interesting and educational bits).

https://www.csaglobal.com/wp-content/uploads/2017/08/D4G2_Extended-Abstracts-Volume.pdf

Defining Leading Practice in Minerals development Projects

http://axiomprojectservices.com.au/wp-content/uploads/2019/03/Graham-C.-Axiom_2016.pdf

AIG Seminars and presentations:

(this has been shared before, but always good to go back and check for new stuff).

<https://www.aig.org.au/librar/seminar-presentations/>

Mineral Prospectively analysis and quantitative resource assessments for regional exploration targeting

https://api.research-repository.uwa.edu.au/portalfiles/portal/5263287/Lysytsyn_Volodymyr_2015.pdf

Electronic (FREE!!!) downloads of Geology classics such as Lyell's 'Principles of Geology'; Geikie's 'Mountains', Comstock's 'Elements of Geology' and much more... (also the main page is worth a look.. <https://www.forgottenbooks.com/en>).

<https://www.forgottenbooks.com/en/Science/Geology>

Mining, markets and sustainable opportunities

https://dspace.library.uu.nl/bitstream/handle/1874/299111/Thesis%20A.Middelkoop%20-%20Namibia_Mining_Sust_Standards_3514307%20V1.1.pdf?sequence=1&isAllowed=y

Gold is where you find it (this may be of interest for the Witwatersrand Mining guys).

https://theses.uibn.ru.nl/bitstream/handle/123456789/5524/Bruijn_de_Lichelle_1.pdf?sequence=1

Developing Effective Mineral Resource Policy for Sustainable Livelihoods through Geoscience

<https://www.im4dc.org/wp-content/uploads/2013/09/Scott-ZambiaGS-FR-Completed-Report.pdf>

Managing mining for sustainable development

<https://www.undp.org/content/dam/undp/library/Sustainable%20Development/Extractives/UNDP-MMFSD-LowResolution.pdf>

Evaluating and Classifying Anthropogenic Resources: A New Methodology

https://publik.tuwien.ac.at/files/PubDat_250851.pdf

Minerals in Circular Economy – Book of Abstracts

<https://www.vtt.fi/inf/pdf/technology/2014/T192.pdf>

October 2019

Critical Mineral Resources of the United States:

https://pubs.usgs.gov/pp/1802/pp1802_entirebook.pdf

Ultramafic massifs of the Serranía de Ronda:

<http://www.ehu.eus/sem/documentos/Gervilla.et.al.2019.Geology.metallogeny.Ronda.peridotites.pdf>

GEOLOGY AND ORE DEPOSITS OF THE CENTRAL AFRICAN COPPERBELT:

https://mountainscholar.org/bitstream/handle/11124/251/Broughton_mines_0052E_10371.pdf?sequence=1

Mineral deposits and metallogeny of Fennoscandia:

https://www.ngu.no/upload/Publikasjoner/Boker/GTK_sp_053.pdf

Geology of Mineral Deposits: Tasmania (A summary):

http://www.mrt.tas.gov.au/mrt/doc/doinfo/download/GSB72/GSB_72.pdf

A field guide to the geology of Sudbury:

<http://www.geologyontario.mndm.gov.on.ca/mndmfiles/pub/data/imaging/ofr6243/OFR6243.pdf>

PHOSPHATE DEPOSITS ON THE NORTHWEST AFRICAN CONTINENTAL SHELF AND SLOPE:

<https://spiral.imperial.ac.uk/bitstream/10044/1/16730/2/Summerhayes-CP-1971-PhD-Thesis.pdf>

Mineral resources: Geological scarcity, market price trends, and future generations

<https://www.sciencedirect.com/science/article/pii/S0301420716300861>

The contribution of mining to the emerging circular economy

<https://www.ausimmbulletin.com/feature/the-contribution-of-mining-to-the-emerging-circular-economy/>