

Subjects Covered



Searching Subject Categories

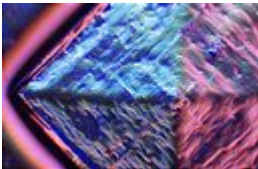
[Click here](#) for information on how to search Subject Categories



01-Mineralogy and Crystallography

- 01A-General mineralogy
- 01B-Mineralogy of silicates
- 01C-Mineralogy of non-silicates

physical, optical, and chemical properties of naturally occurring inorganic minerals and related synthetic minerals, mineral crystallography, including crystal structure, determination of lattice parameters and unit cells, the bonding of atoms and molecules, crystal form and symmetry, [collecting minerals](#), as well as non-mineral gems such as amber and jet



02-Geochemistry

- 02A-General geochemistry
- 02B-Hydrochemistry
- 02C-Geochemistry of rocks, soils, and sediments
- 02D-Isotope geochemistry

abundance of elements, organic materials, water, trace elements, isotopes, geochemical processes and properties, geochemical cycles, geochemical surveys analytical methods such as chemical, spectroscopic, thermal, and X-ray and electron microscopy instruments used for analysis

Related topics in other fields:

- Field 05--petrology, fluid inclusions, geologic thermometry and barometry, meteorites
- Field 03--geochronology
- Field 06--clay mineralogy
- Field 12--paleoclimatology
- [Fields 26 & 28--geochemical prospecting](#)



03-Geochronology

determination by absolute age methods, including radiometric and radiogenic dating; establishing the chronology of events by methods such as lichenometry, racemization, tree rings, hydration of glass, varves, paleomagnetism, tephrochronology, thermoluminescence, radiation damage, fission-track dating and particle-track dating



04-Extraterrestrial geology

of the planets, asteroids, the Moon and moons of other planets, planetary composition, evolution, surface features, structure, motions

Exclusions: astrophysics and extraterrestrial physics

Related topics in other fields:

Field 05-meteorites and tektites



05-Petrology, igneous and metamorphic

05A-Igneous and metamorphic petrology

05B-Petrology of meteorites and tektites

igneous rocks, metamorphic rocks, metasomatism metamorphism, phase equilibria, magmas, lava, intrusions, inclusions, ancient volcanology

Related topics in other fields:

Field 17-phase transitions

Field 23-volcanic features

Field 24-modern volcanology



06-Petrology, sedimentary

06A-Sedimentary petrology

06B-Petrology of coal

sedimentary rocks, sediments, sedimentation, diagenesis, sedimentary structures, genesis of peat, lignite and coal, clay mineralogy, chemical properties of clay minerals

Related topics in other fields:

Field 07-marine sedimentation

Field 24-Quaternary sediments

Field 29-economic studies of peat, lignite and coal



07-Marine geology and oceanography

continental shelf, continental slope, ocean floors, ocean waves (sediment transport), ocean circulation (sediment transport), reefs (modern)

Exclusions:

patterns of ocean circulation

marine biology

wave propagation

Related topics in other fields:

Field 02-geochemistry of sea water

Field 18-ocean basin evolution

Field 21-estuarine studies

Field 24-Quaternary sediments and Recent lake and sea-level changes



08-Paleontology, general studies

of both fossil plants and animals

Archaea, Bacteria, life origin, paleontological textbooks, paleontological glossaries, fossil collecting, problematic fossils, ichnofossils (if not related to a specific fossil group)

Related topics in other fields:

Field 09-fossil plants

Field 10-invertebrates

Field 11-vertebrates

Field 12-biostratigraphy



09-Paleontology, paleobotany

algae, Angiospermae, Bryophyta, Cyanobacteria, Fungi, Gymnospermae, Hepaticae, lichens, nannofossils, palynomorphs, Plantae, Pteridophyta

Related topics in other fields:

Field 12-biostratigraphy, paleoenvironmental interpretation

Field 24-Quaternary palynology



10-Paleontology, invertebrate

Annelida, Archaeocyatha, Arthropoda, Brachiopoda, Bryozoa, Cnidaria (Coelenterata), ebridians, Echinodermata, Foraminifera, Graptolithina, Hemichordata, Insecta, Mollusca, Ostracoda, Porifera, Radiolaria, scolecodonts, Silicoflagellata, Thecamoeba, Tintinnida, Trilobita

Related topics in other fields:

Field 12-biostratigraphy, paleoenvironmental interpretation

Field 24-Quaternary biostratigraphy, paleoenvironmental interpretation



11-Paleontology, vertebrate

Acanthodii, Agnatha, Amphibia, Aves, Chondrichthyes, Chordata, Conodonts, fish, fossil man, Heterostraci, Mammalia, Osteichthyes, Osteostraci, Placodermi, Reptilia, Tetrapoda

Related topics in other fields:

Field 12-biostratigraphy, paleoenvironmental interpretation

Field 24-Quaternary archaeology and artifacts



12-Stratigraphy, historical geology and paleoecology

lithostratigraphy (age relationships of rock strata), biostratigraphy, evolution of land masses (continental drift), paleomagnetism, paleogeography, biogeography, paleoclimatology

Related topics in other fields:

Field 06-reefs and sedimentation

Fields 08-11-paleontology

Field 22-Recent ecology

Field 24-Quaternary



13-Areal geology, general

area studies dealing with several aspects of geology, entries that might be placed in three or more fields, guidebooks, road logs, bibliographies of geology of an area

Related topics in other fields:

Field 14-geologic maps



14-Areal geology, maps and charts

separately published geologic maps, geologic maps with explanatory texts, separately published geologic charts, methodology of geologic mapping

Related topics in other fields:

specific types of maps are found under the specific field, e.g. geomorphologic maps are found in Field 23, Surficial geology, geomorphology



15-Miscellaneous and mathematical geology

biography (if not related to a specific field)
 bibliography (if not related to a specific field)
 popular geology
 elementary geology (textbooks)
 general mathematical principles
 annual reports of geologic surveys and associations
 historical accounts
 education-curricula, enrollments
 directories to geology departments
 geology as a profession-career opportunities
 forensic geology-geology applied to crime solving
Related topics in other fields:
anything related to a specific field will be found in that field rather than here



16-Structural geology

classical tectonics (regional and local structures resulting from solid-rock movements), faults, fractures, folds, orogeny, geosynclines, deformation, structural analysis, epeirogeny, foliation, lineation
Related topics in other fields:

Field 18-plate tectonics, continental drift, sea-floor spreading

Before 1975 the following subjects were found in Structural geology; they are now found in other fields:

Field 05-batholiths, dikes, intrusions, stocks and volcanism

Field 06-breccia, sedimentary structures

Field 12-paleogeography, sea-level changes, unconformities

Field 18-crust, diapirs, geodesy, isostasy, Mohorovicic discontinuity

Field 22-nuclear explosions

Field 23-cratering, cryptoexplosion features

Field 24-glaciers



17-Geophysics, general

17A-General geophysics

17B-Geophysics of minerals and rocks

experimental and theoretical studies of physical properties of rocks, transition states of various compounds under elevated temperature and pressure (applied to core and mantle composition), magnetic and electrical properties of minerals and melts that relate to the Earth's magnetic field; history, development and education in geophysics (since 1981 in Field 18)
 magnetic and gravity fields of the Earth (since 1981 in Field 18)

Exclusions: Meteorology, magnetosphere, astrophysics, aeronomy and solar physics

Related topics in other fields:

Field 04-Extraterrestrial geology



18-Geophysics, solid-Earth

worldwide structure of the Earth, plate tectonics, continental drift sea-floor spreading, paleomagnetism, structure of core, crust and mantle, Mohorovicic discontinuity

Related topics in other fields:

Field 16-Regional and local structure

Prior to 1975 the following subjects were found in Solid-Earth Geophysics; they are now found in other fields:

Field 20-Geophysical surveys

Field 19-Seismology



19-Geophysics, seismology

earthquakes and elastic waves, including seismograms, wave velocity, seismic sources, seismicity, microearthquakes, microseisms, mechanism of tsunamis and volcanic earthquakes

Related topics in other fields:

Field 18-velocity structure of Earth's interior

Field 22-geologic hazards, seismic risk

Field 30-earthquake engineering



20-Geophysics, applied

applied studies not related to a specific subject including: well-logging, remote sensing, magnetotelluric surveys, gravity surveys, electrical surveys, magnetic surveys, seismic surveys, electromagnetic surveys



21-Hydrogeology and hydrology

ground water-geochemistry, movement, resources, mathematical models

thermal waters, springs, geysers, fumaroles, soil-water regimes, surface water-chemistry, sediment transport, hydrologic cycle (from 1969 to 1974, fewer references to surface water were included)

Exclusions: biology of surface water, hydraulics

Related topics in other fields:

Field 02-geochemistry of water

Field 22-pollution of water and again after 1989



22-Environmental geology

climate change, ecology, geologic hazards-earthquakes, floods, land subsidence, landslides, debris flows, tsunamis, volcanoes, groundwater pollution conservation, land use, pollution of surface water (seldom covered) reclamation

* With the growth of the environmental sciences, inclusion of environmental topics has increased dramatically in recent years.

Related topics in other fields:

Field 22-Hydrogeology and hydrology

Field 30-Engineering geology



23-Surficial geology, geomorphology

genesis and evolution of features on the Earth's surface-meteor craters, cryptoexplosion features, eolian features, erosion features, fluvial features, frost action, lacustrine features, mass movements, shore features, solution features, and volcanic features

Related topics in other fields:

Field 24-Quaternary glacial features and modern volcanology



24-Surficial geology, Quaternary geology

the last 2.6 million years of Earth's history, including:

archaeology, glacial geology, stratigraphy, palynology, modern volcanology, sea-level changes



25-Surficial geology, soils

soils-genesis, morphology, evolution, chemistry, erosion and classification

Exclusions: agricultural studies

Related topics in other fields:

Field 21-soil water regimes

Field 22-soil pollution

Field 23-erosion processes

Field 30-engineering properties of soils



26-Economic geology, general--geology of deposits

26A-General economic geology--geology of deposits

26B-General economic geology--economics

commodity studies-more than one type of commodity mining geology

Related topics in other fields:

Field 27-metals

Field 28-nonmetals

Field 29-energy sources



27-Economic geology of metal ore deposits

27A-Geology of metal ore deposits

27B-Economics of metal ores

metal ores-genesis, resources, economics, exploration, production and utilization (includes uranium)

Related topics in other fields:

Field 26-general and mining geology



28-Economic geology of nonmetal deposits

28A-Geology of nonmetal deposits

28B-Economics of nonmetal deposits

nonmetal deposits-genesis, resources, economics, exploration, production, and utilization

Related topics in other fields:

Field 26-general and mining geology



29-Economic geology of energy sources

29A-Geology of energy sources

29B-Economics of energy sources

petroleum, natural gas, coal deposits (economic studies), oil shale geothermal energy, oil sands

Related topics in other fields:

Field 06-genesis of coal, peat, and lignite

Field 26-general and mining geology

Field 27-uranium ores



30-Engineering geology

waste disposal, reclamation, structures-dams, foundations, highways, marine installations, nuclear facilities, reservoirs, tunnels, underground installations and waterways when geologic subjects such as rock and soil properties are discussed

Related topics in other fields:

Field 22-Environmental geology

List A - GeoRef Categories/Subjects Covered

[Subjects Covered](#) (back to top)

General notes

These thesaurus lists, lists A-R, are used by GeoRef indexers for selecting index terms and by searchers for additional information on the hierarchies not necessarily found in individual term records in the body of the Thesaurus. In most cases, an hierarchical list is given. In some cases, an alphabetical or other list is provided.

The notes under **Searching** attempt to guide the searcher in the use of the list. Searchers might also read the notes on **Indexing** for further clues but should be aware that these notes reflect current practice which in some cases differs from past practice. Further notes on specific terms are in the body of the Thesaurus and additional notes on searching are in the GeoRef Thesaurus, 11th edition [Introduction](#) beginning on page x. Information specific to searching and the individual list topics is included, e.g. a section on subject categories begins on page x.

Under **Indexing** current indexing practice is given. These notes should be read along with the instructions under the individual terms in the body of the Thesaurus.

Subject categories

All references included in the GeoRef database are assigned one or occasionally several specific categories. The list of Subjects Covered shows the categories, lettered subcategories, and major topics as well as related topics in other fields, exclusions, and notes on changes in scope.

Generally one major code is selected with the intention of targeting the article to a particular audience. Similar topics are sometimes found under different codes, such as reclamation under both environmental geology and engineering geology. The indexer generally chooses one over the other and rarely may choose to include the article under both topics.

Searching

Beginning in 1981, the specific letter-coded categories are used. The categories may be used in searching both as words (phrases) or codes.

Single words from the codes are often included in the default subject search field. Thus a search for earthquake engineering can be accomplished by combining variant forms of "earthquake" which may be found in the Basic Index available on a searching platform, with "engineering" (either searched in the category field or the default subject search field).

Categories may also be used to eliminate unwanted aspects from a search. A search on magmas, for example, could be restricted to Earth-bound processes by using the Boolean Not with "extraterrestrial". To distinguish papers on commodities, the user may restrict the category to economic geology, e.g. copper AND economic in category. For geochemical papers, one might want to exclude economic in the category.

When searching categories, keep in mind that certain categories are not used with Quaternary geology 24. Therefore if the searcher wants to include those articles, the search could include the topic as an index term with Quaternary geology as the category, or with Quaternary as an index term, e.g.: igneous rocks and 05* in category; OR igneous rocks and Quaternary in category.

For specific field identifiers, see the documentation for the individual retrieval system. For more information regarding the application of each category code, see [Subjects Covered](#) above.

Indexing

- In some categories, such as Geochemistry 02, Paleontology 08-11, and Economic Geology 26-29, there is a general category which is used for articles on the discipline or technique, or when more than one of the topics are included in the same article, e.g. when both hydrochemistry 02B and soils 02C are included, then 02A would be selected as the geochemistry category.
 - Seismology applied to hazards engineering is used with Engineering geology 30, otherwise, seismology is usually placed under geologic hazards in Environmental geology 22, or in Geophysics, seismology 19.
 - Quaternary geology is placed in category 24 rather than petrology (05, 06), paleontology 08-11, stratigraphy 12, structural geology 16, solid-Earth geophysics 18, geomorphology 23, or soils 25.
 - Extraterrestrial geology 04 is used alone. If an Earth process or meteorites are discussed in the same record, other categories such as 02 Geochemistry may be used as well.
 - Areal geology 13 is used where the article deals with three or more separate topics and is concerned with an area.
 - Areal geology, maps and charts 14 is used for discussions of mapping and maps larger than a standard manuscript page.
 - General geophysics 17B is used where geophysics of rocks and minerals are related to the Earth's core or mantle.
 - Geomorphology 23 papers on landforms use many of the common feature names, such as deltas. Other topics are indexed using environment or sedimentation terms.
 - Economic geology 26-29 papers which focus on economics rather than geology of the commodity are designated with a B code, e.g. 26B-29B. Articles with a commodity economics focus are rarely covered unless they occur with another topic of interest.
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