

沈其韩,耿元生. 2009. 变质作用分类的历史回顾和新的试行分类建议. 岩石学报, 25(8): 1737-1748

变质作用分类的历史回顾和新的试行分类建议

作者

单位

[沈其韩](#)

[中国地质科学院地质研究所, 北京 100037](#)

[耿元生](#)

基金项目: 本文受中国地质调查局工作项目“1:500万变质地质图的编制与研究”资助.

摘要:

根据变质作用分类研究的历史回顾和最新进展,本文介绍了一个试行的、较系统的变质作用分类方案,可分为局部性的变质作用和区域性的变质作用两个大类9个类型。局部性的变质作用包括以下5个类型:(1)接触变质作用,包括热变质作用、接触交代变质作用和高热变质作用3个亚类;(2)低-中-高温动力变质作用,包括低-中-高温韧性剪切带变质作用和温压递进逆冲断层变质作用2个亚类;(3)冲击变质作用;(4)水热变质作用;(5)燃烧变质作用。区域性的变质作用可分为以下4个类型:(6)早前寒武纪克拉通基底变质作用-低中压-中高温区域变质作用,可分为5个亚类,分别是低-中压角闪岩相变质作用、低-中压麻粒岩相变质作用、低-中压角闪岩相-麻粒岩相变质作用、低-中压绿片岩相-角闪岩相递进的变质作用和区域超高温麻粒岩相变质作用;(7)造山带变质作用,可分为3个亚类,分别是低温-低压区域动力变质作用、碰撞造山变质作用和深俯冲高压-超高压区域变质作用;(8)埋深变质作用;(9)洋底变质作用。

英文摘要:

Based on a history review of the advancement in classification of the metamorphism types, this paper has proposed a tentative and systematic classification of types of metamorphism. Metamorphism can be divided into two great types: Local and regional metamorphism, each of which involves 4 or 5 types. Local metamorphism is divided into the following five types: (1) contact metamorphism which includes three subtypes, i.e. thermal metamorphism, contact metasomatic metamorphism and pyro-metamorphism; (2) low-medium-high temperature dynamic metamorphism involving two subtypes such as low-medium-high temperature ductile shear zone metamorphism and temperature- and pressure-increasing thrust metamorphism; (3) impact (or shock) metamorphism; (4) hydrothermal metamorphism; (5) burn metamorphism. Regional metamorphism is divided into the following four types; (6) Early Precambrian craton metamorphism or low-medium pressure to medium-high temperature regional metamorphism which include five subtypes: low-medium pressure amphibolite facies metamorphism, low-medium pressure granulite facies metamorphism, low-medium pressure amphibolite facies-granulite facies metamorphism, low-medium pressure greenschist to amphibolite facies progressive metamorphism and regional ultrahigh temperature granulite facies metamorphism; (7) orogenic metamorphism including three subtypes: i.e. low-temperature-low-pressure regional dynamic metamorphism, collision metamorphism and deep subduction zone high-ultrahigh pressure metamorphism; (8) burial metamorphism; and (9) ocean-floor metamorphism.

关键词: [接触变质作用](#) [动力变质作用](#) [冲击变质作用](#) [造山带变质作用](#) [早前寒武纪克拉通变质作用](#) [埋深变质作用](#) [洋底变质作用](#)

投稿时间: 2009-03-01 最后修改时间: 2009-05-01

[HTML](#) [查看全文](#) [查看/发表评论](#) [下载PDF阅读器](#)

黔ICP备07002071号-2

主办单位: 中国矿物岩石地球化学学会

单位地址: 北京9825信箱/北京朝阳区北土城西路19号

本系统由北京勤云科技发展有限公司设计

[linezing.com](#)