





图 1 河南省郑州市地质图







THE GEOLOGICAL CHARACTERISTICS OF PRO-  
TEROZOIC MARINE VOLCANIC ROCKS—SPLITE  
IN THE XINHE AREA, NORTHERN LIAONING

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Abstract

Just volcanic outcrops rock distributed extensively in Proterozoic strata in the Xunhe area in northern Liaoning were previously called the "Chalcedony schists", covering an area of about 2000 sq km. The origin and age of the volcanic rocks have long been controversial, according to the data of 1:50000 regional surveys obtained in recent years, the paper deals with the regional distribution, petrological occurrence, rock types, mineral composition, textures and structures and pervasiveness of the volcanic rocks. Finally they are confirmed to be marine volcanic rocks—spilitic—of Mesoproterozoic age (Proterozoic) and the Eshengou Subformation has been established.

1. INTRODUCTION

In addition to the northern magmatic belt such as the Gashanina 666 belt and the Vaionan 666 belt (with a displacement of 133–139 km), and the nappes resulted in large-scale crustal shortening (with a crustal strain of 25.1–75.2%)<sup>1,2</sup>.

On the basis of a correlation of regional characteristics and structural analysis on different scales, the author discusses the genetic relation between strike-slip shearing and nappes and the tectonic evolution in the study area during the Induside-oroly Tethyanian period from the kinetic and dynamic points of view.