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Autore	Wang Wei
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Sommario/riassunto	This thesis presents geological, petrological, geochemical, and zircon U–Pb–Lu–Hf isotopic field data for representative Precambrian lithologies in the Western Liaoning-Northeastern Hebei Provinces along the northern margin of the North China Craton (NCC). It describes late Neoproterozoic (2.64–2.48 Ga) supracrustal metavolcanic rocks and granitoid gneisses; late Paleoproterozoic (1.72–1.68 Ga) Jianping alkaline plutons and Pinggu alkaline volcanic rocks; and newly discovered ~1.23 Ga mafic dykes. The nature of magma sources and genesis of each magmatic episode are investigated, and the Precambrian (~2.6–1.2 Ga) lithospheric mantle evolution and crust-mantle interaction processes are established for the first time –aspects that provide important constraints in our understanding of the Precambrian crustal evolution and geodynamic processes in the region studied.