





Special Issue Reprint

# **Large Igneous Provinces**

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Over the past decade, major advances have been made in global research on the critical role of large igneous provinces (LIPs) in major geodynamic processes. These include the formation and evolution of the lithosphere and mantle, supercontinent breakup, dramatic climate change events (including mass extinctions), and the genesis of major ore deposits.

This Special Issue highlights recent progress in LIP research through eight papers arranged by LIP age. The contributions include insights into source chemistry for the young (16 Ma) Columbia River LIP, the plumbing system of the 118–114 Ma Rajmahal flood basalts in the context of the Kerguelen plume, mechanisms by which plume-related LIPs drive continental breakup, magnetic fabric studies used to determine magma flow in parts of the 252 Ma Siberian Traps LIP, characterization of an intrusion associated with the poorly understood ca. 260 Ma Khangai LIP, application of U–Pb garnet dating to alkaline ultramafic complexes in the ca. 645–625 Ma Eastern Sayan Province, and linking Neoproterozoic redbeds to hydrothermal fluids derived from the 940–890 Ma Dashigou LIP.





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