

Contents

* HAUGHTON, P. D. W., TODD, S. P. & MORTON, A. C. Sedimentary provenance studies	1
ALLEN, P. Provenance research: Torridonian and Wealden	13
* ZUFFA, G. G. On the use of turbidite arenites in provenance studies: critical remarks	23
* MORTON, A. C. Geochemical studies of detrital heavy minerals and their application to provenance research	31
TORTOSA, A., PALOMARES, M. & ARRIBAS, J. Quartz grain types in Holocene deposits from the Spanish Central System: some problems in provenance analysis	47
* BASU, A. & MOLINAROLI, E. Reliability and application of detrital opaque Fe-Ti oxide minerals in provenance determination	55
HURFORD, A. J. & CARTER, A. The role of fission track dating in discrimination of provenance	67
BATTEN, D. J. Reworking of plant microfossils and sedimentary provenance	79
VELBEL, M. A. & SAAD, M. K. Palaeoweathering or diagenesis as the principal modifier or sandstone framework composition? A case study from some Triassic rift-valley redbeds of eastern North America	91
MIŁODOWSKI, A. E. & ŻALASIEWICZ, J. A. Redistribution of rare earth elements during diagenesis of turbidite/hemipelagite mudrock sequences of Llandovery age from Central Wales	101
VALLONI, R., LAZZARI, D. & CALZOLARI, M. A. Selective alteration of arkose framework in Oligo-Miocene turbidites of the Northern Apennines foreland: impact on sedimentary provenance analysis	125
CLIFF, R. A., DREWERY, S. E. & LEEDER, M. R. Sourcelands for the Carboniferous Pennine river system: constraints from sedimentary evidence and U-Pb geochronology using zircon and monazite	137
EVANS, J. A., STONE, P. & FLOYD, J. D. Isotopic characteristics of Ordovician greywacke provenance in the Southern Uplands of Scotland	161
* FLOYD, P. A., SHAIL, R., LEVERIDGE, B. E. & FRANKE, W. Geochemistry and provenance of Rhenohercynian synorogenic sandstones: implications for tectonic environment discrimination	173
GERRARD, C. M. Sedimentary petrology and the archaeologist: the study of ancient ceramics	189
GRAHAM, J. R., WRAFTER, J. P., DALY, J. S. & MENUGE, J. F. A local source for the Ordovician Derryveeny Formation, western Ireland: implications for the Connemara Dalradian	199
MCCANN, T. Petrological and geochemical determination of provenance in the southern Welsh Basin	215
PIRRIE, D. Controls on the petrographic evolution of an active margin sedimentary sequence: the Larsen Basin, Antarctica	231
HUMPHREYS, B., MORTON, A. C., HALLSWORTH, C. R., GATLIFF, R. W. & RIDING, J. B. An integrated approach to provenance studies: a case example from the Upper Jurassic of the Central Graben, North Sea	251
ARRIBAS, J. & ARRIBAS, M. E. Petrographic evidence of different provenance in two alluvial fan systems (Palaeogene of the northern Tajo Basin, Spain)	263
GARDEN, I. R. Changes in the provenance of pebbly detritus in southern Britain and northern France associated with basin rifting	273
NICHOLS, G., KUSNAMA & HALL, R. Sandstones of arc and ophiolite provenance in a backarc basin, Halmahera, eastern Indonesia	291
CAWOOD, P. A. Nature and record of igneous activity in the Tonga arc, SW Pacific, deduced from the phase chemistry of derived detrital grains	305
EVANS, M. J. & MANGE-RAJETZKY, M. A. The provenance of sediments in the Barrême thrust-top basin, Haute-Provence, France	323
CUTHBERT, S. J. Evolution of the Devonian Hornelen Basin, west Norway: new constraints from petrological studies of metamorphic clasts	343
Index	361