

## Contents

Preface	vii
VILLA, I. M. Disequilibrium textures versus equilibrium modelling: geochronology at the crossroads	1
FORSTER, M. A. & LISTER, G. S. Argon enters the retentive zone: reassessment of diffusion parameters for K-feldspar in the South Cyclades Shear Zone, Ios, Greece	17
MAMTANI, M. A. & GREILING, R. O. Serrated quartz grain boundaries, temperature and strain rate: testing fractal techniques in a syntectonic granite	35
CIRRINCIONE, R., FAZIO, E., HEILBRONNER, R., KERN, H., MENGEL, K., ORTOLANO, G., PEZZINO, A. & PUNTURO, R. Microstructure and elastic anisotropy of naturally deformed leucogneiss from a shear zone in Montalto (southern Calabria, Italy)	49
WATANABE, T. Geometry of intercrystalline brine in plastically deforming halite rocks: inference from electrical resistivity	69
ZUCALI, M., BARBERINI, V., CHATEIGNER, D., OULADDIAF, B. & LUTTEROTTI, L. Brittle <i>plus</i> plastic deformation of gypsum aggregates experimentally deformed in torsion to high strains: quantitative microstructural and textural analysis from optical and diffraction data	79
BAUMANN, C., GERYA, T. V. & CONNOLLY, J. A. D. Numerical modelling of spontaneous slab breakoff dynamics during continental collision	99
GARDI, A., BAIZE, S. & SCOTTI, O. Present-day vertical isostatic readjustment of the Western Alps revealed by numerical modelling and geodetic and seismotectonic data	115
SPLENDRE, R., MAROTTA, A. M., BARZAGHI, R., BORGHI, A. & CANNIZZARO, L. Block model versus thermomechanical model: new insights on the present-day regional deformation in the surroundings of the Calabrian Arc	129
MEDA, M., MAROTTA, A. M. & SPALLA, M. I. The role of mantle hydration in continental crust recycling in the wedge region	149
SALVI, F., SPALLA, M. I., ZUCALI, M. & GOSSO, G. Three-dimensional evaluation of fabric evolution and metamorphic reaction progress in polycyclic and polymetamorphic terrains: a case from the Central Italian Alps	173
HOBBS, B. E., ORD, A., SPALLA, M. I., GOSSO, G. & ZUCALI, M. The interaction of deformation and metamorphic reactions	189
Index	225