

Contents

JENKIN, G. R. T., LUSTY, P. A. J., McDONALD, I., SMITH, M. P., BOYCE, A. J. & WILKINSON, J. J. Ore deposits in an evolving Earth: an introduction	1
CAWOOD, P. A. & HAWKESWORTH, C. J. Temporal relations between mineral deposits and global tectonic cycles	9
MOLE, D. R., FIORENTINI, M. L., CASSIDY, K. F., KIRKLAND, C. L., THEBAUD, N., McCUAIG, T. C., DOUBLIER, M. P., DUURING, P., ROMANO, S. S., MAAS, R., BELOUSOVA, E. A., BARNES, S. J. & MILLER, J. Crustal evolution, intra-cratonic architecture and the metallogeny of an Archaean craton	23
ANGERER, T., DUURING, P., HAGEMANN, S. G., THORNE, W. & McCUAIG, T. C. A mineral system approach to iron ore in Archaean and Palaeoproterozoic BIF of Western Australia	81
YARDLEY, B. W. D. & CLEVERLEY, J. S. The role of metamorphic fluids in the formation of ore deposits	117
TRELOAR, P. J., LAWRENCE, D. M., SENGHOR, D., BOYCE, A. & HARBIDGE, P. The Massawa gold deposit, Eastern Senegal, West Africa: an orogenic gold deposit sourced from magmatically derived fluids?	135
BULL, S. W. & LARGE, R. R. Setting the stage for the genesis of the giant Bendigo ore system	161
MOLES, N. R., BOYCE, A. J. & FALICK, A. E. Abundant sulphate in the Neoproterozoic ocean: implications of constant $\delta^{34}\text{S}$ of barite in the Aberfeldy SEDEX deposits, Scottish Dalradian	189
HILL, N. J., JENKIN, G. R. T., BOYCE, A. J., SANGSTER, C. J. S., CATTERALL, D. J., HOLWELL, D. A., NADEN, J. & RICE, C. M. How the Neoproterozoic S-isotope record illuminates the genesis of vein gold systems: an example from the Dalradian Supergroup in Scotland	213
SHUSTER, J., MARSDEN, S., MACLEAN, L. C. W., BALL, J., BOLIN, T. & SOUTHAM, G. The immobilization of gold from gold (III) chloride by a halophilic sulphate-reducing bacterial consortium	249
LUSTY, P. A. J. & GUNN, A. G. Challenges to global mineral resource security and options for future supply	265
KESLER, S. E. & WILKINSON, B. H. Tectonic-diffusion estimates of global mineral resources: extending the method: granitic tin deposits	277
GRAEDEL, T. E. & NASSAR, N. T. The criticality of metals: a perspective for geologists	291
CATHLES, L. M. Future Rx: optimism, preparation, acceptance of risk	303
Index	325