

## Appendix

### Chapter 11

#### Biodiversity, biogeography and phylogeography of Ordovician rhynchonelliform brachiopods

The following appendix consists of a reference list that includes both the publications cited in Harper *et al.* 2013 (this volume) and those cited in the locality list that relates to the locations labelled on the palaeogeographical maps. These data were assembled mainly by the first three authors and checked by the remaining authors; both stratigraphical and taxonomic data have been updated where necessary. The locality list includes both primary and where relevant secondary sources. The latter commonly contain updated taxon lists. Such lists can never be completely comprehensive but the references cited are considered to report the most accurate and relevant data currently available for the basis of the palaeobiogeographical reconstructions and statistical analyses.

### References

- Academy of Geological Sciences, Jiangsu Bureau of Petroleum Prospecting, Nanjing Institute of Geology, Paleontology, and Academia Sinica. 1988. Sinian–Triassic biostratigraphy of the Lower Yangtze peneplatform in Jiangsu Region. Nanjing University Press, Nanjing, China.
- Aceñolaza, F. G. 1968. Geología estratigráfica de la región de la Sierra de Cajas, Dpto. Humahuaca (provincia de Jujuy). *Revista de la Asociación Geológica Argentina*, **23**, 207–222.
- Aceñolaza, F. G. 1983. The Tremadocian beds and the Cambrian–Ordovician boundary problems in Latin America. In: *Papers for the symposium on the Cambrian–Ordovician and Ordovician–Silurian boundaries*. Nanjing Institute of Geology and Palaeontology, Academia Sinica, 88–93.
- Adrain, J. M., Westrop, S. R., Chatterton, B. D. E. & Ramsköld, L. 2000. Silurian trilobite alpha diversity and the end-Ordovician mass extinction. *Paleobiology*, **26**, 625–646.
- Alberstadt, L. P. 1973. Articulate brachiopods of the Viola Formation (Ordovician) in the Arbuckle Mountains, Oklahoma. *Oklahoma Geological Survey Bulletin*, **117**, 1–89.

- Amsden, T. W. 1974. Late Ordovician and Early Silurian articulate brachiopods from Oklahoma, southwestern Illinois, and eastern Missouri. *Oklahoma Geological Survey Bulletin*, **119**, 1–154.
- Amsden, T. W. & Sweet, W. C. 1983. Upper Bromide Formation and Viola Group (Middle and Upper Ordovician) in eastern Oklahoma. *Oklahoma Geological Survey Bulletin*, **132**, 1–76.
- Andreeva, O. N. & Nikiforova, O. I. 1955. Brakiopody [Klass Brachiopoda], 61–81. In: Nikiforova, O. I. (ed) *Poevoi atlas ordovikskoi i siluriiskoi fauny sibirskoi platformy* [Field atlas of Ordovician and Silurian faunas of the Siberian Platform]. VESGEI, Gosgeoltekhizdat, Moskva, 268 pp. [in Russian].
- Angelin, N. P. & Lindström, G. 1880. *Fragmenta Silurica e dono Caroli Henrici Wegelin*. Kungliga Svenska vetenskapsakademien, Stockholm. 60 pp.
- Arbin, P., Havlíček, V. & Tamain, G. 1978. La "Formation d'Enevrio" de l'Ordovicien de la Sierra Morena (Espagne), et sa faune à *Drabovia praedux* nov. sp. (Brachiopoda). *Bulletin de la Société Géologique de France* (7), **20**, 29–37.
- Baarli, B. G. 1987. Benthic faunal associations in the Lower Silurian Solvik Formation of the Oslo-Asker Districts, Norway. *Lethaia*, **20**, 75–90.
- Baarli, B. G. 1988. The Llandovery enteletacean brachiopods of the central Oslo region, Norway. *Palaeontology*, **31**, 1101–1129.
- Baarli, B. G. 1995. Orthacean and strophomenid brachiopods from the Lower Silurian of the central Oslo Region. *Fossils and Strata*, **39**, 93 pp.
- Baarli, B. G. & Harper, D. A. T. 1986. Relict Ordovician brachiopod faunas in the Lower Silurian of Asker, Oslo Region, Norway. *Norsk Geologisk Tidsskrift*, **66**, 87–98.
- Babin, C. & Destombes, J. 1990. Les mollusques bivalves et rostroconches Ordoviens de l'Anti-Atlas marocain: Intérêt paléogéographique de leur inventaire. *Géologie Méditerranéenne*, **17**, 243–261.
- Babin, C., Courtefoile, R., Mélou, M., Pillet, J., Vizcaïno, D. & Yochelson, E. L. 1982. Brachiopodes (Articulés) et mollusques (bivalves, rostroconches, monoplacophores, gastéropodes) de l'Ordovicien inférieur (Trémadocien–Arenigien) de la Montagne Noire (France méridionale). *Mémoires de la Société d'études scientifiques de l'Aude, Carcassonne*, 63 pp, 15 pls.
- Bancroft, B. B. 1945. The brachiopod zonal indices of the stages Costonian to Onnian in Britain. *Journal of Paleontology*, **19**, 181–252.

- Bassett, M. G. 1981. The Ordovician brachiopods of Cornwall. *Geological Magazine*, **118**, 647–664.
- Bassett, M. G. 1986. Silurian stratigraphy and facies development in Scandinavia. In: Gee, D. G. & Sturt, B. A. (eds) *The Caledonide Orogen - Scandinavia and Related Areas*. Wiley, Chichester.
- Bassett, M.G., Popov, L.E. & Holmer, L.E. 1999. Organophosphatic brachiopods: patterns of biodiversification and extinction in the early Palaeozoic. *Geobios*, **32**, 145-163.
- Bassett, M.G., Popov, L.E. & Holmer, L.E. 2002. Brachiopods: Cambrian-Tremadoc precursors to Ordovician radiation events. In: J.A. Crame & A.W. Owen (Eds), *Palaeobiogeography and Biodiversity Change: the Ordovician and Mesozoic-Cenozoic Radiations*. Special Publications. 194. The Geological Society, London, pp. 13-23.
- Bassett, M. G., Popov, L. E., Aldridge, R. J., Gabbott, S. E., & Theron, J. N. 2009. Brachiopoda from the Soom Shale Lagerstätte (Upper Ordovician, South Africa). *Journal of Paleontology*, **83**, 614–623.
- Bates, D. E. B. 1968. The lower Palaeozoic brachiopod and trilobite faunas of Anglesey. *Bulletin of the British Museum (Natural History), Geology*, **16**, 128–199.
- Bates, D. E. B. 1969. Some early Arenig brachiopods and trilobites from Wales. *Bulletin of the British Museum (Natural History), Geology*, **18**, 28 pp.
- Benedetto, J. L. 1987. Braquiópodos clitamboníticos de la Formación San Juan (Ordovícico temprano), Precordillera Argentina. *Ameghiniana*, **24**, 95–108.
- Benedetto, J. L. 1995. La fauna de braquiópodos de la formación Las Plantas (Ordovicico Tardío, Caradoc), Precordillera Argentina. *Revista Española de Paleontología*, **10**, 239–258.
- Benedetto, J.L. 1998. Early Palaeozoic brachiopods and associated shelly faunas from western Gondwana: their bearing on the geodynamic history of the pre-Andean margin. *Geological Society, London, Special Publications*, **142**, 57-83.
- Benedetto, J. L. 1999. El género *Drabovinella* (Brachiopoda) en el Caradociano de la Sierra de Mojotoro, Provincia de Salta, Argentina. *Ameghiniana*, **36**, 235–238. [in Spanish].
- Benedetto, J. L. 2001. Palaeolatitudinal distribution patterns of higher rhynchonelliform brachiopods in the early Ordovician. In: *Brachiopods: past and present*. C.H.C. Brunton, L.R.M. Cocks & S.L. Long. (Eds). Brachiopods: past and present, Special Vol. Series **63**. Taylor and Francis, London, UK, pp. 299-314.

- Benedetto, J. L. 2002. The Ordovician brachiopod faunas of Argentina: chronology and biostratigraphic succession. *Correlación Geológica*, **16**, 87–106.
- Benedetto, J. L. 2003. *Ordovician fossils of Argentina*. Universidad Nacional de Córdoba, pp. 561.
- Benedetto, J. L. 2007. New Upper Cambrian–Tremadoc rhynchonelliformean brachiopods from northwestern Argentina: Evolutionary trends and diversification of plectorthoideans in the Andean Gondwana. *Journal of Paleontology*, **81**, 261–285.
- Benedetto, J. L. & Carrasco, P. A. 2002. Tremadoc (earliest Ordovician) brachiopods from Purmamarca and the Sierra de Mojotoro, Cordillera Oriental of northwestern Argentina. *Géobios*, **35**, 647–661.
- Benedetto, J. L. & Herrera, Z. A. 1986. Braquiópodos del Suborden Strophomenidina de la Formación San Juan (Ordovícico temprano), Precordillera de San Juan, Argentina. *4º Congreso Argentino Paleontología y Bioestratigrafía, Actas*, **1**, 113–123. [in Spanish]
- Benedetto, J. L. & Herrera, Z.A. 1987a. The genus *Platystrophia* King (Brachiopoda) in the San Juan Formation of the Argentinian Precordillera. *Ameghiniana*, **24**, 51–59.
- Benedetto, J. L. & Herrera, Z.A. 1987b. *Sanjuanella*, un nuevo género de la Subfamilia Ahtiellinae (Brachiopoda, Plectambonitacea) del Ordovícico de la Precordillera Argentina. *4º Congreso Latinoamericano de Paleontología, Actas*, **1**, 97–109.[in Spanish].
- Benedetto, J. L. & Herrera, Z.A. 1993. New Early Ordovician Leptellinidae (Brachiopoda) from the San Juan Formation, Argentina. *Ameghiniana*, **30**, 39–58.
- Benedetto, J.L. & Sánchez, T.M. 1990. Fauna y edad del estratotipo de la Formación Salar del Rincón (Eopaleozoico, Puna Argentina). *Ameghiniana*, **27**, 317–326.
- Benedetto, J.L. & Sánchez, T.M. 2003. The Ordovician radiation from a Gondwanan perspective: the early diversification of brachiopods and bivalves on mid- to high-latitude siliciclastic platforms. *Serie Correlación Geológica*, **17**, 245–249.
- Bergström, J. 1968. Upper Ordovician brachiopods from Västergötland, Sweden. *Geologica et Palaeontologica*, **2**, 1–35.
- Bergström, S. M., Chen, X., Gutiérrez-Marco, J. C. and Dronov, A. 2009. The new chronostratigraphic classification of the Ordovician System and its relations to major regional series and stages and to  $\delta^{13}\text{C}$  chemostratigraphy. *Lethaia*, **42**, 97–107.
- Berry, W. B. N. 1964. The Middle Ordovician of the Oslo Region, Norway, No. 16. Graptolites of the Ogygioceras Series. *Norsk Geologisk Tidsskrift*, **44**, 61–170

- Berry, W. B. N. & Boucot, A. J. 1973. Glacio-eustatic control of Late Ordovician–Early Silurian platform sedimentation and faunal changes. *Bulletin of the Geological Society of America*, **84**, 275–284.
- Berry, W. B. N., Lawson, D. A., & Yancy, E. S. 1979. Species diversity patterns in some Middle Ordovician communities from California, Nevada. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **26**, 99–116.
- Blodgett, R. B., Wheeler, K. L., Rohr, D. M., Harris, A. G. & Weber, F. R. 1987. A late Ordovician reappraisal for the upper Fossil Creek Volcanics, and possible significance for glacio-eustasy. In: Hamilton, T. D. & Galloway, J. P. (eds) *Geologic Studies in Alaska by the U.S. Geological Survey during 1986*. U.S. Geological Survey Circular, **998**, 54–58.
- Blodgett, R. B., Rohr, D. M. & Boucot, A. J. 2002. Paleozoic linkages between Alaskan accreted terranes and Siberia, 273–291. In: Miller, E. L., Grantz, A. & Klemperer, S. L. (eds) *Tectonic Evolution of the Bering Shelf – Chukchi Sea-Arctic Margin and Adjacent Landmasses*. Geological Society of America Special Paper, **360**, 387 pp.
- Botquelen, A., 2003. *Impact des variations eustatiques sur les assemblages benthiques à brachiopodes: l'Ordovicien sarde et le Dévonien Ibéro-armoricain. Paléoécologie-Taphonomie-Stratigraphie séquentielle—Systématique*. Unpublished Ph.D. dissertation, Université de Bretagne Occidentale, Brest, 325 pp.
- Botquelen, A. & Mélou, M. 2007. Caradoc brachiopods from the Armorican Massif (Northwestern France). *Journal of Paleontology*, **81**, 1080–1090.
- Bottjer, D.J., Droser, M.L., Sheehan, P.M. and McGhee, G.R.Jr. 2001. The Ecological Architecture of Majoe Events in the Phanerozoic History of Marine Invertebrate Life. In: Allmon, W.D. and Bottjer, D.J., eds. *Evolutionary Paleoecology*. New York: Columbia University Press. 35–61.
- Boucot, A. J., 1983. Does evolution take place in an ecological vacuum? *Journal of Paleontology*, **57**, 1–30.
- Boucot, A. J., Rong, J. -y., Chen, X. & Scotese, C. R. 2003. Pre-Hirnantian Ashgill climatically warm event in the Mediterranean region. *Lethaia*, **36**, 119–132.
- Brenchley, P. J. 1984. Late Ordovician extinctions and their relationship to the Gondwana glaciation, 291–327. In: Brenchley, P.J. (ed) *Fossils and climate*. John Wiley and Sons, New York.

- Brenchley, P. J. & Cocks, L. R. M. 1982. Ecological associations in a regressive sequence: the latest Ordovician of the Oslo - Asker district, Norway. *Palaeontology*, **25**, 783–815.
- Brenchley, P. J., Marshall, J. D., Carden, G. A. F., Robertson, D. B. R., Long, D. F. G., Meidla, T., Hints, L. & Anderson, T. F. 1994. Bathymetric and isotopic evidence for a short-lived Late Ordovician glaciation in a greenhouse period. *Geology*, **22**, 295–298.
- Brenchley, P. J., Marshall, J. D., Hints, L. & Nolvak, J. 1997. New isotopic data solving an old biostratigraphic problem: the age of the upper Ordovician brachiopod *Holorhynchus giganteus*. *Journal of Geological Society, London*, **154**, 335–342.
- Bruton, D. L. & Harper, D. A. T. 1981. Brachiopods and trilobites of the early Ordovician serpentine Otta Conglomerate, south central Norway. *Norsk Geologisk Tidsskrift*, **61**, 153–181.
- Buggisch, W., Joachimski, M. M., Lehnert, O., Bergström, S. M., Repetski, J. E. & Webers, G. F., 2010. Did intense volcanism trigger the first Late Ordovician icehouse? *Geology*, **38**, 327–330.
- Butts, C. 1940. Geology of the Appalachian Valley in Virginia. Part I – Geological text and illustrations. *Virginia Geological Survey Bulletin*, **52**, 1–568.
- Candela, Y. 2003. Late Ordovician brachiopods from the Bardahessiagh Formation of Pomeroy, Ireland. *Monograph of the Palaeontological Society, London* (Publ. No. 618, part of Vol. 156 for 2002), **95**, 12. pls.
- Candela, Y. 2006a. Statistical comparisons of late Caradoc (Ordovician) brachiopod faunas around the Iapetus Ocean, and terranes located around Australia, Kazakhstan and China. *Geodiversitas*, **28**, 433–446.
- Candela, Y. 2006b. Late Ordovician brachiopod faunas from Pomeroy, Northern Ireland: a palaeoenvironmental synthesis. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, **96**, 317–325.
- Candela, Y. 2011. Phylogenetic relationships of leptellinid brachiopods. *Alcheringa*, **35**, 413–426.
- Candela, Y. & Harper, D. A. T. 2010. Late Ordovician (Katian) brachiopods from the Southern Uplands of Scotland: biogeographic patterns on the edge of Laurentia. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, **100**, 253–274.

- Capera, J. C., Courte sole, R. & Pillet, J. 1978. Contribution à l'étude de l'Ordovicien inférieur de la Montagne Noire : biostratigraphie et révision des Agnostida. *Annales de la Société Géologique du Nord*, **98**, 67–87.
- Carlisle, H. 1979. Ordovician stratigraphy of the Tramore area, County Waterford, with a revised Ordovician correlation for southeast Ireland. In: Harris, A. L., Holland, C. H. & Leake, B. E. (eds) *The Caledonides of the British Isles - reviewed*. Geological Society of London, Special Publications, 545–554.
- Chang M.-l., 1983. Brachiopods from the Miaopo Formation in Huanghuachang of Yichang, Hubei Province [in Chinese with English abstract]. *Acta Palaeontologica Sinica*, **22**, 474–481.
- Chen, P., Jin, J. & Lenz, A.C., 2008. Evolution, palaeoecology, and palaeobiogeography of the Late Ordovician–Early Silurian brachiopod *Epitomyonia*. *Palaeoworld*, **17**, 85–101.
- Chen Xu, Rong Jia-yu, Mitchell, C. E., Harper, D. A. T., Fan, J., Zhan Ren-bin, Zhang, Y., Li, Rong-yu & Wang Yu. 2000. Late Ordovician to earliest Silurian graptolite and brachiopod biozonation from the Yangtze region, South China, with a global correlation. *Geological Magazine*, **137**, 623–650.
- Christiansen, J.L. & Stouge, S. 1999. Oceanic circulation as an element in palaeogeographical reconstructions: the Arenig (Early Ordovician) as an example. *Terra Nova*, **11**, 73–78.
- Clarkson, E. N. K., Harper, D. A. T., Owen, A. W. & Taylor, C. M. 1992. Ordovician faunas in mass-flow deposits, Southern Scotland. *Terra Nova*, **4**, 245–253.
- Cloud, P. E., jr. & Barnes, V. E. 1957. Early Ordovician sea in Central Texas, 163–214. In: Ladd, H. S. (ed) *Treatise on marine ecology and paleoecology. 2. Paleoecology*. Geological Society of America, Memoir, **67**. Boulder, Colorado.
- Cocks, L. R. M. 1978. A review of the British Lower Palaeozoic brachiopods, including a synoptic revision of Davidson's Monograph. *Palaeontological Society Monograph*, **131**, 1–256.
- Cocks, L. R. M. 1982. The commoner brachiopods of the latest Ordovician of the Oslo - Asker District, Norway. *Palaeontology*, **25**, 755–781.
- Cocks, L. R. M. 1988. Brachiopods across the Ordovician – Silurian boundary. *Bulletin of the British Museum (Natural History), Geology*, **43**, 311–315.

- Cocks, L.R.M. 1996. Lower Palaeozoic brachiopod communities: in Copper, P., and Jisuo Jin, eds., Brachiopods, Proceedings of the Third International Brachiopod Congress: A.A. Balkema, Rotterdam, 69–71.
- Cocks, L. R. M. 2000. The Early Palaeozoic geography of Europe. *Journal of the Geological Society (London)*, **157**, 1–10.
- Cocks, L. R. M. 2001. Ordovician and Silurian global geography. *Journal of the Geological Society (London)*, **158**, 197–210.
- Cocks, L. R. M. 2005. Strophomenate brachiopods from the late Ordovician Boda Limestone of Sweden: Their systematics and implications for palaeogeography. *Journal of Systematic Palaeontology*, **3**, 243–282.
- Cocks, L. R. M. 2008. The Middle Llandovery brachiopod fauna of the Newlands Formation, Girvan Scotland. *Journal of Systematic Palaeontology*, **6**, 61–100.
- Cocks, L. R. M. 2010. Caradoc strophomenoid and plectambonitoid brachiopods from Wales and the Welsh Borderland. *Palaeontology*, **53**, 1155–1200.
- Cocks, L.R.M., Brunton, C.H.C., Rowell, A.J. & Rust, I.C. 1970. The first Lower Palaeozoic fauna proved from South Africa. *Quarterly Journal of the Geological Society, London*, **125**, 583–600.
- Cocks, L. R. M. & Cooper, R. A. 2004. Late Ordovician (Hirnantian) shelly fossils from New Zealand and their significance. *New Zealand Journal of Geology & Geophysics*, **47**, 71–80.
- Cocks, L.R.M. & Fortey, R.A. 1982: Faunal evidence for oceanic separations in the Palaeozoic of Britain. *Journal of the Geological Society London*, **139**, 465–478.
- Cocks, L. R. M. & Fortey, R. A. 1990. Biogeography of Ordovician and Silurian faunas. *Geological Society Memoir*, **12**, 97–104.
- Cocks, L. R. M. & Fortey, R. A. 1997. A new *Hirnantia* fauna from Thailand and the biogeography of the latest Ordovician of Southeast Asia. *Geobios*, **30**, (Supp. 1), 117–126.
- Cocks, L.R.M. & Fortey, R.A. 1998: The Lower Palaeozoic margins of Baltica. *Geologiske Föreningens i Stockholm Förhandlingar*, **120**, 173–179.
- Cocks, L. R. M. & Lockley, M. G. 1981. Reassessment of the Ordovician brachiopods from the Budleigh Salterton Pebble Bed, Devon. *Bulletin of the British Museum (Natural History), Geology*, **35**, 111–124.

- Cocks, L. R. M. & Modzalevskaya, T. L. 1997. Late Ordovician brachiopods from Taimyr, Arctic Russia, and their palaeogeographical significance. *Palaeontology*, **40**, 1061–1093.
- Cocks, L. R. M. & Price, D. 1975. The biostratigraphy of the Upper Ordovician and Lower Silurian of south-west Dyfed, with comments on the *Hirnantia* fauna. *Palaeontology*, **18**, 703–724.
- Cocks, L. R. M. & Rong Jia-yu. 1988. A review of the Late Ordovician *Foliomena* brachiopod fauna with new data from China, Wales & Poland. *Palaeontology*, **31**, 53–67.
- Cocks, L. R. M. & Rong Jia-yu. 1989. Classification and review of the brachiopod superfamily Plectambonitacea. *Bulletin of the British Museum (Natural History), Geology*, **45**, 77–163.
- Cocks, L. R. M. & Rong Jia-yu. 2008. Earliest Silurian faunal survival and recovery after the end Ordovician glaciation: evidence from the brachiopods. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, **98**, 291–301.
- Cocks, L. R. M. & Torsvik, T. H. 2002. Earth geography from 500 to 400 million years ago: a faunal and palaeomagnetic review. *Journal of the Geological Society, London*, **159**, 631–644.
- Cocks, L. R. M. & Torsvik, T. H. 2005. Baltica from the late Precambrian to the mid-Palaeozoic times: The gain and loss of a terrane's identity. *Earth-Science Reviews*, **72**, 39–66.
- Cocks, L. R. M. & Torsvik, T. H. 2007. Siberia, the wandering northern terrane, and its changing geography through the Palaeozoic. *Earth-Science Reviews*, **82**, 29–74.
- Cocks, L. R. M. & Zhan Ren-bin. 1998. Caradoc brachiopods from the Shan States, Burma (Myanmar). *Bulletin of the British Museum (Natural History), Geology*, **54**, 109–130.
- Cocks, L. R. M., Brunton, C. H. C., Rowell, A. J. & Rust, I. C. 1969. The first Lower Palaeozoic fauna proved from South Africa. *Quarterly Journal of the Geological Society of London*, **125**, 583–603.
- Cocks, L. R. M., McKerrow, W. S. & vanStaal, C. R. 1997. The margins of Avalonia. *Geological Magazine*, **134**, 627–636.
- Colman-Sadd, S. P. & Russell, H. A. J. 1982. Geology of the Miguels Lake map area (2D/12), Newfoundland. Current Research, Newfoundland Department of Mines and Energy, Report, **82-1**, 30–50.

- Cooper, G. A. 1930. The brachiopod genus *Pionodema* and its homeomorphs. *Journal of Paleontology*, **4**, 369–382.
- Cooper, G. A. 1956. Chazyan and related brachiopods. *Smithsonian Miscellaneous Collections*, **127**, 1–1245, pls. 1–269.
- Copper, P. 1977. *Zygospira* and some related Ordovician and Silurian atrypoid brachiopods. *Palaeontology*, **20**, 295–335.
- Copper, P. 1982. Early Silurian atrypoids from Manitoulin Island and Bruce Peninsula. *Journal of Paleontology*, **56**, 680–702.
- Copper, P. 1986. Evolution of the earliest smooth spire-bearing atrypoids (Brachiopoda: Lissatrypidae, Ordovician, Silurian). *Palaeontology*, **29**, 827–866.
- Copper, P. 1995. Five new genera of Late Ordovician–Early Silurian brachiopods from Anticosti Island, Eastern Canada. *Journal of Paleontology*, **69**, 846–862.
- Copper, P. 2004. *Silurian (Late Llandovery–Ludlow) atrypid brachiopods from Gotland, Sweden, and the Welsh Borderlands, Great Britain*. NRC Research Press, Ottawa. 215 pp.
- Corbett, K. D. & Banks, M. R. 1974. Ordovician stratigraphy of the Florentine Synclinorium, southwest Tasmania. *Papers and Proceedings of the Royal Society of Tasmania*, **107**, 207–238.
- Cullison, J. S. 1944. The stratigraphy of some Lower Ordovician formations of the Ozark uplift. *University of Missouri School of Mines and Metallurgy Technical Series Bulletin*, **15**, 1–112.
- Curry, G. B. & Williams, A. 1984. Lower Ordovician Brachiopods from the Ben Suardal Limestone Formation (Durness Group) of Skye, Western Scotland. *Transactions of the Royal Society of Edinburgh. Earth Sciences*, **75**, 301–310.
- Dahlqvist, P., Harper, D. A. T. & Wickström, L. M. 2010. Late Ordovician shelly faunas from Jämtland: palaeocommunity development along the margin of the Swedish Caledonides. *Bulletin of Geosciences*, **85**, 505–512.
- Davis, R. A. 1985. Cincinnati fossils, an elementary guide to the Ordovician rocks and fossils of the Cincinnati, Ohio region. *Cincinnati Museum of Natural History, Popular Publication Series*, **10**, 1–60.
- Dewing, K. 1999. Late Ordovician and Early Silurian strophomenid brachiopods of Anticosti Island, Québec, Canada. *Palaeontographica Canadana*, **17**, 1–143.

- Dewing, K. 2001. Hinge modifications and musculature of strophomenoid brachiopods: examples across the Ordovician–Silurian boundary, Anticosti Island. *Canadian Journal of Earth Sciences*, **38**, 125–141.
- Dewing, K. 2004. Shell structure and its bearing on the phylogeny of Late Ordovician – Early Silurian strophomenoid brachiopods from Anticosti Island, Quebec. *Journal of Paleontology*, **78**, 275–286.
- Droser, M.L. & Sheehan, P.M. 1997. Palaeoecology of the Ordovician radiation: Resolution of large-scale patterns with individual clade histories, palaeogeography and environments. *Geobios Mémoire Spécial*, **20**, 221–229.
- Ebbestad, J. O. R. 1999. Trilobites of the Tremadoc Bjørkåsholmen Formation in the Oslo Region, Norway. *Fossils and Strata*, **47**, 1–118.
- Egerquist, E. 2003. New brachiopods from the Lower–Middle Ordovician (Billingen–Volkhov stages) of the East Baltic. *Acta Palaeontologica Polonica*, **48**, 31–38.
- Egerquist, E. 2004. *Ordovician (Billingen and Volkov stages) brachiopod faunas of the east Baltic*. PhD-Thesis.
- Elaouad-Debbaj, Z. 1984. Chitinozoaires ashgilliens de l’Anti-Atlas (Maroc). *Geobios*, **17**, 45–68.
- Elaouad-Debbaj, Z. 1986. Chitinozoaires de la formation du Ktaoua Inférieur, Ordovicien supérieur de l’Anti-Atlas (Maroc). *Hercynica Séries II*, **1**, 35–55. [in French].
- Finnegan, S. & Droser, M. L. 2008. Reworking diversity: effects of storm deposition on evenness and sampled richness, Ordovician of the Basin and Range, Utah and Nevada. *Palaios*, **23**, 87–96.
- Finnegan, S., Bergmann, K., Eiler, J. M., Jones, D. S., Fike, D. A., Eisenman, I., Hughes, N. C., Tripati, A. K. & Fischer, W. W. 2011. The magnitude and duration of Late Ordovician–Early Silurian glaciations. *Science*, **331**, 903–906.
- Fix, M. F. 1975. *The Paleontology and stratigraphy of the Smithville and Blackrock Formations of Southeastern Missouri*. M.S. Thesis, Geology, Washington University, 1–147.
- Fortey, R.A. & Cocks, L.R.M. 1986. Marginal faunal belts and their structural implications, with examples from the Lower Palaeozoic. *Journal of the Geological Society, London*, **143**, 151–160.
- Fortey, R. A. & Cocks, L. R. M., 2003. Palaeontological evidence bearing on global Ordovician–Silurian continental reconstructions. *Earth-Science Reviews*, **61**, 245–307.

- Fortey, R. A. & Mellish, C. J. T. 1992. Are some fossils better than others for inferring palaeogeography? The Early Ordovician of the North Atlantic Region as an example. *Terra Nova*, **4**, 210–216.
- Fu, L. -p. 1982. Brachiopoda, 95–178, pls 30–45. In: Xi'an Institute of Geology & Mineral Resources (ed) *Palaeontological Atlas of Northwest China, Shaanxi, Gansu & Ningxia Volume 1*. Geological Publishing House, Beijing, 480 pp., 106 pls.
- Guizhou Stratigraphic Working Group. 1977. Regional stratigraphic table of the southwestern region of China, Guizhou part. Geological Publishing House, Beijing, 104 pp. (in Chinese).
- Gutiérrez-Marco, J. C. & Villas, E. 2007. Brachiopods from the uppermost Lower Ordovician of Peru and their palaeogeographical significance. *Acta Palaeontologica Polonica*, **52**, 547–562.
- Hallam, A. 1992. *Phanerozoic sea-level changes*. Columbia University Press, New York, 266 pp.
- Hammann, W., Robardet, M. & Romanom, M. 1982. The Ordovician System in Southwestern Europe (France, Spain, and Portugal). *International Union of Geological Science publications*, **11**, 47 pp.
- Hammer, Ø. & Harper, D. A. T. 2006. *Palaeontological Data Analysis*. Blackwell Publishing, Oxford, 351 pp.
- Hansen, J. 2008. Upper Ordovician brachiopods from the Arnestad and Frognerkilen formations in the Oslo–Asker district, Norway. *Palaeontos*, **13**, 1–99, 12 pls.
- Hansen, J. & Harper, D. A. T. 2003. Brachiopod microfaunal distribution through the upper Volkov – lower Kunda (Lower Ordovician) rocks, Lynna River, St. Petersburg region. *Bulletin of the Geological Society of Denmark*, **50**, 45–53.
- Hansen, J. & Holmer, L. E. 2010. Diversity fluctuations and biogeography of Ordovician brachiopod faunas in northeastern Spitsbergen. *Bulletin of Geosciences*, **85**, 497–504.
- Harper, D.A.T. 1981. The stratigraphy and faunas of the Upper Ordovician High Mains Formation of the Girvan district. *Scottish Journal of Geology* 17, 247-255.
- Harper, D. A. T. 1984. Brachiopods from the Upper Ardmillan succession (Ordovician) of the Girvan district, Scotland. Part 1. *Monograph of the Palaeontographical Society*, 136 (564), pp. 1-78, pls. 1-11.
- Harper, D. A. T. 1986. The brachiopod *Ptychopleurella lapworthi* (Davidson) from the Ordovician of Girvan, S.W. Scotland. *Journal of Paleontology*, **60**, 845–850.

- Harper, D. A. T. 1988. Ordovician–Silurian junctions in the Girvan district, S.W. Scotland. *Bulletin of the British Museum (Natural History), Geology*, **43**, 45–52.
- Harper, D. A. T. 1989. Brachiopods from the Upper Ardmillan succession (Ordovician) of the Girvan District, Scotland, Part 2. *Monograph of the Palaeontographical Society*, **142** (579), 79–128.
- Harper, D. A. T. 1992. Ordovician provincial signals from Appalachian-Caledonian Terranes. *Terra Nova*, **4**, 204–209.
- Harper, D. A. T. 1998. Interpreting orogenic belts: principles and examples. In Doyle, P. and Bennett, M.R. (eds) *Unlocking the stratigraphical record*, 491–524. John Wiley and Sons, Chichester.
- Harper, D. A. T. 2000. Late Ordovician brachiopod biofacies of the Girvan district, SW Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, **91**, 471–477.
- Harper, D. A. T. 2006a. The Ordovician biodiversification: Setting an agenda for marine life. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **232**, 148–166.
- Harper, D. A. T. 2006b. Brachiopods from the Upper Ardmillan succession (Ordovician) of the Girvan district, Scotland. Part 3. *Monographs of the Palaeontographical Society*, **159** (624), 129–187, pls 23–33.
- Harper, D. A. T. 2010. The Ordovician brachiopod radiation: roles of alpha, beta, and gamma diversity, 69–83. In: Finney, S. C. & Berry, W. B. N. (Eds) *The Ordovician Earth system. Geological Society of America Special Paper*, **466**. The Geological Society of America. 193 pp.
- Harper, D. A. T. & Brenchley, P. J. 1993. An endemic brachiopod fauna from the Middle Ordovician of North Wales. *Geological Journal*, **28**, 21–36.
- Harper, D. A. T. & Hints, L. 2001. Distribution and diversity of Ordovician articulated brachiopods in the East Baltic. In: *Brachiopods: past and present*. C.H.C. Brunton, L.R.M. Cocks & S.L. Long. (Eds). Brachiopods: past and present, Special Vol. Series 63. Taylor and Francis, London, UK: 315–326.
- Harper, D. A. T. & Mac Niocaill, C., 2002. Early Ordovician rhynchonelliformean brachiopod biodiversity: comparing some platforms, margins and intra-oceanic sites around the Iapetus Ocean. In: J.A. Crame & A.W. Owen (Eds), *Palaeobiogeography and Biodiversity Change: the Ordovician and Mesozoic–Cenozoic Radiations*. Special Publications. **194**. The Geological Society, London, pp. 25–34.

- Harper, D.A.T., Mitchell, W.I. and Rong Jia-yu, 1994. New faunal data from the highest Ordovician rocks at Pomeroy, County Tyrone, Northern Ireland. *Scottish Journal of Geology* 30, 187-190.
- Harper, D.A.T. and Owen, A.W., 1984. The Caradoc brachiopod and trilobite fauna of the upper Kirkerud Group, Hadeland, Norway. *Geologica et Palaeontologica* 18, 21-51, 6 pls.
- Harper, D. A. T. & Rong Jia-yu. 2008. Completeness of the Hirnantian brachiopod record: Spatial heterogeneity through the end Ordovician extinction event. *Lethaia*, **41**, 195–197.
- Harper, D. A. T. & Williams, S. H. 2002. A relict Ordovician brachiopod fauna from the *Parakidograptus acuminatus* Biozone (lower Silurian) of the English Lake District. *Lethaia*, **35**, 71–78.
- Harper, D. A. T., Owen, A. W. & Williams, H. 1984. The Middle Ordovician of the Oslo Region, Norway, 34. The type Nakkholmen Formation (upper Caradoc), Oslo, and its faunal significance. *Norsk Geologisk Tidsskrift*, **64**, 293–312.
- Harper, D. A. T., Mitchell, W. I., Owen, A. W. & Romano, M. 1985. Upper Ordovician brachiopods and trilobites from the Clashford House Formation, near Herbertstown, Co. Meath, Ireland. *Bulletin of the British Museum (Natural History), Geology*, **38**, 287–308.
- Harper, D. A. T., Mac Niocaill, C. & Williams, S. H. 1996. The palaeogeography of the early Ordovician Iapetus terranes: an integration of faunal and palaeomagnetic constraints. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **121**, 297–312.
- Harper, D. A. T., Rong Jia-yu & Sheehan, P. M. 1999. Ordovician diversity patterns in early rhynchonelliform (protorthide, orthide and strophomenide) brachiopods. *Acta Universitatis Carolinae, Geologica*, **43**, 325–327.
- Harper, D. A. T., Cocks, L. R. M., Popov, L. E., Sheehan, P. M., Bassett, M. G., Copper, P., Holmer, L. E., Jin, J. & Rong, J. -y. 2004. Brachiopods, 159–179. In: Webby, B.D., Paris, F., Droser, M.L. & Percival, I.G. (eds) *The Great Ordovician Biodiversification Event*. Columbia University Press, New York. 484 pp.
- Harper, D. A. T., Jin, J., Rasmussen, C. M. Ø., Rasmussen, J. A. R. & Stouge, S. 2007. Overview of the pentameride brachiopod succession (Upper Ordovician–Lower Silurian) in Børglum Elv and G. B. Schley Fjord, Peary Land, North Greenland. *Acta Palaeontologica Sinica*, **46** (Suppl.), 176–180.

- Harper, D. A. T., Bruton, D. L. & Rasmussen, C. M. Ø. 2008. The Otta brachiopod and trilobite fauna: palaeogeography of Early Palaeozoic terranes and biotas across Baltoscandia. *Fossils and Strata*, **54**, 31–40.
- Harper, D.A.T., Owen, A.W. and Bruton, D.L. 2009. Ordovician life around the Celtic fringes: diversifications, extinctions and migrations of brachiopod and trilobite faunas at middle latitudes. *Geological Society, London, Special Publications*, **325**, 155-168.
- Harper, D. A. T., Parkes, M. A. & McConnell, B. J. 2010. Late Ordovician (Sandbian) brachiopods from the Mweelrea Formation, South Mayo, western Ireland: stratigraphic and tectonic implications. *Geological Journal*, **45**, 445–450.
- Harper, D.A.T., Hammarlund, E. & Rasmussen, C.M.Ø. 2013. End Ordovician extinctions: a coincidence of causes. *Gondwana Research* (in press).
- Harrington, H. J. 1937. On some Ordovician fossils from Northern Argentina. *Geological Magazine*, **74**, 97–124.
- Harrington, H. J. 1957. Ordovician Formations of Argentina. In: Harrington, H. J. & Leanza, A. F. (eds) *Ordovician Trilobites of Argentina*. Department of Geology, University of Kansas, Special Publication 1, 1–59.
- Harrington, H. J. & Kay, M. 1951. Cambrian and Ordovician faunas of Eastern Colombia. *Journal of Paleontology*, **25**, 655–668.
- Havlíček, V. 1949. Orthoidea a Clitambonoidea z Českého Tremadoku. (Orthoidea and Clitambonoidea of the Bohemian Tremadoc.). *Statního Geologického (stavu Československé Republiky, Sborník*, **16**, 93–144.
- Havlíček, V. 1950. Ramenonozci Českého Ordoviku [The Ordovician Brachiopoda from Bohemia]. *Rozpravy Ústředního ústavu geologického*, **13**, 1–72. [English translation on p. 75–135].
- Havlíček, V. 1967. Brachiopoda of the Suborder Strophomenidina in Czechoslovakia. *Rozpravy Ústředního ústavu geologického*, **33**, 1–236.
- Havlíček, V. 1970. Heterorthidae (Brachiopoda) in the Mediterranean Province. *Sborník Geologických Ve*

Havlíček, V. 1980. New Eospiriferinae (Brachiopoda) in Bohemia. *Sborník Geologických*

*Ve*

- Herrera Z.A. & Benedetto, J.L. 1989. Braquiópodos del suborden Orthidina de la Formación San Juan (Ordovícico temprano), en el área de Huaco-Cerro Viejo, Precordillera Argentina. *Ameghiniana*, **26**, 3-22.
- Herrera, Z. A. & Benedetto, J. L. 1991 [1990]. Early Ordovician brachiopod faunas of the Precordillera Basin, Western Argentina: Biostratigraphy and paleobiogeographical affinities, 283–301 *In: MacKinnon, D. I., Lee, D. E. & Campbell, J. D. (eds) Brachiopods through time*. Balkema, Rotterdam.
- Hiller, N. 1980. Ashgill Brachiopoda from the Glyn Ceiriog District, north Wales. *Bulletin of the British Museum (Natural History), Geology*, **34**, 109–216.
- Hints, L. 1973. New Orthacean brachiopods from the Middle Ordovician of the East Baltic area and Sweden. *Eesti NSV Teaduste Akadeemia Toimetised (Keemia Geoloogia)*, **3**, 248–256 [in Russian with English abstract].
- Hints, L. 1975. Brakhiopody Enteletacea Ordovika Pribaltiki. *Eesti NSV Teaduste Akadeemia Geoloogia Instituut, Tallinn*, 117 pp., 23 pl. [in Russian].
- Hints, L. 1979. The genus *Saukrodictya* (Enteletacea) from the Ordovician of Ordovician and Silurian of Estonia. *Eesti NSV Teaduste Akadeemia Toimetised*, **28**, 52–59.
- Hints, L. & Harper, D. A. T. 2003. Review of the Ordovician rhynchonelliformean Brachiopoda of the East Baltic: Their distribution and biofacies. *Bulletin of the Geological Society of Denmark*, **50**, 29–43.
- Hints, L. & Harper, D. A. T. 2008. The brachiopods *Alwynella* and *Grorudia*: homeomorphic plectambonitoids in the Middle and Upper Ordovician of Baltoscandia. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, **98**, 271–280.
- Hints, L. & Rõõmusoks, A. 1997. Ordovician articulate brachiopods, p. 226–228. *In: Raukas, A. & Teedumäe, A. (eds) Geology and Mineral Resources of Estonia*. Estonian Academy Publishers, Tallinn. 436 pp.
- Hints, L., Hints, O., Nemliher, R. & Nõlvak, J. 2007. Hulterstad brachiopods and associated faunas in the Vormsi Stage (Upper Ordovician, Katian) of the Lelle core, Central Estonia. *Estonian Journal of Earth Sciences*, **56**, 131–142.
- Hintze, L. F. 1952. Lower Ordovician trilobites from western Utah and eastern Nevada. *Utah Geological and Mineralogical Survey Bulletin*, **48**, 249 pp.
- Hofmann, H. J. 1963. Ordovician Chazy Group in Southern Quebec. *American Association of Petroleum Geologists Bulletin*, **47**, 270–301.

- Hofmann, H. J. 1982. Middle to Late Ordovician fossiliferous rocks of the Montreal Area. p.D1–D41. In: Globensky, Y. (ed) 3rd North American Paleontological Convention, Ontario Conv. Field Trips, Guidebook, Montreal, Quebec.
- Holmer, L. E., Popov, L. E., Streng, M. & Miller, J. F. 2005. Lower Ordovician (Tremadocian) lingulate brachiopods from the House and Fillmore Formations, Ibex area, Western Utah, USA. *Journal of Paleontology*, **79**, 884–906.
- Horný, R. J. 1997. Ordovician Tergomya and Gastropoda (Mollusca) of the Anti-Atlas (Morocco). *Acta Musei Nationalis Pragae, Series B - Historia Naturalis*, **53**, 37–78.
- Howe, H. J. 1965. Plectambonitacea, Strophomenacea, and Atrypacea from Montoya Group (Ordovician) of Trans-Pecos Texas. *Journal of Paleontology*, **39**, 647–656.
- Howe, H. J. 1966. Orthacea from the Montoya Group (Ordovician) of Trans-Pecos Texas. *Journal of Paleontology*, **40**, 241–257.
- Howe, H. J. 1967. Rhynchonellacea from the Montoya Group (Ordovician) of Trans-Pecos Texas. *Journal of Paleontology*, **41**, 845–860.
- Howe, H. J. 1969. Rhynchonellacean brachiopods from the Richmondian of Tennessee. *Journal of Paleontology*, **43**, 1331–1350.
- Howe, H. J. 1988. Articulate brachiopods from the Richmondian of Tennessee. *Journal of Paleontology*, **62**, 204–218.
- Howe, H. J. & Reso, A. 1967. Upper Ordovician brachiopods from the Ely Springs Dolomite in south-western Nevada. *Journal of Paleontology*, **41**, 351–363.
- Hughes, C.P., Rickards, R.B. & Williams, A. 1980. The Ordovician fauna from the Contaya Formation of eastern Peru. *Geological Magazine*, **117**, 1–20.
- Hunan Bureau of Geology and Mineral Deposits. 1988. Summary of regional geology of Hu"nan Province, China. Geological Publishing House, Beijing, China, 719 pp. (in Chinese with English abstract).
- Hurst, J. M. 1979. Uppermost Ordovician and Silurian geology of north-west Peary Land, North Greenland. *Rapport Grønlands geologiske Undersøgelse*, **88**, 41–51.
- Hurst, J. M. & Sheehan, P. M. 1982. Pentamerid brachiopod relationships between Siberia and East North Greenland in the Late Ordovician and Early Silurian. In: Mamet, B. & Copeland, M. J. (eds) *Third North American Paleontological Convention, Proceedings*, **2**, p. 482.
- Ingham, J. K., Curry, G. B. & Williams, A. 1986. Early Ordovician Dounans Limestone fauna, Highland Border Complex, Scotland. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, **76**, 481–513.

- Jaanusson, V. 1962. Two Plectambonitacean brachiopods from the Dalby Limestone (Ordovician) of Sweden. *Bulletin of the Geological Institution of Uppsala University*, **39**, 1–8, pl. 1.
- Jaanusson, V. 1963. Lower and Middle Viruan (Middle Ordovician) of the Siljan District. *Bulletin of Geological Institutions of the University of Uppsala*, **42**, 1–40.
- Jaanusson, V. 1976. Faunal dynamics in the Middle Ordovician (Viruan) of Baltoscandia. In: M.G. Bassett (ed.), *The Ordovician System. Proceedings of a Paleontological Association Symposium*, 301–326. University of Wales Press
- Jaanusson, V. & Bergström, S. M. 1980. Middle Ordovician faunal spatial differentiation in Baltoscandia and the Appalachians. *Alcheringa*, **4**, 89–110.
- Jin, J. 1996. Ordovician (Llanvirn - Ashgill) rhynchonellid brachiopod biogeography, 123–132. In: Copper, P. & Jin, J. (eds) *Brachiopods*. A. A. Balkema, Rotterdam.
- Jin, J. 2001. Evolution and extinction of the North American *Hiscobeccus* brachiopod fauna during the Late Ordovician. *Canadian Journal of Earth Sciences*, **38**, 143–151.
- Jin, J. 2008. Environmental control on the temporal & spatial differentiation of Early Silurian pentameride brachiopod communities, Anticosti Island, eastern Canada. *Canadian Journal of Earth Sciences*, **45**, 159–187.
- Jin, J. & Chatterton, B. D. E. 1997. Latest Ordovician–Silurian articulate brachiopods and biostratigraphy of the Avalanche Lake area, southwestern district of Mackenzie, Canada. *Palaeontographica Canadiana*, **13**, 1–167.
- Jin, J. & Copper, P. 1997. *Parastrophinella* (Brachiopoda): its paleogeographic significance at the Ordovician/ Silurian boundary. *Journal of Paleontology*, **71**, 369–380.
- Jin, J. & Copper, P. 1999. The deep-water brachiopod *Dicoelosia* King, 1850, from the Early Silurian tropical carbonate shelf of Anticosti Island, eastern Canada. *Journal of Paleontology*, **73**, 1042–1055.
- Jin, J. & Copper, P. 2000. Late Ordovician and Early Silurian pentamerid brachiopods from Anticosti Island, Québec, Canada. *Palaeontographica Canadiana*, **18**, 1–140.
- Jin, J. & Copper, P. 2004. Evolution of the Early Silurian rhynchonellide brachiopod *Stegerynchus*, Anticosti Island, Eastern Canada. *Journal of Paleontology*, **78**, 866–883.
- Jin, J. & Copper, P. 2008. Response of brachiopod communities to environmental change during the Late Ordovician mass extinction interval, Anticosti Island, eastern Canada. *Fossils and Strata*, **54**, 41–51.

- Jin, J. & Norford, B. S. 1996. Upper Middle Ordovician (Caradoc) brachiopods from the Advance Formation, northern Rocky Mountains, British Columbia. *Bulletin of the Geological Survey of Canada*, **491**, 20–77.
- Jin, J. & Popov, L. E. 2008. A new genus of Late Ordovician–Early Silurian Pentameride brachiopods and its phylogenetic relationships. *Acta Palaeontologica Polonica*, **53**, 221–236.
- Jin, J. & Zhan Ren-bin 2000. Evolution of the Late Ordovician orthid brachiopod *Gnamptorhynchos* Jin, 1989 from *Platystrophia* King, 1850, in North America. *Journal of Paleontology*, **74**, 983–991.
- Jin, J. & Zhan Ren-bin 2001. *Late Ordovician articulate brachiopods from the Red River and Stony Mountain Formations, Southern Manitoba*. NRC Research Press, Ottawa. 117 pp.
- Jin, J. & Zhan Ren-bin. 2008. *Late Ordovician Orthide and Billingsellide brachiopods from Anticosti Island, Eastern Canada: diversity change through mass extinction*. NRC Research Press, Ottawa. 151 pp.
- Jin Jisuo, Zhan Renbin and Rong Jiayu. 2006. Taxonomic reassessment of two virgianid brachiopod genera from the Upper Ordovician and Lower Silurian of South China. *Journal of Paleontology*, **80**, 72–82.
- Jin, J., Caldwell, W. G. E. & Norford, B. S. 1989. Rhynchonellid brachiopods from the Upper Ordovician – Lower Silurian Beaverfoot and Nonda formations of the Rocky Mountains, British Columbia. *Contributions to Canadian Paleontology, Bulletin of the Geological Survey of Canada*, **396**, 21–59.
- Jin, J., Caldwell, W. G. E. & Norford, B. S. 1997. Late Ordovician brachiopods and biostratigraphy of the Hudson Bay Lowlands, northern Manitoba and Ontario. *Bulletin of the Geological Survey of Canada*, **513**, 1–115.
- Jin, J., Zhan Ren-bin & Rong Jia-yu. 2006. Taxonomic reassessment of two virgianid brachiopod genera from the Upper Ordovician and Lower Silurian of South China. *Journal of Paleontology*, **80**, 72–82.
- Jin, J., Zhan Ren-bin, Copper, P. & Caldwell, W. G. E. 2007. Epipunctae and phosphatized setae in Late Ordovician plaesiomyid brachiopods from Anticosti Island, Eastern Canada. *Journal of Paleontology*, **81**, 666–684.
- Johnson, M. E., Rong, J. -y. & Fox, W. T. 1989. Comparison of Late Ordovician epicontinental seas and their relative bathymetry in North America and China. *Palaios*, **4**, 43–50.

- Jones, O. T. 1928. *Plectambonites* and some allied genera. *Memoirs of the Geological Survey of Great Britain, Palaeontology*, **1**, 367–527, pls. 21–25.
- Kanygin, A. V., Moskalenko, T. A., Yadrenkina, A. G., Abaimova, G. P., Semenova, B. C., Sychev, O. V. & Timokhin, A. V. 1989. The Ordovician of the Siberian Platform. Fauna and stratigraphy of the Lena facies zone. Novosibirsk, Nauka, **751**, 216 pp. [in Russian].
- Kanygin, A. V., Timokhin, A. V., Sennikov, N. V., Yadrenkina, A. G., Gonta, T. V., Sychev, O. V., Obut, O. T. & Kipriyanova, T. P. 2006. Ordovician sequence of the key Kulyumbe section (Siberian platform). *Field excursion guidebook: International Symposium and fieldtrip “Palaeogeography and global correlation of Ordovician events” (IGCP 503 Project “Ordovician Palaeogeography and Palaeoclimate”)*. Academik Publishing House “GEO”, Novosibirsk. 91 pp.
- Kanygin, A. V., Timokhin, A. V., Sychev, O. V. & Yadrenkina, A. G. 2006. Osnovnye etapy evolutsii i biofacial'noe raionirovanie ordovikskogo paleobasseina Sibirskoi platform [The main Ordovician evolutionary stages and biofacies of the Siberian platform basin], 22–25. *Proceedings of the International Symposium “Palaeogeography and Global Correlation of Ordovician Events”*. Academik Publishing House “GEO”, Novosibirsk. [in Russian].
- Karim, T. S. & Westrop, S. R. 2002. Taphonomy and paleoecology of Ordovician trilobite clusters, Bromide Formation, south-central Oklahoma. *Palaios*, **17**, 394–403.
- Kay, M. 1962. Classification of the Ordovician Chazyan shelly and graptolite sequences from Central Nevada. *Bulletin of the Geological Society of America*, **73**, 1421–1430.
- Klenina, L. N., Nikitin, I. F. & Popov, L. E. 1984. *Brachiopods and biostratigraphy of Middle and Upper Ordovician of Khingiz Mountains*. Nauka, Kazakhstan SSR, Alma-Ata. 196 pp. [In Russian].
- Kobayashi, T. 1935. On the *Kainella* Fauna of the basal Ordovician age found in Argentina. *Japanese Journal of Geology and Geography*, **12**, 59–67.
- Krug, A. Z. & Patzkowsky, M. E. 2004. Rapid recovery from the Late Ordovician mass extinction. *PNAS*, **101**, 17605–17610.
- Krug, A. Z. & Patzkowsky, M. E. 2007. Geographic variation in turnover and recovery from the Late Ordovician mass extinction. *Paleobiology*, **33**, 435–454.
- Kulkov, N. P. & Severgina, L. G. 1987. Ordovician and Silurian boundary in Gornoi Altai. *Seriya Geologicheskaya*, **9**, 69–74. [in Russian].

- Kulkov, N. P. & Sev vergina, L. G. 1989. *Ordovician and Silurian Stratigraphy and Brachiopods from Gorny Altai*. Nauka, Moscow. 221 pp. [in Russian].
- Kulkov, N. P., Vladimirsjaka, E. V. & Rybkina, N. L. 1985. The brachiopods and biostratigraphy of the Upper Ordovician and Silurian of Tuva. *Transactions of the Institute of Geology and Geophysics, Siberian Branch Academy of Sciences of USSR*, **635**. 1–208. [in Russian].
- Laurie, J. R. 1987. Early Ordovician Orthide Brachiopods from the Digger Island Formation, Waratah Bay, Victoria. *Memoirs of the Museum of Victoria*, **48**, 101–106.
- Laurie, J.R. 1991. Articulate brachiopods from the Ordovician and Lower Silurian of Tasmania. *Memoirs of the Association of Australasian Palaeontologists*, **11**, 1–106.
- Laurie, J. R. 1997. Silicified Late Cambrian brachiopods from the Georgina Basin, western Queensland. *Alcheringa*, **21**, 179–189.
- Laurie, J. R. & Burrett, C. 1992. Biogeographic significance of Ordovician brachiopods from Thailand and Malaysia. *Journal of Paleontology*, **66**, 16–23.
- Lees, D. C., Fortey, R. A., Cocks, L. R. M. 2002. Quantifying paleogeography using biogeography: A test case for the Ordovician and Silurian of Avalonia based on brachiopods and Trilobites. *Paleobiology*, **28**, 343–363.
- Leone, F., Hammann, W., Laske, R., Serpagli, E. & Villas, E. 1991. Lithostratigraphic units and biostratigraphy of the post-sardic Ordovician sequence in south-west Sardinia. *Bollettino della Società Geologica Italiana*, **30**, 201–235.
- Leslie, S. A. & Lehnert, O. 2005. Middle Ordovician (Chazyan) sea-level changes and the evolution of the Ordovician conodont genus *Cahabagnathus* Bergström, 1983. *Journal of Paleontology*, **79**, 1131–1142.
- Levy, R. & Nullo, F. E. 1973. Braquiopodos Ordovicicos de la Sierra del Famatina (Formacion Molles), Prov. de La Rioja. *Ameghiniana*, **5**, 139–151.
- Li Rong-yu & Copper, P. 2006. Early Silurian (Llandovery) orthide brachiopods from Anticosti Island, Eastern Canada: The O/S extinction recovery fauna. *Special Papers in Palaeontology*, **76**, 80 pp.
- Li, Y., Kershaw, S. & Mu, X. 2004. Ordovician reef systems and settings in South China before the Late Ordovician mass extinction. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **205**, 235–254.
- Liu, D. -y., Xu, H. -k. & Liang, W. -p. 1983. *Phylum Brachiopoda, Palaeontological Atlas of Eastern China. Early Palaeozoic Volume 1*. Nanjing Institute of Geology and Mineral Resources: Science Press, Beijing. 657 pp., 176 pls. [in Chinese].

- Lochman, C. 1965. Lower Ordovician (Zone D) faunules from the Williston Basin, Montana. *Journal of Paleontology*, **39**, 466–486.
- Lochman-Balk, C. & Wilson, J. L. 1967. Stratigraphy of Upper Cambrian–Lower Ordovician subsurface sequence in Williston Basin. *American Association of Petroleum Geologists, Bulletin*, **51**, 883–917.
- Lockley, M. G. 1980. Caradoc faunas associations of the area between Bala and Dinas Mawddwy, North Wales. *Bulletin of the British Museum (Natural History), Geology*, **33**, 165–235.
- Lockley, M. G. 1983. A review of brachiopod dominated palaeocommunities from the type Ordovician. *Palaeontology*, **26**, 111–145.
- Lockley, M. G. & Williams, A. W. 1981. Lower Ordovician Brachiopoda from mid and south-west Wales. *Bulletin of the British Museum (Natural History), Geology*, **35**, 1–78.
- Ludvigsen, R. 1975. Ordovician formations and faunas, southern Mackenzie Mountains. *Canadian Journal of Earth Sciences*, **12**, 663–697.
- Macomber, R. W. 1970. Articulate brachiopods from the Upper Bighorn Formation (Late Ordovician) of Wyoming. *Journal of Paleontology*, **44**, 416–450.
- Massa, D., Havlíček, V. & Bonnefous, J. 1977. Stratigraphic and faunal data on the Ordovician of the Rhadames Basin (Libya and Tunisia). *Bulletin des Centres Recherches Exploration-Production Elf-Aquitaine*, **1**, 3–27.
- Mazzullo, S. J. & Friedman, G. M. 1977. Competitive algal colonization of peritidal flats in a Schizohaline environment: The Lower Ordovician of New York. *Journal of Sedimentary Research*, **47**, 398–410.
- McKerrow, W. S. & Cocks, L. R. M. 1976. Progressive faunal migration across the Iapetus Ocean. *Nature*, **263**, 304–306.
- McKerrow, W. S. & Cocks, L. R. M. 1981. Stratigraphy of the eastern Bay of Exploits, Newfoundland. *Canadian Journal of Earth Sciences*, **18**, 751–764.
- McKerrow, W.S. & Cocks, L.R.M. 1993. A reassessment of the early Ordovician 'Celtic' brachiopod province. *Journal of the Geological Society, London*, **150**, 1039–1042.
- Mc Namara, K. J. 1980. Taxonomy and distribution of chasmopine trilobites. *Geological Magazine*, **117**, 65–80.
- Mélou, M. 1971. Nouvelle espèce de *Leptestiina* dans l'Ordovicien supérieur de l'Aulne (Finistère). *Mémoires du Bureau de Recherches Géologiques et Minières*, **73**, 93–105. [in French].

- Mélou, M. 1973. Le genre *Aegiromena* (Brachiopode-Strophomenida) dans l'Ordovicien du Massif Armorican (France). *Annales de la Société Géologique du Nord*, **93**, 253–264. [in French].
- Mélou, M. 1990. Brachiopodes articulés de la Coupe de l'Ile de Rosan (Crozon, Finistère). Formation des Tufts et Calcaires de Rosan (Caradoc–Ashgill). *Geobios*, **23**, 539–579. [in French].
- Menakova, G.N. 1984. O nekotorykh brakhiopodykh verkhnego ordovika Zeravshano-Gissarskoi Gornoi Oblasti [On certain brachiopods of the Upper Ordovician of Zeravshan–Gissar Mountain region], 75–85. In: Dzhalilov, M.R. (ed) *Novye Vidy Iskopaemoi Flory i Fauny Tadzhikista [New fossil flora and fauna of Tajikistan]*. Institut Geologii Donish, Dushanbe. Akademiiia Nauk Tadzhikskoi SSR. [in Russian].
- Merriam, C. W. 1963. Paleozoic rocks of Antelope Valley, Eureka and Nye Counties, Nevada. *United States Geological Survey Professional Paper*, **423**, 1–67.
- Mikulás, R. 1985. The Brachiopods of the Podolí Ore Horizon (Upper Ordovician, Barrandian Area). *Časopis národního muzea v Praze*, **154**, 51–54.
- Mitchell, W. I. 1974. An outline of the stratigraphy and palaeontology of the Ordovician rocks of Central Portugal. *Geological Magazine*, **111**, 385–396.
- Mitchell, W. I. 1977. The Ordovician brachiopoda from Pomeroy, Co. Tyrone. *Palaeontological Society Monograph*, **130**, 1–138, pls 1–28.
- Modzalevskaya, T. L. 2003. Silurian and Devonian brachiopods from Severnaya Zemlya (Russian Arctic). *Geodiversitas*, **25**, 73–107.
- Munnecke, A., Calner, M., Harper, D. A. T. & Servais, T., 2010. Ordovician and Silurian sea-water chemistry, sea-level, and climate: a synopsis. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **296**, 389–413.
- Musteikis, P. & Cocks, L. R. M., 2004. Strophomenide and orthotetide Silurian brachiopods from the Baltic region, with particular reference to Lithuanian boreholes. *Acta Palaeontologica Polonica*, **49**, 455–482.
- Neuman, R. B. 1964. Fossils in Ordovician Tuffs, Northeastern Maine. *Bulletin of the United States Geological Survey*, **1181-E**. 38 pp.
- Neuman, R. B. 1972. Brachiopods of Early Ordovician volcanic islands. *24th International Geological Congress (Section 7)*. Montreal, 297–302.
- Neuman, R. B. 1984. Geology and paleobiology of islands in the Ordovician Iapetus Ocean: review and implications. *Bulletin of the Geological Society of America*, **95**, 1188–1201.

- Neuman, R. B. 1988. Palaeontological evidence bearing on the Arenig – Caradoc development of the Iapetus Ocean Basin. In: Harris, A. L. & Fettes, D. J. (eds) *The Caledonian – Appalachian Orogen. Geological Society Special Publication*, **38**, 269–274.
- Neuman, R. B. 1994. Late Ordovician (Ashgill) *Foliomena* fauna brachiopods from northeastern Maine. *Journal of Paleontology*, **68**, 1218–1234.
- Neuman, R. B. & Bates, D. E. B. 1978. Reassessment of Arenig and Llanvirn age (Early Ordovician) brachiopods from Anglesey, north-west Wales. *Palaeontology*, **21**, 571–613.
- Neuman, R. B. & Bruton, D. L. 1974. Early Middle Ordovician fossils from the Hølonda area, Trondheim Region, Norway. *Norsk Geologisk Tidsskrift*, **54**, 69–115.
- Neuman, R. B. & Bruton, D. L. 1989. Brachiopods and Trilobites from the Ordovician Lower Hovin Group (Arenig/Llanvirn), Hølonda Area, Trondheim Region, Norway: New and Revised Taxa and Paleogeographic Interpretation. *Bulletin, Norges Geologiske Undersøkelse*, **414**, 49–89.
- Neuman, R. B. & Harper, D. A. T. 1992. Paleogeographic significance of Arenig–Llanvirn Toquima-Table Head and Celtic brachiopod assemblages, 242–254. In: Webby, B. D. & Laurie, J. R. (eds) *Global perspectives on Ordovician geology*. Balkema, Rotterdam. 513 pp.
- Neuman, R.B., Harper, D.A.T. & Van Staal, C., 1994. Discussion on a reassessment of the Early Ordovician 'Celtic' brachiopod province. *Journal of the Geological Society, London*, **151**, 891–892.
- Neuman, R. B., Bruton, D. L. & Pojeta, J. 1997. Fossils from the Ordovician “Upper Hovin Group” (Caradoc–Ashgill), Trondheim region, Norway. *Bulletin, Norges Geologiske Undersøkelse*, **432**, 25–58.
- Nicholson, H. A. & Etheridge, R., Jr. 1878. A monograph of the Silurian fossils of the Girvan district in Ayrshire, with special reference to those contained in the 'Gray collection'. Blackwood & Sons, Edinburgh & London. Fasciculus 1, 135 pp.
- Nielsen, A. T. 2004. Ordovician Sea Level Changes: A Baltoscandian Perspective, 84 – 93. In: Webby, B. D., Paris, F., Droser, M. L. & Percival, I. G. (eds) *The Great Ordovician Biodiversification Event*. Columbia University Press, New York. 484 pp.
- Nikiforova, O. I. & Andreeva, O. N. 1961. Stratigrafiya ordovika i silura Sibirskoi Platformy i ee paleontologicheskoe obsnovanie (Brakhiopody). *Trudy VSEGEI, novaya seriya, Leningrad*, **56**. 412 pp. [in Russian]

- Nikitin, I. F. 1980. Hirnantian brachiopods, 35–64. In: Apollonov, M. K., Bandaletov, S. M. & Nikitin, I. F. (eds) *The Ordovician – Silurian boundary in Kazakhstan*. Nauka Kazakh SSR Publishing House, Alma-Ata, USSR.
- Nikitin, I. F., Apollonov, M. K., Tsai, D. T., & Rukavishnikova, T. B. 1980. Ordovician system, 44–78. In: Abdulin, A. A. (ed) *Chu-Iliiskii rudnyi pojas. Part I. Geologia Chu-Iliiskogo regiopna*. Nauka, Alma-Ata.
- Nikitin, I. F., Popov, L. E. & Bassett, M. G. 2003. Late Ordovician brachiopods from the Selety river basin, north Central Kazakhstan. *Acta Palaeontologica Polonica*, **48**, 39–54.
- Nikitin, I. F., Popov, L. E. & Bassett, M. G. 2006. Late Ordovician rhynchonelliformean brachiopods of north-central Kazakhstan. In: Bassett, M. G. & Deisler, V. K. (eds) *Studies in Palaeozoic Palaeontology. National Museum of Wales Geological Series*, **25**, 223–294.
- Nikitina, O.I., Popov, L.E., Neuman, R.B., Bassett, M.G. and Holmer, L.E. 2006. Mid Ordovician (Darriwilian) brachiopods of South Kazakhstan. In: Bassett, M.G. and Deisler, V.K. (eds), *Studies in Palaeozoic Palaeontology. National Museum of Wales Geological Series*, 25, 145–222.
- Nilsson, R. 1977. A boring through Middle and Upper Ordovician strata at Koängen in western Scania. *Sveriges Geologiska Undersökning*, **C733**, 1–58.
- Oradovskaya, M. M. 1983. Brachiopods, 35–73. In: Koren, T. N., Oradovskaya, M. M., Pylma, L. J., Sobolevskaya, R. F. & Chugaeva, R. F. (eds) *The Ordovician – Silurian boundary in the northeast of the USSR*. Nauka, Leningrad. [In Russian].
- Öpik, A. A. 1930. Brachiopoda Protremata der Estländischen Ordovizischen Kukruse-Stufe. *Tartu Universitatis (Dorpatensis), Acta and Commentationes*, Series A, **17**, 1–262, 22 pls.
- Öpik, A. A. 1939. Brachiopoden und Ostrakoden aus dem Expansusschiefer Norwegens. *Norsk Geologisk Tidsskrift* **19**, 117-142, pls 1-6.
- Owen, A.W. and Harper, D.A.T., 1982. The Middle Ordovician of the Oslo Region, Norway, 31. The Upper Caradoc trilobites and brachiopods from Vestbråten, Ringerike. *Norsk Geologisk Tidsskrift* **62**, 95-120.
- Parkes, M. A. 1992. Caradoc brachiopods from the Leinster terrane (SE Ireland) - a lost piece of the Iapetus puzzle? *Terra Nova*, **4**, 223–230.

- Parkes, M. A. 1994. The brachiopods of the Duncannon Group (Middle-Upper Ordovician) of southeast Ireland. *Bulletin of the British Museum (Natural History), Geology*, **50**, 105–174.
- Parkes M. A., Ryan P. D. & Harper, D. A. T., 1990. Microcomputer seriation of palaeobiogeographical data. In Bruton, D. L. and Harper, D. A. T. (eds) Microcomputers in Palaeontology. *Palaeontological Contributions from the University of Oslo* **370**, 56-66.
- Paterson, J. R & Brock, G. A. 2003. Early Ordovician orthide brachiopods from Mount Arrowsmith, northwestern New South Wales, Australia. *Records of the Australian Museum*, **55**, 221-230.
- Paškevičius, J. 1994. *Baltijos Respubliky Geologija [The Geology of the Baltic Republics]*. Vastybinių leidybos centras, Vilnius. 447 pp. [In Lithuanian].
- Patzkowsky, M. E. 1995. Gradient analysis of Middle Ordovician brachiopod biofacies: biostratigraphic, biogeographic, and macroevolutionary implications. *Palaios*, **10**, 154–179.
- Patzkowsky, M. E. & Holland, S. M. 1997. Patterns of Turnover in Middle and Upper Ordovician brachiopods of the Eastern United States: a test of coordinated stasis. *Paleobiology*, **23**, 420–443.
- Percival, I. G. 1978. Inarticulate brachiopods from the Late Ordovician of New South Wales and their palaeoecological significance. *Alcheringa*, **2**, 117–141.
- Percival, I. G. 1979a. Ordovician plectambonitacean brachiopods from New South Wales. *Alcheringa*, **3**, 91–116.
- Percival, I. G. 1979b. Late Ordovician Articulate Brachiopods from Gunningbland, Central Western New South Wales. *Proceedings of the Linnean Society of New South Wales*, **103**, 75-187, 2 pls.
- Percival, I. G. 1991. Late Ordovician articulate brachiopods from central New South Wales. *Memoirs of the Association of Australasian Palaeontologists*, **11**, 107–177.
- Percival, I. G. 2005. Late Ordovician deepwater (BA 4) brachiopods of circum-Pacific terranes. *Abstracts for the Second International Symposium of IGCP503 on Ordovician Palaeogeography and Palaeoclimate. Milwaukee Public Museum, Insight*, **2**, 24–25.
- Percival, I. G. 2009. Late Ordovician strophomenide and pentameride brachiopods from central New South Wales. *Proceedings of the Linnean Society of New South Wales*, **130**, 157–178.

- Percival, I. G., Popov, L. E., Zhan, R. B. & Ghobadi Pour, M. 2011. Patterns of origination and dispersal of Middle to Late Ordovician brachiopods: examples from South China, East Gondwana, and Kazakh terranes; pp 413–419, in Gutiérrez-Marco, J.C., Rábano, I. & García-Bellido, D. (eds.), *Ordovician of the World*. Cuadernos del Museo Geominero, 14. Instituto Geológico y Minero de España, Madrid.
- Percival, I. G., Webby, B. D. & Pickett, J. W. 2001. Ordovician (Bendigonian, Darriwilian to Gisbornian) faunas from the northern Molong Volcanic Belt of central New South Wales. *Alcheringa*, **25**, 211–250.
- Peters, S. E. 2003. *Evenness, richness and the Cambrian-Paleozoic faunal transition in North America: an assemblage-level perspective*. PhD thesis, University of Chicago. 279 pp.
- Pickerill, R. K. & Brenchley, P. J. 1979. Caradoc marine benthic communities of the south Berwyn Hills, North Wales. *Palaeontology*, **22**, 229–264.
- Pollock, S. G., Harper, D. A. T. & Rohr, D. M. 1994. Late Ordovician nearshore faunas and depositional environments, northwestern Maine. *Journal of Paleontology*, **68**, 925–937.
- Popov, L. E. & Cocks, L. R. M. 2006. Late Ordovician brachiopods from the Dulankara Formation of the Chu-Ili Range, Kazakhstan: Their systematics, palaeoecology and palaeobiogeography. *Palaeontology*, **49**, 247–283.
- Popov, L. E., Nikitin, I. F. & Sokiran, E. V. 1999. The earliest atrypides and athyridides (Brachiopoda) from the Ordovician of Kazakhstan. *Palaeontology*, **42**, 625–661.
- Popov, L. E., Nikitin, I. N. & Cocks, L. R. M. 2000. Late Ordovician brachiopods from the Otar Member of the Chu-Ili Range, South Kazakhstan. *Palaeontology*, **43**, 833–870.
- Popov, L. E., Cocks, L. R. M. & Nikitin, I. F. 2002. Upper Ordovician brachiopods from the Anderken Formation, Kazakhstan: their ecology and systematics. *Bulletin of the British Museum (Natural History), Geology*, **58**, 13–79.
- Popov, L. E., Ghobadi Pour, M., Bassett, M. G. & Kebria-ee, M. 2009. Billingsellide and Orthide brachiopods: New insights into earliest Ordovician evolution and biogeography from Northern Iran. *Palaeontology*, **52**, 35–52.
- Popov, L. E., Vinn, O. & Nikitina, O. I. 2001. Brachiopods of the redefined family Tritoechiidae from the Ordovician of Kazakhstan and South Urals. *Geobios*, **32**, 131–155.
- Potter, A. W. 1990a. Middle and Late Ordovician brachiopods from the Eastern Klamath Mountains, northern California, Part 1. *Palaeontographica A*, **212**, 31–158, pls. 1–7.

- Potter, A. W. 1990b. Middle and Late Ordovician brachiopods from the Eastern Klamath Mountains, northern California, Part 2. *Palaeontographica A*, **213**, 1–114, pls. 1–10.
- Potter, A. W. 1990c. The Ordovician brachiopod genus *Bimuria* from the Eastern Klamath Mountains, northern California. *Journal of Paleontology*, **64**, 200–213.
- Potter, A. W. 1991. Discussion of the systematic placement of the Ordovician brachiopod genera *Cooperea* and *Craspedelia* by Cocks and Rong (1989). *Journal of Paleontology*, **65**, 742–755.
- Potter, A. W. & Boucot, A. J. 1992. Middle and Late Ordovician brachiopod benthic assemblages of North America, 307–327. In: Webby, B. D. & Laurie, J. R. (eds) *Global perspectives on Ordovician geology*. Balkema, Rotterdam. 513 pp.
- Poulsen, V. 1976. *Dalmanitina* beds (late Ordovician) on Bornholm. *Danmarks geologiske Undersøgelse, Årbog*, 53–87.
- Price, D. 1981. Ashgill trilobite faunas from the Llyn Peninsula, North Wales. *Geological Journal*, **16**, 201–216.
- Rábano, I. 1990. Trilobites del Museo Geominero; I, *Platypeltoides magrebiensis* n. sp., Asaphina, Nileidae, del Ordovicico inferior del Anti-Atlas central, Marruecos. *Boletín Geológico y Minero*, **101**, 21–27.
- Rasmussen, C. M. Ø. 2005. *Middle Ordovician (Kundan) brachiopods from the east Baltic: Aspects of taxonomy, biogeography, palaeoecology, bio- and ecostratigraphy*. Unpublished Cand. Scient. thesis, University of Copenhagen. 137 pp., 12 pls.
- Rasmussen, C. M. Ø. 2009. *A palaeoecological and biogeographical investigation of the Ordovician–Silurian boundary based on brachiopods*. PhD Thesis, University of Copenhagen, 82 pp., 8 pls.
- Rasmussen, C. M. Ø. 2011. Final destination, first discovered: The tale of *Oanduporella* Hints, 1975, 447–455. In: Gutiérrez-Marco, J.C, Rabano, I. & Garcia-Bellido, D. (eds.), *Ordovician of the World*. Cuadernos del Museo Geominero, 14. Instituto Geológico y Minero de España, Madrid. 679 pp.
- Rasmussen, C. M. Ø. 2013. Late Ordovician brachiopods from eastern North Greenland: equatorial offshore migration of the Red River fauna. *Palaeontology*, **56**, *in press*.
- Rasmussen, C. M. Ø., Hansen, J., & Harper, D. A. T. 2007. Baltica: A mid Ordovician diversity hotspot. *Historical Biology*, **19**, 255–161.
- Rasmussen, C. M. Ø. & Harper, D. A. T. 2011a. Did the amalgamation of continents drive the End Ordovician mass extinctions? *Palaeogeography, Palaeoclimatology, Palaeoecology*, **311**, 48–62.

- Rasmussen, C. M. Ø. & Harper, D. A. T. 2011b. Interrogation of distributional data for the end Ordovician crisis interval: *where did disaster strike?* *Geological Journal*, **46**, 478–500.
- Rasmussen, C. M. Ø., Ebbestad, J. O. R. & Harper, D. A. T. 2010. Unravelling a Late Ordovician pentameride (Brachiopoda) hotspot from the Boda limestone, Siljan district, central Sweden. *GFF*, **132**, 133–152.
- Rasmussen, C. M. Ø., Harper, D. A. T. & Blodgett, R. B. 2012. Late Ordovician brachiopods from West-central Alaska: systematics, ecology and palaeobiogeography. *Fossils and Strata*, **58**, 1–103.
- Reyes-Abril, J., Villas, E. & Gutiérrez-Marco, J.C. 2010. Orthid brachiopods from the Middle Ordovician of the Central Iberian Zone, Spain. *Acta Palaeontologica Polonica*, **55**, 285–308.
- Rong Jia-yu. 1984. Brachiopods of latest Ordovician in the Yichang District, Western Hubei, Central China, 111–176. In Nanjing Institute of Geology and Palaeontology, Academia Sinica (ed.), *Stratigraphy and Palaeontology of Systemic Boundaries in China, Ordovician-Silurian Boundary*, 1. Anhui Science and Technology Publishing House, He-fei.
- Rong Jia-yu & Boucot, A. J. 1998. A global review of the Virginidae (Ashgillian–Llandovery, Brachiopoda, Pentameroidea). *Journal of Paleontology*, **72**, 457–465.
- Rong Jia-yu & Harper, D. A. T. 1988. Global synthesis of the late Ordovician Hirnantian brachiopod faunas. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, **79**, 383–402.
- Rong Jia-yu & Harper, D. A. T. 1999. Brachiopod survival and recovery from the latest Ordovician mass extinctions in South China. *Geological Journal*, **34**, 321–348.
- Rong Jia-yu & Li Rong-yu. 1999. A silicified *Hirnantia* Fauna (latest Ordovician brachiopods) from Guizhou, Southwest China. *Journal of Paleontology*, **73**, 831–849.
- Rong Jia-yu & Zhan Ren-bin. 1996. Brachidia of Late Ordovician and Silurian eospiriferines (Brachiopoda) and the origin of the spiriferides. *Palaeontology*, **39**, 941–977.
- Rong Jiayu and Zhan Renbin. 2003. Late Ordovician brachiopod mass extinction of South China. In: Rong Jiayu and Fang Zongjie, eds, *Biotic Mass Extinction and Recovery Afterwards---Evidence from South China*. 71–96. Hefei, China University of Science and Technology Press (in Chinese with English abstract).

- Rong Jia-yu, Jones, B. & Nentwich, F. W. 1989. *Proconchidium* from Late Ordovician strata of Brodeur Peninsula, Baffin Island, Arctic Canada. *Journal of Paleontology*, **63**, 25–33.
- Rong Jia-yu, Zhan Ren-bin & Han Nai-ren 1994. The oldest known *Eospirifer* (Brachiopoda) in the Changwu Formation (late Ordovician) of western Zhejiang, east China, with a review of the earliest spiriferoids. *Journal of Paleontology*, **68**, 763–776.
- Rong Jia-yu, Zhan Ren-bin & Harper, D. A. T. 1999. Late Ordovician (Caradoc–Ashgill) brachiopod faunas with *Foliomena* based on data from China. *Palaios*, **14**, 412–431.
- Rong Jia-yu, Chen Xu & Harper, D. A. T. 2002. The latest Ordovician *Hirnantia* Fauna (Brachiopoda) in time and space. *Lethaia*, **35**, 231–249.
- Rong Jia-yu, Zhan Ren-bin & Jin, J. 2004. The Late Ordovician and Early Silurian pentameride brachiopod *Holorhynchus* Kiær, 1902 from North China. *Journal of Paleontology*, **78**, 287–299.
- Rong Jia-yu, Jin, J. & Zhan Ren-bin. 2005. Two new genera of early Silurian stricklandoid brachiopods from South China and their bearing on stricklandoid classification and paleobiogeography. *Journal of Paleontology*, **79**, 1143–1156.
- Rong Jia-yu, Boucot, A. J., Harper, D. A. T., Zhan Ren-bin & Neuman, R. B. 2006. Global analyses of brachiopod faunas through the Ordovician and Silurian transition: reducing the role of the Lazarus effect. *Canadian Journal of Earth Sciences*, **43**, 23–39.
- Rong Jia-yu, Huang, B., Zhan Ren-bin & Harper, D. A. T. 2008a. Latest Ordovician brachiopod and trilobite assemblage from Yuhang, northern Zhejiang, East China: a window on Hirnantian deep-water benthos. *Historical Biology*, **20**, 127–148.
- Rong Jia-yu, Jin, J., Zhan Ren-bin & Bergström, J. 2008b. The earliest known *Stegerhynchus* (Rhynchonellida, Brachiopoda) from the Hirnantian strata (uppermost Ordovician) at Borenshult, Östergötland, Sweden. *GFF*, **130**, 21–30.
- Rõõmusoks, A., 1959. Strophomenoidea of the Ordovician and Silurian of Estonia, I. The genus *Sowerbyella* Jones. *Tartu Riikliku Ulikool Toimetised*, **75**, 11–50, pls. 1–8. [In Russian].
- Rõõmusoks, A. 1981. Ordovician and Silurian Strophomenida of Estonia. III. *Eesti NSV Teaduste Akadeemia Toimetised*, *Geoloogia*, **30**, 61–71.
- Rõõmusoks, A. 1985. The genera *Trigrammaria* and *Microtrypa* (Strophomenidae) in the Ordovician of Baltoscandia. *Proceedings of the Academy of Sciences of the Estonian SSR. Geology*, **34**, 133–140.

- Rõõmusoks, A. 1993a. Four new brachiopod genera of the superfamily Oepikinidae (Strophomenacea) from the Ordovician of Estonia. *Proceedings of the Academy of Sciences of the Estonian SSR. Geology*, **42**, 48–57.
- Rõõmusoks, A. 1993b. Some brachiopod genera of the superfamily Strophomeninae from the Ordovician of Estonia. *Proceedings of the Academy of Sciences of the Estonian SSR. Geology*, **42**, 110–117.
- Rõõmusoks, A. 1993c. A review of Estonian Ordovician Rafinesquinids (Brachiopoda, Strophomenacea). *Proceedings of the Academy of Sciences of the Estonian SSR. Geology*, **42**, 160–166.
- Rõõmusoks, A. 2004. Ordovician strophomenoid brachiopods of northern Estonia. *Fossilia Baltica*, **3**, 151 pp, 34 pls.
- Rosova, A.B. 1968. Biostratigraphic zoning and trilobites of the Upper Cambrian and Lower Ordovician of the northwestern Siberian platform. *Trudy Instituta Geologii i Geofiziki Vypusk Akademii Nauk SSSR*, **36**, 1–243. [in Russian].
- Ross, R. J., jr. 1949. Stratigraphy and trilobite faunal zones of the Garden City Fm., Northeastern Utah. *American Journal of Science*, **247**, 472–491.
- Ross, R. J., jr. 1957. Ordovician fossils from wells in the Williston Basin, eastern Montana. *Bulletin of the United States Geological Survey*, **1021-M**, 439–510.
- Ross, R. J., jr. 1964. Middle and Lower Ordovician Formations in Southernmost Nevada and Adjacent California. *Bulletin of the United States Geological Survey*, **1180-C**. 112 pp.
- Ross, R. J., jr. 1972. Fossils from the Ordovician bioherm at Meiklejohn Peak, Nevada. *United States Geological Survey Professional Paper*, **685**. 46 pp., 18 pls.
- Ross, R. J., jr. & Dutro, J. T., jr. 1966. Silicified Ordovician brachiopods from East-Central Alaska. *Smithsonian Miscellaneous Collections*, **149**, 1–22.
- Ross, R. J., Jr. & Ingham, J. K. 1970. Distribution of the Toquima-Table Head (Middle Ordovician Whiterock) faunal realm in the Northern Hemisphere. *Geological Society of America, Bulletin*, **81**, 393–408.
- Rozman, K. S. 1964. Brakiopody srednogo i poznego ordovika Selenyakhskogo kryazha [Middle and Late Ordovician brachiopods from the Selennayakh district], 109–193. In: Chugaeva, M. N. Rozman, K. S. & Ivanova, V. A. (eds) *Stravnitelnaya biostratigrafiya ordovikskikh otlozheniy Severo-Vostoka SSSR [Comparative biostratigraphy of Ordovician deposits in the north-east of the USSR]*. Akademia Nauka SSSR Geol. Inst. Trudy, **106**. 233 pp. [in Russian].

- Rozman, K. S., 1978. Brachiopods of the Obikalon Beds. Boundary Beds of the Ordovician and Silurian of the Altai-Sayan Region and Tien-Shan. *Transactions of the Academy of USSR Siberian Branch Institute of Geology and Geophysics*, **397**, 75–125.
- Rozman, K. S. 1979. Brakhiopody (Rhynchonellacea) mangazeiskogo i dolborskogo gorizonta. (Brachiopods (Rhynchonellacea) of the Mangazeisky and Dolborsky Horizons.). In: Rozman K. S., Krasilova I. N., Stukalina T. A., Sytova V. A. (eds) *Fauna Ordovika Srednei Sibiri. Akademii Nauk SSSR, Geologicheskii Institut, Trudy (Moscow)*, **330**, 37–78, pls. 1–22. [In Russian].
- Sánchez, T.M. 1995. Comments on the genus *Catamarcaia* Sanchez and Babin and the origin of the Arcoida. *Geobios*, **28** (3), 343–346.
- Sando, W. J. 1957. Beekmantown Group (Lower Ordovician) of Maryland. *Geological Society of America, Memoir*, **68**, 161 pp.
- Schönlau, H. P. 1988. The Ordovician–Silurian boundary in the Carnic Alps of Austria. In: Cocks, L. R. M. & Rickards, R. B. (eds) *A global analysis of the Ordovician–Silurian boundary. Bulletin of the British Museum (Natural History), Geology*, **43**, 107–115.
- Sennikov, N. V., Yolkin, E. A., Petrunina, Z. E., Gladkikh, L. A., Obut, O. T., Izokh, N. G. & Kipriyanova, T. P. 2008. *Ordovician–Silurian biostratigraphy and paleogeography of the Gorny Altay*. Trofimuk Institute of Petroleum Geology and geophysics SB RAS Publishing House, Novosibirsk, 156 pp. [In Russian].
- Servais, T. & Sintubin, M. 2009. Avalonia, Armorica, Perunica: terranes, microcontinents, microplates or palaeobiogeographical. *Geological Society of London, Special Publications*, **325**, 103–115.
- Servais, T., Owen, A. W., Harper, D. A. T., Kröger, B. & Munnecke, A. 2010. The Great Ordovician Biodiversification Event (GOBE): The palaeoecological dimension. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **294**, 99–119.
- Severgina, L.G. 1978. Brachiopods and stratigraphy of the Upper Ordovician of mountainous Altai Region, Salair and mountainous Shoria. *Akademii Nauk SSSR, Sibirskoe Otdelenie, Institut Geologii i Geofiziki, Trudy*, **405**, 3–41. [In Russian].
- Severgina, L.G. 1984. Some Upper Ordovician (Ashgill) brachiopods of the Gornoi Altai. *Trudy Instituta Geologii i Geofiziki Akademia Nauk SSSR, Sibirskoe Otdelenie, Moscow*, **584**, 29–48, pls. 3–4. [in Russian]
- Shaw, A. B. 1958. Stratigraphy and Structure of the St. Albans Area, Northwestern Vermont. *Geological Society of America, Bulletin*, **69**, 519–567.

- Sheehan, P.M. 1973. The relation of Late Ordovician glaciation to the Ordovician – Silurian changeover in North American brachiopod faunas. *Lethaia*, **6**, 147–154.
- Sheehan, P.M. 1975a. Brachiopod synecology in a time of crisis (Late Ordovician – Early Silurian). *Paleobiology*, **1**, 205–212.
- Sheehan, P.M. 1975b. Upper Ordovician and Silurian brachiopods from the Sollis Limestone, Chihuahua, Mexico. *Journal of Paleontology*, **49**, 200–211.
- Sheehan, P.M. 1979. Swedish Late Ordovician marine benthic assemblages and their bearing on brachiopod zoogeography, 61–73. In: Gray, J. & Boucot, A. J. (Editors), *Historical Biogeography, Plate Tectonics, and the Changing Environment*. The Oregon State University Press, Corvallis, xii + 500 pp.
- Sheehan, P. M. 1988. Late Ordovician events and the terminal Ordovician extinction. *New Mexico Bureau of Mines and Mineral Resources Memoir*, **44**, 405–415.
- Sheehan, P. M. and Baillie, P. W. 1981. A new species of *Eospirifer* from Tasmania. *Journal of Paleontology*, **55**, 248–256.
- Sheehan, P. M. and Coorough, P. J. 1990. Brachiopod zoogeography across the Ordovician – Silurian boundary extinction event. In: W. S. McKerrow and C. R. Scotese (Editors), *Palaeozoic palaeogeography and biogeography*. Geological Society, London, Memoir **12**, pp. 181–187.
- Sheehan, P. M. & Lespérance, P. J. 1979. Late Ordovician (Ashgillian) brachiopods from the Percé region of Québec. *Journal of Paleontology*, **53**, 950–967.
- Sheehan, P. M. & Lespérance, P. J. 1981. Brachiopods from the White Head Formation (Late Ordovician–Early Silurian) of the Perce Region, Quebec, Canada. *Field meeting, Anticosti-Gaspe, Quebec 1981*, 247–249.
- Sichuan Stratigraphic Working Group. 1978. Regional stratigraphic table of the southwestern region of China, Sichuan part. Geological Publishing House, Beijing, China, 311 pp. (in Chinese).
- Sohrabi, A. and Jin, J. 2013a. Evolution of the Rhynchotrema-Hiscobecus lineage: implications for the diversification of the Late Ordovician Epicontinental Brachiopod Fauna of Laurentia. *Lethaia*, **46**, 188–210.
- Sohrabi, A. and Jin, J. 2013b (published online). Global palaeobiogeography of brachiopod faunas during the early Katian (Late Ordovician) greenhouse episode. *Palaeogeography, Palaeoclimatology, Palaeoecology*. doi 10.1016/j.palaeo.2013.02.027.

- Sokolov, B. S. 1982. Ordovician of the Siberian Platform: Key section on the Kulumbe River. *Academy of Sciences of the USSR, Siberian Branch, Transactions*, **506**, 1–239.
- Sowerby, J. d. C. 1839. Shells. In: Murchison, R. I. (ed) *The Silurian System*. John Murray, London. 768 pp., 37 pls.
- Spelman, A. R. 1966. Stratigraphy of Lower Ordovician Nittany Dolomite in central Pennsylvania. *Pennsylvania Geological Survey Bulletin*, **G47**, 1–187.
- Spjeldnæs, N. 1957. The Middle Ordovician of the Oslo Region, Norway. 8: Brachiopods of the Suborder Strophomenida. *Norsk Geologisk Tidsskrift*, **37**, 1–214.
- Spjeldnæs, N. 1961. Ordovician climatic zones. *Norsk Geologisk Tidsskrift*, **41**, 45–77.
- St. Joseph, J. K. S. 1938. The Pentameracea of the Oslo region being a description of the Kiær collection of pentamerids. *Norsk Geologisk Tidsskrift*, **17**, 225–336.
- Stratigraphic Group of AnHui, China. 1978. Regional stratigraphic table of Eastern China, AnHui Province. Geological Publishing House, Beijing, China, 266 pp. (in Chinese)., 46 pp. (in Chinese).
- Stratigraphic Group of Central South China. 1974. Regional stratigraphic data of central South China. Geological Publishing House, Beijing, China
- Stratigraphic Group of LiaoNing and HeNan Provinces. 1978. Regional stratigraphic table of northern China: LiaoNing and HeNan Provinces. Geological Publishing House, Beijing, China, 296 pp. (in Chinese).
- Stratigraphic Group of Yunnan, China. 1978. Regional stratigraphic data of Southwest China, Yunnan Province. Geological Publishing House, Beijing, China, 438 pp. (in Chinese).
- Stubblefield, C. J. & Bulman, O. M. B. 1927. The Shineton Shales of the Wrekin District. *Quarterly Journal of the Geological Society of London*, **83**, 96–146.
- Sturesson, U., Popov, L.E., Holmer, L.E., Bassett, M.G., Felitsyn, S. and Belyatsky, B. 2005. Neodymium isotopic composition of Cambrian–Ordovician biogenic apatite in the Baltoscandian Basin: implications for palaeogeographical evolution and patterns of biodiversity. *Geological Magazine*, **142**, 419–439.
- Su Y. -z. 1980. Cambrian to Devonian brachiopods, 254–327, pls 112–134. In: Shenyang Institute of Geology and Mineral Resources (ed.) *Palaeontological Atlas of Northeast China (1) Palaeozoic Volume*. Geological Publishing House, Beijing, 686 pp., 261 pls.
- Suárez-Soruco, R. 1992. El Paleozoico inferior de Bolivia y Perú, 225–239. In: Gutierrez-Marco, J. C., Saavedra J. & Rábano, I. (eds) *Paleozoico Inferior de Iberomérica*. Universida de Extremadura, Mérida, Spain. [in Spanish].

- Sutcliffe, O. E., Harper, D. A. T., Salem, A. A., Whittington, R. J. & Craig, J. 2001. The development of an atypical *Hirnantia*-brachiopod fauna and the onset of glaciation in the late Ordovician of Gondwana. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, **92**, 1–14.
- Temple, J. T. 1965. Upper Ordovician brachiopods from Poland and Britain. *Acta Palaeontologica Polonica*, **10**, 379–427, pls. I–XXI.
- Temple, J. T. 1968. The Lower Llandovery (Silurian) brachiopods from Keisley, Westmorland. *Monograph of the Palaeontographical Society*, **122**, 1–58, pl. 1–10.
- Thomsen, E., Jin, J. & Harper, D. A. T. 2006. Early Silurian brachiopods (Rhynchonellata) from the Sælabonn Formation of the Ringerike district, Norway. *Bulletin of the Geological Society of Denmark*, **53**, 111–126.
- Tjernvik, T. E. 1956. On the Early Ordovician of Sweden stratigraphy and fauna. *Bulletin of the Geological Institutions of the University of Uppsala*, **36**, 109–284.
- Tjernvik, T. E. 1958. The Tremadocian beds at Flagboro in south-eastern Scania (Sweden). *Geologiska Foereningens i Stockholm Foerdhandlingar*, **80**, 259–276.
- Tolmacheva, T., Fedorov, P. & Egerquist, E. 2003. Conodonts and brachiopods from the Volkov Stage (Lower Ordovician) microbial mud mound at Putilovo Quarry, north-western Russia. *Bulletin of the Geological Society of Denmark*, **50**, 63–74.
- Toomey, D. F. & Nitecki, M. H. 1979. Organic buildups in the Lower Ordovician (Canadian) of Texas and Oklahoma. *Fieldiana Geology*, **2**, 1–181.
- Troedsson, G. T. 1928. On the Middle and Upper Ordovician faunas of Northern Greenland. Part II. *Meddelelser om Grønland*, **72**, 1–197.
- Vennin, E., Alvaro, J. J. & Villas, E. 1998. High-latitude pelmatozoan-bryozoan mud-mounds from the late Ordovician northern Gondwana platform. *Geological Journal*, **33**, 121–140.
- Villas, E. 1985. Braquiópodos del Ordovícico Medio y Superior de las Cadenas Ibericas Orientales. *Memorias del Museo Paleontológico de la Universidad de Zaragoza*, **1**, 1–223. [in Spanish].
- Villas, E. 1987. The Upper Ordovician clastic sequence of the Catalonian Coastal Ranges and its brachiopod fauna. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen*, **174**, 55–74.
- Villas, E. 1992. New Caradoc brachiopods from the Iberian Chains (Northeastern Spain) and their stratigraphic significance. *Journal of Paleontology*, **66**, 772–793.

- Villas, E. 1995. Caradoc through early Ashgill brachiopods from the Central-Iberian Zone (Central Spain). *Geobios*, **28**, 49–84.
- Villas, E., Gisbert, J. & Montesinos, R. 1989. Brachiopods from volcanoclastic Middle and Upper Ordovician of Asturias (Northern Spain). *Journal of Paleontology*, **63**, 554–565.
- Villas, E., Lorenzo, S. & Gutierrez-Marco, J. C. 1999. First record of a *Hirnantia* fauna from Spain, and its contribution to the Late Ordovician palaeogeography of northern Gondwana. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, **89**, 187–197.
- Villas, E., Hammann, W. & Harper, D. A. T. 2002. *Foliomena* fauna (Brachiopoda) from the Upper Ordovician of Sardinia. *Palaeontology*, **45**, 267–295.
- Villas, E. & Herrera, Z.A. 2004. Revision of the brachiopod *Eoorthis grandis* Harrington, 1938, from the Lower Ordovician of Northwestern Argentina. *Ameghiniana*, **41**, 119–123.
- Villas, E., Vizcaïno, D., Álvaro, J. J., Destombes, J. & Vennin, E. 2006. Biostratigraphic control on the latest-Ordovician glaciogenic unconformity in Alnif (Eastern Anti-Atlas, Morocco), based on brachiopods. *Geobios*, **39**, 727–737.
- Villas, E., Herrera, Z. A. & Ortega, G. C. 2009. Early orthid brachiopods from the Tremadocian (Lower Ordovician) of northwestern Argentina. *Journal of Paleontology*, **83**, 604–613.
- Waisfeld, B. G. & Henry, J.-L. 2003. *Huemacaspis* (Trilobita, Kerfornellinae) from the Late Ordovician of the Argentine Cordillera Oriental. *Geobios*, **36**, 491–499.
- Walker, K. R., Broadhead, T. W. & Keller, F. B. 1980. Middle Ordovician carbonate shelf to deep water basin deposition in the Southern Appalachians. Field Trip 10. *University of Tennessee—Studies in Geology*, **4**, 120 pp.
- Wang, Ruizhi 1981. Stratigraphic Summary of the Southwestern Region of China: Ordovician. Institute of Geology and Mine Deposit at Chengdu, Ministry of Geology. 61 pp. (in Chinese).
- Wang, Y. 1949. Maquoketa Brachiopoda of Iowa. *Geological Society of America, Memoir*, **42**, 1–55.
- Whittington, H. B. 1938. New Caradocian brachiopods from the Berwyn Hills, North Wales. *Annals and Magazine of Natural History, Series 11*, **2**, 241–259, pls. 10, 11.

- Whittington, H. B. & Williams, A. 1955. The fauna of the Derfel Limestone of the Arenig District, North Wales. *Philosophical Transactions of the Royal Society of London*, **B238**, 397–430, pls. 38–40.
- Wilcox, C. J. & Lockley, M. G. 1981. A reassessment of facies and faunas the type Llandeilo (Ordovician), Wales. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **34**, 285–314.
- Williams, A. 1949. New Lower Ordovician brachiopods from the Llandeilo-Llangadock District. *Geological Magazine*, **86**, 161–174.
- Williams, A. 1962. The Barr and Lower Ardmillan Series (Caradoc) of the Girvan District, southwest Ayrshire. *Geological Society of London Memoir*, **3**, 1–267, pls. 1–25.
- Williams, A. 1963. The Caradocian brachiopod faunas of the Bala district, Merionethshire. *Bulletin of the British Museum (Natural History), Geology*, **8**, 327–341, pls. 1–16.
- Williams, A. 1969. Ordovician faunal provinces with reference to brachiopod distribution. In: Wood, A. (ed.) *The Precambrian and lower Palaeozoic rocks of Wales*. University of Wales Press, Cardiff. 117–154.
- Williams, A. 1972. An Ordovician Whiterock fauna in western Ireland. *Proceedings of Royal Irish Academy*, **72B**, 235–278.
- Williams, A. 1973. Distribution of brachiopod assemblages in the relation to the Ordovician palaeogeography. In: Hughes, N. F. (ed) *Organisms and continents through time. Special Papers in Palaeontology*, **12**, 241–269.
- Williams, A. 1974. Ordovician Brachiopoda from the Shelve District, Shropshire. *Bulletin of the British Museum (Natural History), Geology supplement*, **11**, 1–163, 28 pls.
- Williams, A. & Curry, G. B. 1985. Lower Ordovician Brachiopoda from the Tourmakeady Limestone, Co. Mayo, Ireland. *Bulletin of the British Museum (Natural History), Geology*, **38**, 183–269.
- Williams, A. & Wright, A. D. 1981. The Ordovician–Silurian boundary in the Garth area of southwest Powys, Wales. *Geological Journal*, **16**, 1–39.
- Williams, A. Lockley, M. G. & Hurst, J. M. 1981. Benthic palaeocommunities represented in the Flairfach Group and coeval Ordovician successions of Wales. *Palaeontology*, **24**, 661–694.
- Williams, A., Carlson, S. J., Brunton, C. H. C., Holmer, L. E., Popov, L. E. 1996. A supradordinal classification of the Brachiopoda. *Philosophical Transactions of the Royal Society of London (Series B)*, **351**, 1171–1193.

- Williams, S.H., Harper, D.A.T., Neuman, R.B., Boyce, W.D. and Mac Niocaill, C., 1996. Lower Paleozoic fossils from Newfoundland and their importance in understanding the history of the Iapetus ocean. *Geological Survey of Canada Paper* 42, 115-126.
- Wilson, A. E. 1913. A New Brachiopod from the Base of the Utica. *Canadian Geological Survey Department of Mineral Resources Bulletin*, **1**, 81–6, pl. 8.
- Wilson, J. L. 1954. Ordovician stratigraphy in Marathon Folded Belt, West Texas. *American Association of Petroleum Geologists, Bulletin*, **38**, 2455–2475.
- Wilson, J.T. 1966. Did the Atlantic close and reopen. *Nature*, **211**, 676-681.
- Wonderley, P. F. & Neuman, R. B. 1984. The Indian Bay Formation: early Middle Ordovician volcanogenic rocks in the northern Gander Terrane, Newfoundland, and their regional significance. *Canadian Journal of Earth Sciences*, **21**, 525–532.
- Wright, A.D. 1963. *The brachiopod fauna of the Portrane Limestone*. Unpublished PhD thesis, Queen's University of Belfast.
- Wright, A. D. 1964. The fauna of the Portrane Limestone, II. *Bulletin of the British Museum (Natural History), Geology*, **9**, 157–256.
- Wright, A. D. 1968a. A new genus of dicoelosiid brachiopod from Dalarna. *Arkiv för Zoologi*, **22**, 127–138.
- Wright, A. D. 1968b. A westward extension of the Upper Ashgillian *Hirnantia* Fauna. *Lethaia*, **1**, 352–367.
- Wright, A. D. & Jaanusson, V. 1993. New genera of Upper Ordovician triplesiid brachiopods from Sweden. *GFF*, **115**, 93–108.
- Wright, A. D. & Rong Jiayu. 2008. Co-existence of interarea and palintrope: contribution of a new pentameride brachiopod from the Upper Ordovician of Sweden. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, **98**, 263–269.
- Xian Siyuan & Jiang Zonglong. 1978. Brachiopoda, 251–337, pls 94–128. In: Guizhou Geological and Palaeontological Working Team (eds) *Palaeontological Atlas of Southwest China-Guizhou Province (Cambrian to Devonian), Volume 1*. Geological Publishing House, Beijing. 843pp., 214 pls. (in Chinese).
- Xu, H. -k. 1996. Late Ordovician brachiopods from the central part of eastern Qinling Region. *Acta Palaeontologica Sinica*, **35**, 544–574. [in Chinese, with English summary].

- Xu H. -k. & Liu D. -y. 1984. Late Lower Ordovician brachiopods of Southwestern China. *Bulletin of the Nanjing Institute of Geology and Palaeontology, Academia Sinica*, **8**, 147–235, pls 1–18. (in Chinese with English summary).
- Xu, H. -k., Rong Jiayu & Liu, D. -y. 1974. Ordovician brachiopods, 144–154, pls. 64–66. In: Nanjing Institute of Geology and Palaeontology, Academia Sinica (ed.) *A Handbook of the Stratigraphy and Palaeontology, in Southwest China*. Science Press, Beijing. 454 pp., 202 pls. (in Chinese).
- Young, T. P. 1988. The lithostratigraphy of upper Ordovician of central Portugal. *Journal of the Geological Society of London*, **154**, 377–392.
- Zeng Q. -l. 1977. Brachiopoda, 27–69, pls 10–23. In: Hubei Institute of Geologic Sciences et Alabama (eds) *Palaeontological Atlas of Central-South China (1) Early Palaeozoic Volume*. Geological Publishing House, Beijing. 470 pp., 116 pls. (in Chinese).
- Zeng Q. -l. 1987. Brachiopoda, 209–244, pls 8–18. In: Wang, X. -f., Ni, S. -z., Zeng, Q. -l., Xu G. -h., Zhou, T. -m., Li Z. -h. & Xiang L. -w. (eds) *Biostratigraphy of the Yangtze Gorge Area (2) Early Palaeozoic Era*. Geological Publishing House, Beijing. 641 pp., 72 pls.
- Zhan Ren-bin & Cocks, L. R. M. 1998. Late Ordovician brachiopods from the South China Plate and their palaeogeographical significance. *Special Papers in Palaeontology*, **59**, 1–70.
- Zhan Ren-bin & Harper, D.A.T. 2006. Biotic diachroneity during the Ordovician radiation: evidence from South China. *Lethaia*, **39**, 211–226.
- Zhan Ren-bin, Jin, J. & Rong Jiayu. 2006. β-diversity fluctuations in Early–Mid Ordovician brachiopod communities of South China. *Geological Journal*, **41**, 271–288.
- Zhan Ren-bin & Jin, J. 2005. Brachiopods from the Dashaba Formation (Middle Ordovician) of Sichuan Province, south-west China. *Special Papers in Palaeontology*, **74**, 1–63.
- Zhan Ren-bin & Jin, J. 2005. New data on the *Foliomena* fauna (Brachiopoda) from the Upper Ordovician of South China. *Journal of Paleontology*, **79**, 670–686.
- Zhan Renbin and Jin Jisuo. 2008. Aspects of recent advances in the Ordovician stratigraphy and palaeontology of China. *Palaeoworld*, **17**, 1–11.
- Zhan Renbin and Jin Jisuo. 2008. Diversity analysis of the Early Ordovician *Sinorthis* Fauna (Brachiopoda) from the Meitan Formation of Zunyi, northern Guizhou, South China. In: Cusack, M. and Harper, D.A.T., eds, Brachiopod Research into the Third

- Mellennium-in honour of the late Sir Alwyn Williams. *Transactions of the Royal Society of Edinburgh: Earth and Environmental Science*, **98**, 239–251.
- Zhan Renbin, Jisuo Jin and Chen Pengfei. 2010. Early-Mid Ordovician *Yangtzeella* (Syntrophiidina, Brachiopoda) and its evolutionary significance. *Palaeontology*, **53**, 77–96.
- Zhan Renbin, Jin Jisuo and Li Guipeng. 2007. The *Saucrorthis* Fauna (Brachiopoda) and its implications for the Ordovician radiation in South China. *Acta Palaeontologica Sinica*, **46** (suppl.), 515–522 (in English with Chinese abstract).
- Zhan Renbin and Liu Jianbo. 2010. The great Ordovician biodiversification in South China: A synopsis. 270–284. In: Long Manyuan, Gu Hongya and Zhou Zhonghe (eds), Darwin's Heritage Today—Proceedings of the Darwin 200 Beijing International Conference. Beijing, Higher Education Press. 383 pp.
- Zhan Ren-bin, Rong Jiayu, Jin, J. & Cocks, L. R. M. 2002. Late Ordovician brachiopod communities of southeast China. *Canadian Journal of Earth Sciences* **39**, 445–468.
- Zhan Ren-bin, Rong Jiayu, Cheng, J. & Cheng, P. 2005. Early-Mid Ordovician brachiopod diversification in South China. *Science in China*, **48**, 662–675.
- Zhan Ren-bin, Jin, J., Rong Jiayu, Chen, P. & Yu, G. 2008. Strophomenide brachiopods from the Changwu Formation (Late Katian, Late Ordovician) of Chun'an, western Zhejiang, South-East China. *Palaeontology*, **51**, 737–766.
- Zhan, R. B., Li, R. Y., Percival I. G. & Liang, Y. 2011. Brachiopod biogeographic change during the Early to Middle Ordovician in South China. *Memoirs of the Association of Australasian Palaeontologists*, **41**, 273–287.
- Zhang, N. & Boucot, A. J. 1988. *Epitomyonia* (Brachiopoda): ecology and functional morphology. *Journal of Paleontology*, **62**, 753–758.
- Zhang, S. & Barnes, C. R. 2007. Late Ordovician to early Silurian conodont faunas from the Kolyma Terrane, Omulev Mountains, Northeast Russia, and their paleobiogeographic affinity. *Journal of Paleontology*, **81**, 490–512.
- Zuykov, M. A. & Butts, S. H. 2008. *Glyptorthis* (Foerste, 1914) and *Bassettella* new genus (Brachiopoda: Orthida) from the Late Ordovician of the East Baltic. *Journal of Paleontology*, **82**, 197–200.
- Zuykov, M. A. & Harper, D. A. T. 2007. *Platystrophia* (Orthida) and new related Ordovician and Early Silurian brachiopod genera. *Estonian Journal of Earth Sciences*, **56**, 11–34.

	A	B	C	D	E
	Code	General area	Region	Palaeogeography	Reference
1					
2	01-Tr	Argentina	Sierra De Famatina	Famatina	Acenolaza 1983
3	02-Tr	Argentina	Jujuy	Cordillera Oriental	Harrington 1937, Acenolaza 1968, Benedetto and Carrasco 2002, Benedetto 2007
4	03-Tr	Argentina	Puna	Puna	Benedetto 2007
5	04-Tr	Argentina	Rioja	Precordillera	Harrington 1957
6	05-Tr	Argentina	Salta	Cordillera Oriental	Harrington 1937, Harrington <i>in</i> Harrington and Leanza 1957, Benedetto and Carrasco 2002, Benedetto 2007, Villas <i>et al.</i> 2009
7	06-Tr	Argentina	San Juan	Precordillera	Kobayashi 1935, Benedetto 2003
8	07-Tr	Australia	Victoria	Gondwana	Laurie 1987
9	08-Tr	Bolivia	Cuesta De Erquis, Noquera, Palquis, Tarija, Tincuya	Cordillera Oriental	Havliček 1980, Havliček and Branisa 1980, Benedetto 2007
10	09-Tr	Canada	Newfoundland	Newfoundland	Liljeroth unpublished
11	10-Tr	China (N)		North China	Su 1980
12	11-Tr	China (S)	Yangtze Platform	South China	Zeng 1977
13	12-Tr	China (S)	Chongqing	South China	Wang 1981
14	13-Tr	China (S)	Guangxi (W)	South China	Xu <i>et al.</i> 1974
15	14-Tr	China (S)	Yanhe, Tongzi, Wudang	South China	Xu <i>et al.</i> 1974, Guizhou Stratigraphic Work Group 1977, Xian and Jiang 1978, Wang 1981
16	15-Tr	China (S)	Upper Yangtze Platform	South China	Xu <i>et al.</i> 1974, Wang <i>et al.</i> 1987
17	16-Tr	China (S)	Lower Yangtze Platform, Jiangnan transitional belt	South China	Liu <i>et al.</i> 1983; Academy of Geological Sciences, Jiangsu Bureau of Petroleum Prospecting, Nanjing Institute Geology, Paleontology, and Academia Sinica 1988
18	17-Tr	China (S)	Jiangxi	South China	Liu <i>et al.</i> 1983
19	18-Tr	China (S)	Shanghai	South China	Liu <i>et al.</i> 1983
20	19-Tr	China (S)	Shaanxi (S)	South China	Xu <i>et al.</i> 1974
21	20-Tr	China (S)	Sichuan	South China	Xu <i>et al.</i> 1974, Sichuan Stratigraphic Work Group 1978, Wang 1981
22	21-Tr	China (S)	Yangtze Gorge Area	South China	Zeng 1987
23	22-Tr	China (S)	Yichang	South China	Li <i>et al.</i> 2004
24	23-Tr	China (S)	Zhejiang	South China	Liu <i>et al.</i> 1983
25	24-Tr	China (S)	Anhui	South China	Sichuan Stratigraphic Work Group 1978, Stratigraphic Group of Yunnan 1978, Liu <i>et al.</i> 1983
26	25-Tr	Columbia	Macarena (S)	Gondwana	Harrington 1951
27	26-Tr	Czech	Bohemia	Perunica	Havliček 1949, 1977; Havliček and Vaněk 1966; Popov <i>et al.</i> 2009
28	27-Tr	England	Shropshire	Avalonia	Stubblefield and Bulman 1927

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
29	28-Tr	France (S)	Montagne Noir	Armorica	Popov <i>et al.</i> 2009, Liljeroth unpublished
30	29-Tr	Germany	Bavaria	Saxo Thuringia	Benedetto 2007
31	30-Tr	Iran (C)		Alborz	Popov <i>et al.</i> 2009
32	31-Tr	Iran (NC)	Alborz Mts.	Alborz	Popov <i>et al.</i> 2009
33	32-Tr	Morocco	Anti-Atlas Mts.	Gondwana	Havlíček 1971, Rabano 1990, Popov <i>et al.</i> 2009
34	33-Tr	Norway	Vestfossen	Baltica	Ebbestad 1999
35	34-Tr	Russia	Urals (N)	Urals	Popov <i>et al.</i> 2009
36	35-Tr	Siberia	Dyukta, Dzherba and Nyuya rivers, Tochilnaya	Siberia	Kanygin <i>et al.</i> 1989, Cocks and Torsvik 2007
37	36-Tr	Siberia (NW)	Igar region, Kulumbe River Valley	Siberia	Rosova 1968, Sokolov 1982
38	37-Tr	Siberia (SW)		Siberia	Cocks and Torsvik 2007
39	38-Tr	Sweden	Scania, South Bothnian district, Västergötland, Öland	Baltica	Tjernvik 1958
40	39-Tr	Tasmania	Florentine Synclinorium	Tasmania	Corbett and Banks 1974
41	40-Tr	Turkey	Eastern Pontides	Eastern Pontides	Popov <i>et al.</i> 2009
42	41-Tr	Turkey (S)	Turkish Taurides	Taurides	Popov <i>et al.</i> 2009
43	42-Tr	USA	Maryland	Laurentia	Sepkoski 1998
44	43-Tr	USA	Montana	Laurentia	Lochman 1965, Sepkoski 1998
45	44-Tr	USA	Nevada	Laurentia	Ross 1970, Sepkoski 1998
46	45-Tr	USA	New York	Laurentia	Sepkoski 1998
47	46-Tr	USA	North Dakota	Laurentia	Lochman 1965
48	47-Tr	USA	Pennsylvania	Laurentia	Sando 1957, Spelman 1966
49	48-Tr	USA	Texas	Laurentia	Wilson 1954, Cloud and Barnes 1957, Sepkoski 1998
50	49-Tr	USA	Utah	Laurentia	Sepkoski 1998, Holmer <i>et al.</i> 2005
51	50-Tr	USA	Virginia	Laurentia	Butts 1940
52	51-Tr	Wales (NW)	Gwynedd	Avalonia	Stubblefield and Bulman 1927
53	01-Fl	Argentina	Argentina	Peri-Gondwana?	Popov <i>et al.</i> 2009
54	02-Fl	Argentina	Jujuy	Cordillera Oriental	Benedetto 2003
55	03-Fl	Argentina	Puna	Puna	Benedetto 2003
56	04-Fl	Argentina	Rioja	Famatina	Benedetto 2003
57	05-Fl	Argentina	San Juan	Precordillera	Herrera and Benedetto 1991, Benedetto 2003
58	06-Fl	Australia	New South Wales (Mt. Arrow-smith)	Gondwana	Brock and Paterson 2003
59	07-Fl	Australia (W)	Prices Creek	Gondwana	Laurie 1987b, 1997

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
60	08-Fl	Canada	Northwest Territories (Mackenzie Mts.)	Laurentia	Ludvigsen 1975, Sepkoski 1998
61	09-Fl	China (S)	Chongqing	South China	Wang 1981, Zhan <i>et al.</i> 2005
62	10-Fl	China (S)	Guizhou	South China	Wang 1981, Zhan <i>et al.</i> 2005
63	11-Fl	China (S)	Hubei	South China	Wang <i>et al.</i> 1987
64	12-Fl	China (S)	Jiangsu	South China	Academy of Geological Sciences, Jiangsu Bureau of Petroleum Prospecting, Nanjing Institute Geology, Paleontology, and Academia Sinica 1988
65	13-Fl	China (S)	Sichuan	South China	Wang 1981, Zhan <i>et al.</i> 2005
66	14-Fl	Czech Republic	Bohemia	Perunica	Havlíček 1967, 1977, Popov <i>et al.</i> 2009
67	15-Fl	Estonia (N)	Tallinn	Baltica	Hints <i>et al.</i> 1997, Egerquist 2003
68	16-Fl	France	Montagne Noir	Armorica	Capera <i>et al.</i> 1978, Babin <i>et al.</i> 1982
69	17-Fl	Malaysia	Pulau Langun, Pulau Langkawi	Sibumasu	Laurie and Burrett 1992
70	18-Fl	Morocco	Anti-Atlas Mts.	Gondwana	Havlíček 1971, Babin and Destombes 1990, Popov <i>et al.</i> 2009
71	19-Fl	Russia	St. Petersburg	Baltica	Egerquist 2003
72	20-Fl	Russia	Urals	Urals Terrane	Popov <i>et al.</i> 2009
73	21-Fl	Scotland	Aberfoyle	Peri-Laurentia	Ingham <i>et al.</i> 1986
74	22-Fl	Scotland	Skye	Peri-Laurentia	Curry and Williams 1984
75	23-Fl	Siberia	Siberian craton	Siberia	Cocks and Torsvik 2007
76	24-Fl	Svalbard	Spitsbergen	West Svalbard	Hansen and Holmer 2010
77	25-Fl	USA	Arkansas	Laurentia	Cullison 1944
78	26-Fl	USA	Maryland	Laurentia	Sepkoski 1998
79	27-Fl	USA	Missouri	Laurentia	Fix 1975
80	28-Fl	USA	Montana	Laurentia	Sepkoski 1998
81	29-Fl	USA	Nevada	Laurentia	Merriam 1963, Ross 1964, Peters 2003
82	30-Fl	USA	North Dakota	Laurentia	Sepkoski 1998
83	31-Fl	USA	Texas	Laurentia	Toomey and Nitecki 1979
84	32-Fl	USA	Utah	Laurentia	Hintze 1952, Sepkoski 1998, Peters 2003, Finnegan and Droser 2008
85	01-DapDar	Algeria, Morocco	Ougarta (Algeria), Anti-Atlas Mts. (Morocco)	Gondwana	Havlíček 1970, 1971; Mergl 1983
86	02-DapDar	Argentina	Catamarca	Famatina	Benedetto 2003
87	03-DapDar	Argentina	Jujuy	Cordillera Oriental	Acenolaza 1968, Benedetto 2003
88	04-DapDar	Argentina	Rioja	Famatina	Levy and Nullo 1973, Benedetto 2003

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
89	05-DapDar	Argentina	San Juan (N)	Precordillera	Benedetto and Herrera 1986, 1987a,b, 1993; Herrera and Benedetto 1987, 1988; Benedetto 1987, 2003; Herrera 1991; Sanchez 1995
90	06-DapDar	Australia	New South Wales (Wahringa)	Gondwana	Percival <i>et al.</i> 2001
91	07-DapDar	Bolivia	Irpa Irpa, San Lucas, Teoponte, Totoropalca, Tuctapari	Cordillera Oriental	Havliček and Branisa 1980
92	08-DapDar	Canada	Indian Bay, Newfoundland	Newfoundland	Wonderley and Neuman 1984
93	09-DapDar	Canada	New Brunswick	Miramichi Terrane	Andreeva 1972, Neuman 1984
94	10-DapDar	Canada	Newfoundland (New World Island)	Newfoundland	Neuman 1976, 1968, 1984
95	11-DapDar	Canada	Newfoundland (Bishops Falls)	Newfoundland	Colman-Sadd and Russell 1982, Neuman 1984
96	12-DapDar	Canada	Newfoundland (Port Saunders)	Newfoundland	Harper and Neuman 1992
97	13-DapDar	Canada	Northwest Territories (Mackenzie Mts.)	Laurentia	Hayes 1980, Potter and Boucot 1992
98	14-DapDar	Canada	Quebec (S)	Laurentia	Hofmann 1963, 1982
99	15-DapDar	China (N)	Liaoning	North China	Stratigraphic Group of Liaoning and Henan Provinces 1989
100	16-DapDar	China (NW)	Gansu	North China	Fu 1982, Zhan 1997
101	17-DapDar	China (NW)	Ningxia	North China	Fu 1982, Zhan 1997
102	18-DapDar	China (NW)	Shaanxi	North China	Fu 1982, Zhan 1997
103	19-DapDar	China (S)	Anhui	South China	Stratigraphic Group of Anhui, China 1978, Liu <i>et al.</i> 1983, Zhan 1997
104	20-DapDar	China (S)	Chongqing (N)	South China	Zhan <i>et al.</i> 2005
105	21-DapDar	China (S)	Guangxi (W)	South China	Xu and Liu 1984
106	22-DapDar	China (S)	Guizhou	South China	Guizhou Stratigraphic Work Group 1977, Wang 1981, Xu and Liu 1984, Zhan <i>et al.</i> 2005
107	23-DapDar	China (S)	Hubei	South China	Xu and Liu 1984, Wang <i>et al.</i> 1987
108	24-DapDar	China (S)	Hunan (W)	South China	Xu and Liu 1984
109	25-DapDar	China (S)	Jiangsu	South China	Liu <i>et al.</i> 1983, Academy of Geological Sciences, Jiangsu Bureau of Petroleum Prospecting, Nanjing Institute Geology, Paleontology and Academia Sinica 1988, Zhan 1997
110	26-DapDar	China (S)	Jiangxi	South China	Liu <i>et al.</i> 1983, Zhan 1997
111	27-DapDar	China (S)	Shanghai	South China	Liu <i>et al.</i> 1983, Zhan 1997
112	28-DapDar	China (S)	Shaanxi (S)	South China	Xu and Liu 1984

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
113	29-DapDar	China (S)	Sichuan	South China	Guizhou Stratigraphic Work Group 1977, Wang 1981, Xu and Liu 1984, Zhan and Jin 2005, Zhan <i>et al.</i> 2005
114	30-DapDar	China (S)	Zhejiang	South China	Liu <i>et al.</i> 1983, Zhan 1997
115	31-DapDar	Czech Republic	Bohemia	Perunica	Havliček 1970, 1977
116	32-DapDar	England	Cornwall, Devon	Armorica	Bassett 1981, Cocks and Lockley 1981
117	33-DapDar	England	Shropshire	Avalonia	Bates 1969, Williams 1974
118	34-DapDar	Estonia (N)	Harku Trench	Baltica	Hints and Rõõmuksos 1997, Rasmussen 2005
119	35-DapDar	France	Normandy	Armorica	Cocks and Lockley 1981
120	36-DapDar	Greenland (NE)		Laurentia	Harper and Neuman 1992
121	37-DapDar	Ireland	Mayo Co.	Northwestern Terrane	Williams 1972, Williams and Curry 1985, Harper and Neuman 1992
122	38-DapDar	Ireland	Waterford Co. (Tramore)	Leinster Terrane	Liljeroth unpublished
123	39-DapDar	Ireland (E)	Meath Co. (Bellewstown)	Bellewstown Terrane	Harper and Neuman 1992
124	40-DapDar	Ireland (SE)	Tagoat	Rosslare Terrane	Neuman and Harper 1992
125	41-DapDar	Latvia (W)		Baltica	Hints and Harper 2003, Hansen 2008
126	42-DapDar	Malaysia, Thailand	Pulau Langun, Pulau Langkawi (Malaysia), Langu (Thailand)	Sibumasu	Laurie and Burrett 1992
127	43-DapDar	Norway	Hølonda	Hølonda Terrane	Neuman and Bruton 1974, 1989
128	44-DapDar	Norway	Oslo Region	Baltica	Öpik 1939, McNamara 1980
129	45-DapDar	Norway	Smøla	Smøla Terrane	Harper and Neuman 1992
130	46-DapDar	Norway	Valdres	Valdres Terrane	Harper and Neuman 1992
131	47-DapDar	Norway (C)	Oppland	Baltica	Bruton and Harper 1981
132	48-DapDar	Peru	Contaya Hills	Peri-Gondwana?	Hughes 1980
133	49-DapDar	Poland	Holy-Cross Mts.	Malopolska	Harper and Neuman 1992
134	50-DapDar	Russia (NW)	St. Petersburg	Baltica	Egerquist 2003, 2004; Hansen and Harper 2003; Tolmacheva <i>et al.</i> 2003; Rasmussen 2005
135	51-DapDar	Scotland	Highland Border	Midland Valley Terrane	Harper and Neuman 1992
136	52-DapDar	Scotland	South Ayrshire	Midland Valley Terrane	Williams 1962

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
137	53-DapDar	Siberia	Siberian Craton	Siberia	Harper and Neuman 1992
138	54-DapDar	Spain	Zaragoza district	Iberia	Villas 1985
139	55-DapDar	Spain	Cabo Penas	Iberia	Villas <i>et al.</i> 1989
140	56-DapDar	Svalbard	Spitsbergen	West Svalbard	Hansen and Holmer 2010
141	57-DapDar	Sweden	Siljan District, Öland	Baltica	Jaanusson 1960, 1962, 1963; Rasmussen 2005
142	58-DapDar	Tasmania	South of Mt Field National Park	Tasmania	Laurie 1991
143	59-DapDar	USA	Appalachians (S)	Laurentia	Walker <i>et al.</i> 1980
144	60-DapDar	USA	California (Klamath)	Klamath	Berry <i>et al.</i> 1979, Potter 1990
145	61-DapDar	USA	Maine	Laurentia	Neuman 1964, 1984
146	62-DapDar	USA	Nevada	Laurentia	Kay 1962, Ross 1972, Berry <i>et al.</i> 1979
147	63-DapDar	USA	New York (Beekmantown)	Laurentia	Landing and Westrop 2006
148	64-DapDar	USA	Oklahoma (Arbuckle Mts.)	Laurentia	Harper and Neuman 1992
149	65-DapDar	USA	Utah (NE)	Laurentia	Ross 1949
150	66-DapDar	Wales (N)	Anglesey	Avalonia	Bates 1968, 1969; Neuman and Bates 1978
151	67-DapDar	Wales (S)	Builth, Carmarthenshire, Llandeilo, Monmouthshire, Pembrokeshire	Avalonia	Bates 1969, Williams 1974, Lockley and Williams 1981, Williams <i>et al.</i> 1981, Wilcox and Lockley 1981
152	01-Sa	Algeria	Algerian Sahara	Gondwana	Botquelen and Melou 2007
153	02-Sa	Argentina	Jujuy, Salta	Cordillera Oriental	Benedetto 1999, 2003
154	03-Sa	Argentina	Mendoza	Precordillera	Cocks and Rong 1989
155	04-Sa	Argentina	Rioja	Precordillera	Benedetto 2003
156	05-Sa	Argentina	San Juan	Precordillera	Cocks and Rong 1989, Benedetto 2003, Fortey and Cocks 2003
157	06-Sa	Australia	New South Wales (Cliefden Caves)	Gondwana	Percival 1991, Cocks and Zhan 1998, Fortey and Cocks 2003
158	07-Sa	Australia	New South Wales (Fairbridge)	Gondwana	Percival <i>et al.</i> 2001
159	08-Sa	Australia	New South Wales (Goonumbla)	Gondwana	Cocks and Rong 1989
160	09-Sa	Bolivia	Cordillera Oriental	Cordillera Oriental	Havlíček and Branisa 1980, Waisfeld and Henry 2003
161	10-Sa	Burma	Shan States	Sibumasu	Cocks and Zhan 1998
162	11-Sa	Canada	Manitoulin	Laurentia	Cooper 1956
163	12-Sa	Canada	Northwest Territories	Laurentia	Potter and Boucot 1992
164	13-Sa	Canada	Ontario	Laurentia	Cooper 1956
165	14-Sa	Canada	Quebec	Laurentia	Cooper 1956, Copper 1977
166	15-Sa	China (N)	Longxian County	North China	Cocks and Rong 1989, Rong <i>et al.</i> 1999, Zhan and Jin 2005
167	16-Sa	China (S)	Guizhou (N)	South China	Cocks and Zhan 1998

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
168	17-Sa	China (S)	Hubei (W)	South China	Chang 1983, Cocks and Rong 1989, Zhan and Cocks 1998, Rong <i>et al.</i> 1999
169	18-Sa	China (S)	Nanzen, NW margin of South China Plate, Shaanxi (S)	South China	Cocks and Rong 1989, Rong <i>et al.</i> 1999, Zhan and Jin 2005
170	19-Sa	China (S)	Sichuan	South China	Rong <i>et al.</i> 1999
171	20-Sa	China (S)	South China	South China	Zhan <i>et al.</i> 2008
172	21-Sa	Czech Republic	Bohemia	Perunicia	Havlíček 1967, 1977, Cocks and Rong 1989
173	22-Sa	England	Shropshire	Avalonia	de Sowerby 1839, Jones 1928, Williams 1974, Cocks 1978, Cocks and Rong 1989, Hurst 1979, Jin and Copper 1997, Jin and Zhan 2001, Hansen 2008
174	23-Sa	Estonia (N)	Aluvere, Kaikula, Kohtla, Lasnamägi, Lekhtmetsa-Saky, Rakvere, Tallinn	Baltica	Öpik 1930; Cooper 1956; Roomusoks 1959, 2004; Harper 1984; Cocks and Rong 1989; Villas 1992; Cocks 2005; Hints and Harper 2003
175	24-Sa	Estonia (N)-Russia (NW)		Baltica	Hints and Harper 2003, Zuykov and Butts 2008
176	25-Sa	France	Armorican Massif	Armorica	Villas <i>et al.</i> 2006, Botquelen and Melou 2007
177	26-Sa	France	Montagne Noire	Armorica	Havlíček 1981, Cocks and Rong 1989
178	27-Sa	France	Normandy	Armorica	Villas 1992
179	28-Sa	Ireland (SE)	Ballinatray, Ballygarvan Bridge, Ballykale, Carrigadaggan, Grange Hill House Cottage, Greenville-Moyne, Kildare, Kilbride	Leinster Terrane	Parkes 1992, 1994
180	29-Sa	Ireland (SE)	Waterford Co. (Dunabrottin)	Leinster Terrane	Liljeroth unpublished
181	30-Sa	Ireland (SE)	Waterford Co. (Tramore)	Leinster Terrane	Liljeroth unpublished
182	31-Sa	Ireland (SE)	Wexford	Leinster Terrane	Parkes 1992, 1994
183	32-Sa	Ireland (W)	Mayo (S)	Mweelrea	Harper <i>et al.</i> 2010
184	33-Sa	Kazakhstan	Chinghiz Mts.	Chinghiz	Cocks and Rong 1989, Cocks and Zhan 1998, Fortey and Cocks 2003
185	34-Sa	Kazakhstan	Chu-Ili Range (Kotnak Mts.)	Chulli	Cocks and Rong 1989, Nikitin <i>et al.</i> 1996, Popov <i>et al.</i> 2002, Fortey and Cocks 2003
186	35-Sa	Kirgizya (N)	Tabulgat, Moldo Too	Tien Shan	Cocks and Rong 1989, Popov <i>et al.</i> 2000
187	36-Sa	Latvia (W)		Baltica	Hints and Harper 2003, Hansen 2008
188	37-Sa	North Ireland	Pomeroy	Midland Valley Terrane	Candela 2003
189	38-Sa	Norway	Fangberget, Furuberget, Oslo-Asker	Baltica	Spjeldnæs 1957, Harper and Owen 1984, Owen and Harper 1982, Harper <i>et al.</i> 1985, Cocks and Rong 1989, Hansen 2008

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
190	38-Sa	Portugal	Bucaco	Iberia	Villas 1992, Botquelen and Melou 2007
191	39-Sa	Russia	Moscow Synecclise	Baltica	Nikiforova 1976
192	40-Sa	Russia	Northeastern Gorny Altai	Gorny Altai	Sennikov <i>et al.</i> 2008
193	41-Sa	Russia	Western Gorny Altai	Gorny Altai	Sennikov <i>et al.</i> 2008
194	42-Sa	Scotland	Girvan	Midland Valley Terrane	Williams 1962, Harper <i>et al.</i> 1985, Harper 1986, Cocks and Rong 1989, Popov <i>et al.</i> 2002, Hansen 2008
195	43-Sa	Scotland (SE)	Peeblesshire	Southern Uplands	Candela and Harper 2010
196	44-Sa	Scotland (W)	Kilbucho/Wallace's Cast	Midland Valley Terrane	Clarkson <i>et al.</i> 1992, Candela and Harper 2010
197	45-Sa	Siberia	Kulyumbe	Siberia	Kanygin <i>et al.</i> 2006
198	46-Sa	Spain (C)	Central Iberian Zone	Iberia	Villas 1995
199	47-Sa	Spain (NE)	Iberian Chains	Iberia	Villas 1985, 1992; Botquelen and Melou 2007
200	48-Sa	Sweden	Scania, Siljan District, Öland	Baltica	Jaanusson 1962, Harper 1984, Harper <i>et al.</i> 1985, Cocks and Rong 1989, Hansen 2008
201	49-Sa	USA	Alabama	Gondwana	Cooper 1956, Copper 1977, Cocks and Rong 1989
202	50-Sa	USA	Alaska (Jones Ridge)	Alaska	Ross and Dutro 1966
203	51-Sa	USA	Alaska (White Mt.)	Alaska	Rasmussen 2009
204	52-Sa	USA	California (Klamath)	Klamath	Cocks and Rong 1989, Potter 1990
205	53-Sa	USA	Georgia	Laurentia	Cooper 1956
206	54-Sa	USA	Illinois	Laurentia	Cooper 1956
207	55-Sa	USA	Iowa	Laurentia	Cooper 1956
208	56-Sa	USA	Kentucky	Laurentia	Cooper 1956, Copper 1977, Howe 1988, Cocks and Rong 1989, Patzkowski and Holland 1997
209	57-Sa	USA	Maryland	Laurentia	Cooper 1956
210	58-Sa	USA	Minnesota	Laurentia	Cooper 1956, Copper 1977
211	59-Sa	USA	Missouri	Laurentia	Cooper 1956
212	60-Sa	USA	Nevada	Laurentia	Cooper 1956
213	61-Sa	USA	New Jersey	Laurentia	Cooper 1956
214	62-Sa	USA	New Mexico (S)	Laurentia	Howe 1967
215	63-Sa	USA	New York	Laurentia	Cooper 1956, Rong and Zhan 1996, Patzkowsky and Holland 1997, Jin and Zhan 2000
216	64-Sa	USA	Ohio Valley	Laurentia	Howe 1988, Cocks and Rong 1989, Patzkowski and Holland 1997, Cocks and Zhan 1998

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
217	65-Sa	USA	Oklahoma	Laurentia	Cooper 1956
218	66-Sa	USA	Pennsylvania	Laurentia	Cooper 1956
219	67-Sa	USA	Tennessee	Laurentia	Cooper 1956, Cocks and Rong 1989
220	68-Sa	USA	Texas (W)	Laurentia	Howe 1967
221	69-Sa	USA	Vermont	Laurentia	Cooper 1956
222	70-Sa	USA	Virginia	Laurentia	Cooper 1956, Cocks and Rong 1989
223	71-Sa	USA	Wisconsin	Laurentia	Cooper 1956, Cocks and Rong 1989, Baarli 1995, Patzkowsky and Holland 1997
224	72-Sa	USA (E)		Laurentia	Patzkowsky and Holland 1997
225	73-Sa	Uzbekistan	Tian-Shan	Tien Shan	Fortey and Cocks 2003, Cocks 2005
226	74-Sa	Wales	Bala, Berwyn Hills, Derfel Gorge, Glyn Ceiriog, Gwynedd, Powys, Shelve Inlier	Avalonia	Whittington 1938; Williams 1949, 1963, 1974; Hurst 1979; Pickerill and Brenchley 1979; Lockley 1980; Harper <i>et al.</i> 1985; Cocks and Rong 1989; Harper and Brenchley 1993; Cocks and Zhan 1998; Villas <i>et al.</i> 2006; Hansen 2008
227	01-KaL	Algeria, Morocco	Polignac Basin (Algeria), Morocco (East Anti Atlas Mts.)	Gondwana	Havliček 1971, Massa <i>et al.</i> 1977, Boucot <i>et al.</i> 2003, Villas <i>et al.</i> 2006
228	02-KaL	Argentina	San Juan	Precordillera	Benedetto 2003
229	03-KaL	Australia	New South Wales (Cliefden Caves, Bowan Park)	Gondwana	Percival 1978, 1979a, 1991, 1995, 2009; Percival <i>et al.</i> unpublished
230	04-KaL	Canada	British Columbia (Rocky Mts.)	Laurentia	Cocks and Zhan 1998
231	05-KaL	Canada	Manitoba (S)	Laurentia	Jin <i>et al.</i> 1997, Jin and Zhan 2001
232	06-KaL	Canada	Newfoundland (New World Island)	Newfoundland	McKerrow and Cocks 1981
233	07-KaL	Canada	Ontario	Laurentia	Cooper 1956, Copper 1977, Cocks and Rong 1989
234	08-KaL	Canada	Quebec	Laurentia	Cooper 1956
235	09-KaL	China (N)	Ningxia	North China	Rong and Zhan 1996
236	10-KaL	China (N)	Qinghai	North China	Popov <i>et al.</i> 2000
237	11-KaL	China (N)	Shaanxi (N)	North China	Cocks and Rong 1989, Jin and Copper 1997, Cocks and Zhan 1998, Rong <i>et al.</i> 1999, Zhan and Jin 2005
238	12-KaL	China (S)	Shaanxi (S)	South China	Cocks and Rong 1989, Rong <i>et al.</i> 1999, Zhan and Jin 2005
239	13-KaL	China (S)	Sichuan	South China	Rong <i>et al.</i> 1999
240	14-KaL	China (S)	Yunnan (W)	South China	Rong <i>et al.</i> 1999
241	15-KaL	China (S)		South China	Zhan <i>et al.</i> 2008

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
242	16-KaL	Czech Republic	Bohemia	Perunica	Havlíček 1977; Mikulas 1985; Harper <i>et al.</i> 1985; Cocks and Rong 1989; Villas 1992, Villas <i>et al.</i> 2006
243	17-KaL	England	Shropshire	Avalonia	Cocks and Rong 1989, Cocks and Fortey 1997
244	18-KaL	Estonia (N and S)	Hiumaa, Kaikula, Lekhtmetsa-Saky, Rakvere, Saku	Baltica	Rõõmusoks 1959, 2004; Hints 1975; Copper 1977; Cocks and Rong 1989; Villas 1992; Hints and Harper 2003; Cocks 2005; Hansen 2008; Estonian DB (the Web, 2010)
245	19-KaL	France	Brittany	Armorica	Mélou 1990
246	20-KaL	France	Montagne Noire	Armorica	Havlíček 1981; Cocks and Rong 1989
247	21-KaL	France	Normandy	Armorica	Villas 1992
248	22-KaL	Girvan	Craighead Inlier, Penwhapple Burn	Midland Valley Terrane	Williams 1962; Copper 1977; Cocks and Rong 1989; Harper 1989, 2000, 2006; Cocks and Modzalevskaya 1997; Jin and Copper 1997; Cocks 2005
249	23-KaL	Ireland (N)	Pomeroy	Midland Valley Terrane	Mitchell 1977, Candela 2003
250	24-KaL	Italy	Carnic Alps	Carnic Alps	Havlíček <i>et al.</i> 1987; Botquelen 2003
251	25-KaL	Italy	Sardinia	Sardinia	Cocks and Rong 1989, Villas <i>et al.</i> 2002, Botquelen 2003, Zhan and Jin 2005
252	26-KaL	Kazakhstan	Chinghiz Mts., Pre-Chinghiz Mts., Tarbagatau Mts.	Chinghiz	Cocks and Modzalevskaya 1997, Cocks and Rong 1989, Cocks and Zhan 1998, Nikitin <i>et al.</i> 2003, Popov <i>et al.</i> 2000, Popov and Cocks 2006
253	27-KaL	Kazakhstan	Chu-Ili Mts	Chu-Ili	Copper 1977, Nikitin <i>et al.</i> 1980, 2003, 2006; Klenina <i>et al.</i> 1984, Patzkowsky and Holland 1997, Popov <i>et al.</i> 2000, Popov and Cocks 2006
254	28-KaL	Kazakhstan	Chu-Ili Mts	Chu-Ili	Cocks and Rong 1989, Popov and Cocks 2006
255	29-KaL	Kazakhstan	Dzhebagly Mts., Koskaras valley	Tien Shan	Popov <i>et al.</i> 2000, Nikitin <i>et al.</i> 2003, Cocks 2005, Popov and Cocks 2006
256	30-KaL	Kyrgystan N	Near Besheke	Tien Shan	Popov <i>et al.</i> 2000, Nikitin <i>et al.</i> 2003
257	31-KaL	Latvia (W)		Baltica	Harper 1984, Hints and Harper 2003, Hansen 2008
258	32-KaL	Libya	Rhadames Basin	Gondwana	Massa <i>et al.</i> 1977
259	33-KaL	Lithuania		Baltica	Paskevicius 1994, Hansen 2008
260	34-KaL	Mongolia (NW)	Agach-Ula Hills region, River Bairimgol	Mongolia-Siberia?	Rozman 1979, Cocks and Rong 1989

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
261	35-KaL	Norway	Oslo region	Baltica	Spjeldnæs 1957; Harper <i>et al.</i> 1984, 1985; Cocks and Rong 1989; Hansen 2008
262	36-KaL	Norway	Trondheim	Hølonda Terrane	Copper 1977, Neuman <i>et al.</i> 1997
263	37-KaL	Portugal	Bucaco	Iberia	Villas 1992, Botquelen and Melou 2007
264	38-KaL	Russia	Altai-Sayan region	Altai	Sennikov <i>et al.</i> 2008
265	39-KaL	Russia	Central Gorny Altai	Altai	Severgina 1978, Cocks and Zhan 1998
266	40-KaL	Scotland	Kilbucho	Midland Valley Terrane	Candela and Harper 2010
267	41-KaL	Siberia	Kulyumbe	Siberia	Kanygin <i>et al.</i> 2006
268	42-KaL	Siberia		Siberia	Nikiforova and Andreeva 1961, Fortey and Cocks 2003
269	43-KaL	Siberia (NE)	Yana River area	Kolyma	Jin and Copper 1997
270	44-KaL	Spain (C)	Central Iberian Zone	Iberia	Candela pers. com.
271	45-KaL	Spain (E)	Catalonian Coastal Ranges	Iberia	Candela pers. com.
272	46-KaL	Spain (N)	Asturia, northern Iberian Chains	Iberia	Villas <i>et al.</i> 1989, Villas 1992, Botquelen and Melou 2007
273	47-KaL	Sweden	Amtjärn Quarry, Scania, Öland	Baltica	Harper 1984, Cocks 2005, Hansen 2008
274	48-KaL	Tasmania		Tasmania	Laurie 1991, Nikitin <i>et al.</i> 2003
275	49-KaL	Thailand	Satun	Sibumasu	Zhan and Jin 2005
276	50-KaL	USA	Alabama	Laurentia	Cooper 1956
277	51-KaL	USA	California (Klamath)	Klamath	Potter 1990
278	52-KaL	USA	Illinois	Laurentia	Cooper 1956
279	53-KaL	USA	Iowa	Laurentia	Cooper 1956
280	54-KaL	USA	Kentucky	Laurentia	Cooper 1956, Baarli 1995, Patzkowsky and Holland 1997
281	55-KaL	USA	Maryland	Laurentia	Cooper 1956
282	56-KaL	USA	Minnesota	Laurentia	Cooper 1956
283	57-KaL	USA	Missouri	Laurentia	Cooper 1956
284	58-KaL	USA	Nevada	Laurentia	Cooper 1956
285	59-KaL	USA	New Jersey	Laurentia	Cooper 1956
286	60-KaL	USA	New Mexico (S)	Laurentia	Howe 1965, 1967
287	61-KaL	USA	New York	Laurentia	Cooper 1956, Cocks and Rong 1989, Rong and Zhan 1996, Jin and Zhan 2000
288	62-KaL	USA	Ohio	Laurentia	Copper 1977, Howe 1988, Cocks and Rong 1989, Cocks and Modzalevskaya 1997, Patzkowsky and Holland 1997, Cocks 2005, Popov and Cocks 2006
289	63-KaL	USA	Oklahoma	Laurentia	Cooper 1956

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
290	64-KaL	USA	Pennsylvania	Laurentia	Cooper 1956
291	65-KaL	USA	Tennessee	Laurentia	Cooper 1956, Howe 1988, Cocks and Rong 1989, Patzkowski and Holland 1997, Cocks 2005
292	66-KaL	USA	Texas (W)	Laurentia	Howe 1965, 1966, 1967, 1988; Patzkowski and Holland 1997
293	67-KaL	USA	USA (E)	Laurentia	Villas <i>et al.</i> 1989, Patzkowsky and Holland 1997
294	68-KaL	USA	Vermont	Laurentia	Cooper 1956
295	69-KaL	USA	Virginia	Laurentia	Cooper 1956, Copper 1977
296	70-KaL	USA	Wisconsin	Laurentia	Cooper 1956, Baarli 1995, Patzkowsky and Holland 1997
297	71-KaL	Uzbekistan	Tian-Shan	Tien Shan	Cocks and Rong 1989
298	72-KaL	Wales	Bala, Glyn Ceiriog, Powys	Avalonia	Bancroft, 1945; Hurst 1979; Cocks and Rong 1989; Villas 1992, Villas <i>et al.</i> 2006; Hansen 2008
299	01-KaU	Alaska (E)	Jones Ridge	Alaska	Ross and Dutro 1966, Cocks and Rong 1989, Potter 1991
300	02-KaU	Alaska (W)	Baird Mts, Lone Mt, Mt. Michelson, Shublik Mts., White Mt.	Alaska	Blodgett <i>et al.</i> 1987, 2002; Rong and Boucot 1998; Jin <i>et al.</i> 2006
301	03-KaU	Argentina	San Juan Province N	Precordillera	Benedetto 2003
302	04-KaU	Australia	New South Wales (Cleifden Caves)	Gondwana	Percival 1979a,b, 1991; Cocks and Rong 1989; Percival unpublished
303	05-KaU	Australia	New South Wales (Gunningbland)	Gondwana	Percival 1978, 1979a,b, 2009
304	06-KaU	Belgium		Avalonia	Cocks and Modzalevskaya 1997, Boucot <i>et al.</i> 2003
305	07-KaU	Canada	Anticosti Island	Anticosti	Copper 1977, 1995; Cocks and Modzalevskaya 1997; Dewing 1999, 2001; Jin and Zhan 2001; Zhan and Jin 2005; Thomsen <i>et al.</i> 2006
306	08-KaU	Canada	Baffin Island (N)	Laurentia	Rong <i>et al.</i> 1989, Rong and Boucot 1998
307	09-KaU	Canada	British Columbia (Rocky Mts.)	Laurentia	Jin <i>et al.</i> 1989
308	10-KaU	Canada	Manitoba	Laurentia	Jin <i>et al.</i> 1997, Jin and Zhan 2001
309	11-KaU	Canada	Newfoundland (New World Island)	Newfoundland	McKerrow and Cocks 1981
310	12-KaU	Canada	Ontario	Laurentia	Copper 1977
311	13-KaU	Canada	Quebec	Laurentia	Copper 1977, Sheehan and Lespérance 1979, Cocks and Rong 1989, Cocks 2005, Zhan and Jin 2005

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
312	14-KaU	China (N)	Qinghai	North China	Cocks and Modzalevskaya 1997; Popov and Cocks 2006
313	15-KaU	China (N)	Shaanxi	North China	Cocks and Rong 1989
314	16-KaU	China (S)	Anhui Prov.	South China	Cocks and Rong 1989, Rong <i>et al.</i> 1999, Zhan and Jin 2005
315	17-KaU	China (S)	Guizhou	South China	Cocks and Rong 1989; Rong <i>et al.</i> 1999, 2002; Chen <i>et al.</i> 2000; Harper and Williams 2002; Zhan and Jin 2005
316	18-KaU	China (S)	Hubei	South China	Chen <i>et al.</i> 2000, Zhan and Jin 2005
317	19-KaU	China (S)	Jiangxi	South China	Rong and Zhan 1996, Rong and Boucot 1998, Zhan and Cocks 1998, Rong <i>et al.</i> 1999, Zhan <i>et al.</i> 2002, Cocks 2005, Zhan and Jin 2005, Jin <i>et al.</i> 2006
318	20-KaU	China (S)	Nanjing	South China	Rong <i>et al.</i> 1999; Zhan and Jin 2005
319	21-KaU	China (S)	Shaanxi	South China	Xu 1996, Popov <i>et al.</i> 2000, Nikitin <i>et al.</i> 2003
320	22-KaU	China (S)	Zhejiang	South China	Liang <i>in</i> Liu 1983; Cocks and Rong 1989; Rong <i>et al.</i> 1989, 1999; Rong and Boucot 1998; Zhan and Cocks 1998; Chen <i>et al.</i> 2000; Zhan <i>et al.</i> 2002, 2008; Cocks 2005; Zhan and Jin 2005; Jin <i>et al.</i> 2006; Popov and Cocks 2006
321	23-KaU	China (S)		South China	Cocks and Rong 1989, Zhan <i>et al.</i> 2008
322	24-KaU	Czech Republic	Bohemia	Perunica	Havlíček 1967, 1977
323	25-KaU	England	Shropshire	Avalonia	Cocks and Fortey 1997
324	26-KaU	England (N)	Cumbria	Leinster Terrane	Wright 1963, 1964; Jin and Copper 1997, 1999; Cocks 2005
325	27-KaU	Estonia (N)	Kõrgessaare, Miaremetsa, Moe, Paopa, Rapla	Baltica	Hints and Harper, 2003; Cocks and Rong 1989, Cocks and Modzalevskaya 1997, Jin and Copper 1999, Popov <i>et al.</i> 2000, Rong <i>et al.</i> 2004, Roomusoks 2004, Cocks 2005, Hints <i>et al.</i> 2007, Estonian DB (the Web)
326	28-KaU	France	Brittany	Armorica	Boucot <i>et al.</i> 2003
327	29-KaU	France	Montagne Noire	Armorica	Havlíček 1981; Havlíček <i>et al.</i> 1987; Boucot <i>et al.</i> 2003
328	30-KaU	Greenland (NE)	Peary Land	Laurentia	Troedsson 1928, Rong <i>et al.</i> 1989, Rong and Boucot 1998, Rasmussen 2009

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
329	31-KaU	Ireland (N)	Pomeroy, Tyrone	Midland Valley Terrane	Mitchell 1977, Copper 1982, Harper 1988, Cocks and Rong 1989, Villas 1992, Jin and Copper 1999, Boucot <i>et al.</i> 2003, Cocks 2005
330	32-KaU	Ireland (SE)	Portrane, Kildare	Leinster Terrane	Wright 1963, 1964, Villas <i>et al.</i> 1989, Cocks and Modzalevskaya 1997, Boucot <i>et al.</i> 2003, Nikitin <i>et al.</i> 2003, Cocks 2005
331	33-KaU	Italy	Sardinia	Sardinia	Havliček <i>et al.</i> 1987; Villas <i>et al.</i> 2002, Boucot <i>et al.</i> 2003, Zhan and Jin 2005
332	34-KaU	Kazakhstan	Chinghiz and Tarbagatai Ranges	Chinghiz	Klenina <i>et al.</i> 1984, Cocks and Rong 1989, Rong and Boucot 1998, Rong <i>et al.</i> 2004, Cocks 2005, Zhan and Jin 2005
333	35-KaU	Kazakhstan	Dzhungar Altai, off Altai-Khingan	Altai	Rong <i>et al.</i> 2004
334	36-KaU	Kazakhstan	Koskaras valley	Tien Shan	Popov <i>et al.</i> 2000, Nikitin <i>et al.</i> 2003, Rong <i>et al.</i> 2004, Popov and Cocks 2006
335	37-KaU	Kazakhstan (S)	Chu-Ili Range	Chulli	Rong <i>et al.</i> 1994, Rong and Boucot 1998, Fortey and Cocks 2003, Jin <i>et al.</i> 2006, Popov and Cocks 2006
336	38-KaU	Kazakhstan, Siberia	Chukotka (Kazakh.), Mirny, Omulev and Seleniakh Mts, Yasach River Basin (Siberia)	Kolyma	Rong <i>et al.</i> 1989, 2004; Rong and Boucot 1998
337	39-KaU	Latvia		Baltica	Hints and Harper, 2003; Rong <i>et al.</i> 2004
338	40-KaU	Lithuania		Baltica	Hints and Harper, 2003; Rong <i>et al.</i> 2004
339	41-KaU	Mongolia	Inner Mongolia (W)	Mongolia/ N. China	Rong <i>et al.</i> 2004
340	42-KaU	Morocco	Anti Atlas Mts., Coastal Meseta	Gondwana	Havliček 1971, Villas 1992, Sutcliffe <i>et al.</i> 2001, Boucot <i>et al.</i> 2003, Villas <i>et al.</i> 2006, Botquelen and Melou 2007
341	43-KaU	Norway	Oslo-Asker region	Baltica	Cocks 1988; Cocks and Rong 1989; Rong <i>et al.</i> 1989, 2004; Cocks and Modzalevskaya 1997; Rong and Boucot 1998; Cocks 2005
342	44-KaU	Norway (NE)	Kåfjorddalen	Kåfjord nappe	Rong and Boucot 1998
343	45-KaU	Poland	Holy Cross Mt., Poland	Malopolska	Boucot <i>et al.</i> 2003, Zhan and Jin 2005, Popov and Cocks 2006
344	46-KaU	Russia	Altai Mts (NE)	Altai	Jin and Copper 1997
345	47-KaU	Russia	Altai-Sayan region	Altai	Severgina 1978, Cocks and Rong 1989, Cocks and Modzalevskaya 1997, Rong and Boucot 1998
346	48-KaU	Russia	Salair, Kemerovo Oblast	Salair	Jin and Copper 1997

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
347	49-KaU	Russia	Urals (boreal)	Urals	Rong <i>et al.</i> 1989, 2004; Rong and Boucot 1998
348	50-KaU	Scotland	Girvan	Midland Valley Terrane	Cocks and Rong 1989; Harper 1984, 1989, 2000, 2006; Cocks and Modzalevskaya 1997; Cocks 2005; Popov and Cocks 2006
349	51-KaU	Siberia	Taimyr	Taimyr	Cocks and Modzalevskaya 1997, Cocks 2005
350	52-KaU	Siberia		Siberia	Fortey and Cocks 2003, Popov and Cocks 2006
351	53-KaU	Spain		Iberia	Villas <i>et al.</i> 2006
352	54-KaU	Spain (E)	Catalonian Coastal Ranges	Iberia	Boucot 2003
353	55-KaU	Spain (N)	Asturia	Iberia	Villas <i>et al.</i> 1989
354	56-KaU	Sweden	Scania, Siljan District, Väster-götland	Baltica	Zhang and Boucot 1988, Cocks and Modzalevskaya 1997, Rong and Boucot 1998, Cocks 2005, Zhan and Jin 2005, Popov and Cocks 2006, Wright and Rong 2007
355	57-KaU	Sweden (N)	Västerbotten (W)	Baltica	Rong and Boucot 1998, Rong <i>et al.</i> 2004
356	58-KaU	USA	Illinois	Laurentia	Howe 1988, Jin and Copper 1997
357	59-KaU	USA	Indiana	Laurentia	Copper 1977, Howe 1988, Patzkowski and Holland 1997
358	60-KaU	USA	Iowa	Laurentia	Wang 1949, Davis 1985, Howe 1988, Cocks and Rong 1989, Patzkowski and Holland 1997, Popov <i>et al.</i> 2000, Jin and Zhan 2001, Nikitin <i>et al.</i> 2003, Cocks 2005
359	61-KaU	USA	Maine	Avalonia	Neuman 1994
360	62-KaU	USA	Minnesota	Laurentia	Cocks and Rong 1989
361	63-KaU	USA	Missouri	Laurentia	Howe 1988, Patzkowski and Holland 1997
362	64-KaU	USA	Montana	Laurentia	Jin and Zhan 2001
363	65-KaU	USA	New Mexico	Laurentia	Howe 1967
364	66-KaU	USA	North Michigan	Laurentia	Copper 1977
365	67-KaU	USA	Northern California (Klamath Mts.)	Klamath	Potter 1990, 1991
366	68-KaU	USA	Ohio	Laurentia	Wang 1949, Davis 1985, Howe 1988, Cocks and Rong 1989, Patzkowski and Holland 1997, Cocks and Zhan 1998, Jin and Zhan 2000
367	69-KaU	USA	Oklahoma (Arbuckle Mts.)	Laurentia	Howe 1988, Patzkowski and Holland 1997
368	70-KaU	USA	Tennessee	Laurentia	Howe 1969, 1988; Patzkowski and Holland 1997; Jin and Zhan 2000; Cocks 2005

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
369	71-KaU	USA	Texas	Laurentia	Howe 1966, 1967, 1988; Patzkowski and Holland 1997
370	72-KaU	USA	USA (E)	Laurentia	Villas <i>et al.</i> 1989, Patzkowsky and Holland 1997
371	73-KaU	USA	Wyoming	Laurentia	Macomber 1970, Howe 1988, Jin and Zhan 2001
372	74-KaU	Uzbekistan	Tian-Shan	Tien Shan	Rong and Boucot 1998, Rong <i>et al.</i> 2004, Popov and Cocks 2006
373	75-KaU	Wales (N)	Dyfed, Glyn Ceiriog	Avalonia	Jones 1928, Hiller 1980, Cocks and Rong 1989, Villas 1992, Neuman 1994, Cocks and Modzalevskaya 1997, Boucot <i>et al.</i> 2003, Cocks 2005, Zhan and Jin 2005
374	76-KaU	Wales (S)		Avalonia	Cocks and Rong 1988, Boucot <i>et al.</i> 2003, Zhan and Jin 2005
375	01-Hi	Africa (S)		Gondwana	Cocks <i>et al.</i> 1970
376	02-Hi	Argentina	San Juan	Precordillera	Benedetto 2003
377	03-Hi	Austria	Carnic Alps	Carnic Alps	Schönlau 1988, Havlíček <i>et al.</i> 1987
378	04-Hi	Burma	Shan States N	Sibumasu	Cocks and Fortey 1997, Cocks and Copper 2004
379	05-Hi	Canada	Anticosti Island	Anticosti	Cocks 1988, 2008; Jin and Copper 1997; Jin and Zhan 2000; Dewing 2001, 2004; Zhan and Jin 2005; Li and Copper 2006
380	06-Hi	Canada	Manitoba	Laurentia	Jin <i>et al.</i> 1997
381	07-Hi	Canada	Northwest Territories	Laurentia	Potter 1990, Jin and Chatterton 1997, Jin and Zhan 2000
382	08-Hi	Canada	Quebec	Laurentia	Sheehan and Lesperance 1981; Cocks 1988, 2005
383	09-Hi	China (N)	Shaanxi	North China	Cocks and Rong 1989
384	10-Hi	China (S)	Hubei (W)	South China	Cocks 1988, Cocks and Rong 1989, Cocks and Fortey 1997, Chen <i>et al.</i> 2000, Rong <i>et al.</i> 2002
385	11-Hi	China (S)	Jiangxi	South China	Zhan <i>et al.</i> 2002, Zhan and Jin 2005
386	12-Hi	China (S)	Northern Guizhou	South China	Rong and Li 1999; Chen <i>et al.</i> 2000; Rong <i>et al.</i> 2002, 2006; Harper and Williams 2002
387	13-Hi	China (S)	South Sichuan	South China	Rong <i>et al.</i> 2002, Cocks and Copper 2004
388	14-Hi	China (S)		South China	Rong <i>et al.</i> 2002, Cocks and Copper 2004, Zhan <i>et al.</i> 2008
389	15-Hi	Czech Republic	Bohemia	Perunica	Havlíček 1967, 1977, Cocks 1988, Cocks and Rong 1989
390	16-Hi	Denmark	Bornholm	Baltica	Poulsen 1976

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
391	17-Hi	England (N)	English Lake District	Leinster Terrane	Harper and Williams 2002, Temple 1965, Cocks 1988, Cocks and Rong 1989, Baarli 1995, Rong <i>et al.</i> 2006
392	18-Hi	Estonia (N)	Kaapsalyski Cliff	Baltica	Hints and Harper 2003, Cocks and Modzalevskaya 1997, Rõõmukos 2004, Cocks 2005
393	19-Hi	France	Brittany	Armorica	Boucot <i>et al.</i> 2003
394	20-Hi	France (SE)	Montagne Noire	Armorica	Boucot <i>et al.</i> 2003
395	21-Hi	France (SW)	Eastern Pyrenees (Massif de Mounhoumet)	Armorica	Boucot <i>et al.</i> 2003
396	22-Hi	Ireland (N)	Pomeroy	Midland Valley Terrane	Harper <i>et al.</i> 1994; Mitchell 1977
397	23-Hi	Ireland (SE)	Kildare	Leinster Terrane	Wright 1968, Cocks 1988
398	24-Hi	Kazakhstan	Chu-Ili Range	Chu-Ili	Cocks 1988, Cocks and Rong 1989, Fortey and Cocks 2003
399	25-Hi	Liberia	South of Awanat Wnin	Gondwana	Sutcliffe <i>et al.</i> 2001
400	26-Hi	Libya	Western Djebel Fezzan	Gondwana	Havlíček and Massa 1973
401	27-Hi	Morocco	Anti Atlas Mts	Gondwana	Havlíček 1971, Sutcliffe <i>et al.</i> 2001, Villas <i>et al.</i> 2006
402	28-Hi	New Zealand	South Island (N)	Takaka Terrane	Cocks and Cooper 2004
403	29-Hi	Norway	Oslo-Asker district	Baltica	Cocks, 1982; Baarli 1987, 1988, 1995; Baarli and Harper 1986; Cocks 1988, 2005; Cocks and Modzalevskaya 1997; Musteikis and Cocks 2004
404	30-Hi	Poland	Holy Cross Mt.	Malopolska	Cocks 1988, Neuman 1994, Chen <i>et al.</i> 2000
405	31-Hi	Portugal	Bucaco (S) and Dornes	Iberia	Young 1988
406	32-Hi	Russia	Altai	Altai	Kulkov and Severyina 1989
407	33-Hi	Russia/Siberia	Mirny Creek, Kolyma River area	Kolyma	Cocks 1988, Jin and Copper 1997, Rong and Boucot 1998, Modzalevskaya 2003
408	34-Hi	Sardinia	Iglisiente Region	Sardinia	Villas <i>et al.</i> 2002
409	35-Hi	Scotland	Girvan	Midland Valley Terrane	Harper 1981; Cocks 1988; Cocks and Rong 1989; Harper 2000, 2006
410	36-Hi	Spain (EC)	Iberian Chain	Iberia	Villas <i>et al.</i> 1999, Vennin <i>et al.</i> 1998, Chen <i>et al.</i> 2000
411	37-Hi	Sweden	Jämtland, Siljan District, Västergötland	Baltica	Bergström 1968; Cocks 1988, 2005; Dahlqvist <i>et al.</i> 2010
412	38-Hi	Tadzhikstan		Tien Shan	Menakova 1991
413	39-Hi	Tasmania		Tasmania	Laurie 1991, Rong <i>et al.</i> 1994, Cocks and Cooper 2004
414	40-Hi	Thailand	Satun	Sibumasu	Cocks and Fortey 1997, Chen <i>et al.</i> 2000

	A	B	C	D	E
1	Code	General area	Region	Palaeogeography	Reference
415	41-Hi	Tibet (SE)	Xizang (SC)	South Tibet	Rong <i>et al.</i> 2002
416	42-Hi	USA	Illinois	Laurentia	Amsden 1974, Cocks 1988, Jin and Copper 2004
417	43-Hi	USA	Maine (N)	Avalonia	Rong <i>et al.</i> 2006
418	44-Hi	USA	Missouri	Laurentia	Amsden 1974; Cocks 1988, 2008; Zhang and Boucot 1988; Cocks and Rong 1989
419	45-Hi	USA	New Mexico	Laurentia	Howe 1967
420	46-Hi	USA	Oklahoma	Laurentia	Amsden 1974, Cocks 1988
421	47-Hi	USA	Texas (W)	Laurentia	Howe 1967
422	48-Hi	Uzbekistan	Zerafshan-Gissar Mts.	Tien Shan	Rong and Boucot 1998, Popov and Cocks 2006
423	49-Hi	Wales (C)	Garth	Avalonia	Williams and Wright 1981, Rong <i>et al.</i> 2006
424	50-Hi	Wales (N)	Bala, Glyn Ceiriog	Avalonia	Hiller 1980, Cocks 1988
425	51-Hi	Wales (S)	Dyfed, Haverfordshire, Haverfordwest, Powys	Avalonia	Cocks and Price 1985, Cocks 1988, Zhang and Boucot 1988, Cocks and Rong 1989