

References

- Altamini Z., Sillard P., Boucher C. (2002): ITRF2000: a new release of the International Terrestrial Reference frame for earth science applications. *J. Geophys. Res.* 107:2001JB000561.
- Artemjev M.E., Artyushkov E.V. (1971): Structure and isostasy of the Baikal rift and the mechanism of rifting. *Journal of Geophysical Research.* 76:1197-1211.
- BABEL Working Group (1993): Deep seismic reflection/refraction interpretation of crustal structure along BABEL profiles A and B in the southern Baltic Sea. *Geophys. J. Int.* 112:325-343.
- Bachmann G.H., Grosse S. (1989): Struktur und Entwicklung des Norddeutschen Beckens-geologische und geophysikalische interpretation einer verbesserten Bouguer-Schwere-karte. *NDS. Akad. Geowiss. Veröffl.* 2: 23-47.
- Bachmann G.H., Hoffmann N. (1997): Development of the Rotliegend Basin in Northern Germany. *Geol. JB.* 103: 9-31.
- Baldschuhn R., Binot F., Fleig S., Kockel F. (eds.) (2001): Geotektonischer Atlas von Nordwest-Deutschland und dem deutschen Nordsee-Sektor- Strukturen, Struckurenwicklung, Paläogeographie. *Geologisches Jahrbuch A.* 153: 1-88, 3 CD-Rs.
- Barton P., Wood R. (1984): Tectonic evolution of the North Sea Basin: crustal stretching and subsidence. *Geophysical Journal of the Royal Astronomical Society.* 79: 987-1022.
- Bayer U., Scheck M., Köhler M. (1997): 3D Modelling of the Thermal Field in the Northeast German Basin, *Geologische Rundschau.* 58: 241-251.
- Bayer U., Scheck-Wenderoth M., Rabbel W., Krawczyk C.M., Götze H. –J., Stiller M., Beilecke Th., Marotta A.M., Barrio-Alvers L., Kuder J. (1999): An integrated study of the NE German Basin. *Tectonophysics.* 314: 285-307.
- Bayer U., Grad M., Pharaoh T.C., Thybo H., Guterch A., Banka D., Lamarche J., Lassen A., Lewerenz B., Scheck-Wenderoth M., Marotta A.M. (2002): The southern margin of the East European Craton: new results from seismic sounding and potential fields between the North Sea and Poland. *Tectonophysics.* 360: 301-314.
- Beach A., Bird T., Gibbs A. (1987): Extensional tectonics and crustal structure: deep seismic reflection data from the northern North Sea Viking Graben. In: Coward M.P., Dewey J.F., Hancock P.L. (eds): Continental Extensional Tectonics. *Geological Society Special Publication.* 28: 467-476.
- Beamont C. (1981): Foreland basins. *Geophysical Journal of the Royal Astronomical Society.* 65: 291-329.
- Beaumont C., Keen C.E., Boutillier R. (1982): On the evolution of rifted continental margins: comparison of models and observations for the Nova Scotia margin. *Geophys. J. R. Astron. Soc.* 70: 667-715.

- Behn M.D., Lin J., Zuber M.T. (2002): A continuum mechanics model for normal faulting using a strain-rate softening rheology: implications for thermal and rheological controls on continental and oceanic rifting. *Earth and Planetary Science Letters*. 202: 725-740.
- Beilecke T., Rabbel W. (1999): Erste Ergebnisse der Weitwinkelseismik. *In: On Begleitprojekte zu DEKORP NE-Deutschland (Special Volume)*. *Terra Nostra*. 99/3.
- Benek R., Kramer W., Mckann, T., Scheck-Wenderoth M., Negendank J.F.W., Korich D., Heubscher H.D., Bayer U. (1996) Permo-Carboniferous Magmatism and Related Subsidence of the NE German Basin. *Tectonophysics*. 266: 379-404.
- Berthelsen A. (1998): the Tornquist Zone northwest of the Carpathians: an intraplate pseudosuture. *Geol. Stockh. Förh.* 120: 223-230.
- Betz D., Führer F., Greiner G., Plein E. (1987): Evolution of the Lower Saxony Basin. *Tectonophysics*. 137:127-170.
- Bird P., Piper K. (1980): Plane-stress finite element models of tectonic flow in southern California. *Phys. Earth Planer. Inter.* 21: 158-175.
- Bird P. (1989): New finite element techniques for modelling deformation histories of continents with stratified temperature-dependent rheology. *J. Geophys. Res.* 94: 3967-3990.
- Bird P. (1999): Thin-plate and thin-shell finite element programs for forward dynamic modeling of plate deformation and faulting. *Comput. Geosci.* 25: 383-394.
- Bird P., Kong X. (1994): Computer simulations of California tectonics confirm very low strengths of major faults. *Bull. Geol. Soc. Am.* 106: 159-174.
- Bijwaard H., Spakman W., Engdahl E.R. (1998): Closing the gap between regional and global travel time tomography. *J. Geophys. Res.* 103: 30055-30078.
- Bleibinhaus F., Beilecke T., Braum K., Gebrande H. (1999): A seismic velocity model for the SW Baltic Sea derived from BASIN'96 refraction seismic data. *Tectonophysics*. 314: 269-283.
- Bonini M., Sokoutis D., Talbot C., Boccaletti M., Milnes A.G. (1999): Indenter growth in analogue models of Alpine-type deformation. *Tectonics*. 18:119-128.
- Braun J., Beaumont C. (1989a): A physical explanation of the relation between flank uplifts and the breakup unconformity at rifted continental margins. *Geology*. 17: 760-764.
- Braun J., Beaumont C. (1989b): Contrasting styles of lithospheric extension: implications for differences between the Basin and Range province and rifted continental margins. *AAPG Mem.* 46: 53-79.
- Brink H. J., Franke D., Hoffmann N., Horst W., Onken O. (1990): Structure and evolution of the North German Basin. *In: Freemann R., Giese P. Müller S.T. (Eds.), The European Geotraverse. Integrative Studies*. European Science Foundation, Strasbourg: 195-212.

- Brink H. J., Dürschner H., Trappe H. (1992): Some aspects of the late and post-Variscan development of the Northwestern German Basin. *Tectonophysics*. 207: 65–95.
- Brunet M.F., LePichon X. (1982): Subsidence of the Paris basin. *Journal of Geophysical Research*. 87: 8547-8560.
- Buck W.R., Martinet F., Steckler M.S., Cochran J.R. (1988): Thermal consequences of lithosphere extension: pure and simple. *Tectonics*. 7: 213-234.
- Buck W.R. (1991): Modes of continental lithospheric extension. *J. Geophys. Res.* 96: 20161-20178.
- Bukovics C., Cartier E.G., Shaw N.D., Ziegler P.A. (1984): Structure and development of the mid-Norway continental margin. In: Spencer A.M., Johnson S.O., Moerk A., Nysaether E., Songstad P., Spinnanger A. (eds.): *Petroleum Geology of the North European Margin: Graham and Trotman (London)*. 407-423.
- Byerlee J.D. (1978): Friction of rocks. *Pure Appl. Geophys.* 116: 615-626.
- Cacace M., Bayer U., Marotta A.M. (2007): Strain localization due to structural inhomogeneities in the Central European Basin System. *International Journal of Earth Sciences*.
- Carter N.L., Tsenn M.C. (1987): Flow properties of continental lithosphere. *Tectonophysics*. 136: 27-63.
- Chapman D.S., and Furlong K.P. (1992): Thermal state of the continental crust. In: Fountain D.M., Arculus R.J., Kay R.W., eds. *Continental lower crust: Developments in Geotectonics: Elsevier, Amsterdam*. 23: 179–199.
- Chopra P.N., Paterson M.S. (1981): The experimental deformation of Dunite. *Tectonophysics*. 78:453-473.
- Cianetti S., Gasperini P., Giunchi C., Boschi E. (2001): Numerical modelling of the Aegean-Anatolian region: geodynamical constraints from observed rheological heterogeneities. *Geophys. J. Int.* 146: 760-780.
- Clausen O.R., Pedersen P.K. (1999): Late Triassic structural evolution of the southern margin of the Ringkoebing-Fyn High, Denmark, *Mar. Pet. Geol.* 16: 653–665.
- Cloetingh S., McQueen H., Lambeck K. (1985): On a tectonic mechanism for regional sea level variations. *Earth and Planetary Science Letters*. 75: 157-166.
- Cloetingh S., Wortel M.J.R. (1986): Stress in the Indo-Australian plate. *Tectonophysics*. 132: 49-67.
- Cloetingh S., Gradstein F.M., Kooi H., Grant A.C., Kaminski M. (1990): Plate reorganization: a cause of rapid late Neogene subsidence and sedimentation around the North Atlantic? *Journal of the Geological Society, London*. 147:494-506.

- Cloetingh S., Kooi H. (1992): Intraplate stresses and dynamical aspects of rifted basins. *Tectonophysics*. 215: 167-185.
- Cloetingh S., Sassi W., Horvarth F. (Eds.) (1993): The origin of sedimentary basins: inferences from quantitative modelling and basin analysis. *Tectonophysics*. 226: 1-518.
- Cloetingh S., Van Wees J.-D., Van der Beek P.A., Spadini G. (1995): Extension in convergent regimes: constraints from thermo-mechanical modelling of Alpine/Mediterranean basins and intra-cratonic rifts. *Mar. Petrol. Geol.* 12: 793-808.
- Cloetingh S., Burov E.B. (1996): Thermomechanical structure of European continental lithosphere; constraints from rheological profiles and EET estimates. *Geophysical Journal International*. 124: 695–723.
- Cloetingh S., Van Wees J.-D. (2005): Strength reversal in Europe's intraplate lithosphere: transition from basin inversion to lithospheric folding. *Geology*. 33: 285-288.
- Cloetingh S., Cornu T., Ziegler P.A., Beekman F., Environmental Tectonics (ENTEC) Working Group (2006): Neotectonics and intraplate continental topography of the northern Alpine Foreland. *Earth-Science Reviews*. 74: 127-196.
- Cochran J.R. (1983): Effects of finite rifting times on the development of sedimentary basins. *Earth and Planetary Science Letters*. 66: 289-302.
- Coward, M. P. (1986). Heterogeneous stretching, simple shear and basin development. *Earth and Planetary Science Letters*. 80: 325–336
- Dadlez R. (1989): Epicontinental Permian and Mesozoic basins in Poland. *Kwart. Geol.* 33: 175-198.
- Dadlez R. (2003): Mesozoic thickness pattern in the Mid-Polish Trough. *Geological Quaternary*. 47: 223-240.
- Dadlèz R., Narkiewicz M., Stephenson R. A., Visser M. T. M. (1995): Tectonic evolution of the Mid-Polish Trough: modelling implications and significance for central European geology. *Tectonophysics*. 252: 179-195.
- Dadlez R., Narkiewicz M., Pokorski J., Wagner R. (1998): Subsidence history and tectonic controls on the Late Permian and Mesozoic development of the mid-Polish Trough. *Prace PanÁstwowego Instytutu Geologicznego*. 165: 47–56.
- De Lugt I.R., Van Wees J.-D., Wong Th.E. (2003): The tectonic evolution of the southern Dutch North Sea during the Palaeogene: basin inversion in distinct pulses. In: Nielsen S.B., Bayer U. (Eds.): Dynamics of Sedimentary Basin Inversion: Observations and Modelling. *Tectonophysics*. 373:141-159.
- DeMets C., Gordon R., Argus D, Stein S. (1994): Effect of recent revisions to the geomagnetic reversal time scale on estimates of current plate motions. *Geophys. Res. Lett.* 21:2191-2194.

- De Jager J. (2003): Inverted basins in the Netherlands, similarities and differences. *Netherlands Journal of Geosciences-Geol. en Mijn.* 82:355-366.
- DEKORP-BASIN Research Group (1999): Deep crustal structure of the Northeast German Basin: new DEKORP-BASIN'96 deep profiling results. *Geology.* 27: 55-58.
- Devoti R., Ferraro C., Gueguen E., Lanotte R., Luceri V., Nardi A., Pacione R., Rutigliano P., Sciaretta C., Vespe F. (2002): Geodetic control on recent tectonic movements in the central Mediterranean area. *Tectonophysics.* 346: 151-167.
- Dickinson W. R. (1976): Plate Tectonic Evolution of Sedimentary Basins. *Am. Assoc. Petrol. Geol., Continuing Education Course Notes, Ser. 1.*
- DOBREFraction'99 Working Group (2003): "DOBREFraction'99"-velocity model of the crust and upper mantle beneath the Donbas Foldbelt (East Ukraine). *Tectonophysics.* 371: 81-110.
- Dunbar J.A., Sawyer D.S. (1989): How preexisting weaknesses control the style of continental breakup. *J. Geophys. Res.* 94: 7278-7292.
- England P. (1983): Constraints on extension of continental lithosphere. *J. Geophys. Res.* 88: 1145-1152.
- England P., McKenzie D. (1982): A thin viscous sheet model for continental deformation. *Geophys. J. R. Astr. Soc.* 70: 295-321.
- England P., McKenzie D. (1983) Corrections to: a thin viscous sheet model for continental deformation. *Geophys. J. R. Astr. Soc.* 73: 523-532.
- England P., Houseman G. (1985): The influence of lithospheric strength heterogeneities on the tectonics of Tibet and surrounding regions. *Nature.* 315: 297-301.
- England P., Houseman G. (1989): Extension during continental convergence, with application to the Tibetan Plateau. *Journal of Geophysical Research.* 94: 17561-17579.
- Eugeno-S Working Group (1998): Crustal structure and tectonic evolution of the transition between the Baltic Shield and North German Caledonides (the EUGENO-S project). *Tectonophysics.* 150: 253-348.
- Evans D., Graham C., Armour A., Bathurst P. (2003): The Millennium Atlas: Petroleum geology of the central and northern North Sea. *The Geological Society of London (London).* 990 pp.
- Fernandez M., Ranalli, G. (1997): The role of rheology in extensional basin formation modelling. *Tectonophysics.* 282: 129-145.
- Frederiksen S., Nielsen S.B., Balling N. (2001,a): Post-Permian evolution of the Central North Sea: a numerical model. *Tectonophysics.* 343: 185-203.
- Frederiksen S., Nielsen S.B., Balling N (2001,b): A numerical dynamic model for the Norwegian Danish Basin. *Tectonophysics.* 343:165-183

- Galloway W.E. (1989): Genetic stratigraphic sequences in basin analysis: application to northwest Gulf of Mexico Cenozoic Basin. *Am. Assoc. Pet. Geol. Bull.* 73: 143-154.
- Gemmer L., Nielsen S.B. (2001): Three-dimensional inverse modeling of the thermal structure and implications for lithospheric strength in Denmark and adjacent areas of Northwest Europe. *Geophys. J. Int.* 147: 141-154.
- Gemmer L., Nielsen S.B., Huuse M., Lykke-Andersen H. (2002): Post-mid-Cretaceous eastern North Sea evolution inferred from 3D thermo-mechanical modelling. *Tectonophysics.* 350: 315-342.
- Goes S., Govers R., Vacher P. (2000): Shallow mantle temperatures under Europe from P and S wave tomography, *J. Geophys. Res.* 105: 11153–11169.
- Goes S., Loohuis J.J.P., Wortel M.J.R., Govers R. (2002): The effect of plate stresses and shallow mantle temperatures on tectonics of northwestern Europe. *Global and Planetary Change.* 27: 23-38.
- Goetze C., Evans B. (1979): Stress and temperature in the bending lithosphere as constrained by experimental rock mechanics. *Geophys. J. R. Astron. Soc. London.* 135:463-478.
- Gölke M., Coblenz D. (1996): Origins of the European regional stress field. *Tectonophysics.* 266: 11-24.
- Gölke M., Cloetingh S., Coblenz D. (1996): Finite-element modelling of stress patterns along the Mid-Norwegian continental margin, 62° to 68°N. *Tectonophysics.* 266:33-53.
- Grad M., Janik T., Yliniemi J., Guterch A., Luosto U., Tiira T., Komminaho K., Sroda P., Hönig K., Makris J., Lund C. –E. (1999): Crustal structure of the Mid-Polish Trough beneath the Teisseyre-Tornquist Zone seismic profile. *Tectonophysics.* 314: 145-160.
- Grad M., Guterch A., Mazur S. (2002): Seismic refraction evidence for the crustal structure in the central part of the Trans-European Suture Zone in Poland. In: Winchester J. A., Pharaoh, Y. C., Verniers J. (eds) *Palaeozoic Amalgamation of Central Europe, Geological Society London, Special Publication.* 201: 295-309.
- Gregersen S., Voss P. (2002): Summary of the project TOR: delineation of a stepwise, sharp, deep lithosphere transition across Germany-Denmark-Sweden. *Tectonophysics.* 360: 61-73.
- Grünthal G., Stromeyer D. (1992): The recent Crustal Stress Field in Central Europe: Trajectories and Finite Element Modeling. *J. Geophys. Res.* 97: 11805–11820.
- Grünthal G., Stromeyer D. (1994): The recent crustal stress field in Central Europe sensu lato and its quantitative modelling. *Geol. Mijnb.* 73: 173–180.
- Guterch A., Grad M., Thybo H., Keller G.R. (1999): POLONAISE'97-an international seismic experiment between Precambrian and Variscan Europe in Poland. *Tectonophysics.* 314:101-121.
- Hakenberg M., Swidrowska J. (1997): Propagation of the south-eastern segment of the Polish Trough connected with bounding fault zones (from the Permian to the Late Jurassic). *Earth and Planetary Science.* 324: 793-803.

- Hanks, T.C. (1971): The Kuril Trench-Hokkaido Rise System: Large Shallow Earthquakes and Simple Models of Deformation. *Geophys. J. R. astr. Soc.* 23: 173-189.
- Hansen D.L., Nielsen S.B., Lykke-Andersen H. (2000): The post-Triassic evolution of the Sorgenfrei-Tornquist zone-results from thermo-mechanical modelling. *Tectonophysics*. 328: 245-267.
- Hansen D.L., Nielsen S.B. (2002): Does thermal weakening explain basin inversion? Stochastic modelling of the thermal structure beneath sedimentary basins. *Earth and Plan. Science Letters*. 198: 113-127.
- Haxby W.F., Turcotte D.L., Bird J.M. (1976): Thermal and mechanical evolution of the Michigan Basin. *Tectonophysics*. 36: 57-75.
- Hefty J. (1998): Estimation of Site Velocities from CEGRN GPS Campaigns Referred to CERGOP Reference Frame. *Institute of Geodesy and Geodetic Astronomy Publ. Warsaw Institute of Technology*. 9: 67-79.
- Hibsch C., Jarrige J.J., Cushing E.M., Mercier J. (1995): Palaeostress analysis, a contribution to the understanding of basin tectonics and geodynamic evolution. Example of the Permian/Cenozoic tectonics of Great Britain and geodynamic implications in western Europe. *Tectonophysics*. 252:103-136.
- Horvath F., Cloetingh S. (1996): Stress-induced late-stage subsidence anomalies in the Pannonian Basin. *Tectonophysics*. 266: 287-300.
- Houseman G., England P. (1986a): A dynamical model for lithosphere extension and sedimentary basin formation. *J. Geophys. Res.* 91: 3651-3663.
- Houseman G., England P. (1986b): Finite strain calculations of continental deformation 1. Method and general results for convergent zones. *J. Geophys. Res.* 91: 3651-3663.
- Jaritz W. (1987): The origin and development of salt structures in northwest Germany. In: Lerche I., O'Brien J.J. (eds): *Dynamical geology of salt and related structures*. Academic, Orlando, 480-493.
- Jarosiński, M. (1998): Contemporary stress field distortion in the Polish part of the western Outer Carpathians and their basement, *Tectonophysics*. 297: 91–119.
- Jarosinski M. (2001): Present-day geodynamics of Palaeozoic complex beneath the Outer Carpathians based on logs and core analysis in the Tarnawa 1 well (English summary), *Prace Panstwowego Instytutu Geologicznego*. 17: 119–132.
- Jarosinski M. (2005): Ongoing tectonic reactivation of the Outer Carpathians and its impact on the foreland: results of borehole breakout measurements in Poland. *Tectonophysics*. 410: 189-216.
- Jarvis G.T., McKenzie D. (1980): Sedimentary basin formation with finite extension rates. *Earth and Planetary Science Letters*. 61: 030-318.

- Ji S., Zhao P. (1993): Flow laws of multiphase rocks calculated from experimental data on the constituent phases. *Earth and Planetary Science Letters*. 117: 181-187.
- Jiménez-Munt I., Fernández M., Torne M. Bird P. (2001): The transition from linear to diffuse plate boundary in the Azores-Gibraltar region: results from a thin-sheet model. *Earth and Planetary Science Letters*. 192: 175-189.
- Jiménez-Munt I., Sabadini R., Gardi A. (2003): Active deformation in the Mediterranean from Gibraltar to Anatolia inferred from numerical modeling and geodetic and seismological data. *J. Geophys. Res.* 108: 1-24.
- Kaiser A., Reicherter K., Hübscher C., Gajewski D. (2005): Variation of the present-day stress field within the North German Basin-insights from thin shell FE modeling based on residual GPS velocities. *Tectonophysics*. 397: 55-72.
- Karner G.D., Watts A.B. (1983): Gravity anomalies and flexure of the lithosphere at mountains ranges. *Journal of Geophysical Research*. 88: 10449-10477.
- Kirby S.H. (1983): Rheology of the lithosphere. *Reviews of Geophysics and Space Physics*. 21: 1458-1487.
- Kirby S.H., Kronenberg A.K. (1987): Rheology of the lithosphere: selected topics. *Review of Geophysics*. 25:1219-1244.
- Kooi H., Cloetingh S. (1989a): Intraplate stresses and the tectono-stratigraphic evolution of the Central North Sea. *AAPG Mem.* 48: 541-558.
- Kooi H., Cloetingh S. (1989b): Some consequences of compressional tectonics for extensional models of basin subsidence. *Geol. Rundsch.* 78: 183-195.
- Kooi H., Cloetingh S., Burrus J. (1992): Lithospheric necking and regional isostasy at extensional basins. 1. Subsidence and gravity modelling with an application to the Gulf of Lions margin (SE France). *Journal of Geophysical Research*. 97: 17553-17571.
- Kossow D., Krawczyk C. M. (2002): Structure and quantification of processes controlling the evolution of the inverted NE-German Basin. *Marine and Petroleum Geology*. 19: 601-618.
- Krawczyk C.M., Eilts F., Lassen A., Thybo H. (2002): Seismic evidence of Caledonian deformed crust and uppermost mantle structures in the northern part of the Trans-European Suture Zone SW Baltic Sea. *Tectonophysics*. 360: 215-244.
- Krzyzwiec P. (2002): Mid-Polish Trough inversion-seismic examples, main mechanisms, and its relationship to the Alpine-Carpathians collision. *EGU Stephan Mueller Special Publication Series (European Geosciences Union 2002)*. 1: 151-165.
- Krzyzwiec P. (2006): Structural inversion of the Pomerania and Kuiavian segments of the Mid-Polish Trough-lateral variations in timing and structural style. *Geological Quarterly*. 50: 151-168.
- Lamarche J., Bergerat F., Lewandoski M., Mansy J.L., Swidrowska J., Wieczorek J. (2002): Variscan to Alpine heterogeneous palaeo-stress field above a major Palaeozoic suture in the Carpathian foreland (Southeastern Poland). *Tectonophysics*. 357:58-80.

Lamarche J., Scheck-Wenderoth M., Lewerenz B. (2003): Heterogeneous tectonic inversion of the Mid-Polish Trough related to crustal architecture, sedimentary patterns and structural inheritance. *Tectonophysics*. 373: 75-92.

Lamarche J., Scheck-Wenderoth M. (2005): 3D structural model of the Polish Basin. *Tectonophysics*. 397: 73-91.

Lankreijer A.C., Mocanu V., Cloetingh S. (1997): Lateral variations in lithosphere strength in the Romanian Carpathians: constraints on basin evolution. *Tectonophysics*. 272: 269-290.

Lake S.D., Karner G.D. (1987): The structure and evolution of the Wessex Basin, southern England: an example of inversion tectonics. *Tectonophysics*. 137: 347-378.

Lempp, Lerche (2006): Correlation of Stress Directions across the North German Basin: Suprasalt and Subsalt Differences. ZDGG 157/2, 279-298, Schweizerbart Stuttgart, June 2006.

LePichon X., Sibuet J.C. (1981): Passive margins: A model of formation. *Journal of Geophysical Research*. 86: 3708-3720.

Lerche I., O'Brien J.J.(1987): *Dynamical Geology of Salt and Related Structures* (Academic Press, San Diego. 832 pp.

Liboriussen J., Ashton P., Tygesen T. (1987): The tectonic evolution of the Fennoscandian Border Zone in Denmark. *Tectonophysics*. 137:21-29.

Lokhorst A. (1997): NW European Gas Atlas-Composition and Isotope ratios of Natural Gases. Gis application on CD by the British Geological Survey. *Bundesanstalt für Geowissenschaften und Rohstoffe, Danmarks og Grønlands Geologiske Undersøgelse, Nederlands Instituut voor Toegepaste Geowetenschappen, Państwowy Instytut Geologiczny, European Union*.

Lokhorst A. (ed.) (1998): The Northwest European gas atlas. *Netherlands Institute of Applied Geosciences TNO (Haarlem)*. ISBN 90-72869-60-5.

Lynch H.D, Morgan P. (1987): The tensile strength of the lithosphere and the localization of extension. *Geol. Soc. Spec. Publ.* 28: 53-65.

Lynch H.D., Morgan P. (1990): Finite-element models of continental extension. *Tectonophysics*. 174: 115-135.

Lundin E.R., Dorè A.G. (1997): A tectonic model for the Norwegian passive margin with implications for the NE Atlantic: Early Cretaceous to break-up. *Journal of Geological Society (London)*. 154: 545-550.

Majdanski M., Grad M., Guterch A., SUDETES 2003 Working Group (2006): 2-D seismic tomographic and ray tracing across the Sudetes Mountains basing on SUDETES 2003 experiment data. *Tectonophysics*. 413: 249-269.

Maystrenko Y., Stovba, S., Stephenson, R., Bayer, U., Menyoli, E., Gajewski, D., Huebscher, C., Rabbal, W., Saintot, A., Starostenko, V., Thybo, H., Tolkunov, A. (2003a): Crustal-scale

pop-up structure in cratonic lithosphere: DOBRE deep seismic reflection study of the Donbas fold belt, Ukraine. *Geology*. 31: 733–736.

Maystrenko Y, Bayer U, Stovba S, Stephenson R, Saintot A (2003b) 2D Reverse Tectonic Modelling along the DOBRE-2000 deep seismic reflection profile and its northern continuation in the Donbas Foldbelt, Ukraine // Moscow, Russia - International geophysical conference and exhibition “Geophysics of the 21st century – the leap into the future”, CD-ROM: PS14, Poster N 17.

Maystrenko Y., Bayer U., Scheck-Wenderoth M. (2005): The Glueckstadt Graben, a sedimentary record between the North and Baltic Sea in north and central Europe. *Tectonophysics, Special Issue*. 397: 113-126.

Maystrenko Y., Bayer U., Scheck-Wenderoth M. (2006): 3-D reconstruction of salt movements within the deepest post-Permian structure of the Central European Basin System- the Glückstadt Graben. *Netherlands Journal of Geosciences-Geol. en Mijn.*85: 181-196.

Marotta A.M, Bayer U., Thybo H. (2000): The legacy of the NE German Basin-reactivation by compressional buckling. *Terra Nova*. 12: 132-140.

Marotta A.M., Bayer u., Scheck-Wenderoth M., Thybo H. (2001): The stress field below the NE German Basin: effects induced by the Alpine collision. *Geophys. J. Int.* 144: F8-F12.

Marotta A.M., Bayer U., Thybo H., Scheck-Wenderoth M. (2002): Origin of the regional stress in the North German basin: results from numerical modelling. *Tectonophysics*. 360 245–264.

Marotta A.M., Sabadini R. (2003): Numerical models of tectonic deformation at the Baltica-Avalonia transition zone during the Paleocene phase of inversion. *Tectonophysics*. 373: 25-37.

Marotta A.M., Mitrovica J.X., Sabadini R., Milne G. (2004): Combined effects of tectonics and glacial isostatic adjustment on intraplate deformation in central and northern Europe: applications to geodetic baseline analyses. *J. Geophys. Res.* 109.

Marotta A.M. (2005): The fingerprints of intra-continental deformation in Central Europe as envisage by the synergic use of predicting modelling and geodetic data. *Bollettino di Geofisica Teorica ed Applicata*. 46: 181-199.

Martín-Chivelet J. (1997): Late Cretaceous subsidence history of the Betic Continental Margin (Jumilla-Yecla region, SE Spain). *Tectonophysics*. 265:191-211.

Mattern F., (1996): The Elbe zone at Dresden-a Late Paleozoic pull-apart intruded shear zone. *Z. deutsch. Geol. Ges.* 147: 57-80.

Mazur S., Scheck-Wenderoth M. (2005): Constraints on the tectonic evolution of the Central European Basin System revealed by seismic reflection profiles from Northern Germany. *Netherlands Journal of Geosciences-Geol. en Mijn.* 84:389-401.

Mazur S., Scheck-Wenderoth M., Krzywiec P. (2005): Different modes of the Late Cretaceous-Early Tertiary inversion in the north German and Polish basins. *Int. J. Earth Sci. (Geol. Rundsch.)*. 94:782-798.

- McClusky S., Balassanian S., Barka A., Demir C., Ergintav S., Georgiev I., Gurkan O., Hamburger M., Hurst K., Kahle H., Kastens K., Kekelidze G., King R., Kotzev V., Lenk O., Mahmoud S., Mishin A., Nadariya M., Ouzounis A., Paradissis D., Peter Y., Prilepin M., Reilinger R., Sanli I., Seeger H., Tealeb A., Toksöz M.N., Veis G. (2000): Global Positioning System constraints on plate kinematics and dynamics in the eastern Mediterranean and Caucasus. *J. Geophys. Res.* 105: 5695-5720.
- McKenzie D. (1978a): Some remarks on the development of sedimentary basins. *Earth and Planetary Science Letters.* 40:25-32.
- McKenzie D. (1978a): Some remarks on the development of sedimentary basins. *Earth and Planetary Science Letters.* 40: 25-32.
- McKenzie D. (1978b): Active tectonics of the Alpine-Himalayan belt: the Aegean Sea and surrounding regions. *Geophysical Journal of the Royal Astronomical Society.* 55: 217-254.
- McKenzie D., Bowin C. (1976): The relationship between bathymetry and gravity in the Atlantic Ocean. *J. Geophys. Res.* 81: 1903–1915.
- Meijer P.Th. (1995): Dynamics of active continental margins: the Andes and the Aegean region (Ph. D. thesis). *Geol. Ultraiectina.* 130: 220 pp.
- Melosh H.J., Williams C.A. Jr. (1989): Mechanics of graben formation in crustal rocks-A finite element analysis. *J. Geophys. Res.* 94: 13961-13973.
- Michelsen O. (1982): Geology of the Danish Central Graben. *Geological Survey of Denmark Series B.* 8
- Milne G.A., Davis J.L., Mitrovica J.x., Scherneck H.-G., Johansson J.M., Vermeer M., Koivula H. (2001): Space-geodetic constraints on glacial isostatic adjustment in Fennoscandia. *Science.* 291: 2381-2385.
- Mogesen T.E. (1995): Triassic and Jurassic structural development along the Tornquist Zone, Denmark. *Tectonophysics.* 252: 197-220.
- Molnar P., Tapponier P. (1981): A possible dependence of tectonic strength on the age of the crust in Asia. *Earth and Planetary Science Letters.* 52: 107-114.
- MONA LISA Working Group (1997): Deep seismic investigations of the lithosphere in the southeaster North Sea. *Tectonophysics.* 269:1-19.
- Morgan P. (1984): The thermal structure and thermal evolution of the continental lithosphere. *Phys. Chem. Earth.* 15: 107–193.
- Mosar J., Lewis G., Torsvik T.H. (2002): North Atlantic sea-floor spreading rates; implications for the Tertiary development of inversion structures of the Norwegian-Greenland Sea. *Journal of the Geological Society (London).* 159: 503-515.
- Müller B., Zoback M.L., Fuchs K., Mastin L., Gregersen S., Pavoni N., Stephansson O., Ljunggren C. (1992): Regional patterns of tectonic stress in Europe. *J. Geophys. Res.* 97: 11783-11803.

- Nalpas T., Le Douaran S., Brun J. -P., Unternehr P., Richert J. -P. (1995): Inversion of the Broad Fourteens Basin (offshore Netherlands), a small-scale model investigation. *Sedimentary Geology*. 95:237-250.
- Nielsen S.B., Hansen D.L. (2000): Physical explanation of the formation and evolution of inversion zones and marginal troughs. *Geology*. 28:875-878.
- Nikishin A.M., Ziegler P.A., Stephenson R.A., Cloetingh S., Furne A.V., Fokin P.A., Ershov A.V., Boloytov S.N., Korotaev M.V., Alekseev A.S., Gorbachev V.I., Shipilov E.V., Lankreijer A.C., Bembinova E.Y., Shalimov I.V. (1996): Late Precambrian to Triassic history of the East European craton: dynamics of sedimentary basin evolution. *Tectonophysics*. 268: 23-63.
- Norling E., Bergström J. (1987): Mesozoic and Cenozoic tectonic evolution of Scania, southern Sweden. *Tectonophysics*. 137:7-19.
- Ondrak R. Wenderoth F., Scheck-Wenderoth M., Bayer U. (1998): Integrated geothermal modelling on different scales in the Northeast German basin. *Geol. Rundsch.* 87: 32-42.
- Ord A., Hobbs B.E. (1989): The strength of the continental crust, detachment zones and the development of plastic instabilities. *Tectonophysics*. 158: 269-289.
- Oszczypko N. (2006): Late Jurassic-Miocene evolution of the Outer Carpathians fold-and-thrust belt and its foredeep basin (Western Carpathians, Poland). *Geological Quarterly*. 50:169-194.
- Otto V. (2003): Inversion-related features along the southeastern margin of the North German Basin (Elbe Fault System). In: Nielsen S.B., Bayer U., Eds: *Dynamics of sedimentary basin inversion: observations and modelling*. *Tectonophysics*. 373: 107-123.
- Pan W.K.Y., Murphy L., Sullivan B., Bilsborrow R. (2001): Population and Land use in Ecuador's northern Amazon in 1999: intensification and growth in the frontier. Paper presented at population association of America Annual Meeting, Washington, DC.
- Pascal C., Gabrielsen R.H. (2001): Numerical modelling of Cenozoic stress patterns in the Mid-Norwegian margin and the northern North Sea. *Tectonics*. 20:585-599.
- Pedersen H.A., Sanchez-Sesma F.J., Campillo M. (1994): Three-dimensional scattering by two dimensional topographies. *Bull. Seism. Soc. Am.* 94: 1169-1183.
- Pegrum R.M. (1984): The extension of the Tornquist Zone in the Norwegian North sea. *Nor. Geol. Tidsskr.* 64:39-68.
- Pharaoh T.C. (1999): Palaeozoic terranes and their lithospheric boundaries within the Trans-European Suture Zone (TESZ): a review. *Tectonophysics*. 314: 17-41.
- Pittman III W.C., Andrews J.A. (1985): Subsidence and thermal history of small pull-apart basins. *The Society of Economic Paleontologists and Mineralogists*. 3911: 45-49.

- Plašienka D., Grecula P., Putiš M., Kovač M., Hovorka D. (1997): Evolution and structure of the Western Carpathian: an overview. In: Grecula P, Hovorka D, Putiš M (Eds.): Geological evolution of the Western Carpathians. *Mineralia Slovaca, Bratislava*: 1-24.
- Pollack H.N., Chapman D.S. (1977): On the regional variation of heat flow, geotherms and lithospheric thickness. *Tectonophysics*. 38: 279-286.
- Pollack H.N., Hurter S.J., Johnson J.R. (1993): Heat flow from the Earth' interior: analysis of the global data set. *Rev. Geophys.* 31: 267-280.
- Rabbel W., Förste K., Schulze A., Bittner R., Röhl J., Reichert J.C. (1995): A high-velocity layer in the lower crust of the North German Basin. *Terra Nova*. 7: 327–337.
- Ranalli G., Murphy D.C. (1987): Rheological stratification of the lithosphere. *Tectonophysics*. 132: 281-295.
- Ranalli G. (1994): Nonlinear flexure and equivalent mechanical thickness of the lithosphere. *Tectonophysics*. 240: 107-114.
- Ranalli G. (1995): Rheology of the Earth, 2nd edition. *Chapman & Hall Eds.*
- Ranalli G. (1997): Rheology of the lithosphere in space and time. *Geological Society London, Special Publications*. 121: 19-37.
- Ranalli G., Murphy D.G. (1987): Rheological stratification of the lithosphere. *Tectonophysics*. 132: 281-295.
- Reemst P., Cloetingh S., Fanavoll S. (1994): Tectonostratigraphic modelling of Cenozoic uplift and erosion in the SW Barents Sea. *Mar. Pet. Geol.* 11: 478-490.
- Reinecker J., Heidbach O., Tingay M., Sperner B., Müller B. (2005): The release 2005 of the World Stress Map. Available on line at: <http://www.world-stress-map.org>.
- Richardson R.M, Solomon S.C. Sleep N.H. (1979): Tectonic stress in the plates. *Rev. Geophys.* 17: 981-1019.
- Richardson R.M., Cox B.L. (1984): Evolution of oceanic lithosphere: a driving force study of the Nazca plate. *J. Geophys. Res.* 89: 10043-10052.
- Richardson R.M., Reding L. (1991): North American plate dynamics. *J. Geophys. Res.* 96: 12201-12223.
- Richardson R.M. (1992): Ridge forces, absolute plate motions, and the intraplate stress field. *J. Geophys. Res.* 97: 11739–11748.
- Richardson R.M., Coblenz D.D. (1994): Stress modelling in the Andes: constraints on the South American intraplate stress magnitudes. *J. Geophys. Res.* 99: 22015-22025.
- Roeckell, Lemmp C. (2003): Spannungszustand im Norddeutschen Becken. Erdöl Erdgas Kohle 119 Jg., Heft 2, 73-80, Urban Verlag Hamburg/Wien.

Royden L., Keen C.E. (1980): Rifting process and thermal evolution of the continental margin of eastern Canada determined from subsidence curves. *Earth and Planetary Science Letters*. 51: 343-361.

Roth F., Fleckenstein P., Palmer J., Groß U. (1999): Stress orientation found in the NE Germany differ from the West-European trend. Proceeding ICDP/KTB-Kolloquium-BOCHUM, 255-264.

Roth, F., Fleckenstein, P. (2001): Stress orientations found in northeast Germany differ from the West European trend. *Terra Nova*. 13: 289–296.

Sales J.K. (1968): Crustal mechanics of Cordilleran foreland deformation: a regional and scale models approach. *Am. Assoc. Pet. Geol. Bull.* 52: 2016-2044.

Salveson J.O. (1978): Variations in geology of rift basins – a tectonic model. In: Proceedings of the Rio Grande Rift Symposium, Santa Fe, October 8-17, 1978, Los Alamos Laboratory LA-7487-C, 82-86.

Sassi F.P., Visona D., Ferrara G., Gatto G.O., Ibrahim H.A., Saida A.A., Tonarini, S. (1993): The crystalline basement of Northern Somalia: lithostratigraphy and sequence of events. In: Abbate E., Sagri M., Sassi F.P. (eds) *Geology and mineral resources of Somalia and surrounding regions. Ist Agronomico Oltemare, Firenze, Relazione e Monographie*. 340.

Scheck-Wenderoth M., Bayer U. (1999): Evolution of the Northeast German Basin-inferences from a 3D structural model and subsidence analysis. *Tectonophysics*. 313: 145-169.

Scheck-Wenderoth M., Barrio-Alvers L., Bayer U., Götze H. –J. (1999): Density structure of the Northeast German Basin: 3D modelling along the DEKORP Line Basin'96. *Phys. Chem. Eart. Part A* 24: 221-230.

Scheck-Wenderoth M., Bayer U., Otto V., Lamarche J., Banka D., Pharaoh T. (2002): The Elbe Fault System in north central Europe-a basement controlled zone of crustal weakness. *Tectonophysics*. 360: 281-299.

Scheck-Wenderoth M., Bayer U., Lewerenz B. (2003): Salt redistribution during extension and inversion inferred from 3D backstripping. *Tectonophysics*. 373: 55-73.

Scheck-Wenderoth M., Lamarche J. (2005): Crustal memory and basin evolution in the Central European Basin System-new insights from a 3D structural model. *Tectonophysics*. 397: 143-165.

Scheck-Wenderoth, M., Krzywiec, P., Maystrenko, Y., Zühlke, R., Froitzheim, N. (in press): Permian to Cretaceous tectonics of Central Europe. In McCann, T. (Ed): *Geology of Central Europe*. Geological Society Special Publication, London.

Scherneck H.-G., Johansson J.M., Mitrovica J.X., Davis J.L. (1998): The BIFROST project: GPS determined 3-D displacement rates in Fennoscandia from 800 days of continuous observations in the SWEPO network. *Tectonophysics*. 294: 305–321.

Schmid S.M., Pfiffner O.A., Froitzheim N., Schoborn G., Kissling E. (1996): Geophysical-geological transect and tectonic evolution of the Swiss-Italian Alps. *Tectonics*. 15:1036-1064.

- Schmid S.M., Fügenschuh B., Kissling E., Schuster R. (2004): Tectonic map and overall architecture of the Alpine orogen. *Eclogae geol. Helv.* 97:93-117.
- Sclater J.G., Celerier B. (1987): Extensional models for the formation of sedimentary basins and continental margins. *Norsk Geologisk Tidsskrift.* 67: 253-267.
- Sclater J.G., Christie P.A.F. (1980): Continental stretching: an explanation of the post-Mid-Cretaceous subsidence of the central North Sea basin. *Journal of Geophysical Research.* 85: 3711-3739.
- Sibson R.H., (1983): Continental fault structure and the shallow earthquake source, *Journal of Geologic Society of London.* 140: 741–767.
- Shimada M. (1993): Lithosphere strength inferred from fracture strength of rocks at high confining pressures and temperatures. *Tectonophysics.* 217: 55–64.
- Shomali Z.H., Roberts R.G., Pedersen L.B., TOR Working Group (2006): Lithospheric structure of the Tornquist Zone resolved by nonlinear P and S teleseismic tomography along the TOR array. *Tectonophysics.* 416: 133-149.
- Sleep N.H. (1971): Thermal effects of the formation of Atlantic continental margins by continental break up. *Geophys. J.R. Astron. Soc.* 24: 325-350.
- Sonder L.J., England P.C., Houseman G.A. (1986): Continuum calculations of continental deformation in transcurrent environments. *J. Geophys. Res.* 91: 4797-4810.
- Sonder L.J., England P. (1989): Effects of a temperature-dependent rheology on large-scale continental extension. *J. Geophys. Res.* 94: 7603–7619.
- Sørensen K. (1986): Danish basin subsidence by Triassic rifting on a lithospheric cooling background. *Nature.* 319: 60-663.
- Spakman W., Van der Lee S., Van der Hilst R.D. (1993): Travel-time tomography of the European-Mediterranean mantle down to 1400 km. *Phys. Earth Planet. Inter.* 79: 3-74.
- Stampfli G.M., Mosar J., Favre P., Pilleveit A., Vannay J.-C. (2001): Late Palaeozoic to Mesozoic evolution of the Western Tethyan realm: the Neotethys-East Mediterranean basin connection. In: Ziegler P.A., Cavazza W., Robertson A.H.F., Crasquin-Soleau S. (Eds.): *Peri-Tethys Memoir: Peri-Tethyan rift/wrench basins and passive margins. Mémoires du Muséum National d'Historie Naturelle, Paris.* 186: 51-108.
- Stampfli G.M., Borel G.D. (2002): A plate tectonic model for the Paleozoic and Mesozoic constrained by dynamic plate boundaries and restored synthetic oceanic isochrons. *Earth and Planetary Science Letters.* 196: 17-33.
- Steckler M.S., Watts A.B. (1978): Subsidence of the Atlantic type continental margin off New York. *Earth Planet. Sci. Lett.* 41: 1-13.
- Steckler M.S. (1981): The Thermal and Mechanical Evolution of the Atlantic-type Continental Margin. PhD thesis, Columbia Univ. New York, USA.

- Stephenson R.A., Embry A.F., Nakiboglu S.M., Hastaoglu M.A. (1987): Rift-initiated Permian to Early Cretaceous subsidence of the Svedrup basin. *In: Sedimentary basins and basin-forming mechanisms*. Beamont C. & Tankard A.J. (Eds.). *Mem. Can. Soc. Pet. Geol.* 12: 213-231.
- Stephenson R.A., Narkiewicz M., Dadlez R., Van Wees J.-D., Andriessen P. (2003): Tectonic modelling of the Polish basin in the light of new data on crustal structure and magnitude of inversion. *Sedimentary Geology*. 156:59-70.
- Swidrowska J., Hakenberg M. (2000): Palaeotectonic conditions of Cretaceous basin development in the southeastern segment of the Mid Polish Trough. *IN: Crasquin-Soleau S., Barries E. (Eds.): Peri-Tethys Memoir 5: new data on Peri-Tethyan sedimentary basins. Mémoires du Muséum national d'Historie naturelle (Paris)*. 239-256.
- Yegorowa T., Bayer U., Thybo H., Maystrenko Y., Scheck-Wenderoth M., Lyngsie S.B. (2007): Gravity signals from the lithosphere in the Central European Basin System. *Tectonophysics*. 429: 133-163.
- Tapponier P., Molnar P. (1977): Active faulting and tectonics in China. *J. Geophys. Res.* 82: 2905.
- Thybo H. (1990): A seismic model along the EGT profile-from the North German Basin into the Baltic Shield. *In: Freeman R., Müller St. (Eds.): Proceedings of the 5th Study Centre on the European Geotraverse Project*. Strasbourg: ESF: 99-108.
- Thybo H. (1997): Geophysical characteristics of the Tornquist Fan area, northwest Trans-European Suture Zone: indication of late Carboniferous to early Permian dextral transtension. *Geological Magazine*. 134: 597-606.
- Thybo H., Pharaoh T., Guterch A. (eds.) (1999): Geophysical investigations of the Trans-European suture zone. *Tectonophysics (Special Issue)*. 314: 1-3, 350 pp.
- Thybo H., Pharaoh T., Guterch A. (eds.) (2002): Geophysical investigations of the Trans-European suture zone II. *Tectonophysics (Special Issue)*. 339: 1-2, 237 pp.
- Torsvik T.H., VanderVoo R., Meert J.G., Mosar J., Walderhaug H.J. (2001): Reconstructions of continents around the North Atlantic at about the 60th parallel. *Earth Planet. Sci. Lett.* 187: 55-69.
- Underhill J.R., Partington M.A. (1993): Jurassic thermal doming and deflation in the North Sea: implications of the sequence stratigraphic evidence. *In: Parker J.R.(ed.): Petroleum geology of northwest Europe: proceedings from the 4th Conference, London*, The Geological Society: 337-345.
- Tommasi A., Vauchez A., Daudré B. (1995): Initiation and propagation of shear zones in a heterogeneous continental lithosphere. *J. Geophys. Res.* 100: 22083-22101.
- Turcotte D., Schubert G. (2002): Geodynamic, 2nd edn. *Cambridge University Press*.
- Van den Beukel J. (1990): Thermal and mechanical modelling of convergent plate margins. *Ph.D. Thesis, Geological Ultraiectina*. 62: 126 pp.

Van der Beek P., Andriessen P., Cloetingh S. (1995): Morphotectonic evolution of rifted continental margins: Inferences from a coupled tectonic-surface processes model and fission track thermochronology. *Tectonics*. 14: 10.1029/94TC02445.

Van Hoorn B. (1987): Structural evolution, timing and tectonic style of the Sole Pit inversion. *Tectonophysics*. 137:239-254.

Van Wees J. -D., Stephenson R.A. (1995): Quantitative modelling of basin and rheological evolution of the Iberian Basin (Central Spain): implications for lithospheric dynamics of intraplate extension and inversion. *Tectonophysics*. 252: 163-178.

Van Wees J. -D., Cloetingh S. (1996): 3D flexure and intraplate compression in the north Sea Basin. *Tectonophysics*. 266: 343-359.

Van Wees J. -D., Stephenson R. A., Ziegler P. A., Bayer U., McCann T., Dadlèz R., Gaupp R., Narkiewicz M., Bitzer F., Scheck-Wenderoth M. (2000): On the origin of the Southern Permian Basin, Central Europe. *Marine and Petroleum Geology*. 17: 43-59.

Van Wees J. -D., Beekman F. (2000): Lithosphere rheology during intraplate basin extension and inversion-Inferences from automated modelling of four basins in western Europe. *Tectonophysics*. 320: 219-242.

Van Wijhe D.H. (1987): Structural evolution of inverted basins in the Dutch offshore. *Tectonophysics*. 137:171-175.

Vaucher A., Tommasi A., Egydio-Silva M. (1994): Self-indentation of continental lithosphere. *Geology*. 22: 967-970.

Vejbæk O.V., Andersen C. (1987): Cretaceous-Early Tertiary inversion in the Danish Central Trough. *Tectonophysics*. 137:221-238.

Vejbæk O. V (1990): The Horn Graben, and its relationship to the Oslo Graben and the Danish Basin. *Tectonophysics*. 178:29-49.

Vejbæk O. V. (1997): Dybe strukturer I danske sedimentaræ bassiner. *Geol. Tidsskr.* 41:1-31.

Vilotte J.P., Daignieres M., Madariaga R. (1982): Numerical modeling of intraplate deformation: simple mechanical models of continental collision. *J. Geophys. Res.* 87: 10709-10728.

Vilotte J.P., Daignieres M., Madariaga R., Zienkiewicz O.C. (1984): The role of a heterogeneous inclusion during continental collision. *Phys. Earth Planet. Inter.* 36: 236-259.

Vilotte J.P., Madariaga R., Daignieres M., Zenkiewicz O.C. (1985): numerical studies of continental collision; influence of buoyancy forces and an initial stiff inclusion. *Geophys. J. R. Astron. Soc.* 84: 279-310.

Vogt P. R., Ostenso N. A. (1967): Steady state crustal spreading. *Nature*. 215:810-17.

- Voss P., Mosegaard K., Gregersen S., TOR Working Group (2006): The Tornquist Zone, a north east inclining lithospheric transition at the south western margin of the Baltic Shield: revealed through a nonlinear teleseismic tomographic inversion. *Tectonophysics*. 416: 151-166.
- Wahlstrom R., Grünthal G. (1994): Seismicity and seismotectonic implications in the southern Baltic Sea area. *Terra Nova*. 6: 149-157.
- Walcott, R. I. (1970): Flexure of the lithosphere at Hawaii. *Tectonophysics*. 9: 435-446.
- Watts A. B., Cochran J. R. (1974): Gravity Anomalies and Flexure of the Lithosphere along the Hawaiian-Emperor Seamount Chain. *Geophysical Journal International*. 38: 119-141.
- Watts, A. B., Cochran, J. R., Selzer, G. (1975): Gravity anomalies and flexure of the lithosphere: a three-dimensional study of the Great Meteor seamount, northeast Atlantic. *J. Geophys. Res.* 80: 1391-1398.
- Watts A. B., Kamer G.D., Steckler M.S. (1982): Lithospheric flexure and the evolution of sedimentary basins. *Philos. Trans. R. Soc. London Ser. A*. 305: 249-281.
- Weertman J., Weertman J.R. (1975): High temperature creep of rock, and mantle viscosity. *Ann. Rev. Earth Planet. Sci.* 3:292-315.
- Wernicke, B. (1981): Low-angle normal faults in the Basin and Range Province: nappe tectonics in an extending orogen. *Nature*. 291: 645-648.
- Wernicke B. (1985): Uniform-sense simple shear of the continental lithosphere. *Can. J. Earth Sci.* 22: 108-125.
- White N., McKenzie D. (1988): Formation of the “steer’s head” geometry of sedimentary basins by differential stretching of the crust and mantle. *Geology*. 16:250-253.
- White N., Latin D. (1993): Subsidence analysis from the North Sea “triple-junction”. *Journal of Geological Society*. 150:
- Wilks K.R., Carter N.L. (1990): Rheology of some continental lower crustal rocks. *Tectonophysics*. 182: 57-77.
- Wilson M. (1993) Magmatism and the geodynamics of basin formation. *Sediment. Geol.* 86: 5-29.
- Wollemberg H.A., Smith A.R: (1987): Radiogenic heat production of crustal rocks: an assessment based on geochemical data. *Geophysical Research Letters*. 14: 295-298.
- Wood R., Barton P. (1983): Crustal thinning and subsidence in the North Sea. *Nature*. 302: 134-136.
- Wortel M.J.R, Cloetingh S. (1985): Accretion and lateral variations in tectonic structure along the Peru-Chile trench. *Tectonophysics*. 112:443-462.
- Zenkiewicz O.C. (1977): The finite element method in structural and continuum mechanics.

Ziegler P.A. (1986): Late Cretaceous and Cenozoic intra-plate compressional deformations in the Alpine Foreland—a geodynamic model. *Tectonophysics*. 137:389-420.

Ziegler P.A. (1990): Geological Atlas of Western and Central Europe. *Geol. Soc. Publ. House*, 2nd edition.

Ziegler P.A. (1998): evolution of the Arctic-North Atlantic and the Western Tethys. *AAPG Mem.* 43. www.searchanddiscovery.com/documents/97020/memoir43.htm

Ziegler P.A., Van Wees J.-D., Cloetingh S. (1998): Mechanical controls on collision-related compressional intraplate deformation. *Tectonophysics*. 300: 103-129.

Ziegler P.A., Stampfli G.M. (2001): Late Palaeozoic-Early Mesozoic plate boundary reorganization: collapse of the Variscan orogen and opening of Neotethys. In: Casini R. (eds.): *The continental Permian of the Southern Alps and Sardinia (Italy): regional reports and general correlations*. *Annali Museo Civico Scienze Naturali (Brescia)*. 25: 17-34.

Ziegler P.A., Cloetingh S., Guiraud R., Stampfli G.M. (2001): Peri-Tethyan Platforms: constraints on dynamics of rifting and basin inversion In: Ziegler P.A., Cavazza W, Robertson A.H.F., Crasquin-Soleau S (eds.) *Peri-Tethys memoir 6: Peritethyan rift/wrench basins and passive margins*, *IGCP 369. Mém. Museum Nat. Hist. Nat.* 186: 9-49.

Ziegler P.A., Dèzes P. (2005): Crustal evolution of Western and Central Europe. *Memoir of the Geological Society*, London.

Zoback M.L. (1992): First- and second-order patterns of stress in the lithosphere: the World Stress Map Project. *J. Geophys. Res.* 97: 11703-11728.