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Liste complète des articles dans des revues scientifiques et ouvrages à comités de lecture:

- 123- Tachikawa K, Sépulcre S, Toyofuku T, Bard E. Assessing influence of diagenetic carbonate dissolution on planktonic foraminiferal Mg/Ca in the South-eastern Arabian Sea over the past 450 k years: Comparison between *Globigerinoides ruber* and *Globigerinoides sacculifer*. *Geochemistry Geophysics Geosystems (G-cubed)* 9 (4), Q04037, doi:10.1029/2007GC001904, 1-16 (2008).
- 122- Bard E, Delaygue G. Comment on « Are there connections between the Earth's magnetic field and climate? » by Courtillot et al. (2007), *Earth and Planetary Science Letters* 265, 302-307 (2008).
- 121- Blanchet CL, Thouveny N, Vidal L, Leduc G, Tachikawa K, Bard E, Beaufort L. Terrigenous input response to glacial/interglacial climatic over southern Baja California: a rock magnetic approach. *Quaternary Science Reviews* 26, 3118-3133 (2007).
- 120- Pichevin L, Bard E, Martinez P, Billy I. Evidence of ventilation changes in the Arabian Sea during the Late Quaternary: implication for denitrification and nitrous oxide emission. *Global and Biogeochemical Cycles* 21, GB4008, doi:10.1029/2006GB002852, 1-12 (2007).
- 119- Buck C, Bard E. A calendar chronology for mammoth and horse extinction in North America based on Bayesian radiocarbon calibration. *Quaternary Science Reviews* 26, 2031-2035, (2007).
- 118- Bard E, Raisbeck G, Yiou F, Jouzel J. Comment on « Solar activity during the last 1000 yr inferred from radionuclide records » by Muscheler et al. (2007). *Quaternary Science Reviews* 26, 2301-2308, (2007).
- 117- Eris KK, Ryan WBF, Cagatay MN, Sancar U, Lericolais G, Menot G, Bard E, The timing and evolution of the post-glacial transgression across the Sea of Marmara shelf, south of Istanbul, *Marine Geology* 243, 57-76, (2007).
- 116- Böning P, Bard E, Rose E. Towards direct micron-scale XRF elemental maps and quantitative profiles of wet marine sediments. *Geochemistry Geophysics Geosystems (G-cubed)* 8 (5), doi: 10.1029/2006GC001480, 1-14, (2007).
- 115- de Garidel-Thoron T, Rosenthal Y, Beaufort L, Bard E, Sonzogni C, Mix A, A multiproxy assessment of the equatorial Pacific hydrography during the last 30 ky. *Paleoceanography* 22, PA3204, doi:10.1029/2006PA001269, 1-18, (2007).
- 114- Leduc G, Vidal L, Tachikawa K, Rostek F, Sonzogni C, Beaufort L, Bard E. Moisture transport across Central America as a positive feedback on abrupt climatic changes. *Nature* 445, 908-911 (2007).
- 113- Rickaby REM, Bard E, Sonzogni C, Rostek F, Beaufort L, Barler S, Rees G, Schrag D. Coccolith chemistry reveals secular variations in the global ocean carbon cycle ? *Earth and Planetary Science Letters* 253, 83-95, (2007).
- 112- Stanford JD, Rohling EJ, Hunter, S, Roberts AP, Rasmussen SO, Bard E, McManus J, Fairbanks RG. Meltwater injections and deep circulation in the North Atlantic. *Paleoceanography*

21, PA4103, doi:10.1029/2006PA001340, 1-9, (2006).

111- Ménot G, Bard E, Rostek F, Weijers JWH, Hopmans EC, Schouten S, Sinninghe Damsté JS. Early reactivation of European rivers during the last deglaciation. *Science* 313, 1623-1625, (2006).

110- Siddall M, Bard E, Rohling EJ, Hemleben C. Sea-level reversal during Termination II. *Geology* 34, 817-820, (2006).

109- Bard E, Frank M. Climate change and solar variability: what's new under the Sun. *Earth and Planetary Science Letters* 248, 1-14, (2006).

108- Reimer PJ, Baillie MGL, Bard E, Beck JW, Blackwell PG, Buck CE, Burr GS, Edwards RL, Friedrich M, Guilderson TP, Hogg AG, Hughen KA, Kromer B, McCormac G, Manning S, Reimer RW, Southon JR, Stuiver M, van der Plicht J, Weyhenmeyer CE. Comment on "Radiocarbon Calibration Curve Spanning 0 to 50,000 Years B.P. Based on Paired $^{230}\text{Th}/^{234}\text{U}/^{238}\text{U}$ and ^{14}C Dates on Pristine Corals" by R.G. Fairbanks et al. and "Extending The Radiocarbon Calibration Beyond 26,000 Years Before Present Using Fossil Corals" by T.-C. Chiu et al. *Quaternary Science Reviews* 25, 855-862, (2006).

107- Bard E, Rostek F, Ménot-Combes G. Chronologie des variations climatiques rapides pendant la dernière période glaciaire. *Comptes Rendus de l'Académie des Sciences (C.R. Palevol)* 5, 13-19, (2006).

106- Siddall M, Stocker TF, Blunier T, Spahni R, McManus J, Bard E. Using a maximum simplicity paleoclimate model to simulate millennial variability during the last four glacial periods. *Quaternary Science Reviews* 25, 3185-3197 (2006).

105- Silenzi S, Bard E, Montagna P, Antonioli F. Isotopic and elemental records in a non-tropical coral (*Cladocora caespitosa*): Discovery of a new high-resolution climate archive for the Mediterranean Sea. *Global and Planetary Change* 49, 94-120 (2005).

104- Bard E, Ménot-Combes G, Rostek F. Present status of radiocarbon calibration and comparison records based on polynesian corals and Iberian Margin sediments. *Radiocarbon* 46, 1189-1203, (2004).

103- van der Plicht J, Beck JW, Bard E, Baillie MGL, Blackwell PG, Buck CE, Friedrich M, Guilderson TP, Hughen KA, Kromer B, McCormac FG, Bronk Ramsey C, Reimer PJ, Reimer RW, Remmele S, Richards DA, Southon JR, Stuiver M, Weyhenmeyer CE. NOTCAL04 comparison-calibration ^{14}C records 26–50 cal kyr BP. *Radiocarbon* 46, 1225-1238, (2004).

102- Hughen KA, Baillie MGL, Bard E, Beck JW, Bertrand C, Blackwell PG, Buck CE, Burr G, Cutler KB, Damon PE, Edwards RL, Fairbanks RG, Friedrich M, Guilderson TP, Kromer B, McCormac G, Manning S, Bronk Ramsey C, Reimer PJ, Reimer RW, Remmele S, Southon JR, Stuiver M, Talamo S, Taylor FW, van der Plicht J, Weyhenmeyer CE. MARINE04 marine radiocarbon age calibration 26-0 ka BP. *Radiocarbon* 46, 1059-1086, (2004).

101- Reimer PJ, Baillie MGL, Bard E, Bayliss A, Beck JW, Bertrand C, Blackwell PG, Buck CE, Burr GS, Cutler KB, Damon PE, Edwards RL, Fairbanks RG, Friedrich M, Guilderson TP, Hog AG, Hughen KA, Kromer B, McCormac G, Manning S, Bronk Ramsey C, Reimer RW, Remmele S, Southon JR, Stuiver M, Talamo S, Taylor FW, van der Plicht J, Weyhenmeyer CE. INTCAL04 terrestrial radiocarbon age calibration. *Radiocarbon* 46, 1029-1058, (2004).

- 100- Bard E, Greenhouse effect and ice ages: historical perspective. *Comptes Rendus de l'Académie des Sciences (C.R. Geosciences)* 336, 603-638, (2004).
- 99- Thévenon F, Bard E, Williamson D, Beaufort L. Biomass burning records from the West Equatorial Pacific over the last 360 kyr: Methodological, climatic and anthropic implications. *Palaeogeography, Palaeoclimatology and Palaeoecology* 213, 83-99, (2004).
- 98- Paterne M, Ayliffe LK, Arnold M, Cabioch G, Tisnérat-Labordé N, Hatté C, Douville E, Bard E. Paired ^{14}C and $^{230}\text{Th}/\text{U}$ datings on surface corals from Marquesas and Vanuatu (sub-equatorial Pacific) in the 3000 to 15,000 cal yr range. *Radiocarbon* 46, 551-566, (2004).
- 97- Antonioli F, Bard E, Silenzi S, Potter E-K, Improta S. 215-kyr sea-level oscillations from marine and continental layers in Argentarola cave speleothems (Italy). *Global and Planetary Changes* 43, 57-78, (2004).
- 96- Rosenthal Y, Perron-Cashman S, Lear CH, Bard E, Barker S, Billups K, Bryan M, Delaney ML, deMenocal PB, Dwyer GS, Elderfield H, German CR, Greaves M, Lea DW, Marchitto Jr. TM, Pak DK, Ravelo AC, Paradis GL, Russell AD, Schneider R, Scheindrich K, Stott L, Tachikawa K, Tappa E, Thunell R, Wara M, Weldeab S, Wilson P. Inter-laboratory comparison study of Mg/Ca and Sr/Ca measurements in planktonic foraminifera for paleoceanographic research. *Geochemistry Geophysics Geosystems (G-cubed)* 5 (4), 2003GC000650, 1-29, (2004).
- 95- Bard E, Rostek F, Ménot-Combes G. Radiocarbon calibration beyond 20,000 B.P. by means of planktonic foraminifera of the Iberian Margin. *Quaternary Research* 61 (2), 204-214, (2004).
- 94- Rosell-Melé A, Bard E, Emeis KC, Grieger B, Hewitt C, Müller PJ, Schneider RR. Sea surface temperature glacial anomalies in the global ocean estimated from the alkenone UK37' index: comparison with GCMs. *Geophysical Research Letters* 31, L03208, 1-4, (2004).
- 93- Bard E, Rostek F, Ménot-Combes G. A better radiocarbon clock. *Science* 303, 178-179, (2004).
- 92- Bard E, Kromer B. Absolute and radiocarbon chronologies of the Younger Dryas cold period. in Widemann F, Taborin Y eds. *Geophysical and archaeological chronologies for the Upper Palaeolithic*, Bari Edipuglia, 375-379, (2003).
- 91- Schulte S, Bard E. Past changes of biologically mediated dissolution of calcite above the chemical lysocline documented in Indian Ocean sediments. *Quaternary Science Reviews* 22, 1757-1770, (2003).
- 90- Reimer PJ, Hughen KA, Guilderson TP, McCormac Baillie MGL, Bard E, Barratt P, Beck JW, Buck CE, Damon PE, Friedrich M, Kromer B, Bronk-Ramsey C, Reimer RW, Remmeli S, Southon JR, Stuiver M, van der Plicht J. Preliminary report of the first workshop of the INTCAL04 radiocarbon calibration/comparison working group. *Radiocarbon* 44, 653-661, (2002).
- 89- Bard E. Climate shock: Abrupt changes over millennial time scales. *Physics Today* 55 (12), 32-38, (2002).
- 88- Delanghe D, Bard E, Hamelin B. New TIMS constraints on the uranium-238 and uranium-234 in seawaters from the main ocean basins and the Mediterranean Sea. *Marine Chemistry* 80, 79-93, (2002).

- 87- Bard E, Delaygue G, Rostek F, Antonioli F, Silenzi S, Schrag DP. Hydrological conditions over the western Mediterranean basin during the deposition of the cold sapropel 6 event. *Earth and Planetary Science Letters* 202, 481-494 (2002).
- 86- Pailler D, Bard E. High frequency paleoceanographic changes during the past 140,000 years recorded by the organic matter in sediments off the Iberian Margin. *Palaeogeography, Palaeoclimatology and Palaeoecology* 181, 431-452, (2002).
- 85- Sicre M-A, Bard E, Ezat U, Rostek F. Alkenones distributions in the North Atlantic and Nordic sea surface waters. *Geochemistry, Geophysics and Geosystems (G-cubed)* 3 (2), 2001GC000159, 1-13, (2002).
- 84- Bard E, Antonioli F, Silenzi S. Sea-level during the penultimate interglacial period based on a submerged stalagmite from Argentarola Cave (Italy). *Earth and Planetary Science Letters* 196, 135-146, (2002).
- 83- Pailler D, Bard E, Rostek F, Zheng Y, Mortlock R, Van Geen A. Burial of redox-sensitive metals and organic matter in the equatorial Indian Ocean linked to precession. *Geochimica et Cosmochimica Acta* 66, 849-865, (2002).
- 82- Camoin G, Ebren P, Eisenhauer A, Bard E, Faure G. A 300,000 years coral reef record of sea level changes, Mururoa Atoll (French Polynesia). *Palaeogeography, Palaeoclimatology and Palaeoecology* 175, 325-341, (2001).
- 81- Rosell-Melé A, Bard E, Emeis K-C, Grimalt JO, Müller P, Schneider RR, Blanz T, Bouloubassi I, Epstein B, Fahl K, Fluegge A, Freeman K, Goni M, Güntner U, Hartz D, Hellebust S, Herbert T, Ikehara M, Ishiwatari R, Kawamura K, Kenig F, de Leeuw J, Lehman S, Mejanelle L, Ohkouchi N, Pancost RD, Pelejero C, Prahl F, Quinn J, Rontani J-F, Rostek F, Rullkötter J, Sachs J, Sawada K, Schulz-Bull D, Sikes E, Sonzogni C, Ternois Y, Versteegh G, Volkman J and Wakeham S. Precision of the current methods to measure the alkenone proxy UK37' and absolute abundance in sediments: results of an interlaboratory comparison study. *Geochemistry, Geophysics and Geosystems (G-cubed)* 2, 2000GC000141, 1-28, (2001).
- 80- Bard E. Extending the calibrated radiocarbon record. *Science* 292, 2443-2444, (2001).
- 79- Clark PU, Mix A, Bard E. Ice sheets and sea-level of the Last Glacial Maximum. *Eos Trans. of AGU* 82 (22), 241-246-247, (2001).
- 78- Bard E. Paleoceanographic implications of the difference in deep-sea sediment mixing between large and fine particles. *Paleoceanography* 16, 235-239, (2001).
- 77- Cardinal D, Hamelin B, Bard E, Pätzold J. Sr/Ca, U/Ca and $\delta^{18}\text{O}$ records in massive corals from Bermuda: Relationships with sea surface temperatures. *Chemical Geology* 176, 215-235, (2001).
- 76- Bard E. Citation for the presentation of the 2000 V.M. Goldschmidt Award to Geoffrey Eglinton. *Geochimica et Cosmochimica Acta* 65, 1003-1004, (2001).
- 75- Delaygue G, Bard E, Rollion C, Jouzel J, Stiévenard M, Duplessy J-C, Ganssen G. Oxygen isotope/salinity relationship in the northern Indian Ocean. *Journal of Geophysical Research* 106 (C3), 4565-4574, (2001).

- 74- Bard E. Comparison of alkenone estimates with other temperature proxies. *Geochemistry, Geophysics and Geosystems (G-cubed)* 2, 2000GC000050, 1-12, (2001).
- 73- Mix AC, Bard E, Schneider RR. Environmental Processes of the Ice age: Land, Oceans, Glaciers (EPILOG). *Quaternary Science Reviews* 20, 627-657, (2001).
- 72- Siani G, Paterne M, Arnold M, Bard E, Métivier B, Tisnerat N, Bassinot F. Radiocarbon reservoir ages in the Mediterranean sea and Black Sea. *Radiocarbon* 42, 271-280, (2000).
- 71- Mix AC, Bard E, Eglington G, Keigwin LD, Ravelo AC, Rosenthal Y. Alkenones and multi-proxy strategies in paleoceanographic studies. *Geochemistry, Geophysics and Geosystems (G-cubed)* 1, 2000GC000056, 1-22, (2000).
- 70- Bard E, Rostek F, Turon J-L, Gendreau S. Hydrological impact of Heinrich events in the subtropical northeast Atlantic. *Science* 289, 1321-1324, (2000).
- 69- Delaygue G, Jouzel J, Masson V, Koster R, Bard E. Validity of the isotopic thermometer in central Antarctica: limited impact of glacial precipitation seasonality and moisture origin. *Geophysical Research Letters* 27 (17), 2677-2680, (2000).
- 68- Bard E, Raisbeck G, Yiou F, Jouzel J Solar irradiance during the last 1200 yr based on cosmogenic nuclides. *Tellus B* 52, 985-992, (2000).
- 67- Budziak D, Schneider R, Rostek F, Müller PJ, Bard E, Wefer G. Late Quaternary insolation forcing on total organic carbon and C37 alkenone variations in the Arabian Sea. *Paleoceanography* 15, 307-321, (2000).
- 66- Lambeck K, Bard E. Sea-level change along the French Mediterranean coast since the time of the Last Glacial Maximum. *Earth and Planetary Science Letters* 175, 202-222 (2000).
- 65- Cayre O, Bard E. The last deglaciation in the Eastern Arabian Sea: Planktonic foraminiferal and alkenone records. *Quaternary Research* 52, 337-342, (1999).
- 64- Schulte S, Rostek F, Bard E, Rullkötter J, Marchal O. Variations of oxygen-minimum and primary productivity recorded in sediments of the Arabian Sea. *Earth and Planetary Science Letters* 173, 205-221, (1999).
- 63- Bard E. Ice age temperatures and geochemistry. *Science* 284, 1133-1134, (1999).
- 62- Rosell-Melé A, Bard E, Emeis KC, Farrimond P, Grimalt J, Müller PJ, Schneider RR. Project takes a new look at past sea surface temperatures. *Eos Trans. of AGU* 79 (33) 393-394, (1998).
- 61- Duplessy J-C, Arnold M, Bard E, Cortijo E, Labeyrie L, Laj C, Lehman B, Mazaud A, Paterne M, Tisnerat N, Vidal L. Le carbone 14: progrès récents et limitations de la méthode de datation. in Causse C, Gasse F eds. *Hydrogéologie et Géochimie Isotopique*. Paris ORSTOM, 229-250, (1998).
- 60- Montaggioni L, Bard E. Continuous record of reef growth over the past 14 ky on the mid-Pacific island of Tahiti. Comment and Reply. *Geology* 26, 479-480, (1998).
- 59- Stuiver M, Reimer PJ, Bard E, Beck JW, Burr GS, Hughen KA, Kromer B, McCormac G, van der Plicht J, Spurk M. INTCAL98 radiocarbon age calibration, 24,000-0 cal BP. *Radiocarbon* 40, 1041-1083, (1998).

- 58- Bard E. Geochemical and geophysical implications of the radiocarbon calibration. *Geochimica et Cosmochimica Acta* 62, 2025-2038, (1998).
- 57- Bard E, Arnold M, Hamelin B, Tisnerat-Laborde N, Cabioch G. Radiocarbon calibration by means of mass spectrometric $^{230}\text{Th}/^{234}\text{U}$ and ^{14}C ages of corals. An updated data base including samples from Barbados, Mururoa and Tahiti. *Radiocarbon* 40, 1085-1092, (1998).
- 56- Sonzogni C, Bard E, Rostek F. Tropical sea surface temperature during the last glacial period: a view based on alkenones in Indian Ocean. *Quaternary Science Reviews* 17, 1185-1201, (1998).
- 55- Rostek F, Bard E, Beaufort L, Sonzogni C, Ganssen G. Sea surface temperature and productivity records for the past 240 kyr in the Arabian Sea. *Deep Sea Research II* 44, 1461-1480, (1997).
- 54- Bard E, Raisbeck G, Yiou F, Jouzel J Solar modulation of cosmogenic nuclide production over the last millennium: comparison between ^{14}C and ^{10}Be records. *Earth and Planetary Science Letters* 150, 453-462, (1997).
- 53- Bard E. Nuclide production by cosmic rays during the Last Ice Age. *Science* 277, 532-533, (1997)
- 52- Sonzogni C, Bard E, Rostek F, Dollfus D, Rosell-Melé A, Eglinton G. Temperature and salinity effects on alkenones ratios measured in sediments from the Indian Ocean. *Quaternary Research* 47, 344-355, (1997).
- 51- Montaggioni L, Cabioch G, Camoin G, Bard E, Ribaud-Laurenti A, Faure G, Déjardin P, Récy J. Continuous record of reef growth over the past 14 ky on the mid-Pacific island of Tahiti. *Geology* 25, 555-558, (1997).
- 50- Sonzogni C, Bard E, Rostek F, Lafont R, Rosell-Melé A, Eglinton G. Core-top calibration of the alkenone index versus sea surface temperature in the Indian Ocean. *Deep Sea Research II* 44, 1445-1460, (1997).
- 49- Bard E, Rostek F, Sonzogni C. Interhemispheric synchrony of the last deglaciation inferred from alkenone palaeothermometry. *Nature* 385, 707-710, (1997).
- 48- Bard E, Jouannic C, Hamelin B, Pirazzoli P, Arnold M, Faure G, Sumosusastro PA, Syaefudin. Pleistocene sea levels and tectonic uplift based on radiometric dating of coral terraces at Sumba Island, Indonesia. *Geophysical Research Letters* 23, 12, 1473-1476, (1996).
- 47- Bard E, Hamelin B, Arnold M, Montaggioni L, Cabioch G, Faure G, Rougerie F. Sea level record from Tahiti corals and the timing of deglacial meltwater discharge. *Nature* 382, 241-244, (1996).
- 46- Grönvold K, Oskarsson N, Johnsen SJ, Clausen HB, Hammer CU, Bond G, Bard E. Ash layers from Iceland in the Greenland GRIP ice core correlated with oceanic and land sediments. *Earth and Planetary Science Letters* 135, 149-155, (1995).
- 45- Bard E, Kromer B. The Younger Dryas: absolute and radiocarbon chronologies. *Proceedings of the Royal Dutch Academy of Science* 44, 161-167, (1995).

- 44- Goslar T, Arnold M, Bard E, Kuc T, Pazdur MF, Ralska-Jasiewiczowa M, Rozanski K, Tisnerat N, Walanus A , Wicik B, Wieckowski K. High concentration of atmospheric ^{14}C during the Younger Dryas cold episode. *Nature* 377, 414-417, (1995)
- 43- Austin WEN, Bard E, Hunt JB, Kroon D, Peacock JD. The ^{14}C age of the Icelandic Vedde Ash: implications for Younger Dryas marine reservoir age corrections. *Radiocarbon* 37, 53-62, (1995).
- 42- Rostek F, Ruhland G, Bassinot F, Beaufort L, Müller PJ, Bard E. Fluctuations of the Indian monsoon regime during the last 170,000 years: evidence from sea surface temperature, salinity and organic carbon records. in Global Precipitations and Climate Change. M. Desbois & F. Désalmand (eds). NATO ASI Serie I, 26, 27-51, (1994).
- 41- Bard E, Cornu S, Pätzold J. Paleotemperature of the last interglacial based on $\delta^{18}\text{O}$ of mollusks. in J.-C. Duplessy & Spyridakis (eds): Long Term Climatic Variations - Data and Modeling. Springer-Verlag. NATO ASI Serie I, vol 22 , 259-266, (1994).
- 40- Bard E, Arnold M, Mangerud M, Paterne M, Labeyrie L, Duprat J, Mélières MA, Sonstegaard E, Duplessy JC. The North Atlantic atmosphere-sea surface ^{14}C gradient during the Younger Dryas climatic event. *Earth and Planetary Science Letters* 126, 275-287, (1994).
- 39- Duplessy JC, Bard E, Labeyrie L, Duprat J, Moyes J. Oxygen isotope records and salinity changes in the Northeastern Atlantic during the last 18000 yrs. *Paleoceanography* 8, 341-350, (1993).
- 38- Bard E, Arnold M, Fairbanks RG, Hamelin B. $^{230}\text{Th}/^{234}\text{U}$ and ^{14}C ages obtained by mass spectrometry on corals. *Radiocarbon* 35, 191-199, (1993).
- 37- Cornu S, Pätzold J, Bard E, Meco J, Cuerda-Barcelo J. Paleotemperature of the last interglacial period based on $\delta^{18}\text{O}$ of *Strombus bubonius* from the western Mediterranean Sea. *Palaeogeography, Palaeoclimatology and Palaeoecology* 103, 1-20, (1993).
- 36- Rostek F, Ruhland G, Bassinot F, Müller PJ, Labeyrie L, Lancelot Y, Bard E. Reconstructing sea surface temperature and salinity using $\delta^{18}\text{O}$ and alkenone records. *Nature* 364, 319-321, (1993).
- 35- Bradley R, Bard E, Farqhar G, Joussaume S, Lautenschlager M, Molfino B, Raschke E, Shackleton N, Sirocko F, Stauffer B, White J. Evaluating strategies for reconstructing past global changes - what and where are the gaps. in Global Changes in the Perspective of the Past, (Eddy J.A. & Oeschger H. eds), John Wiley Ltd, 103-120, (1993).
- 34- Goslar T, Kuc T, Ralska-Jasiewiczowa M, Rozanski K, Arnold M, Bard E, van Geel B, Pazdur M, Szeroczynska K, Wicik B, Wieckowski K, Walanus A. High-resolution lacustrine record of the Late glacial/Holocene transition in central Europe. *Quaternary Science Reviews* 12, 287-294, (1993).
- 33- Bard E, Stuiver M, Shackleton NJ. How accurate are our chronologies of the past ? in Global Changes in the Perspective of the Past, (Eddy J.A. & Oeschger H. eds), J. Wiley Ltd, 103-120, (1993).
- 32- Goslar T, Kuc T, Pazdur M, Ralska-Jasiewiczowa M, Rozanski K, Szeroczynska K, Walanus A, Wicik B, Wieckowski K, Arnold M, Bard E. Possibilities of reconstruction of radiocarbon level

changes during the Late Glacial by laminated sequence of the Gosciaz Lake. *Radiocarbon* 34, 826-832, (1992).

- 31- Bard E, Fairbanks RG, Hamelin B. How accurate are the U-Th ages obtained by mass spectrometry on coral terraces. In Kukla G & Went E, eds: Start of a Glacial, NATO ASI serie I, vol. 3., Springer-Verlag, 15-21, (1992).
- 30- Bard E, Fairbanks RG, Arnold M, Hamelin B. $^{230}\text{Th}/^{234}\text{U}$ and ^{14}C ages obtained by mass spectrometry on corals from Barbados (West Indies), Isabela (Galapagos) and Mururoa (French Polynesia). In Bard E, Broecker WS eds: The Last Deglaciation: Absolute and Radiocarbon Chronologies, *NATO ASI series*, serie I, vol 2. Springer Verlag, 103-112, (1992).
- 29- Mazaud A, Laj C, Bard E, Arnold M, Tric E. A geomagnetic calibration of the radiocarbon time-scale. In Bard E & Broecker WS eds: The Last Deglaciation: Absolute and Radiocarbon Chronologies, *NATO ASI series*, serie I, vol 2. Springer Verlag, 163-169, (1992).
- 28- Raisbeck GM, Yiou F, Jouzel J, Petit JR, Barkov NI, Bard E. ^{10}Be deposition at Vostok, Antarctica, during the last 50,000 years and its relationship to possible cosmogenic production variations during this period. In Bard E & Broecker WS eds: The Last Deglaciation: Absolute and Radiocarbon Chronologies, *NATO ASI series*, I vol 2. Springer Verlag, 127-140, (1992).
- 27- Bard E, Fairbanks RG, Hamelin B, Zindler A, Hoang CT. Uranium-234 anomalies in corals older than 150,000 yr. *Geochimica et Cosmochimica Acta* 55, 2385-2390, (1991).
- 26- Mazaud A, Laj C, Bard E, Arnold M, Tric E. Geomagnetic field control of ^{14}C production over the last 80 ky: Implications for the radiocarbon time-scale. *Geophysical Research Letters* 18, 1885-1888, (1991).
- 25- Hamelin B, Bard E, Zindler A, Fairbanks RG. $^{234}\text{U}/^{238}\text{U}$ mass spectrometry of corals: How accurate is the U-Th age of the last interglacial period. *Earth and Planetary Science Letters* 106, 169-180, (1991).
- 24- Duplessy JC, Bard E, Arnold M, Shackleton NJ, Duprat J, Labeyrie LD. How fast did the ocean-atmosphere system run during the last deglaciation. *Earth and Planetary Science Letters* 103, 27-40, (1991).
- 23- Bard E, Arnold M, Duplessy JC. Reconciling the sea level record of the last deglaciation with the $\delta^{18}\text{O}$ spectra from deep sea cores. *Quaternary Proceedings* 1, 67-73, (1991).
- 22- Bard E, Hamelin B, Fairbanks RG. U/Th ages obtained by mass spectrometry in corals from Barbados. sea level during the past 130,000 years. *Nature* 346, 456-458, (1990).
- 21- Bard E, Hamelin B, Fairbanks RG, Zindler A, Arnold M., Mathieu G. U/Th and ^{14}C ages of corals from Barbados and their use for calibrating the ^{14}C timescale beyond 9000 years BP. *Nuclear Instruments and Methods B* 52, 461-468, (1990).
- 20- Bard E, Hamelin B, Fairbanks RG, Zindler A. Calibration of the ^{14}C timescale over the past 30,000 years using mass spectrometric U-Th ages from Barbados corals. *Nature* 345, 405-410, (1990).

- 19- Bard E, Labeyrie L, Pichon JJ, Labracherie M, Arnold M, Duprat J, Moyes J, Duplessy JC. The last deglaciation in the Southern and Northern Hemispheres: a comparison based on $\delta^{18}\text{O}$, sea surface temperature estimates and accelerator ^{14}C dating from deep sea sediments. *In* Bleil U. Thiede J. eds: Geological History of the Polar Oceans, NATO ASI series, serie C. Kluwer Academic, Dordrecht, 405-415, (1990).
- 18- Bard E, Fairbanks R, Arnold M, Duprat J, Moyes J, Duplessy JC. Sea-level estimates during the last deglaciation based on $\delta^{18}\text{O}$ and accelerator mass spectrometry ^{14}C -ages measured in *Globigerina bulloides*. *Quaternary Research* 31, 381-391, (1989).
- 17- Arnold M, Bard E, Maurice P, Valladas H, Duplessy JC. ^{14}C dating with the Gif-sur-Yvette Tandetron accelerator: status report and study of isotopic fractionation in the sputter ion source. *Radiocarbon* 31, 284-290, (1989).
- 16- Bard E, Arnold M, Toggweiler R, Maurice P, Duplessy JC. Bomb C-14 in the Indian Ocean measured by accelerator mass spectrometry. Oceanographic implications. *Radiocarbon* 31, 510-522, (1989).
- 15- Labracherie M, Labeyrie L, Duprat J, Bard E, Arnold M, Pichon JJ, Duplessy JC. The last deglaciation in the Southern Ocean. *Paleoceanography* 4, 629-638, (1989).
- 14- Bard E, Labeyrie L, Arnold M, Labracherie M, Pichon JJ, Duprat J, Duplessy JC. AMS- ^{14}C ages measured in deep sea cores from the southern ocean: implications for sedimentation rates during isotope stage 2. *Quaternary Research* 31, 309-317, (1989).
- 13- Mazaud A, Laj C, Bard E. A phenomenological model for reversals of the geomagnetic field. *In* Lowes FJ et al. eds: Geomagnetism and Paleomagnetism, NATO ASI series, Kluwer Academic, Dordrecht, 205-214, (1989).
- 12- Duplessy JC, Arnold M, Bard E, Juillet-Leclerc A, Kallel N, Labeyrie L. AMS- ^{14}C study of transient events and of the ventilation rate of the Pacific intermediate water during the last deglaciation. *Radiocarbon* 31, 493-502, (1989).
- 11- Bard E. Correction of accelerator mass spectrometry ^{14}C ages measured in planktonic foraminifera: Paleoceanographic implications. *Paleoceanography* 3, 635-645, (1988).
- 10- Duplessy JC, Bard E, Arnold M, Maurice P. Determination of carbon-14 by accelerator mass spectrometry: oceanographic implications. *In* Guay JC, Guegueniat P, Pentreath RJ eds: Radionuclides: A Tool for Oceanography, Elsevier Sci. Pub. 64-73, (1988).
- 9- Bard E, Arnold M, Östlund HG, Maurice P, Monfray P, Duplessy JC. Penetration of bomb radiocarbon in the tropical Indian ocean by means of accelerator mass spectrometry. *Earth and Planetary Science Letters* 87, 379-389, (1988).
- 8- Bard E, Arnold M, Maurice P, Duprat J, Moyes J, Duplessy JC. Retreat velocity of the North-Atlantic polar front during the last deglaciation determined by ^{14}C accelerator mass spectrometry. *Nature* 328, 791-794, (1987).
- 7- Arnold M, Bard E, Maurice P, Duplessy JC. C-14 dating with the Gif sur Yvette Tandetron accelerator: status report. *Nuclear Instruments and Methods B* 29, 120-123, (1987).

- 6- Bard E, Arnold M, Duprat J, Moyes J, Duplessy JC. Reconstruction of the last deglaciation: deconvolved records of $\delta^{18}\text{O}$ profiles, micropaleontological variations and accelerator mass spectrometric ^{14}C dating. *Climate Dynamics* 1, 101-112, (1987).
- 5- Duplessy JC, Bard E, Arnold M, Maurice P. A.M.S. ^{14}C -chronology of the deglacial warming of the north Atlantic ocean. *Nuclear Instruments and Methods B* 29, 223-227, (1987).
- 4- Bard E, Arnold M, Maurice P, Duplessy JC. Bomb radiocarbon in the ocean by means of accelerator mass spectrometry: technical aspect. *Nuclear Instruments and Methods B* 29, 297-301, (1987).
- 3- Lapicque G, Livingston HD, Lambert CE, Bard E, Labeyrie LD. Interpretation of $^{239,240}\text{Pu}$ in Atlantic sediments with a non-steady state input model. *Deep Sea Research* 34, 1841-1850, (1987).
- 2- Bard E, Arnold M, Duprat J, Moyes J, Duplessy JC. Bioturbation effects on abrupt climatic changes recorded in deep sea sediments. Correlation between $\delta^{18}\text{O}$ profiles and accelerator ^{14}C dating. in Berger WH, Labeyrie LD eds: *Abrupt Climatic Change. Evidence and Implications*, NATO ASI series, Reidel Publishing Co. 263-278, (1987).
- 1- Duplessy JC, Arnold M, Maurice P, Bard E, Duprat J, Moyes J. Direct dating of the oxygen-isotope record of the last deglaciation by ^{14}C accelerator mass spectrometry. *Nature* 320 (6060), 350-352, (1986).