



Recent scientific publications relevant to mobile telephony

September 2013

Details

Africa: National Surveys of Radiofrequency Field Strengths from Radio Base Stations in Africa, [Joyner et al., Radiation Protection Dosimetry](#), Published online: September 17, 2013.

'...The mean levels in these African countries are similar to the reported levels for countries of Asia, Europe and North America using similar mobile technologies. The median level for the FM services in South Africa was comparable to the individual but generally lower than the combined mobile services.'

Belgium: Ants can be used as bio-indicators to reveal biological effects of electromagnetic waves from some wireless apparatus, [Cammaerts et al., Electromagnetic Biology and Medicine](#), Posted online on August 26, 2013.

'...This test includes quantification of ants' locomotion under natural conditions, then in the vicinity of such wireless equipments [sic]. Observations, numerical results and statistical results allow detecting any effect of a radiating source on these living organisms.'

Canada: Measuring Mobile Phone Use: Self-Report Versus Log Data, [Boase et al., Journal of Computer-Mediated Communication](#), 18(4):508-519, July 2013.

'...The self-report data correlate only moderately with the server log data, indicating low criterion validity. The categorical self-report measure asking respondents to estimate "how often" they use their mobile phones fared better than the continuous self-report measure asking them to estimate their mobile phone activity "yesterday."...'

China: Mobile phone radiation induces mode-dependent DNA damage in a mouse spermatocyte-derived cell line: a protective role of melatonin, [Liu et al., International Journal of Radiation Biology](#), Posted online on August 19, 2013.

'...The levels of DNA damage were significantly increased following exposure to MPR in the listen, dialed and dialing modes. Moreover, there were significantly higher increases in the dialed and dialing modes than in the listen mode...'

China: Proteomic Analysis on the Alteration of Protein Expression in the Early-Stage Placental Villous Tissue of Electromagnetic Fields Associated With Cell Phone Exposure, [Luo et al., Reproductive Sciences](#), 20(9):1055-1061, September 2013.

'...Cell phone EMF might alter the protein profile of chorionic tissue of early pregnancy, during the most sensitive stage of the embryos. The exposure to EMF may cause adverse effects on cell proliferation and development of nervous system in early embryos...'

China: The alteration of spontaneous low frequency oscillations caused by acute electromagnetic fields exposure, [Lv et al., Clinical neurophysiology : official journal of the International Federation of Clinical Neurophysiology](#), Published online 06 September 2013.

'...The study provided the evidences that 30min LTE RF-EMF exposure modulated the spontaneous low frequency fluctuations in some brain regions...'

France: Simplified pregnant woman models for the fetus exposure assessment, [Jala et al., Comptes Rendus Physique](#), 14(5):412-417, May 2013.

'...This simplified model, based on the use of a homogeneous tissue to replace most of the inner organs of the virtual mother, would allow us to deal with many issues that are raised because of the lack of pregnant woman models for numerical dosimetry...'

Iran: The prophylactic effect of vitamin C on induced oxidative stress in rat testis following exposure to 900 MHz radio frequency wave generated by a BTS antenna model, [Jelodar et al., Electromagnetic Biology and Medicine](#), 32(3):409-416, September 2013.

'...RFW causes oxidative stress in testis and vitamin C improves the antioxidant enzymes activity and decreases MDA.'

Japan: Confirmation of quasi-static approximation in SAR evaluation for a wireless power transfer system, [Akimasa et al., Physics in Medicine and Biology](#), 58(17):N241, 7 September 2013.

'...the dosimetry for the external magnetic field, which may be marginally perturbed by the presence of biological tissue, is confirmed to be essential for SAR compliance in the 10 MHz band or lower. This confirmation also suggests that the current in the coil rather than the transferred power is essential for SAR compliance.'

Sweden: Overlap in prevalence between various types of environmental intolerance, [Palmquist et al., International Journal of Hygiene and Environmental Health](#), Available online 19 August 2013.

'...overlaps between the four EIs were greater than predictions based on coincidence for both self-reported and diagnosed cases (except for the overlap between diagnosed intolerance to sounds and EMFs)...'

USA: A survey study of the association between mobile phone use and daytime sleepiness in California high school students, [Nathan et al., BMC Public Health](#), 13(1):840, Published: 12 September 2013.

'...The relationship between daytime sleepiness and mobile phone use was not directly related to the volume of texting but may be related to the temporal pattern of mobile phone use.'

USA: Multifocal Breast Cancer in Young Women with Prolonged Contact between Their Breasts and Their Cellular Phones, [West et al., Case Reports in Medicine](#), Accepted 19 August 2013.

'...These cases raise awareness to the lack of safety data of prolonged direct contact with cellular phones.'

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