



Recent scientific publications relevant to mobile telephony

April 2013

Details

China: Studying the protein expression in human B lymphoblastoid cells exposed to 1.8-GHz (GSM) radiofrequency radiation (RFR) with protein microarray, [Zhijian et al., Biochemical and Biophysical Research Communications](#), 433(1):36-39, 29 March 2013.

'...results validated with Western blot assay indicated that the expression of RPA32 was significantly down-regulated ($P < 0.05$) while the expression of p73 was significantly up-regulated in RFR exposure group ($P > 0.05$)...'

Germany: When Precaution Creates Misunderstandings: The Unintended Effects of Precautionary Information on Perceived Risks, the EMF Case, [Wiedemann et al., Risk Analysis](#), Published online: 28 March 2013.

'...our findings do not support the assumption that informing people about implemented precautionary measures will decrease public concerns.'

Germany: Discourse and policy making on consumer protection in the areas of mobile telecommunication and tanning, [Schweikardt et al., Communication & Medicine](#), 9(1):59-70, 2012.

'...the Federal Office for Radiation Protection (BfS) held the view that alleged health risks from electromagnetic telecommunication were not proven, and propagated the precautionary principle. This opinion did not endanger the agreement of 2001 between the government and mobile telecommunication operators...'

Iran: A theoretical model for the frequency-dependent dielectric properties of corneal tissue at microwave frequencies, [Saviz et al., Progress In Electromagnetics Research](#), 137:389-406, 2013.

'...The model is also useful for the prediction of dielectric properties for high-frequency computational dosimetry, and for understanding the physical mechanisms behind the macroscopic dielectric behaviour in general.'

Malaysia: The influence of human head model wearing metal-frame spectacles to the changes of SAR and antenna gain: simulation of frontal face exposure, [Mat et al., Progress In Electromagnetics Research](#), 137:453-473, 2013.

'...The gain decreased when the energy source was very close to the spectacles and SAR increased enormously.'

The Netherlands: Geospatial modelling of electromagnetic fields from mobile phone base stations, [Beekhuizen et al., Science of The Total Environment](#), 445-446(0):202-209, 15 February 2013.

'...average measured GSM900 field strength was 0.21 V/m, and UMTS 0.09 V/m. The model underestimated the GSM900 field strengths by 0.07 V/m, and slightly overestimated the UMTS field strengths by 0.01 V/m...'

South Korea: The effects of Exposure to 915 MHz RFID on Cerebral Glucose Metabolism in Rat: A [F-18] FDG Micro PET Study, [Kim et al., International Journal of Radiation Biology](#), Posted online on April 15, 2013.

'...Our results suggest that 915 MHz RFID radiation exposure did not cause a significant long lasting effect on glucose metabolism in the rat brain.'

South Korea: Mobile Phone Use, Blood Lead Levels, and Attention Deficit Hyperactivity Symptoms in Children: A Longitudinal Study, [Byun et al., PLoS ONE](#), 8(3):e59742, Published: March 21, 2013.

'...The results suggest that simultaneous exposure to lead and RF from mobile phone use was associated with increased ADHD symptom risk, although possible reverse causality could not be ruled out.'

Sweden: Reduce the hand-effect body loss for LTE mobile antenna in CTIA talking and data modes, [Zhao et al., Progress In Electromagnetics Research](#), 137:73-85 2013.

'...Three different positions of the proposed antenna in the talking mode are compared, and the position with the antenna located on the bottom of the mobile handset and facing the head phantom is recommended for minimal body loss...'

Switzerland: Assessing Human Exposure to Electromagnetic Fields From Wireless Power Transmission Systems, [Christ et al., Proceedings of the IEEE](#), PP(99):1-12, Publication on line: 13 March 2013.

'...the safety guidelines and the fundamental coupling mechanisms of the human body with the electromagnetic near fields of WPT are reviewed as well as the methodology and the instrumentation for the demonstration of the safety of such systems operating between 100 kHz and 50 MHz...'

Switzerland: Environmental and Occupational Interventions for Primary Prevention of Cancer: A Cross-Sectional Policy Framework, [Espina et al., Environmental Health Perspectives](#), 121:(4):420-426, April 2013.

'...Prevention is most effectively achieved through primary prevention policies that reduce or eliminate involuntary exposures to proven and probable carcinogens...'

Taiwan: Risks Perception of Electromagnetic Fields in Taiwan: The Influence of Psychopathology and the Degree of Sensitivity to Electromagnetic Fields, [Tseng et al., Risk Analysis](#), Published online: 28 March 2013.

'...Higher sensitivity to EMFs, psychopathology, being female, being married, more years of education, and having a catastrophic illness had positive associations with perceived risks of EMF-related environmental sources as well as for all environmental sources combined...'

Ukraine: GSM 900 MHz cellular phone radiation can either stimulate or depress early embryogenesis in Japanese quails depending on the duration of exposure, [Tsybulin et al., International Journal of Radiation Biology](#), Posted online on April 11, 2013.

'...Effects of GSM 900 MHz cellular phone radiation on early embryogenesis can be either stimulating or deleterious depending on the duration of exposure.'

USA: Cell Phone Exposures and Hearing Loss in Children in the Danish National Birth Cohort, [Sudan et al., Paediatric and Perinatal Epidemiology](#), 27(3):247-257, May 2013.

'...Our findings could have been affected by various biases and are not sufficient to conclude that cell phone exposures have an effect on hearing. This is the first large-scale epidemiologic study to investigate this potentially important association among children, and replication of these findings is needed.'

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The GSM Association (GSMA) is the global trade association that exists to promote, protect and enhance the interests of GSM mobile operators throughout the world. www.gsma.com/mobile-and-health

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