



Recent scientific publications relevant to mobile telephony

April 2014

Details

Belgium: On-body calibration and processing for a combination of two radio-frequency personal exposimeters, [Thielens et al., Radiation Protection Dosimetry](#), Published online: April 11, 2014.

'...recommend the use of a combination of multiple PEMs and, considering the multivariate data, to provide the mean vector and the covariance matrix next to the commonly listed univariate summary statistics, in future PEM studies.'

China: Association between mobile phone use and semen quality: a systemic review and meta-analysis, [Liu et al., Andrology](#), Published online: 3 April 2014.

'...Evidence from current studies suggests potential harmful effects of mobile phone use on semen parameters. A further multicentred and standardized study is needed to assess the risk of mobile phone use on the reproductive system.'

China: Oxidative changes and apoptosis induced by 1800-MHz electromagnetic radiation in NIH/3T3 cells, [Hou et al., Electromagnetic Biology and Medicine](#), Posted online on March 25, 2014.

'...These results indicate that an 1800-MHz EMR enhances ROS formation and promotes apoptosis in NIH/3T3 cells.'

China: The amelioration of phagocytic ability in microglial cells by curcumin through the inhibition of EMF-induced pro-inflammatory responses, [He et al., Journal of Neuroinflammation](#), 11(1):49, Published: 19 March 2014.

'...This study indicates that curcumin ameliorates the depressed MFG-E8 expression and the attenuated phagocytic ability of EMF-exposed N9 cells, which is attributable to the inhibition of the pro-inflammatory response through the NF-kappaB and STAT3 pathways.'

Egypt: A Survey of Health Effects of Electromagnetic Fields, [Mohamed et al., International Journal of Computer Science Issues](#), 11(1, No. 2):January 2014.

'...Considering the very low exposure levels and research results collected to date, there is no convincing scientific evidence that the weak RF signals from base stations and wireless networks cause adverse health effects. We have only limited knowledge about the long-term effects of EMF. Many will use this uncertainty as a reason for asking regulators to adopt a precautionary approach and, by reducing exposure guidelines below the present levels, provide a greater measure of safety...'

Egypt: Effect of exposure and withdrawal of 900-MHz-electromagnetic waves on brain, kidney and liver oxidative stress and some biochemical parameters in male rats, [Ragy, Electromagnetic Biology and Medicine](#), Posted online on April 8, 2014.

'...electromagnetic field emitting from mobile phone might produce impairments in some biochemicals changes and oxidative stress in brain, liver and renal tissue of albino rats...'

France: The role of anxiety in the perception of technological hazards - A cross-sectional study on cell phones and masts, [Denny-Bas et al., Revue d'Epidémiologie et de Santé Publique](#), Available online 16 March 2014.

'...subjects with an anxious profile are affected by the destabilizing nature of uncertain knowledge concerning the hazardous potency of new technologies and of the controversies concerning this hazard.'

France: Chronic Electromagnetic Exposure at Occupational Safety Level Does Not Affect the Metabolic Profile nor Cornea Healing after LASIK Surgery, [Crouzier et al., Journal of Ophthalmology](#), 2014(11), Published 18 March 2014.

'...It was concluded that withdrawing the medical aptitude of people working in electromagnetic field environments (i.e., radar operators in the navy) after eye surgery was not justified.'

Germany: Do people understand IARC's 2B categorization of RF fields from cell phones?, [Wiedemann et al., Bioelectromagnetics](#), Published online: 15 April 2014.

'...both the characterization of the probability of carcinogenicity, as well as the description of the risk increase given in the IARC press release, was mostly misunderstood by study participants. Respondents also greatly overestimated the magnitude of the potential risk. Our study results showed that IARC needs to improve their scientific communications.'

Nepal: Mobile Communication and its Adverse Effects, [Dahal, Himalayan Physics](#), 4(4):51-59, 2013.

'...The energy carried by the waves is not only useful for mobile communication but also produce adverse affects on the users' health as well as to all living beings which are in the radiation area...'

Poland: The risk of subjective symptoms in mobile phone users in Poland - An epidemiological study, [Szykowska et al., International Journal of Occupational Medicine and Environmental Health](#), 1-11, April 2014.

'...the mobile phone users may experience subjective symptoms, the intensity of which depends on the intensity of use of mobile phones.'

Slovenia: Typical exposure of children to EMF: Exposimetry and dosimetry, [Valic et al., Radiation Protection Dosimetry](#), Published online: April 10, 2014.

'...average exposure was determined to be low compared with ICNIRP reference levels:...0.09 V m⁻¹ for GSM base stations, 0.11 V m⁻¹ for DECT and 0.10 V m⁻¹ for WiFi; other contributions could be neglected...'

South Korea: Response to potential information technology risk: Users' valuation of electromagnetic field from mobile phones, [Jung et al., Telematics and Informatics](#), Available online 29 March 2014.

'...the risk is differently perceived by user clusters and approximately 80% of respondents are likely to change their mobile phone brands for better protection from EMF risk.'

Spain: Variability in Electromagnetic Field Levels Over Time, and Monte-Carlo Simulation of Exposure Parameters, [Pachon-Garcia et al., Radiation Protection Dosimetry](#), Published online: March 3, 2014.

'...analyses the electric field levels around medium-wave transmitters, delimiting the temporal variability of the levels received at a pre-established reception point...The deviations found were around 6 % for short periods and 12 % for long periods...'

Switzerland: Radio-frequency electromagnetic field (RF-EMF) exposure levels in different European outdoor urban environments in comparison with regulatory limits, [Urbiniello et al., *Environment International*, 68\(0\):49-54, July 2014.](#)

'...All exposure levels were far below international reference levels proposed by ICNIRP (International Commission on Non-Ionizing Radiation Protection). Our study did not find indications that lowering the regulatory limit results in higher mobile phone base station exposure levels.'

The MMF is an international association of wireless communications manufacturers established to support scientific research in relation to mobile telephony and health www.mmfai.info

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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