

## Publications in peer reviewed journals

### 2017

- Bölsterli BK, Gardella E, Pavlidis E, Wehrle FM, Tassinari CA, **Huber R**, Rubboli G. *Remission of encephalopathy with status epilepticus (ESES) during sleep renormalizes regulation of slow wave sleep.* **Epilepsia.** 58 (11) 1892-1901.
- Maric A, Lustenberger C, Werth E, Baumann CR, Poryazova R, **Huber R**. *Intraindividual Increase of Homeostatic Sleep Pressure Across Acute and Chronic Sleep Loss: A High-Density EEG Study.* **Sleep.** 40 (9).
- Kurth S, Riedner BA, Dean DC, O'Muircheartaigh J, **Huber R**, Jenni OG, Deoni SCL, LeBourgeois MK. *Traveling slow oscillations during sleep: a marker of brain connectivity in childhood.* **Sleep.** 40 (9).
- Fattinger S, Kurth S, Ringli M, Jenni OG, **Huber R**. *Theta waves in children's waking electroencephalogram resemble local aspects of sleep during wakefulness.* **Sci Rep.** 7 (1) 11187.
- Maric A, Montvai E, Werth E, Storz M, Leemann J, Weissengruber S, Ruff CC, **Huber R**, Poryazova R, Baumann CR. *Insufficient sleep: Enhanced risk-seeking relates to low local sleep intensity.* **Ann Neurol.** 82 (3) 409-418.
- Fattinger S, de Beukelaar TT, Ruddy KL, Volk C, Heyse NC, Herbst JA, Hahnloser RHR, Wenderoth N, **Huber R**. *Deep sleep maintains learning efficiency of the human brain.* **Nat Commun.** 8 15405.
- Olini N, Rothfuchs I, Azzinnari D, Pryce CR, Kurth S, **Huber R**. *Chronic social stress leads to altered sleep homeostasis in mice.* **Behav Brain Res.** 327 167-173.
- Gradwohl G, Olini N, **Huber R**. *Sleep/wake movement velocities, trajectories and micro-arousals during maturation in rats.* **BMC Neurosci.** 18 (1) 24.
- Groch S, Preiss A, McMakin D, Rasch B, Walitza S, **Huber R\***, Wilhelm I\*. *The impact of memory cueing during sleep on the abstraction of the emotional gist in socially anxious and healthy adolescents.* **J Neurosci.** 37 (9) 2425-2434.
- Mouthon A-L, Meyer-Heim A, Kurth S, Ringli M, Pugin F, van Hedel H\*, **Huber R\***. *High-density electroencephalographic recordings during sleep in children and adolescents with acquired brain injury.* **Neurorehabil Neural Repair.** 31 (5) 462-474.
- Groch S, Schreiner T, Rasch B, **Huber R**, Wilhelm I. *Prior knowledge is essential for the beneficial effect of targeted memory reactivation during sleep.* **Sci Rep.** 7 39763.
- Wehrle FM, Latal B, O'Gorman RL, Hagmann CF, **Huber R**. *Sleep EEG maps the functional neuroanatomy of executive processes in adolescents born very preterm.* **Cortex.** 86 11-21.
- Heinzle BK, Bast T, Critelli H, **Huber R**, Schmitt B. *Age-Dependency of Location of Epileptic Foci in "Continuous Spike-and-Waves during Sleep": A Parallel to the Posterior-Anterior Trajectory of Slow Wave Activity.* **Neuropediatrics.** 48 (1) 36-41.

### 2016

- Wilhelm I, Groch S, Preiss A, Walitza S, **Huber R**. *Widespread reduction in sleep spindle activity in socially anxious children and adolescents.* **J Psychiatr Res.** 2016 Epub. 2017 88 47-55.
- Kurth S, Dean DC, Achermann P, O'Muircheartaigh J, **Huber R**, Deoni SCL, LeBourgeois MK. *Increased Sleep Depth in Developing Neural Networks: New Insights from Sleep Restriction in Children.* **Front Hum Neurosci.** 10 456.
- Lustenberger C, Mouthon AL, Tesler N, Kurth S, Ringli M, Buchmann A, Jenni OG, **Huber R**. *Developmental trajectories of EEG sleep slow wave activity as a marker for motor skill development during adolescence: a pilot study.* **Dev Psychobiol.** 2016 Epub. 2017 59 (1) 5-14.
- Latshang TD, Mueller DJ, Lo Cascio CM, Stöwhas AC, Stadelmann K, Tesler N, Achermann P, **Huber R**, Kohler M, Bloch KE. *Actigraphy of Wrist and Ankle for Measuring Sleep Duration in Altitude Travelers.* **High Alt Med Biol.** 17 (3) 194-202.
- Mouthon A-L, van Hedel H, Meyer-Heim A, Kurth S, Ringli M, Pugin F, **Huber R**. *High-density electroencephalographic recordings during sleep in children with disorders of consciousness.* **NeuroImage Clin.** 11 468-75.

- Wehrle FM, Kaufmann L, Benz LD, **Huber R**, O'Gorman RL, Latal B, Hagmann CF. *Very preterm adolescents show impaired performance with increasing demands in executive function tasks.* **Early Hum Dev.** 92 37-43.
- de Beukelaar TT, Van Soom J, **Huber R**, Wenderoth N. *A Day Awake Attenuates Motor Learning-Induced Increases in Corticomotor Excitability.* **Front Hum Neurosci.** 10 138
- Groch S, McMakin D, Guggenbühl P, Rasch B, **Huber R\***, Wilhelm I\*. *Memory cueing during sleep modifies the interpretation of ambiguous scenes in adolescents and adults.* **Dev Cogn Neurosci.** 10 (17) 10-18.

## 2015

- Tesler N, Gerstenberg M, Franscini M, Jenni OG, Walitza S, **Huber R**. *Increased frontal sleep slow wave activity in adolescents with major depression.* **NeuroImage Clin.** 10 250-6.
- Fattinger S, Schmitt B, Bölsterli Heinze BK, Critelli H, Jenni OG, **Huber R**. *Impaired slow wave sleep downscaling in patients with infantile spasms.* **European Journal of Paediatric Neurology.** 19 (2) 134-42.
- Werner H, Hunkeler P, Benz C, Molinari L, **Huber R**, Jenni OG. *The Zurich 3-Step concept for the management of behavioural sleep disorders in children: a before and after Study.* **J Clin Sleep Med.** 11 (3) 241-9.
- Guyer C, **Huber R**, Fontijn J, Bucher HU, Nicolai H, Werner H, Molinari L, Latal B, Jenni OG. *Very preterm infants show earlier emergence of 24-hour sleep-wake rhythms compared to term infants.* **Early Human Development.** 91 (1) 37-42.
- Tesler N, Gerstenberg M, Franscini M, Jenni OG, Walitza S, **Huber R**. *Reduced sleep spindle density in early onset schizophrenia: A preliminary finding.* **Schizophr Res.** 166 (1-3) 355-7.
- Aepli A, Kurth S, Tesler N, Jenni OG, **Huber R**. *Caffeine consuming children and adolescents show altered sleep behavior and deep sleep.* **Brain Sci.** 5 (4) 441-55.
- Pugin F, Metz AJ, Achermann P, Wolf M, Jenni OG, **Huber R**. *Local increase of sleep slow wave activity after three weeks of working memory training in children and adolescents.* **Sleep.** 38 (4) 607-14.
- Pugin F, Metz AJ, Stauffer M, Wolf M, Jenni OG, **Huber R**. *Working memory training shows immediate and long-term effects on cognitive performance in children and adolescents.* **F1000R**. Version 2. F1000Res. doi: 10.12688/f1000research.3665.2.
- Lustenberger C, Wehrle F, Tüshaus L, Achermann P, **Huber R**. *The multidimensional aspects of sleep spindles and their relationship to word-pair memory consolidation.* **Sleep.** 38 (7) 1093-103.
- Lustenberger C, Murbach M, Tüshaus L, Wehrle F, Kuster N, Achermann P, **Huber R**. *Inter-individual and intra-individual variation of the effects of pulsed RF EMF exposure on the human sleep EEG.* **Bioelectromagnetics.** 36 (3) 169-77.
- Tesler N, Latshang TD, Lo Cascio CM, Stadelmann K, Stoewhas A-C, Kohler M, Bloch KE, Achermann P, **Huber R**. *Ascending to moderate altitude impairs overnight memory improvements.* **Physiology & Behavior.** 139 121-6.
- Stadelmann K, Latshang TD, Lo Cascio CM, Clark RA, **Huber R**, Kohler M, Achermann P, Bloch KE. *Impaired postural control in healthy men at moderate altitude (1630 m and 2590 m): data from a randomized trial.* **PLoS One.** 10 (2) e0116695.
- Poryazova R, **Huber R**, Khatami R, Werth E, Brugger P, Barath K, Baumann CR, Bassetti CL. *Topographic sleep EEG changes in the acute and chronic stage of hemispheric stroke.* **J Sleep Res.** 24 (1) 54-65.
- Lustenberger C, O'Gorman RL, Pugin F, Tüshaus L, Wehrle F, Achermann P, **Huber R**. *Sleep spindles are related to schizotypal personality traits and thalamic glutamine/glutamate in healthy subjects.* **Schizophr Bull.** 41 (2) 522-31.

## 2014

- Werner H, Hunkeler P, Benz C, Molinari L, **Huber R**, Jenni OG. *Valid methods for estimating children's sleep problems in clinical practice.* **Acta Paediatr.** 103 (12) e555-7, 2014.
- Wilhelm I, Kurth S, Ringli M, Mouthon AL, Buchmann A, Geiger A, Jenni OG, **Huber R**. *Sleep slow-wave activity reveals developmental changes in experience-dependent plasticity.* **Journal of Neuroscience.** 34 (37) 12568-75, 2014.
- Metz AJ, Pugin F, **Huber R**, Achermann P, Wolf M. *Changes of cerebral tissue oxygen saturation at sleep transitions in adolescents.* **Advances in Experimental Medicine and Biology**, 812 279-85, 2014.

- Bölsterli Heinzle BK, Fattinger S, Kurth S, Lebourgeois MK, Ringli M, Bast T, Critelli H, Schmitt B, **Huber R**. *Spike wave location and density disturb sleep slow waves in patients with CSWS (continuous spike waves during sleep)*. **Epilepsia**, 55 (4) 584-91, 2014.
- Stadelmann K, Latshang TD, Tarokh L, Lo Cascio CM, Tesler N, Stoewhas AC, Kohler M, Bloch KE, **Huber R**, Achermann P. *Sleep respiratory disturbances and arousals at moderate altitude have overlapping electroencephalogram spectral signatures*. **Journal of Sleep Research**, 23 (4) 463-8, 2014.
- Fattinger S, Jenni OG, Schmitt B, Achermann P, **Huber R**. *Overnight changes in the slope of sleep slow waves during infancy*. **Sleep**, 37 (2) 245-53, 2014.
- Olini N, **Huber R**. *Diurnal changes in electrocorticogram sleep slow-wave activity during development in rats*. **Journal of Sleep Research**, 23 (3) 261-7, 2014.
- von Rhein M, Buchmann A, Hagmann C, **Huber R**, Klaver P, Knirsch W, Latal B. *Brain volumes predict neurodevelopment in adolescents after surgery for congenital heart disease*. **Brain**, 137 (Pt 1) 268-76, 2014.
- Ayers L, Stoewhas AC, Ferry B, Latshang TD, Lo Cascio CM, Sadler R, Stadelmann K, Tesler N, **Huber R**, Achermann P, Bloch KE, Kohler M. *Circulating levels of cell-derived microparticles are reduced by mild hypobaric hypoxia: data from a randomised controlled trial*. **European Journal of Applied Physiology**, 114 (5) 1067-73, 2014.
- 2013
- Lee GM, Fattinger S, Mouthon AL, Noirhomme Q, **Huber R**. *Electroencephalogram approximate entropy influenced by both age and sleep*. **Frontiers in Neuroinformatics**, 7 (33), 2013.
- Latshang TD, Lo Cascio CM, Stöwhas A-C, Grimm M, Stadelmann K, Tesler N, Achermann P, **Huber R**, Kohler M and Bloch KE. *Are nocturnal breathing, sleep and cognitive performance impaired at moderate altitude (1630-2590m)? A randomized trial*. **Sleep**, 36 (12) 1969-76, 2013.
- Stadelmann K, Latshang TD, Lo Cascio CM, Tesler N, Stöwhas A-C, Kohler M, Bloch KE, **Huber R**, and Achermann P. *Quantitative changes in the sleep EEG at moderate altitude (1630 m and 2590 m)*. **PLoS ONE**, 8 (10) e76945, 2013.
- Olini N, Kurth S, **Huber R**. *The effects of caffeine on sleep and maturational markers in the rat*. **PLoS ONE**, 8 (9) e72539, 2013.
- Stöwhas A-C, Latshang TD, Lo Cascio CM, Lautwein S, Stadelmann K, Tesler N, Ayers L, Berneis K, Gerber P, **Huber R**, Achermann P, Bloch KE, and Kohler M. *Effects of acute exposure to moderate altitude on vascular function, metabolism and systemic inflammation*. **PLoS ONE**, 8 (8) e70081, 2013.
- Ringli M, Kurth S, **Huber R**, Jenni OG. *The sleep EEG topography in children and adolescents shows sex differences in language areas*. **International Journal of Psychophysiology**, 89 (2) 241-5, 2013.
- Schaefer C, von Rhein M, Knirsch W, **Huber R**, Natalucci G, Caflisch J, Landolt MA, Latal B. *Neurodevelopmental outcome, psychological adjustment, and quality of life in adolescents with congenital heart disease*. **Developmental Medicine & Child Neurology**, 55 (12) 1143-9, 2013.
- Lustenberger C, Murbach M, Dürr R, Schmid MR, Kuster N, Achermann P, **Huber R**. *Stimulation of the brain with radiofrequency electromagnetic field pulses affects sleep-dependent performance improvement*. **Brain Stimulation**, 6 (5) 805-11, 2013.
- Gast H, Müller A, Lopez M, Meier D, **Huber R**, Dechent F, Prinz M, Emmenegger Y, Franken P, Birchler T, Fontana A. *CD40 activation induces NREM sleep and modulates genes associated with sleep homeostasis*. **Brain Behavior and Immunity**, 27 (1) 133-144, 2013.
- Ringli M, Souissi S, Kurth S, Brandeis D, Jenni OG, **Huber R**. *Topography of sleep slow wave activity in children with attention-deficit/hyperactivity disorder*. **Cortex**, 49 (1) 340-347, 2013.
- Huber R**, Mäki H, Rosanova M, Casarotto S, Canali P, Casali A, Tononi G, Massimini M. *Human cortical excitability increases with time awake*. **Cerebral Cortex**, 23 (2) 332-338, 2013.
- Metz A.J, Pugin F, **Huber R**, Achermann P, and Wolf M. *Brain tissue oxygen saturation increases during the night in adolescents*. **Advances in Experimental Medicine and Biology**, 789 113-9, 2013.
- 2012
- Lustenberger C, Maric A, Dürr R, Achermann P, **Huber R**. *Triangular relationship between sleep spindle activity, general cognitive ability and the efficiency of declarative learning*. **PLoS One**, 7 (11) e49561, 2012. Impact Factor: 3.73.

- Guyer C, **Huber R**, Fontijn J, Bucher U, Nicolai H, Werner H, Molinari L, Latal B, Jenni O. *Cycled light exposure reduces fussing and crying of very preterm infants*. **Pediatrics**, 130 (1) e145-e151, 2012.
- Kurth S, Ringli M, Geiger A, LeBourgeois M, Buchmann A, Jenni OG, **Huber R**. *Mapping the electrophysiological marker of sleep depth reveals skill maturation in children and adolescents*. **NeuroImage**, 63 (2) 959-965, 2012.
- Geiger A, **Huber R**, Kurth S, Ringli M, Achermann P, Jenni OG. *Sleep electroencephalography topography and children's intellectual ability*. **Neuroreport**, 23 (2) 93-97, 2012.
- 2011
- Buchmann A, Ringli M, Kurth S, Schaerer M, Geiger A, Jenni OG, **Huber R**. *EEG sleep slow-wave activity as a mirror of cortical maturation*. **Cerebral Cortex**, 21 (3) 607-15, 2011.
- Murphy M, **Huber R**, Esser S, Riedner BA, Massimini M, Ferrarelli F, Ghilardi MF, Tononi G. *The cortical topography of local sleep*. **Current Topics in Medicinal Chemistry**, 11 (19) 2438-46, 2011.
- Buchmann A, Kurth S, Ringli M, Geiger A, Jenni OG, **Huber R**. *Anatomical markers of sleep slow wave activity derived from structural magnetic resonance images*. **Journal of Sleep Research**, 20 (4) 506-13, 2011.
- Bölsterli BK, Schmitt B, Bast T, Critelli H, Jenni OG, **Huber R**. *Evidence for a disruption of synaptic downscaling during sleep in Encephalopathy with Status Epilepticus during Sleep (ESES/CSWS)*. **Clinical Neurophysiology**, 122 (9) 1779-1787, 2011.
- Von Rhein M, Scheer I, Loenneker T, **Huber R**, Knirsch W, Latal B. *Structural brain lesions are correlated with neurodevelopmental deficits in adolescents with congenital heart disease*. **Journal of Pediatrics**, 158 (6) 984-989, 2011.
- 2010
- Kurth S, Jenni OG, Riedner BA, Tononi G, Carskadon MA, **Huber R**. *Characteristics of sleep slow-waves in children and adolescents*. **Sleep**, 33(4) 475-80, 2010.
- Kurth S, Ringli M, Geiger A, LeBourgeois M, Jenni OG, **Huber R**. *Mapping of cortical activity in the first two decades of life: a high-density sleep EEG study*. **Journal of Neuroscience**, 30 13211-13219, 2010.
- Geiger A, **Huber R**, Kurth S, Ringli M, Jenni OG, Achermann P. *The sleep EEG as an individual trait and marker of intellectual ability in school age children*. **Sleep** 34 (2) 181-9, 2010.
- Massimini M, Ferrarelli F, Murphy M, Riedner BA, **Huber R**, Casarotto, Tononi G. *Cortical reactivity and effective connectivity during REM sleep in humans*. **Cognitive Neuroscience**, 1 (3) 176-183, 2010.
- 2009
- Massimini M, Tononi G, **Huber R**. *Slow waves, synaptic plasticity and information processing: insights from transcranial magnetic stimulation and high-density EEG experiments*. **European Journal of Neuroscience**, 29 (9) 1761-1770, 2009.
- Murphy M, Riedner BA, **Huber R**, Massimini M, Ferrarelli F, Tononi G. *Source modeling sleep slow waves*. **Proc Natl Acad Sci USA**, 106 1608-1613, 2009.
- Landsness EC, Crupi D, Hulse BK, Peterson MJ, **Huber R**, Ansari H, Coen M, Cirelli C, Benca RM, Ghilardi MF, Tononi G. *Sleep-dependent improvement in visuomotor learning: A causal role for slow waves*. **Sleep**, 32 (10) 1273-1284, 2009.
- 2008
- Huber R**, Maata S, Esser SK, Sarasso S, Ferrarelli F, Watson A, Ferreri F, Peterson MJ, Tononi G. *Measures of cortical plasticity predict changes in EEG slow-wave activity during subsequent sleep*. **Journal of Neuroscience**, 28 (31) 7911-7918, 2008.
- Ferri R, **Huber R**, Aricò D, Drago V, Rundo F, Ghilardi MF, Massimini M, Tononi G. *The slow-wave components of the cyclic alternating pattern (CAP) have a role in sleep-related learning processes*. **Neuroscience Letters** 432 (3) 228-31, 2008.
- Moisello C, Bove M, **Huber R**, Abbruzzese G, Battaglia F, Tononi G, Ghilardi MF. *Short-term limb immobilization affects motor performance*. **Journal of Motor Behavior**, 40 (2) 165-76, 2008.
- Ferrarelli F, Massimini M, Peterson MJ, Riedner BA, Lazar M, Murphy MJ, **Huber R**, Rosanova M, Alexander AL, Kalin H, Tononi G. *Reduced Evoked Gamma Oscillations in the Frontal Cortex in Schizophrenia Patients: A TMS/EEG Study*. **American Journal of Psychiatry**, 165 (8) 996-1005, 2008.

2007

**Huber R**, Tononi G, Cirelli C. *Exploratory behavior, cortical BDNF expression, and sleep homeostasis*. **Sleep** 30 129-139, 2007.

**Huber R**, Esser SK, Ferrarelli F, Massimini M, Peterson MJ, Tononi G. *TMS-induced cortical potentiation during wakefulness locally increases slow wave activity during sleep*. **PLoS ONE**, 2 (276), 2007.

**Huber R**. *Memory formation: Sleep enough before learning*. **Current Biology**, 17 (10) R368, 2007.

Ferrarelli F, **Huber R**, Peterson MJ, Massimini M, Murphy M, Riedner BA, Watson A, Bria P, Tononi G. *Reduced sleep spindle activity in schizophrenics*. **American Journal of Psychiatry** 164 (3) 483-492, 2007.

Bushey D, **Huber R**, Tononi G, Cirelli C. *Drosophila Hyperkinetic mutants have reduced sleep and impaired memory*. **Journal of Neuroscience**, 27 (20) 5384-5393, 2007.

Massimini M, Ferrarelli F, Esser SK, Riedner BA, **Huber R**, Murphy M, Peterson MJ, Tononi G. *Triggering sleep slow oscillations by transcranial magnetic stimulation*. **Proc Natl Acad Sci USA**, 104 (20) 8496-8501, 2007.

Riedner BA, Vyazovskiy VV, **Huber R**, Ferrarelli F, Peterson MJ, Massimini M, Murphy M, Watson A, Tononi G. *Sleep homeostasis and cortical synchronization: III. A high-density EEG study of sleep slow waves in humans*. **Sleep**, 30 (12) 1643-1657, 2007.

#### 2006

**Huber R**, Ghilardi MF, Massimini M, Ferrarelli F, Riedner BA, Peterson MJ, Tononi G. *Arm immobilization, cortical plasticity, and local sleep homeostasis*. **Nature Neuroscience** 9 1169-1176, 2006.

Esser SK, **Huber R**, Massimini M, Peterson MJ, Ferrarelli F, Tononi G. *A direct demonstration of cortical LTP in humans: A combined TMS/EEG study*. **Brain Research Bulletin** 69 (1) 86-94, 2006.

Tinguely G, **Huber R**, Borbély AA, Achermann P. *Non-rapid eye movement sleep with low muscle tone as a marker of rapid eye movement sleep regulation*. **BMC Neuroscience** 7:2, 2006.

#### 2005

**Huber R**, Treyer V, Schuderer J, Berthold T, Buck B, Kuster N, Landolt H.P., Achermann P. *Exposure to pulse modulated radio-frequency electromagnetic fields affects regional cerebral blood flow*. **European Journal of Neuroscience** 21 1000-1006, 2005.

Cirelli C, **Huber R**, Gopalakrishnan A, Southard TL, Tononi G. *Locus coeruleus control of slow wave homeostasis*. **Journal of Neuroscience** 25 (18) 4503-4511, 2005.

Cirelli C, Bushey D, Hill S, **Huber R**, Kreber R, Ganetzky B, Tononi G. *Reduced sleep in Drosophila Shaker mutants*. **Nature**, 434 1087-1092, 2005.

Massimini M, Ferrarelli F, **Huber R**, Esser SK, Singh H, Tononi G. *Breakdown of cortical connectivity during sleep*. **Science**, 309 2228-2232, 2005.

#### 2004

**Huber R**, Hill SL, Holladay C, Biesiadecki M, Tononi G, Cirelli C. *Sleep homeostasis in Drosophila melanogaster*. **Sleep** 27 (4) 628-639, 2004.

**Huber R**, Ghilardi M-F, Massimini M, Tononi G. *Local sleep and learning*. **Nature** 430 (6995) 78-81, 2004.

Massimini M, **Huber R**, Ferrarelli F, Hill S, Tononi G. *The sleep slow oscillation as a travelling wave*. **Journal of Neuroscience** 24 (31) 6862-6870, 2004.

Rattenborg NC, Mandt BH, Obermeyer WH, Winsauer PJ, **Huber R**, Wikelski M, Benca RM. *Migratory sleeplessness in the white-crowned sparrow (Zonotrichia leucophrys gambelii)*. **PLOS Biology**, 2 (7) 0924-0936, 2004.

#### 2003

**Huber R**, Schuderer J, Graf T, Jütz K, Borbély AA, Kuster N, Achermann P. *Effects of a 900 MHz electromagnetic field on sleep, sleep electroencephalogram and heart rate*. **Bioelectromagnetics** 24 (4) 262-276, 2003.

#### 2002

**Huber R**, Deboer T, Tobler I. *Sleep deprivation in prion protein deficient mice and wild-type controls: genotype dependent regional slow-wave activity rebound*. **NeuroReport** 13 (1) 1-4, 2002.

**Huber R**, Treyer V, Borbély AA, Schuderer J, Gottselig JM, Landolt H-P, Werth E, Berthold T, Kuster N, Buck A, Achermann P. *Electromagnetic fields, such as those from mobile phones, alter regional cerebral blood flow and sleep and waking EEG*. **Journal of Sleep Research** 11 (4) 289-295, 2002.

#### 2000

**Huber R**, Deboer T; Tobler I. *Sleep and dynamics of sleep EEG in three mouse strains: Effects of sleep deprivation and simulation.* **Brain Research** 857 (1-2) 8-19, 2000

**Huber R**, Deboer T, Tobler I. *Topography of EEG dynamics after sleep deprivation in mice.* **Journal of Neurophysiology** 84 (4) 1888-1893, 2000.

**Huber R**, Graf T, Cote KA, Wittmann L, Gallmann E, Matter D, Schuderer J, Kuster N, Borbély AA, Achermann P. *Exposure to pulsed high-frequency electromagnetic field during waking affects human sleep EEG.* **NeuroReport** 11 (15) 3321-3325, 2000.

1999

**Huber R**, Deboer T; Tobler I. *Prion protein: A role in sleep regulation?* **Journal of Sleep Research** 8 (Suppl. 1) 30-36, 1999.

Borbély AA, **Huber R**, Graf T, Fuchs B, Gallmann E, Achermann P. *Pulsed high-frequency electromagnetic field affects human sleep and sleep electroencephalogram.* **Neuroscience Letters** 275 (3) 207-210, 1999.

1998

**Huber R**, Deboer T, Schwierin B, Tobler I. *Effect of melatonin on sleep and brain temperature in the Djungarian hamster and the rat.* **Physiology and Behavior** 65 (1) 77-82, 1998.

### Review articles

Volk C, **Huber R**. *Sleep to grow smart?* **Arch Ital Biol.** 153 (2-3) 99-119, 2015.

Kurth S, Olini N, **Huber R**, LeBourgeois M. *Sleep and Early Cortical Development.* **Curr Sleep Med Rep.** 1 (1) 64-73, 2015.

Mouthon AL, **Huber R**. *Methods in pediatric sleep research and sleep medicine.* **Neuropediatrics**, 46(3) 159-70, 2015.

**Huber R**, Born J. *Sleep, synaptic connectivity, and hippocampal memory during early development.* **Trends Cogn Sci**, 18 (3) 141-52, 2014.

Tesler N, Gerstenberg M, **Huber R**. *Developmental changes in sleep and their relationships to psychiatric illnesses.* **Curr Opin Psychiatry**, 26 (6) 572-9, 2013.

Lustenberger C and **Huber R**. *High density electroencephalography in sleep research: potential, problems, future perspective.* **Frontiers in Neurology**, 3 77, 2012.

Ringli M and **Huber R**. *Developmental aspects of sleep slow waves: Linking sleep, brain maturation and behavior.* **Progress in Brain Research**, 193 63-82, 2011. Impact Factor: 4.19.

**Huber R**. *Functional aspects of the sleep EEG.* Invited review. **Epileptologie** 26 34-41, 2009.

Siebner HR, Bergmann TO, Bestmann S, Massimini M, Johansen-Berg H, Mochizuki H, Bohning DE, Boorman ED, Groppa S, Miniussi C, Pascual-Leone A, **Huber R**, Taylor PCJ, Ilmoniemi RJ, De Gennaro L, Strafella AP, Kähkönen S, Klöppel S, Frisoni GB, George MS, Hallett M, Brandt SA, Rushworth MF, Ziemann U, Rothwell JC, Ward N, Cohen LG, Baudewig J, Paus T, Ugawa Y, Rossini PM. *Consensus paper: Combining transcranial stimulation with neuroimaging.* **Brain Stimulation** 2 58-80, 2009.

### Book chapters

Olini N and **Huber R**. *Ageing and sleep: sleep in all stages of human development.* **Wiley.** ESRS European Sleep Medicine Textbook. Ed. Dogas, 2014.

Khatami R and **Huber R**. *Transkranielle Magnetstimulation (TMS) und Schlaf.* **Ecomed Medizin.** Kompendium Schlafmedizin. Eds. Schulz, Geisler und Rodenbeck, 2013.

Kurth S and **Huber R**. *Sleep slow oscillations and cortical maturation.* **Elsevier.** *Brain activity during sleep.* Ed. Frank. 2012.

**Huber R** and Tononi G. *Sleep and waking across the lifespan.* **John Wiley & Sons.** Handbook of Neuroscience for the Behavioral Sciences. Eds. Berntson and Cacioppo, 2009.

**Huber R.** *TMS und Elektroenzephalographie (EEG)*. **Springer**. Das TMS-Buch. Eds. Siebner und Ziemann, Kapitel 35, 2007.