

Curriculum Vitae Andreas Keil

Education

10/1990-07/1997	Study of Psychology and Statistics at the University of Konstanz
09/1994-04/1995	Internship in a psychiatric specialty clinic for patients with dual diagnosis (i.e. mental retardation and psychiatric diagnoses)
06/1997	Academic degree 'Diplompsychologe' (MA in Psychology), minor degree in Mathematical Statistics
11/1997-01/2000	Graduate study in the project 'Oscillatory event-related brain dynamics and associative learning', funded by DFG. Advisors: Dr. Thomas Elbert, Dr. Matthias M. Müller
02/2000	PhD in Psychology 'Summa Cum Laude' Doctoral Dissertation 'Oscillatory brain activity in human affective stimulus processing'

Positions and honors

05/1999	Awarded the young investigator's award of the Biological Psychology Branch of the German Society for Psychology (DGPs)
07/1999	Awarded the GA-Lienert award for Psychophysiological methods.
02/2000	PhD in Psychology, University of Konstanz; 'Summa Cum Laude'
02/2000-05/2000	Visiting researcher at the NIMH Center for the Study of Emotion and Attention, University of Florida, Gainesville, USA, Drs Margaret M. Bradley and Peter J. Lang.
06/2000	Awarded the young scientists award of the German Society for Psychophysiology (DGPA)
11/2000-11/2004	Assistant Professor, University of Konstanz, Clinical Psychology and Cognitive Neurosciences
07/2001-08/2001	Visiting researcher at the NIMH Center for the Study of Emotion and Attention, University of Florida, Gainesville, USA
06/2002	Elected to the academy of sciences 'JUNGE AKADEMIE' at Berlin (<i>Berlin-Brandenburgische Akademie der Wissenschaften</i> and the <i>Deutsche Akademie der Naturforscher Leopoldina</i>)

07/2003-07/2004	Member of the Board of Directors of the 'JUNGE AKADEMIE'.
06/2003	“Habilitation” (Venia legendi for Psychology = Licensed for teaching in the field of Psychology)
12/2004-01/2007	Associate Professor (C2) of Clinical Psychology and Cognitive Neurosciences, University of Konstanz, Germany.
02/2007-08/2012	Associate Professor of Psychology, Department of Psychology and NIMH Center for the Study of Emotion and Attention, University of Florida.
10/2011-10/2013	Chair, EEG/MEG Guidelines Committee, Society for Psychophysiological Research
09/2012-present	Professor of Psychology, Department of Psychology, University of Florida
2013-2014	Colonel Allen R. and Margaret G. Crow Term Professorship in Liberal Arts and Sciences, University of Florida
2014-2017	Research Foundation Professor, University of Florida

Editor for scientific journals

2004/2005	Associate Editor: BIOLOGICAL PSYCHOLOGY
2006-present	Associate Editor: PSYCHOPHYSIOLOGY
2010-present	Editorial Board Member: FRONTIERS IN COGNITION
2010-present	Editorial Board Member: FRONTIERS IN PERCEPTION SCIENCE
2011-present	Editorial Board Member: PLOS ONE
2015-present	Section Editor in Chief: MethodsX

Referee for scientific journals (last two years, selected):

JAMA Psychiatry	MethodsX
Journal of Cognitive Neuroscience	Brain Research
IEEE Transactions on Biomedical Engineering	Journal of Neuroscience
Journal of Experimental Psychology: HPP & GEN	Psychonomic Bulletin and Review
NeuroImage	Biological Psychology
Emotion	Biological Psychiatry
Cerebral Cortex	Psychological Science
Current Biology	Quarterly J. of Experimental Psychology

Grant reviewing

National Institutes of Health (Member, SPC study section (2015-2019); Ad hoc reviewer on study sections F02A, SPC, APDA, several SEPs); National Science Foundation (CogNeuro panel); Israeli Science Foundation; US-Israeli Research Foundation; German Research Council (DFG); Wellcome Trust; UK Biotechnology and Biological Sciences Research Council; Swiss and Austrian National Science Foundations.

Teaching

Psychobiology of abnormal behavior; Neurobehavioral relations; Sensory Processes; Abnormal Psychology; Cognitive Neuroscience

Grant funding

Active funding

National Institutes of Mental Health (NIMH): *R01 Acquisition and Extinction of Affective Biases in Perception: A single Trial Analysis*. (03/2012-02/2017). Keil: PI (125,000 USD annually in direct costs)

Office of Naval Research: Design, Implementation, and Testing of a Computational Architecture for Perception. (05/2014-04/2017). Keil: Co-PI (71,000 USD annually in direct costs)

Keller Foundation of the American Pain Society (APS): Optimizing pain treatment through Neuroplasticity (08/2014-07/2016). Keil: Co-I (18,000 USD annually in direct costs)

Diretoria de Ciências Agrárias, Biológicas e da Saúde, Department of Science, Technology, and Innovation, Brazil: Post-doctoral training grant for Dr. Rafaela Campagnoli (01/2016-12/2016). Keil: Mentor (29,000 USD in Stipend for Dr. Camapgnoli)

Past funding (listing includes only projects with Keil as PI):

US Department of Defense: Prospective EEG/fMRI Evaluation of Neuro-Feedback for Military Stress Regulation (05/2010-04/2015). Keil: Co-I (19,000 USD annually in direct costs)

National Science Foundation (NSF): Quantifying Causality and Dependency in Complex Brain Networks. (09/2010-09/2015). Keil: Co-PI (47,000 USD in direct costs)

National Institutes of Mental Health (NIMH): *R01 Hypervigilance versus Perceptual Avoidance in Social Phobia*. (08/2009-07/2013). Keil: PI (2009-2013)

Canadian Institutes of Health Research (CIHR): Post-doctoral research training grant to Dr. Vladimir Miskovic (2011-2013), Mentor: A Keil.

Kurt Lion Foundation: *Integrating Diffusion Tensor Imaging and Magnetoencephalography*. (2007-2009).

Society for Psychophysiological Research (SPR): *International Mentorship and Training Award* (06/2009-10/2010).

German Research Foundation (DFG): *Central nervous and behavioral dynamics in human emotional stimulus processing* (2001-2007).

German Research Foundation (DFG): *Brain asymmetries associated with affective processing of visual scenes and written language*. Part of center grant 'Functional asymmetries of cerebral activations' (Director: Dr. Brigitte Rockstroh, ended 12/2005).

Federal Republic of Germany - Department of Science and Education: Young Academy Grant – Trans-Disciplinary Projects for Humanities and Natural Science (2005-2009)

German Research Foundation (DFG): *Limits of intentionality - neural underpinnings of automatic attitude formation*. (2005-2011)

German Research Foundation (DFG): *Dynamics of the Human Defense Cascade*. (2006-2009).

German Research Foundation (DFG): *Regulation of attention across the life span*. (2006-2008).

List of Publications

Articles in peer-reviewed journals

2016 and in press

Gruss, L. F., Langae, T., & Keil, A. (2016). The role of the COMT val158met polymorphism in mediating aversive learning in visual cortex. *NeuroImage*, 125, 633-642.

Deweese, M.M., Müller, M. M., & Keil, A. (in press). Extent and Time Course of Competition in Visual Cortex between Emotionally Arousing Distractors and a Concurrent Task. *European Journal of Neuroscience*.

Schettino, A., Keil, A., Porcu, E., & Müller, M. M. (in press). Shedding light on emotional perception: Interaction of brightness and semantic content in extrastriate visual cortex. *NeuroImage*.

2015

McTeague, L. M., Gruss, L. F., & Keil, A. (2015). Aversive learning shapes neuronal orientation tuning in human visual cortex. *Nature Communications*, 6.

Smith, D. W., & Keil, A. (2015). The Biological Role of the Medial Olivocochlear Efferents in Hearing: Separating Evolved Function from Exaptation. *Frontiers in Systems Neuroscience*, 9(12).

Miskovic, V., Martinovic, J., Wieser, M. J., Petro, N. M., Bradley, M. M., & Keil, A. (2015). Electrooculographic amplification for emotionally arousing natural scenes: The contribution of luminance and chromatic visual channels. *Biological Psychology*, 106, 11-17.

Miskovic, V., & Keil, A. (2015). Reliability of event-related EEG functional connectivity during visual entrainment: Magnitude squared coherence and phase synchrony estimates. *Psychophysiology*, 52 (1), 81-89.

Bartsch, F., Hamuni, G., Miskovic, V., Lang, P. J., & Keil, A. (2015). Oscillatory brain activity in the alpha range is modulated by the content of word-prompted mental imagery. *Psychophysiology*, 52 (6), 727–735.

Ben-Simon, E., Oren, N., Sharon, H., Kirschner, A., Goldway, N., Okon-Singer, H., Deweese, M. M., Keil, A., Hendler, T. (2015). Losing Neutrality: The Neural Basis of Impaired Emotional Control without Sleep. *The Journal of Neuroscience*, 35(38), 13194–13205.

Hazrati, M., Miskovic, V., Principe, J., & Keil, A. (2015). Functional Connectivity in Frequency-Tagged Cortical Networks During Active Harm Avoidance. *Brain Connectivity*. 5(5): 292-302.

Petro, N. M., & Keil, A. (2015). Pre-target oscillatory brain activity and the attentional blink. *Experimental Brain Research*, 233 (12), 3583-3595.

2014

Wieser, M. J. & Keil, A. (2014). Fearful faces heighten the cortical representation of contextual threat. *Neuroimage*, 86, 317-325.

Miskovic, V., & Keil, A. (2014). Escape from Harm: Linking Affective Vision and Motor Responses During Active Avoidance. *Social, Cognitive, and Affective Neuroscience*, 9 (12), 1993-2000.

Srinivasan, S., Keil, A., Stratis, K., Osborne, A. F., Cerwonka, C., Wong, J., Rieger, B.L., Polcz, V., Smith, D.W. (2014). Interaural attention modulates outer hair cell function. *European Journal of*

Neuroscience, 40, 3785-3792

Wieser, M. J., Miskovic, V., Rausch, S., & Keil, A. (2014). Different time course of visuocortical signal changes to fear-conditioned faces with direct or averted gaze: a ssVEP study with single-trial analysis. *Neuropsychologia*, 62, 101-110.

Keil, A., Debener, S., Gratton, G., Junghofer, M., Kappenman, E. S., Luck, S. J. (2014). Publication guidelines and recommendations for studies using electroencephalography and magnetoencephalography. *Psychophysiology*, 51, 1-21.

Song, I., & Keil, A. (2014). Differential classical conditioning selectively heightens response gain of neural population activity in human visual cortex. *Psychophysiology*, 51, 1185-1194.

Weymar, M., Keil, A., & Hamm, A. O. (2014). Timing the fearful brain: unspecific hypervigilance and spatial attention in early visual perception. *Social, Cognitive, and Affective Neuroscience*, 9, 723-729.

Deweese, M. M., Bradley, M. M., Lang, P. J., Andersen, S. K., Muller, M. M., & Keil, A. (2014). Snake fearfulness is associated with sustained competitive biases to visual snake features: hypervigilance without avoidance. *Psychiatry Research*, 219, 329-335.

Ji, H., Chen, B., Yuan, Z., Zheng, N., Keil, A., Principe, J.C., 2014. Online Nonlinear Granger Causality Detection by Quantized Kernel Least Mean Square. *Neural Information Processing. Lecture Notes in Computer Science*, 8835, 68-75.

2013

Keil, A., Miskovic, V., Gray, M. J., & Martinovic, J. (2013). Luminance, but not chromatic visual pathways, mediate amplification of conditioned danger signals in human visual cortex. *European Journal of Neuroscience*, 38(9), 3356-3362.

Miskovic, V. & Keil, A. (2013). Perceiving Threat In the Face of Safety: Excitation and Inhibition of Conditioned Fear in Human Visual Cortex. *Journal of Neuroscience*, 33, 72-78.

Fadlallah, B., Chen, A., Keil, A., Principe, J. (2013). Weighted-permutation entropy: A complexity measure for time series incorporating amplitude information. *Physical review E*. 87: 022911.

Sabatinelli D., Keil A., Frank D.W., Lang P.J. (2013). Emotional perception: Correspondence of early and late event-related potentials with cortical and subcortical functional MRI. *Biological Psychology*, 92, 513-519.

Hajcak, G., Macnamara, A., Foti, D., Ferri, J., Keil, A. (2013). The dynamic allocation of attention to emotion: Simultaneous and independent evidence from the late positive potential and steady state visual evoked potentials. *Biological Psychology*, 92, 447-455.

Freund, A.M., Keil, A. (2013). Out of mind, out of heart: Attention affects duration of emotional experience. *Cognition and Emotion*. 27: 549-557.

Heim, S., Keil, A., Choudhury, N., Thomas Friedman, J., & Benasich, A. A. (2013). Early gamma oscillations during rapid auditory processing in children with a language-learning impairment: Changes in neural mass activity after training. *Neuropsychologia*, 51(5), 990-1001.

Kaan, E., Wayland, R., & Keil, A. (2013). Changes in Oscillatory Brain Networks After Lexical Tone Training. *Brain Sciences*, 3, 757-780

Ihssen, N., & Keil, A. (2013). Accelerative and Decelerative Effects of Hedonic Valence and Emotional Arousal During Visual Scene Processing. *Quarterly Journal of Experimental Psychology*, 66, 1276-1301.

Heim, S., Ihssen, N., Hasselhorn, M., & Keil, A. (2013). Early adolescents show sustained

susceptibility to cognitive interference by emotional distractors. *Cognition and Emotion*, 27, 696-706.

Miskovic, V., & Keil, A. (2013). Visuocortical Changes During Delay and Trace Aversive Conditioning: Evidence From Steady-State Visual Evoked Potentials. *Emotion*, 13, 554-561.

Song, I., & Keil, A. (2013). Affective Engagement and Subsequent Visual Processing: Effects of Contrast and Spatial Frequency. *Emotion*, 13, 748-757.

Heim S, Benasich AA, Keil A (2013) Distraction by emotion in early adolescence: affective facilitation and interference during the attentional blink. *Frontiers in Developmental Psychology*, 4:580.

Heim, S., Tallal, P., & Keil, A. (2013). Early electrocortical indices of selective attention in ADHD: temporal dynamics of stimulus competition. *Cognitive Sciences*, 7, 1.

2012

Smith, D. W., Aouad, R., & Keil, A. (2012). Cognitive task demands modulate the sensitivity of the human cochlea. *Frontiers in auditory cognitive neuroscience*, 3(30), 1-8.

Liu, Y., Huang, H., McGinnis, E. M., Keil, A., & Ding, M. (2012). Neural substrate of the late positive potential in emotional processing. *Journal of Neuroscience*, 32, 14563-14572.

Liu, Y., Keil, A., & Ding, M. (2012). Effects of emotional conditioning on early visual processing: Temporal dynamics revealed by ERP single-trial analysis. *Human Brain Mapping*. 33, 909-919

Miskovic, V., & Keil, A. (2012). Acquired fears reflected in cortical sensory processing: A review of electrophysiological studies of human classical conditioning. *Psychophysiology*, 49(9), 1230-1241.

Heim, S., & Keil, A. (2012). Developmental trajectories of regulating attentional selection over time. *Frontiers in Psychology*, 3, 277.

Wieser, M. J. McTeague, M.M., & Keil, A. (2012). Competition effects of threatening faces in social anxiety. *Emotion*, 12, 1050-1060.

Srinivasan, S., Keil, A., Stratis, K., Woodruff Carr, K. L., & Smith, D. W. (2012). Effects of cross-modal selective attention on the sensory periphery: Cochlear sensitivity is altered by selective attention. *Neuroscience*, 223, 325-332.

Fadlallah, B., Seth, S., Keil, A., & Principe, J. (2012). Quantifying Cognitive State from EEG using Dependence Measures. *IEEE Transactions in Biomedical Engineering*, 59, 2773-2781.

Blessing, A., Keil, A., Gruss, L. F., Zöllig, J., & Martin, M. (2012). Affective learning and psychophysiological reactivity in dementia patients. *International Journal of Alzheimer's Disease*, 2012, 672927, 1-9

Keil, A., Costa, V., Smith, J. C., Sabatinelli, D., McGinnis, E. M., Bradley, M. M., & Lang, P.J. (2012). Tagging cortical networks in emotion: A topographical analysis. *Human Brain Mapping*, 33, 2920-2931.

Bradley, M.M., Keil, A., Lang, P.J. (2012). Orienting and emotional perception: Facilitation, attenuation, and interference. *Frontiers in Emotion Science*, 3, 493 1-6.

Gruss, L.F., Wieser, M.J., Schweinberger, S., Keil, A. (2012) Face-evoked steady-state visual potentials: effects of presentation rate and face inversion. *Frontiers in Human Neuroscience*, 6, 316 1-10.

2011

McTeague, L. M., Shumen, J. R., Wieser, M. J., Lang, P. J., & Keil, A. (2011). Social vision: sustained perceptual enhancement of affective facial cues in social anxiety. *Neuroimage*, 54(2), 1615-1624.

Wieser, M. J., & Keil, A. (2011). Temporal Trade-Off Effects in Sustained Attention: Dynamics in Visual Cortex Predict the Target Detection Performance during Distraction. *Journal of Neuroscience*, 31(21), 7784-7790.

Heim, S., Wirth, N., & Keil, A. (2011). Competition for cognitive resources during rapid serial processing: changes across childhood. *Frontiers in Developmental Psychology*, 2(9). doi: 10.3389/fpsyg.2011.00009

David, I. A., Volchan, E., Vila, J., Keil, A., de Oliveira, L., Faria-Junior, A. J., et al. (2011). Stroop matching task: role of feature selection and temporal modulation. *Experimental Brain Research*, 208(4), 595-605.

McGinnis, E. M., & Keil, A. (2011). Selective processing of multiple features in the human brain: Effects of feature type and salience. *PLoS One*. (2): e16824.doi:10.1371/journal.pone.0016824

Wieser, M., McTeague, L. M., & Keil, A. (2011). Sustained preferential processing of social threat cues - bias without competition? *Journal of Cognitive Neuroscience*, 23, 1973-1986.

von Leupoldt, A., Keil, A., & Davenport, P. W. (2011). Respiratory-related evoked potential measurements using high-density electroencephalography. *Clinical Neurophysiology*, 122(4), 815-818.

Heim, S., Thomas Friedman, J., Keil, A., & Benasich, A. A. (2011). Reduced Sensory Oscillatory Activity during Rapid Auditory Processing as a Correlate of Language-Learning Impairment. *Journal of Neurolinguistics*. 24(5), 538-555.

Ethridge, L., Moratti, S., Gao, Y., Keil, A., & Clementz, B. A. (2011). Sustained Versus Transient Brain Responses in Schizophrenia: The Role of Intrinsic Neural Activity. *Schizophrenia Research*. 133, 106-111

2010

Keil, A., & Müller, M. M. Feature selection in the human brain: Electrophysiological correlates of sensory enhancement and feature integration. *Brain Research*. 2010, 1313, 172-184.

Keil, A., Bradley, M. M., Ihssen, N., Heim, S., Vila, J., Guerra, P., & Lang, P.J. Defensive engagement and perceptual enhancement. *Neuropsychologia*. 2010, 48, 3580-3584.

Von Leupoldt, A., Keil, A., Chan, P.-Y., Bradley, M. M., Lang, P. J., & Davenport, P. W. (2010). Cortical sources of the respiratory-related evoked potential. *Respiratory Physiology and Neurobiology*. 2010: 170, 198-201.

Von Leupoldt, A., Vovk, A., Bradley, M.M., Keil, A., Lang, P.J., Davenport, P.W. The impact of emotion on respiratory-related evoked potentials. *Psychophysiology*. 2010, 47, 579-586.

Schweiger-Gallo, I., Keil, A., Blanco, A., de Miguel, J., Alvaro, J. L., & Garrido, A. Prospects and dilemmas in emotion psychology. *Psychologia*. 2010, 53(3), 139-150.

2009

Keil, A., & Heim, S. Prolonged reduction of electrocortical activity predicts correct performance during rapid serial visual processing. *Psychophysiology*. 2009: 46, 718-725.

Keil, A., & Freund, A. M. Changes in the sensitivity to appetitive and aversive arousal across adulthood. *Psychology and Aging*. 2009: 24(3), 668-680.

Keil, A., Sabatinelli, D., Ding, M., Lang, P. J., Ihssen, N., & Heim, S. Re-entrant projections modulate visual cortex in affective perception: Directional evidence from Granger causality analysis. *Human Brain Mapping*. 2009, 30, 532-540.

Peyk, P., Schupp, H., Keil, A., Elbert, T., & Junghoefler, M. Parallel processing of affective visual stimuli. *Psychophysiology*. 2009, 46:200-208.

Schweiger-Gallo, I., Keil, A., Mc Culloch, K. C., Rockstroh, B., & Gollwitzer, P. Strategic automation of emotion regulation. *Journal of Personality and Social Psychology*, 200, 96, 11-31.

Li, R., Keil, A., & Principe, J. Single-trial P300 estimation with a spatiotemporal filtering method. *Journal of Neuroscience Methods*. 2009, 177, 488-496.

Ihssen, N., & Keil, A. The Costs and Benefits of Attending to Emotional Stimuli during Rapid Serial Visual Presentation. *Cognition and Emotion*. 2009; 23, 296-326.

Moratti, S., & Keil, A. Not what you expect: Experience but not expectancy predicts conditioned responses in human visual and supplementary cortex. *Cerebral Cortex*. 2009. 19, 2803-2809.

Sabatinelli, Bradley, M.M., D., Lang, P.J., Costa., V.D., Keil, A. The timing of emotional discrimination in human amygdala, inferotemporal, and occipital cortex. *Journal of Neuroscience*. 2009. 25, 14864-14868.

2008

Keil, A., Smith, J. C., Wangelin, B., Sabatinelli, D., Bradley, M. M., & Lang, P. J. Electrocutaneous and electrodermal responses co-vary as a function of emotional arousal: A single-trial analysis. *Psychophysiology*. 2008; 45:516-523.

Moratti, S., Rubio, G., Campo, P., Keil, A., & Ortiz, T. Hypofunction of right temporoparietal cortex during emotional arousal in depression. *Archives of General Psychiatry*. 2008; 65:1-10.

Kissler, J., & Keil, A. Look - don't look! How emotional pictures affect pro- and anti-saccades. *Experimental Brain Research*. 2008; 188:215-222.

Müller, M. M., Andersen, S., & Keil, A. Time course of competition for visual processing resources between emotional pictures and a foreground task. *Cerebral Cortex*. 2008; 18, 1892-1899.

Snyder, K. A., & Keil, A. (2008). Repetition suppression of induced gamma activity predicts enhanced orienting toward a novel stimulus in 6-month-old infants. *Journal of Cognitive Neuroscience*, 20, 2137-2152.

Clementz, B. A., Wang, J., & Keil, A. (2008). Normal electrocutaneous facilitation but abnormal target identification during visual sustained attention in schizophrenia. *Journal of Neuroscience*, 28, 13411-13418.

2007

Keil, A., Stolarova, M., Moratti, S., & Ray, W. J. Adaptation in visual cortex as a mechanism for rapid discrimination of aversive stimuli. *NeuroImage*. 2007; 36:472-479.

Keil, A., Bradley, M. M., Junghöfer, M., Russmann, T., Lowenthal, W., & Lang, P. J. Cross-modal attention capture by affective stimuli: Evidence from event-related potentials. *Cognitive, Affective, & Behavioral Neuroscience*. 2007; 7:18-24.

Wang, J., Clementz, B., & Keil, A. The neural correlates of feature-based selective attention when viewing spatially and temporally overlapping images. *Neuropsychologia*. 2007; 45:1393-1399.

Sabatinelli, D., Lang, P. J., Keil, A., & Bradley, M. M. Emotional perception: Correlation of functional MRI and event related potentials. *Cerebral Cortex*. 2007; 17:1066-1073.

Moratti, S., Clementz, B., Ortiz, T., & Keil, A. Neural mechanisms of evoked oscillations: Stability and interaction with transient events. *Human Brain Mapping*. 2007; 28:1318-1333.

Ihssen, N., Heim, S., & Keil, A. The costs of emotional attention: Affective processing inhibits subsequent lexico-semantic analysis. *Journal of Cognitive Neuroscience*. 2007; 19:1932-1949.

Schweinberger, S. R., Kaufmann, J. M., Moratti, S., Keil, A., Burton, A. M. Brain Responses to Repetitions of Human and Animal Faces, Inverted Faces, and Objects - An MEG study. *Brain Research*. 2007; 1184:226-233.

2006

Keil, A., Ihssen, N., Heim, S. Early cortical facilitation for emotionally arousing targets during the attentional blink. *BMC Biology*. 2006; 4:23.

Keil A, Mussweiler T., Epstude K. Alpha-band activity reflects reduction of mental effort in a comparison task: A source space analysis. *Brain Research*. 2006; 1121:117-127.

Keil A. Macroscopic brain dynamics during verbal and pictorial processing of affective stimuli. *Progress in Brain Research*. 2006; 156:217-232.

Stolarova, M, Keil, A, Moratti, S. Modulation of the C1 Visual Event-related Component by Conditioned Stimuli: Evidence for Sensory Plasticity in Early Affective Perception. *Cerebral Cortex*. 2006; 16:876-887.

Moratti S, Keil A, Miller GA. Fear but not awareness predicts enhanced sensory processing in fear conditioning. *Psychophysiology*. 2006; 43:216-226.

Blessing, A, Keil, A, Linden, D.E.J., Heim, S, Ray, W.J. Acquisition of affective dispositions in dementia patients. *Neuropsychologia*. 2006; 44:2366-2373.

Heim, S, Keil, A. Effects of classical conditioning on identification and cortical processing of speech syllables. *Experimental Brain Research*. 2006; 175:411-424.

Heim, S, Keil, A, Ihssen, N. Der Zusammenhang zwischen zeitlicher Aufmerksamkeitsallokation und Lese-Rechtschreibleistungen im frühen Sekundarschulalter. *Zeitschrift für Psychologie*. 2006. 214:196-206.

2005

Moratti, S. & Keil, A. Cortical Activation during Pavlovian Fear Conditioning Depends on Heart Rate Response Patterns: An MEG Study. *Cognitive Brain Research*. 2005; 25:459-471.

Keil A, Moratti S, Sabatinelli D, Bradley MM, Lang PJ. Additive Effects of Emotional Content and Spatial Selective Attention on Electrocortical Facilitation. *Cerebral Cortex*. 2005; 15: 1187-1197.

2004

Keil A, Ihssen N. Identification Facilitation for Emotionally Arousing Verbs during the Attentional Blink. *Emotion*. 2004; 4:36-45.

Heim, S. & Keil, A. Large-scale neural correlates of developmental dyslexia. *European Child and Adolescent Psychiatry*. 2004; 13: 125-140.

Müller MM, Keil A. Neuronal synchronization and selective color processing in the human EEG. *Journal of Cognitive Neuroscience*. 2004; 16:503-522.

Moratti, S, Keil, A, Stolarova, M. Motivated attention in emotional picture processing is reflected by activity modulation in cortical attention networks. *NeuroImage*. 2004; 21:954-964.

Clementz BA, Keil A, Kissler J. Aberrant Brain Dynamics in Schizophrenia: Delayed Buildup and Prolonged Decay of the Visual Steady-State Response. *Cognitive Brain Research*. 2004; 18:121-129.

Weisz, N, Keil, A, Wienbruch, C, Hoffmeister, S & Elbert, T. One sound, two tonotopic maps - activating auditory cortex with compound stimuli. *Clinical Neurophysiology*. 2004; 115:1249-1258.

Härle M, Rockstroh BS, Keil A, Wienbruch C, Elbert T. Mapping the brain's orchestration during speech comprehension: task-specific facilitation of regional synchrony in neural networks. *BMC Neuroscience*. 2004; 5:40

2003

Keil A, Gruber T, Müller MM, Moratti S, Stolarova M, Bradley MM, Lang PJ. Early Modulation of Visual Perception by Emotional Arousal: Evidence from Steady-State Visual Evoked Brain Potentials. *Cognitive, Affective, and Behavioral Neuroscience*. 2003; 3:195-206.

Keil A, Stolarova M, Heim S, Gruber T, Müller MM. Temporal Stability of High-Frequency Brain Oscillations in the Human EEG. *Brain Topography*. 2003; 16:101-110.

Perlstein WM, Cole MA, Larson M, Kelly K, Seignourel P, Keil A. Steady-state visual evoked potentials reveal frontally-mediated working memory activity in humans. *Neurosci Lett*. 2003; 342:191-195.

2002

Keil A, Bradley MM, Hauk O, Rockstroh B, Elbert T & Lang PJ. Large-scale neural correlates of affective picture processing. *Psychophysiology*. 2002; 39:641-649.

Ray WJ, Keil A., Mikuteit A, Bongartz W & Elbert T. High Resolution EEG Indicators of Pain Responses in Relation to Hypnotic Susceptibility and Suggestion. *Biological Psychology*. 2002; 60:17-36.

Gruber T, Müller MM, & Keil A. Modulation of induced gamma band responses in a perceptual learning task in the human EEG. *Journal of Cognitive Neuroscience*. 2001;14:732-744.

Malinowski P, Hübner R, Keil A, Gruber T. The influence of repose competition on cerebral asymmetries for processing hierarchical stimuli revealed by ERP recordings. *Experimental Brain Research*. 2002; 144:136-139.

Hauk O, Keil A, Elbert T, Müller MM. Comparison of data transformation procedures to enhance topographical accuracy in time series analysis of the human EEG. *Journal of Neuroscience Methods*. 2002; 113:111-122.

2001

Keil A, Müller MM, Gruber T, Wienbruch C, Elbert T. Human large-scale oscillatory brain activity during an operant shaping procedure. *Cognitive Brain Research*. 2001; 12:397-407.

Keil A, Gruber T, Müller MM. Functional Correlates of Macroscopic High-Frequency Brain Activity in the Human Visual System. *Neuroscience and Biobehavioral Reviews*. 2001; 25:527-534.

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