

May 19, 2025

CURRICULUM VITAE

BRIGITTE RÖDER

Biological Psychology and Neuropsychology
University Hamburg
D-20146 Hamburg (Germany)
phone: +49 (0)40 42838 3251
e-mail: Brigitte.Roeder@uni-hamburg.de

Birth date: April 12, 1967 in Hermeskeil (Germany)

TABLE OF CONTENT

EDUCATION	2
ACADEMIC APPOINTMENTS	2
OTHER PROFESSIONAL ACTIVITIES.....	2
HONORS AND AWARDS.....	4
CURRENT GRANTS.....	5
PAST GRANTS	5
PROFESSIONAL SOCIETIES	8
MAJOR RESEARCH INTEREST	9
REVIEW ACTIVITY.....	9
ORGANIZED SYMPOSIA AND CONFERENCES.....	11
SELECTED INVITED PRESENTATIONS.....	13
PUBLIC OUTREACH.....	19
TEACHING EXPERIENCE	21
PHD CANDIDATES AND POSTDOCS	22
PUBLICATIONS	23
Journals	23
Book chapters and conference proceedings.....	45
Books & Special issues	48
Abstracts.....	49

EDUCATION

- 2002: Habilitation, Psychology; Philipps-University Marburg (Germany)
1995: Dr. rer. nat. (Ph.D. equivalent), Psychology; Philipps-University Marburg (Germany)
1991: Diplom, Psychology; Philipps-University Marburg (Germany)
1986: Abitur; Staatliches Gymnasium Hermeskeil (Germany)

ACADEMIC APPOINTMENTS

- 2023-pres.: Visiting Scholar LV Prasad Eye Institute, Hyderabad (India)
2010-pres.: Full professor (W3), Biological Psychology and Neuropsychology, University of Hamburg
2004-pres.: Adjunct Professor at the Faculty of Medicine Hamburg-Eppendorf.
2003-2010: Full professor (C4), Biological Psychology and Neuropsychology, University of Hamburg
2000-2003: Emmy Noether-fellow (German Research Foundation); head of a junior research group at the Psychology Department of the Philipps-University Marburg (Germany)
1997-2000: Research and Teaching Associate (F. Rösler); Psychology Department, Philipps-University Marburg (Germany)
1995-1997: Postdoc; Department of Psychology and Neuroscience (H.J. Neville); University of Oregon, Eugene (U.S.)
1993: Visiting Scholar in the Cognitive Psychophysiology-Laboratory (M.G.H. Coles); University of Illinois, Urbana-Champaign (U.S.)
1991-1995: PhD candidate, Research and Teaching Associate (F. Rösler); Psychology Department, Philipps-University Marburg (Germany)
1989-1991: Student Research Assistant (F. Rösler); Behavioral and event-related potential studies in long-term memory and mental imagery; Psychology Department, Philipps-University Marburg (Germany)
1987-1989: Student Research Assistant (H.H. Schulze): Studies in haptic perception and design of tactile displays for the blind; Psychology Department, Philipps-University Marburg (Germany)
1986-1991: Studies of Psychology, Philipps-University Marburg (Germany)

OTHER PROFESSIONAL ACTIVITIES

- since 2024: President of the Hector Fellow Academy
since 2023: Member of the board of directors of the Altonaer Foundation
since 2021: Member of the board of directors of the Hamburg Center of Neuroscience
since 2020: Member of the pre-selection committee for the Hector Award
since 2019: Member of the senate of the German Research Foundation (DFG)

since 2019: Member of the preselection committee for science awards at the University of Hamburg
 since 2018: Chair of the board for graduation of the Psychology Department at the University of Hamburg
 since 2014: Member of the faculty board of the Faculty of Psychology and Human Movement Science at the University of Hamburg
 2022-2024: Member of the presidential committee of the Hector Fellow Academy
 2021-2024: Member of the scientific board of the Leibniz Institute for Neurobiology (Magdeburg, Germany)
 2018-2024: Member of the selection committee of the Academy of Science in Hamburg
 2015-2024: Member of Committee for Life Sciences of the German National Academy of Sciences Leopoldina
 2020-2023: Member of the Excellence Advisory Board of the University of Hamburg
 2017-2022: Member of the scientific advisory board at the Max Planck Institute for Empirical Aesthetics, Frankfurt/M.
 2016-2022: Member of the board of directors of the Transregio German-Chinese Collaborative Research Centre TRR 169
 2021: Chair of the presidential evaluation committee of the Psychology department of the Technical University Dresden (Germany)
 2020: Jury member for the Joachim Jungius award 2020 of the Jungius Society and the Academy of Science Hamburg
 2020, 2015: Jury member for the Ernest-John Solvay Prize, Research Foundation - Flanders (FWO), Belgium
 2017: Member of the Review board SH4 for consolidator grants of the European Research Council (ERC)
 2016-2019: Member of the review board (Psychology: 110) of the German Research Foundation (DFG)
 2015-2019: Member of the Committee for International Affairs at the University of Hamburg
 2014-2018: Member of the Governors of the German-Israeli Foundation for Scientific Research and Development (GIF)
 2012-2017: Regional representative of the German/Austrian constituency of the International Neuropsychology Symposium (INS)
 2016-2017: Member of the founding committee for a Center for Advanced Studies (University of Hamburg, Academy of Sciences in Hamburg)
 02/2014-09/15: Dean of the Faculty of Psychology and Human Movement Science at the University of Hamburg
 11/2013-03/2014: Founding dean of the Faculty of Psychology and Human Movement Science at the University of Hamburg
 2013-2015: Member of the selection committee (postdoc and research fellows) of the Alexander von Humboldt Foundation
 2013-2015: Science Europe, Member of the Committee for the Social Sciences
 2009-2016: Contact person at the University of Hamburg for the German Psychological Society

- 2012-2014: Member of the commission for “European science policy” of the German Rectors’ Conference
- 2011-2014: Member of the board of directors of the Collaborative Research Centre SFB 936
- 2011-2014: Member of the faculty board of the Psychology Department, University Hamburg
- 2008-2009: Dean of the Psychology Department at the University of Hamburg.
- 2007-2008: Vice Dean of the Psychology Department at the University of Hamburg
- 2005-2011: Member of the faculty board of the faculty of Education, Psychology and Human Movement, University Hamburg
- 2005-2009: Member of the board of directors of the research focus Neuroscience at the University of Hamburg
- 2005-2008: Member of the board of directors of NeuroImage Nord (University of Hamburg, Kiel and Lübeck)
- 2004-2011: Vice chairperson of the board for graduation of the Psychology Department at the University of Hamburg
- 2004-2009: Member of the board for the admission of foreign students; Psychology Department of the University of Hamburg
- 1998: Member of the McDonnell Summer Institute in Cognitive Neuroscience, Olympic Valley, CA (U.S.)
- 1997: Member of the McDonnell Summer Institute in Cognitive Neuroscience, Dartmouth Medical School, Hanover (U.S.)
- 1995: Member of the Summer School on Methods in Physiological Psychology; Ruhr-University Bochum and Heinrich-Heine University Düsseldorf (Germany)
- 1994: Member of the European Summer School on Cognitive Neuroscience, Nijmegen (The Netherlands)

HONORS AND AWARDS

- 2023: Visiting Scholar LV Prasad Eye Institute, Hyderabad (India)
- 2021: Henriette Herz Scout of the Alexander von Humboldt Foundation
- 2020: Wilhelm Wundt Medal of the German Psychological Society (DGPs)
- 2018: Fellow of the Hector Academy
- 2017: Hector Science Award of the Hector Foundation
- 2014: Gottfried Wilhelm Leibniz-Award (German Research Foundation, DFG)
- 2011: Fellow of the Association for Psychological Science (APS)
- 2011: Teaching award of the Dep. of Psychology at the University of Hamburg
- 2010: ERC Advanced Investigators Grant
- 2010: Listed in AcademiaNet.de
- 2010: Member of the International Neuropsychological Symposium (INS)
- 2009: Selected for the training program of the Helmholtz Academy
- 2008: Member of the German National Academy of Sciences Leopoldina
- 2007: Member of the Academy of Science in Hamburg

- 2005: Member of the Wilhelm-Wundt Society (WWG)
- 2002: Award for Biology of the Science Academy Göttingen
- 2000: Publication Award of the Biological Psychology section of the German Psychological Society
- 2000: Young Scientist Award of the Federation of the European Societies for Psychophysiology
- 1996: Heinz-Heckhausen Dissertation award of the German Psychological Society (DGPs)

CURRENT GRANTS

- 2023-2027: Hector Fellow Academy "The role of early visual experience for the neural systems processing visual objects", PI Brigitte Röder, Project grant: 275.400 €.
- 2018-2027: University Fellow of the Max Planck School of Cognition (including ≈ 215.000 € for a PhD candidate)
- 2015-2027: German Research Foundation (DFG: Ro 2625/10-1). Leibniz Award. Total Grant 2.5 Mill. €.

PAST GRANTS

- 2023-2024: German Research Foundation (DFG, TRR 169 Transregio "Crossmodal Learning", A1): Adaptation of multisensory processing to changing priors and sensory evidence. PIs: Patrick Bruns and Brigitte Röder (University of Hamburg), Xiaolan Fu (Chinese Academy of Sciences, Beijing). Project grant: 2 PhD positions (65%) + ≈ 5000 €.
- 2020-2024: EU project "The Crossmodal Brain" (Horizon 2020 MSCA ITN: Dr. Aline de Borst). 162.806 €.
- 2020-2023: German Research Foundation (DFG, TRR 169 Transregio "Crossmodal Learning", A1): Adaptation of multisensory processing to changing priors and sensory evidence. PIs: Patrick Bruns and Brigitte Röder (University of Hamburg), Xiaolan Fu (Chinese Academy of Sciences, Beijing). Project grant: 363.560 €.
- 2020-06/2024: Free and Hanseatic City of Hamburg (LFF-FV 73, "Pregnancy, immunology, health risks in mother and child", Speaker: Prof. Dr. Petra Arck). Subproject: „Modulation and immunological and neuronal mechanisms of fetal programming of neurocognitive performance“. PI: Prof. Dr. Brigitte Röder. Project grant: 44.630 €.
- 2020-2023: Free and Hanseatic City of Hamburg (LFF-FV 76, "Mechanisms regulating excitation and inhibition in the learning and diseased brain", Speaker: Prof. Dr. Matthias Kneussel). Subproject: „Changes of the excitatory/inhibitory balance during human brain development“. PI: Prof. Dr. Brigitte Röder.

- Project grant: ca 175.000 €.
- 2019-2023: German Research Foundation (DFG; Research Center SFB 936 “Multisite communication in the brain”; B11): Development of bottom-up and top-down communication in visual and multisensory cortical networks in humans PI: Brigitte Röder. Project grant: 319.200 €.
- 2018-2022: Funding of a PhD position (65%) by the Hector Fellow Academy: 209.927 € (01.10.2018-30.09.2022).
- 2018: EU FP7 post-grant Open Access Pilot. Grant: 4800 €.
- 2017-2020: German-Chinese Alumni Network Neuroscience (co-applicant, main PI: Prof. Dr. Frank Bremmer, Philipps University Marburg)
- 2016-2019: German Research Foundation (DFG, TRR 169 Transregio “Crossmodal Learning”, A1): Dynamic adaptation of multisensory processes by cross-modal recalibration. PIs: Brigitte Röder (University of Hamburg) and Bo Hong (Tsinghua University, Beijing). Project grant: 446.000€.
- 2016-2018: Human Brain Project (EU GA 720270). Project grant: 333.540 €.
- 2015-2019: German Research Foundation (DFG; Research Center SFB 936 “Multisite communication in the brain”; B1): Tactile-visual interactions for saccade planning during free viewing and their modulation by TMS. PIs: Tobias Heed and Brigitte Röder. Project grant: 300.000 €.
- 2015-2018: City of Hamburg excellence program: “Crossmodal learning”. (PIs: Jianwei Zhang, Stefan Wermter, Andreas Engel, Brigitte Röder). Project grant approximately: 280.000 €.
- 2014-2017: EU. “Audio Bracelet for Blind Interaction” (Coordinator: Monica Gori, Italian Institute of Technology, Genua). Project grant: 300.000 €.
- 2013-2015: German Research Foundation (DFG: Ro 2625/12-1). Initiation and enhancement of international cooperation “Recovery of visual and multisensory functions after visual deprivation in humans”. (PI: Brigitte Röder). Project grant: 17.890 €.
- 2011-2012: German National Academy of Sciences Leopoldina. Initiative „Neurobiological and psychological factors of socialization: Consequences for economy and education”. PIs: Frank Rösler, Brigitte Röder. Total grant: 100.000 €.
- 2011-2015: German Research Foundation (DFG; Research Center SFB 936 “Multisite communication in the brain”; B2): Changes of large-scale interactions as a mechanism of adaptive plasticity. PIs: Brigitte Röder and Andreas Engel. Project grant: 357.400 €.
- 2011-2015: German Research Foundation (DFG; Research Center SFB 936 “Multisite communication in the brain”; B1): Role of vision for shaping cortico-cortical interactions mediating sensorimotor transformations. PIs: Tobias Heed and Brigitte Röder. Project grant: 177.600 €.
- 2010-2016: European Research Council Advanced investigators grant (ERC-2009-AdG 249425-CriticalBrainChanges). “Development and plasticity of multisensory functions to study the principles of age dependent learning plasticity in humans”. Total grant: 2.396.640 €.

- 2010-2016: German Research Foundation (DFG: GK 1247/2) German-Chinese Graduate Student Training Program; Crossmodal Interaction in Natural and Artificial Cognitive Systems (CINACS, PIs: Jianwei Zhang (spokesperson), Brigitte Röder, Christian Büchel, Andreas Engel, Christopher Habel, Wolfgang Menzel, Brigitte Röder, 8 professors of Tsinghua University, Beijing). Total grant (German side): 2.412.652 €, Project grant: 220.000 €.
- 2010-2013: EU collaborative grant: COST project TIMELY: Time In Mental activity (PI: Argiro Vataki, an 20 co-investigators among them Brigitte Röder). Total grant: 210.000 €.
- 2009-2012: German Research Foundation (DFG GU 227/11-1): The role of interhemispheric transfer and cerebral asymmetry for multisensory perception: (PI: Onur Güntürkün, Coinvestigator: Brigitte Röder). Project grant: 113.000€.
- 2009-2012: EU collaborative grant: NOMS:Nano-Optical Mechanical Systems (project part of Brigitte Röder) Project grant: 268.700 €.
- 2009-2012: German Research Foundation (DFG FR 2519/1-2): Multisensory plasticity of neuronal word form representations: (PIs: Claudia Friedrich, Brigitte Röder). Total grant: 212.000 €.
- 2009-2010: BWF Hamburg-excellence initiative: Cluster Neurodapt! (PIs: Christian Büchel, Brigitte Röder, 14 further investigators). Total grant: 1.843.585 €; project grant: 115.224 €.
- 2009-2010: German Research Foundation (DFG HO 3924/1-2): Exercise and neural plasticity in humans (PIs: Kirsten Hötting, Brigitte Röder). Total grant: 47.600 €.
- 2008-2011: German Research Foundation (DFG; Research Center SFB 538; E7 Multilingualism): Critical periods for the acquisition of German and of German Sign Language: Is being multilingual of any advantage? PIs: Brigitte Röder and Barbara Hänel-Faulhaber. Project grant: 379.700 €.
- 2007-2008: BMBF (01GJ0610): Neural foundation of bilingual education in hearing impaired children (PIs: Claudia Friedrich, Barbara Hänel, Brigitte Röder). Total grant: 81.096 €.
- 2006-2010: German Research Foundation (DFG: GK 1247/1) German-Chinese Graduate Student Training Program; Crossmodal Interaction in Natural and Artificial Cognitive Systems (CINACS, PIs: Jianwei Zhang (spokesperson), Brigitte Röder (spokesperson Hamburg) Christian Büchel, Andreas Engel, Christopher Habel, Wolfgang Menzel, Brigitte Röder, 8 professors of Tsinghua University, Beijing). Total grant (German side): 1.956.251 € (Project grant: 250.000 €).
- 2006-2009: German Research Foundation (DFG HO 3924/1-1): Exercise and neural plasticity in humans (PIs: Kirsten Hötting, Brigitte Röder). Total grant: 184.000 €.
- 2005-2011: BMBF (0606/101): Whole head MEG system (PIs: Andreas Engel, Christian Büchel, Malte Clausen, Günther Deuschl, Detlef Kömpf, Dieter Naber, Brigitte Röder, Manfred Westphal, Hermann Zeumer). Total grant:

- 2.000.000 €.
- 2005-2008: BMBF (01GW0561): Plasticity and reorganization of object processing in the human brain (PIs: Brigitte Röder, Christian Büchel, Andreas Engel, Hartwig Siebner) (spokesperson: Brigitte Röder). Total grant: 958.388 €; Project grant: 254.633 €.
- 2005: German Research Foundation (DFG; HBFG 102-641): EEG System, PI: Brigitte Röder. Total grant: 140.000 €.
- 2005-2008: German Research Foundation (DFG; Research Center SFB 538; E7 Multilingualism): Critical periods for the acquisition of German and of German Sign Language: Is being multilingual of any advantage? PI: Brigitte Röder. Project grant: 354.800 €.
- 2005-2008: BMBF: 01GO0510: NeurolmageNord (PIs: Christian Büchel, Günther Deuschl, Andreas Engel, Detlef Kömpf, Dieter Naber, Brigitte Röder, Hermann Zeumer). Total grant: 2.000.000 €.
- 2005-2008: German Research Foundation (DFG: FOR 560): Perception and action; PIs: Frank Rösler, Brigitte Röder, Siegfried Bien. Project grant: 226.400 €.
- 2004-2007: German Research Foundation (DFG, GRK 885/1): Brain and behavior: Neuronal representation of action (Spoke persons: Karl Gegenfurtner, Frank Bremmer). Total grant: 1.036.833 € (Project grant: 60.000 €).
- 2000-2004: German Research Foundation (DFG: FOR 254/2-1, 2-4, C1): High density EEG recordings during the activation of semantic and episodic memory. PIs: Frank Rösler, Brigitte Röder, Siegfried Bien.
- 2000-2004: German Research Foundation (DFG, FOR 254/2-1, 2-2, B1): Plasticity of neural representations in blind humans; PIs: Brigitte Röder, Frank Rösler, Siegfried Bien. Total grant: 200.000 €.
- 2000-2004: Emmy Noether Fellowship of the German Research Foundation (Ro 1226/4-1, 4-2, 4-3): Multisensory perception and compensatory plasticity in blind humans. PI: Brigitte Röder. Total grant: 700.000 €.
- 1998-2001: German-American Academic Council Foundation: TransCoop Program: Organization and Reorganization of auditory language functions in sighted and blind People (Brigitte Röder). Total grant: 50.000 DM.
- 1998: German Research Foundation (DFG, Ro 1226/3-1), Travel award (Brigitte Röder). Total grant: 2.400 DM.
- 1995-1997: German Research Foundation (DFG, Ro 1226/1-2), Research Grant: Developmental plasticity („Entwicklungsbedingte Plastizität“) (PI: Brigitte Röder). Total grant: 110.000 DM.
- 1990: Student grant of the Dr. Wolff'sche foundation (Brigitte Röder).
- 1985-1986: Grant for talent High-school students (Brigitte Röder).

PROFESSIONAL SOCIETIES

Deutsche Gesellschaft für Psychologie (DGPs)

Deutsche Gesellschaft für Psychophysiologie und ihre Anwendung (DGPA)

Gesellschaft für Neuropsychologie (GNP)
Indian Academy of Neurosciences (IAN)
International Multisensory Research Forum (IMRF)
International Neuropsychological Symposium (INS)
Neurowissenschaftliche Gesellschaft (NWG)
Society for Neuroscience (SfN)
Society for Psychophysiological Research (SPR)
Wilhelm Wundt-Gesellschaft (WWG)

MAJOR RESEARCH INTEREST

Multisensory processes and human brain development: Experience dependent functional and structural changes of the human brain during development. Neuroplasticity as a result of sensory deprivation and sensory restitution, perceptual-cognitive training and physical exercise. Research methods include behavioral and electrophysiological techniques as well as structural and functional magnetic resonance imaging (fMRI).

REVIEW ACTIVITY

Journals

Brain
Brain and Cognition
Brain Research
Brain Research Bulletin
BMC Neuroscience
British Journal of Ophthalmology
Canadian Journal of Experimental Psychology
Cerebral Cortex
Clinical Neurophysiology
Cognition
Cognitive Brain Research
Communications Biology
Current Directions in Psychological Science
Current Biology
Developmental Psychobiology
Developmental Science
EBioMedicine
Elife
European Journal of Neuroscience
Experimental Brain Research
Frontiers in Integrative Neuroscience
Hearing Research
Infant and Child Development
iScience

Journal of Cognitive Neuroscience
Journal of Dental Research
Journal of Neurophysiology
Journal of Neuroscience
Journal of Vision
Nature
Nature Neuroscience
Neurocase
Neuroimage
Neuropsychologia
Neuroscience
Neuroscience and Biobehavioral Reviews
Neuroscience Letters
Perception
PNAS
Progress in Neurobiology
Psychophysiology
Psychological Bulletin
Psychological Research
Restorative Neurology and Neuroscience
Science
Science Advances
The European Journal of Cognitive Psychology
The Quarterly Journal of Experimental Psychology
Trends in Cognitive Sciences
Trends in Neuroscience
Visual Cognition
Zeitschrift für Neuropsychologie
Zeitschrift für Psychologie

Grants

Alexander von Humboldt Foundation (Germany)
European Research Council (ERC)
Federal Ministry of Education and Research
(BMBF; Germany)
German Research Foundation (DFG, Germany)
German National Academy of Sciences Leopoldina
Le Fonds de la Recherche Scientifique (FNRS)
Max Planck Society (Germany)
Medical Research Council (U.K.)
Minerva Foundation (Germany)
National Science Foundation (U.S.)
The Wellcome Trust (U.K.)

ORGANIZED SYMPOSIA AND CONFERENCES

Annual Hector Fellow Academy Symposium "Why children and adults learn differently", Hamburg (Germany), July 11, 2024.

49th Annual Meeting „Psychologie und Gehirn“ (PuG) 2024, Hamburg (Germany), May 29 - Juni 1, 2024 (co-organizer).

Symposium "Functional and structural changes in the brain due to exercise", Sports, Medicine and Health Summit 2021, virtual congress, April 20-24, 2021 (together with Kirsten Hötting).

INSA-Leopoldina Symposium "The challenge to learn: New approaches to study the problem of stability vs. plasticity in the brain", Hyderabad (India), November 28-29, 2017 (together with D. Balasubramanian, Jozsef Fiser, Neeraj Jain).

Symposium "Frequency-tagging to understand brain function", International Neuropsychological Symposium (INS), Sitia (Greece), June 20-24, 2017 (together with Jeason Mattingly and Bruno Rossion).

Invited Symposium "Developmental Cognitive Neuroscience: Where Experimental Psychology, Developmental Psychology and Neuroscience Meet". 50th Conference of the German Society of Psychology, Leipzig (Germany), September 18-22, 2016 (together with Erich Schröger).

INSA-Leopoldina Workshop "Brain and Eye", in Hyderabad (India), February 1-2, 2016 (together with D. Balasubramanian).

Lecture of the award winner of the European Science Award of the Körber Foundation (May-Britt Moser and Edvard Moser), Hamburg (Germany), September 4, 2014 (co-organizer).

20th Meeting of the Organization of Human Brain Mapping, Hamburg (Germany), June 8-12, 2014 (member of the local organization board).

Symposium "Multisensory neural maps for body schema, action and perception: development and dysfunction." International Neuropsychological Symposium, INS, Nerja (Spain), June 24-29, 2013 (together with Elisabetta Ladavas, E. & Maria Concetta Morrone).

Symposium "Cortical connectivity of crossmodal interactions". Annual meeting of the German Society of Neuroscience. March 2013, Göttingen (Germany) (together with Till Schneider).

Conference “13th International Multisensory Research Forum’, Oxford (U.K.), June 19-June 22, 2012. Member of the organizational board.

Symposium “Neurobiological and psychological determinants of socialisation: Consequences for economy and education II“. January 26-27, 2012 (together with Frank Rösler and Ursula Staudinger).

Symposium “Neurobiological and psychological determinants of socialisation: Consequences for economy and education I“. December 8-9, 2011 (together with Frank Rösler and Ursula Staudinger).

Conference “11th International Multisensory Research Forum’, Liverpool (U.K.), June 16-June 19, 2010. Member of the organizational board.

Conference “10th International Multisensory Research Forum’, New York (U.S.), June 29-July 2, 2009. Member of the organizational board.

Annual Meeting of the Wilhelm-Wundt-Society, Hamburg (Germany), May 21-23, 2009.

Workshop series "Rovereto Workshop on Crossmodal Plasticity"; first workshop: "Crossmodal plasticity in deafness and cochlear implant", Rovereto (Italy) August 27-29, 2009. Co-organizer (with Francesco Pavani, University of Trento, Italy; Pascual Baron, University of Toulouse, France).

Second Sino-German Frontiers of Science Symposium (Alexander von Humboldt Foundation; Chinese Academy of Science), Frankfurt (Germany), May 14-17, 2009. Organizer of the Neuroscience session (together with Xiang Yu, Chinese Academy of Science, Shanghai).

Conference “9th International Multisensory Research Forum”, Hamburg (Germany); July 16-19, 2008. Main organizer.

Conference „Neuroimaging and Psychological Theories of Human Memory“, Marburg, August 2-5, 2006. (with F. Rösler, C. Ranganath, R.H. Kluwe).

Symposium: “Multisensory processing in human cognition.” Annual meeting of the Society of Cognitive Science (*Jahrestagung der Gesellschaft für Kognitions-wissenschaft*), Saarbrücken, March 19-23, 2007.

Symposium: “What sensory deprivation studies tell us about multisensory processing” 5th “International Multisensory Research Forum’, Barcelona (Spain), June 2-5, 2004.

Conference “5th International Multisensory Research Forum’, Barcelona (Spain), June 2-5, 2004. (Member of the organizational board).

Symposium: „Multisensorik und Handlungssteuerung“; Tagung der Experimentell arbeitender Psychologen (TEAP), Giessen (Germany), April 2004 (with J. Trommershäuser, University of Giessen (Germany)).

SELECTED INVITED PRESENTATIONS

(see abstracts too)

Research Academy of the Max Planck School of Cognition (Berlin, Germany):

"Dissecting the visual processing hierarchy with non-invasive electrophysiology approaches in humans", December 5, 2024

Maastricht University (Maastricht, The Netherlands): "The role of early visual experience for the development of the human visual system", November 11, 2024

The Heidelberg Laureate Forum (Heidelberg, Germany) Podium "The paradox of AI. Smarter than a grandmaster but more ignorant than a toddler"; statement "Machine learning vs. human learning", September 24, 2024

Annual Hector Fellow Academy Symposium (Hamburg, Germany): "How important is early childhood experience for human brain development?", July 11, 2024.

Annual meeting of the Wilhelm Wundt Society (WWG) (Leipzig, Germany): „Wie uns Forschung zur Sehrestitution hilft die menschliche Gehirnentwicklung zu verstehen“, May 3, 2024.

Conference on Cognitive Science and Human Development: A Transdisciplinary International Conclave (ACCL) (University of Hyderabad, India): "The role of visual experience for the development of active vision and underlying neural representations", February 12-14, 2024.

Annual meeting of the Center for Mind, Brain and Behavior (CMBB) (Gießen, Germany): „The role of visual experience for the development of active vision and underlying neural representations“, October 5, 2023.

Karolinska Institute (Stockholm, Sweden). "Recovery from congenital blindness: A model to study the mechanisms of sensitive periods in humans." May 25, 2023.

Rotary Club Hamburg-Elbe (Hamburg, Germany): Research visit at the LV Prasad Eye Institute, Hyderabad, India. March 30, 2023.

CEU Budapest (Budapest, Hungary): Recovery from congenital blindness: A model to study the mechanisms of sensitive periods in humans. March 24, 2023.

Indian Institute of Technology (Gandhinagar, India): How research in sight restoration helps us understanding human brain development. February 14, 2023.

23rd Congress "European Association for Vision and Eye Research" (EVER) 2022 (Valencia, Spain): Keynote "Brain mechanism of sight recovery". October 13, 2022.

47th Annual Meeting „Psychologie und Gehirn“ (PuG) 2022 (Freiburg, Germany): Keynote „Wie frühkindliche Erfahrungen das menschliche Gehirn formen“. June 18, 2022.

Alfried Krupp Wissenschaftskolleg Greifswald (Greifswald, Germany): „Sensible

- Phasen in der menschlichen Hirnentwicklung untersucht am Modell von Blindheit und Sehrestitution“. May 31, 2022.
- University College London** (online lecture): “Recovery of visual and multisensory functions after congenital cataract surgery”. January 11, 2022.
- Max Planck Institute for Human Cognitive and Brain Sciences** (online lecture): “The role of experience for the development of visual and multisensory functions”. November 25, 2021.
- Max Planck School of Cognition** (online lecture): “Multisensory processing and age-dependent neuroplasticity”. September 2, 2021.
- World Wide Web seminar “Multisensory Perception Talks”** (online lecture): “Multisensory development and the role of visual experience”. June 17, 2021.
- Champalimaud Research Symposium Hyderabad** (India) (online lecture): “How neuroscience helps to understand functional recovery after congenital cataract surgery”. January 31, 2021.
- Hamburg Institute for Advanced Study (HIAS)** (online lecture): “Age dependent learning: Sensitive periods in human brain development”. October 22, 2020.
- Goethe Center Hyderabad** (online lecture): “Brain mechanisms of sensitive periods”. August 28, 2020.
- 21st Ophthalmologists’ Meeting, Augen-Praxis-Klinik Esslingen** (Esslingen, Germany): „Die Rolle der frühkindlichen Seherfahrung auf die visuelle und audiovisuelle Wahrnehmung“, February 1, 2020.
- Max Planck School of Cognition** (Berlin, Germany): “An introduction to neuroplasticity”, January 10, 2020.
- Rotary Club Hamburg-Deichtor** (Hamburg, Germany): “Die Rolle frühkindlicher Erfahrung für die menschliche Gehirnentwicklung”, November 25, 2019.
- Science Academy in Hamburg** (Hamburg, Germany): „Research at the interface between Psychology and Neuroscience“, November 18, 2019.
- Annual Meeting of the Society for Neuroscience** (Chicago, US): German Social keynote “Sensitive period plasticity in humans”, October 21, 2019.
- Science Academy in Hamburg** (Hamburg, Germany): „Plastizität neuronaler Netzwerke als Grundlage von menschlichem Lernen in der Entwicklung und im Erwachsenenalter“, May 5, 2019.
- Central European University** (Budapest, Hungary): “Multisensory integration and crossmodal recalibration”, March 27, 2019.
- Visual function acquisition in normal development and following emergence from blindness Workshop** (Jerusalem, Israel): “The privilege of the first arriving input in human brain development”, December 16-18, 2018.
- Low Vision and the Brain** (Berlin, Germany): “Functional recovery after cataract surgery”, December 1, 2018.
- University of Lübeck** (Lübeck, Germany): “Learning in development vs. adulthood: Sensitive phases in human brain development”, November 6, 2018.
- The Blind Brain Workshop** (Lucca, Italy): “Experience dependent development of neural network dynamics”, October 11-13, 2018.
- New Horizons in Vision and Hearing Research** (Center for Neurosensory Systems

(Tübingen, Germany): Evening Lecture “Neural correlates of sensory restitution in humans”, March 5, 2018.

LV Prasad Eye Institute Eleventh Annual Champalimaud Symposium (Hyderabad, India): Keynote “The neural basis of sight recovery after cataract surgery”, January 28, 2018.

LV Prasad Eye Institute (Hyderabad, India): “Neuroplasticity”, January 17, 2018.

Indian Institute for Science, Education and Research (Kolkata, India): “Early experience leaves permanent traces in the human brain”, January 5, 2018.

Brain Modes (Manesar, India): “Experience and age dependent development of neural representation”, December 13, 2017.

Center for Advanced Studies in Dubrovnik (Croatia), Spring School Rethinking the senses: “Experience shapes multisensory functions”, April 4, 2017.

University Jena, Spring School on Cortical Feedback (Germany): “Crossmodal plasticity and learning differ in development and adulthood”, March 8, 2017.

Utrecht University, Experimental Psychology Department (Netherlands): Invited keynote “The visual influence on spatial representations”, February 24, 2017.

Durham University, Psychology Department (U.K): “Experience dependent multisensory development“, February 3, 2017.

XXXIV Annual Meeting of Indian Academy of Neurosciences, Manesar (India): Special Lecture “Experience-dependent development of (multi)sensory functions”, October 20, 2016.

German Society of Psychology 50th Anniversary Meeting (Leipzig, Germany). Keynote “Sensitive periods in human neuro-cognitive development”, September 22, 2016.

Leibniz-Lecture in Hyderabad (Hyderabad, India): “Sensitive phases in human brain development”, February 3, 2016.

Hertie Stiftung/FAZ Reihe „Hirnforschung, was kannst du?“ (Frankfurt Germany): „Altersabhängige Lernplastizität des menschlichen Gehirns“, September 15, 2015.

IBRO, Rio de Janeiro (Brazil): DFG workshop “Research in Germany”, July 10, 2015.

New Delhi, German House for Research and Innovation (India): First Leopoldina-Leibniz Lecture “Age-dependent learning plasticity in humans”, January 21, 2015.

New Delhi, National Brain Research Center (India): “Multisensory processing and neuroplasticity”, January 20, 2015.

Pune, ISSA (India): “The role of experience in brain development”. January 15, 2015.

29th Hamburg day of sportmedicine (Hamburg, Germany): “Sport medicine from the perspective of a neuropsychologist”, December 9, 2014.

Delmenhorst, Institute for Advanced Study (Germany): “Age dependent learning plasticity”, November 27, 2014.

Herrenhausen Seminar, Hannover (Germany): “Sensitive periods in humans: The visual deprivation approach”, November 25, 2014.

Universitätsgesellschaft Hamburg (Germany): “How experience shapes brain and behavior”, October 8, 2014.

University of Leuven (Belgium): “Development, sensitive phases and adult recalibration of multisensory processes”, September 28, 2014.

German National Academy, Annual Meeting in Rostock (Germany): “Multisensory Processing”, September 19, 2014.

Rotary Club Hamburg-Altstadt (Germany): “Sensible Phasen in der menschlichen Gehirnentwicklung”, September 1, 2014.

University of Hamburg (Germany): “Sensible Phasen in der menschlichen Gehirnentwicklung”, May 14, 2014.

Osnabrück Computational Cognitive Alliance Meeting (Germany): Keynote “Plasticity of multisensory functions: Spatial recalibration, emotional and motivational influences”, May 7, 2014.

Summerschool German-Chinese graduate school (Beijing, China): “Developmental plasticity of multisensory functions”, September 9, 2013.

Chinese Academy of Science, Institute for Automation (Beijing, China): “Plasticity of multisensory functions”, September 9, 2013.

Sino-German Workshop (Hamburg, Germany): “Why do critical periods exist in development“, September, 2, 2013.

International Neuropsychological Symposium (Nerja, Spain): “The role of experience in multisensory development and processing”, June 26, 2013.

Central European University Budapest (Hungary): “Developmental and adult plasticity of multisensory function”, May 22, 2013.

Radboud University Nijmegen (The Netherlands): “Multisensory processing: development, sensitive phases and adult recalibration”, May 14, 2013.

Sixth Annual Champalimaud Research Symposium (Hyderabad, India): Invited presentation “Functional recovery after cataract surgery shows age dependent neural plasticity in humans”, January 30, 2013.

University for Music and Theater, Rostock. Invited presentation. “Kompensatorische Lernplastizität bei blinden Menschen”, January, 12, 2013.

University of Hamburg, Medical Faculty. “Altersabhängige Lernplastizität untersucht am Modell der sensorischen Deprivation beim Menschen”, August 17, 2012.

Fifth Annual Champalimaud Research Symposium (Hyderabad, India): Invited presentation “Functional recovery of visual and multisensory functions after a transient phase of total congenital blindness”, January 30, 2012.

German National Academy Leopoldina (Potsdam, Germany), Initiative “Neurobiological and psychological factors of socialization: Consequences for economy and education”: “Critical periods”, December 8, 2011.

Jacobs University Bremen (Germany): “Crossmodally generated shifts of auditory localization”, December 6, 2011.

German Rectors’ Conference (Frankfurt, Germany): “ERC advanced investigators grant”, October 10, 2011.

University of Zürich, Neuropsychology: “The experience dependence of multisensory development”, May 18, 2011.

Ludwig-Maximilians University München, Psychology: “Crossmodal generated shifts of auditory localization”, February 9, 2011.

Lübeck, 23rd Workshop for early interventions in blind individual: Keynote: “Compensatory plasticity in the blind”, January 21, 2011.

University of Edinburgh, Center for Cognitive and Neural Systems: „Reference Frames for multisensory interactions“, November 25, 2010.

International Conference on Parietal lobe Functions, Amsterdam: “Crossmodally generated shifts of auditory localization”, September 21, 2010.

Bewegung und Leistungssport, Hamburg: Keynote “Sport und Kognition, September 2, 2010.

Body Representation Workshop, London: invited theme talk: “Development plasticity of reference frames for touch”, March 29, 2010.

Max Planck Institute for Human Cognition and Brain Sciences: “What do we learn from multisensory processes about age dependent neural plasticity in humans?”, July 17, 2009.

Max-Planck Institute (Center for Lifespan Psychology), Berlin: “The visual deprivation approach to study (multi)sensory development in humans”, March 24, 2009.

Tactile Research Group; Chicago: “Spatial reference frames for tactile perception”, November 13, 2008.

Les Diablerets, Lemanic-Neurosciences Annual Meeting: Keynote: „Development and plasticity of multisensory functions“, September 12, 2008.

University of Saarbrücken: „Multisensory space“, May 21, 2008.

Chinese-German Frontiers in Science, Beijing: “What is Neuroplasticity?”, March 13, 2008.

Chinese Academy of Science, Shanghai: “Multisensory processing and the sensory deprivation approach”, March 10, 2008.

University of Frankfurt: “The critical role of developmental vision for (multi)sensory perception”, December 6, 2007.

Polytechnische Gesellschaft, Frankfurt: “Wie Blinde den Verlust eines Sinnessystems kompensieren”, October 2, 2007

University of Oldenburg: “Multisensory functions are shaped by developmental vision”, July 16, 2007.

University of Oxford: “Developmental vision shapes multisensory processes”, May 8, 2007.

University of Hamburg (21. Hamburger Tage der Sport und Bewegungsmedizin): „Bewegung und Neuroplastizität“, April 14, 2007.

Nürnberg („Turm der Sinne“): “Sensory perception and language comprehension in the blind: the plastic brain”, September 23, 2006.

Martin Luther University Halle-Wittenberg: “Interaktionen der Sinnessysteme und crossmodale Kompensation“, July 4, 2006.

Ärztchammer Hamburg: “Kompensatorische Plastizität des Gehirns“, April 11, 2006.

University of Würzburg: “How the senses interact and how vision influences multisensory perception“, Januar 16, 2006.

Verband der Blinden- und Sehbehindertenpädagoginnen/innen, Hannover: “Wie Blinde sehen – Neuronale Grundlagen kompensatorischer Leistungen bei blinden Menschen“, December 10, 2005.

Dartmouth College (Hanover, U.S.), “Summer School in Cognitive Neuroscience”:

"What we learn from the blind about neuroplasticity, July 29, 2005.

University of Karlsruhe: Study Centre for the Visual Impaired: "How the blind perceive the world" December 13, 2004.

University of Lausanne; University Hospital, Neuropsychology: "Multisensory processes and their fate in the blind"; November 18, 2004.

University of Konstanz: "The blind brain", October 22, 2004.

University of London, Institute for Cognitive Neuroscience: "What we learn from the blind about multisensory processes", October 4, 2004.

Max-Planck-Institute for Psychology, Munic: "Multisensory perception and cross-modal compensation", December 10, 2003.

University Bochum, Graduate School Neuroscience: "Blindness: A Model to study Neuronal Plasticity" November 17, 2003.

Potsdam, Emmy-Noether lecture "Wie Blinde den Verlust eines Sinnessystems kompensieren", July 19, 2003.

Justus-Liebig University Giessen, Experimental Psychology: "Multisensory perception and compensatory plasticity in the blind", April 18, 2003.

University Tübingen, Cognitive Neurology: "Multisensory representations of space and the contribution of visual", January 23, 2003.

Max-Planck-Institute for Biological Cybernetics, Tübingen: "Spatial cognition without vision", November 22, 2002.

Wellcome Department of Imaging Neuroscience, London (U.K.) "Compensatory changes in perceptual-cognitive functions as a consequence of visual deprivation in humans", November 8, 2002.

Tamagawa University, Brain Science Research Center (Japan): "Compensatory changes in perceptual and higher cognitive functions as a consequence of visual deprivation in humans", August 2, 2002.

Tsukuba University, Neuroscience Research Institute (Japan): "Compensatory plasticity in congenitally blind humans", July, 23, 2002.

Philipps-University Marburg, Studium Generale: "Ist bei Blinden alles anders? Wie das Gehirn den Ausfall einer Sinnesmodalität kompensiert, June 19, 2002.

Max-Planck Institute for Brain Research, Frankfurt: "What we learn from the blind about plasticity of auditory functions", May 9, 2002.

University of Bremen: "Kompensatorische Plastizität bei blinden Menschen", December 10, 2001.

Hanse Wissenschaftskolleg Delmenhorst: "The principles of brain plasticity", March 8, 2001.

University of Greifswald; Psychology Department: "Compensatory plasticity in the blind", December 13, 2000.

Otto-von-Guericke-University Magdeburg; Psychology Department: "Auditory compensation in blind humans", July 4, 2000.

University of Braunschweig; Psychology Department: "Compensatory plasticity in blind humans", November 23, 1999.

Johann-Wolfgang Goethe University Frankfurt, Psychophysiology Department III: "Neuroplasticity in blind humans". June 23, 1999.

Heinrich-Heine University Düsseldorf: Psychophysiological Department: "Electrophysiological indices of neuronal plasticity in blind humans", January 29, 1999.

University of Marburg, Neuroscience group: "Neural Plasticity in blind humans", January 14, 1999.

University of Leipzig: "Behavioral and electrophysiological indices of compensatory memory performance in blind compared to sighted adults". December 2, 1998.

University of Oregon, Eugene, Institute of Cognitive & Decision Sciences - Colloquium: "Event-related potentials indicating neural plasticity in blind human subjects", Eugene, December 2, 1996.

University of Washington, Seattle: "Slow and phasic event-related potentials in blind and sighted human subjects", January 1996.

University of Illinois, Urbana-Campaign: "Haptic mental rotation in blind and sighted human subjects", September 1993.

PUBLIC OUTREACH

(selected public outreach activities since 2014)

International neuroscience research. Can People Born Blind Learn to See? Interview with Brigitte Röder by Anna Priebe. Newsroom of the University of Hamburg, Doing the Research series 38, 04.12.2024. <https://www.uni-hamburg.de/en/newsroom/forschung/2024/1203-fv-38-pb-gehirnforschung.html>

in German: *Internationale neuro-psychologische Forschung. Können blind geborene Menschen Sehen lernen?* Interview with Brigitte Röder by Anna Priebe. Newsroom of the University of Hamburg, Doing the Research series 38, 04.12.2024 <https://www.uni-hamburg.de/newsroom/forschung/2024/1203-fv-38-pb-gehirnforschung.html>

Why Do Children and Adults learn differently? Annual Symposium of the Hector Fellow Academy (Hamburg, Germany), July 11, 2024. Film by the Hector Fellow Academy. Published on YouTube, 16.07.2024. <https://www.youtube-nocookie.com/embed/ofR2VaTYYt4?rel=0>

in German: *Wieso lernen Kinder anders als Erwachsene?* Annual Symposium of the Hector Fellow Academy (Hamburg, Germany), July 11, 2024. Film by the Hector Fellow Academy. Published on YouTube, 16.07.2024. <https://www.youtube-nocookie.com/embed/TArL7PjHfFg?rel=0>

Fascinating Brain – Brigitte Röder and Her Research on Neuroplasticity. Film by the Hector Fellow Academy. Published on YouTube, 22.02.2024. <https://www.youtube-nocookie.com/embed/cfwOoVsnUc?rel=0>

in German: *Faszination Gehirn – Brigitte Röder und ihre Forschung zur Neuroplastizität.* Film by the Hector Fellow Academy. Published on YouTube,

22.02.2024. <https://www.youtube-nocookie.com/embed/AZy31wrThgU?rel=0>

Plastizität neuronaler Netzwerke als Grundlage von menschlichem Lernen in der Entwicklung und im Erwachsenenalter. Talk by Brigitte Röder within the lecture series "Das intelligenteste Netzwerk der Welt: Unser Gehirn" by the Academy of Sciences and Humanities in Hamburg (Hamburg, Germany) 09.05.2019. <https://www.awhamburg.de/veranstaltungen/aktuelle-termine/details/plastizitaet-neuronaler-netzwerke-als-grundlage-von-menschlichem-lernen-in-der-entwicklung-und-im-erwachsenenalter.html>

Vom Dunkel ins Licht. Article by Alexander Krex, Photographies by Helena Schätzle. Geo, 12/2017, S. 82-96.

Wenn das Gehirn sich formen lässt. Article by Brigitte Röder. Frankfurter Allgemeine Zeitung (FAZ), 23.09.2015, Nr. 221, Natur und Wissenschaft, S. N2.

Wahnsinn trifft Methode: „Wahrheit“. Round table discussion at the Thalia Nachtsyl (Hamburg, Germany) 23.06.2015. Published on YouTube, 12.07.2015. <https://www.youtube-nocookie.com/embed/PQux3LKavxo?rel=0>

Frühkindliche Bildung. Was Hänschen nicht lernt. Report on the podium discussion at the Academy of Sciences and Humanities in Hamburg in cooperation with the German National Academy of Sciences *Was Hänschen nicht lernt...? Ergebnisse zur frühkindlichen Sozialisation aus Biologie, Psychologie, Linguistik und Ökonomie* (Hamburg, Germany) 03.12.2014. Editorial and moderation by Hans-Jürgen Bartsch. Deutschlandfunk Nova, Hörsaal, 11.01.2015. <http://dradiowissen.de/beitrag/frühkindliche-bildung-grenzen-und-möglichkeiten>

Was Hänschen nicht lernt...? Ergebnisse zur frühkindlichen Sozialisation aus Biologie, Psychologie, Linguistik und Ökonomie. Podium discussion at the Academy of Sciences and Humanities in Hamburg in cooperation with the German National Academy of Sciences (Hamburg, Germany) 03.12.2014. Published on YouTube, 10.12.2014. <https://www.youtube.com/embed/C7K8fUDoM6U?si=c4D8PQEDRrvPynCYrel=0>

Die Visionärin. Portrait of Brigitte Röder. Gehirn und Geist. Das Magazin für Psychologie und Hirnforschung, 11/2014, 44f. <http://www.spektrum.de/magazin/profil-neuropsychologin-brigitte-roeder/1311578>

Socialisation in early childhood. Biological, psychological, linguistic, sociological and economic perspectives. Statement. German National Academy of Sciences Leopoldina, acatech – German Academy of Science and Engineering, The Union of the German Academies of Sciences and Humanities, July 2014. https://www.leopoldina.org/uploads/tx_leopublication/2014_Stellungnahme_Sozi

[alisation EN web.pdf](#)

https://www.leopoldina.org/uploads/tx_leopublication/2014_Stellungnahme_Sozialisation_KURZ_EN_web.pdf (short version).

In German: *Frühkindliche Sozialisation. Biologische, psychologische, linguistische, soziologische und ökonomische Perspektiven.* Stellungnahme. Nationale Akademie der Wissenschaften Leopoldina, acatech – Deutsche Akademie der Technikwissenschaften, Union der deutschen Akademie der Wissenschaften, Juli 2014.

https://www.leopoldina.org/uploads/tx_leopublication/2014_Stellungnahme_Sozialisation_web.pdf

https://www.leopoldina.org/uploads/tx_leopublication/2014_Stellungnahme_Sozialisation_KURZ_web.pdf (short version).

TEACHING EXPERIENCE

(a) Psychology Department, Philipps-University Marburg (Germany):

Courses: (1) Experimental Psychology ("ERP-correlates of subjective expectancy"), (2) Experimental Psychology ("Haptic Memory"), (3) Experimental Psychology ("Short-term Memory"), (4) Experimental Psychology ("Image Scanning"), (5) Experimental Psychology ("Visual spatial attention"), (6) Experimental Psychology ("False Memory") (7) "Distortion of egocentric reference frames", (8) "Attention to motion".

Seminars: (1) "Mental workload in the working environment", (2) "Attention and mental workload", (3) "Marketing psychology and psychology of advertising", (4) "Topics in Psychophysiology", (5) "Plasticity of cortical representations", (6) "Brain development and plasticity", (7) "Perception and Attention", (8) "Auditory Perception", (9) "Introduction to Psychology", (10) "Developmental Cognitive Neuroscience", (11) "Haptic memory", (12) "Psychology of attention", (13) "Introduction to the Cognitive Neurosciences", (14) "Multisensory perception", (15) "Cognitive neuroscience applied", (16) "Biological Psychology".

Lectures: (1) "Perception", (2) "Introduction to the Cognitive Neurosciences".

(b) Psychology Department, University of Hamburg (Germany):

Lectures: (1) "Introduction to the Cognitive Neurosciences", (2) "Biological Psychology", (3) "Methods in Cognitive Neuroscience", (4) "Developmental Cognitive Neuroscience", (5) "Sensitive Periods".

Courses: (1) "Introduction to the Cognitive Neurosciences", (2) "Experimental demonstrations", (3) "Experimental methods".

Seminars: (1) "Cognitive Neuroscience", (2) "Neuroplasticity", (3) "How we perceive the world, speak, think and act", (4) "Cognitive Neuroscience and aging", (5) Doctoral Seminar, (6) "Biological Psychology", (7) "Neuroscience of Attention", (8) "Multisensory processes", (9) "Developmental Cognitive Neuroscience", (10)

Science seminar.

(c) *Psychology Department, University of Oregon, Eugene (U.S.):*

Seminars: (1) "Brain development".

(d) *Summer and Spring schools (see talks)*

PHD CANDIDATES AND POSTDOCS

Finished Doctoral Theses: Stephanie Badde, Angelika Becker (co-supervision), Anton Beer, Malte Bieler (co-supervision), Patrick Bruns, Ineke Fengler, Ingo Fleischer, Julia Föcker, Matthias Gondan, Helene Gudi, Marlene Hense, Tobias Heed, Cordula Hölig (co-supervision), Kirsten Hötting, Kathrin Holzschneider, Alexander Kramer, Anne Kriegseis, Laura Kuhne (co-supervision), Kathrin Lange, Pia Ley, Madita Linke, Mario Maiworm, Valeria Occelli (co-supervision), Lisa Putzar, Chiara Renzi (co-supervision), Ann-Kathrin Rogge, Sophie Rohlf, Ulrike Schild (co-supervision), Daniela Schönberger, Thomas Schröder, Jonathan Schubert (co-supervision), Kai Sieben (co-supervision) Nils Skotara, Suddha Sourav, Liesa Stange, Oliver Stock (co-supervision), Anna-Lena Stroh, Ralf Sürig, Agnes Villwock Andreas Weiß, Zhenzhu Yue (co-supervision), Dan Zhang (co-supervision), Liang Zhang (co-supervision), Björn Zierul.

Current Doctoral Candidates: Duygu Bayir, Jordan Hassett, Carolin Heitmann, Waqar Khan, Cora Kubetschek, Tiago Mesquita, Sina Storm.

Past Postdocs: Stephanie Badde, Rakesh Balachandar, Davide Bottari, Patrick Bruns Thérèse Collins, Aline de Borst, Maria de Sousa Guerreiro, Giulia Dormal, Claudia Friedrich, Margriet Groen, Boukje Habets, Barbara Hänel-Faulhaber, Tobias Heed, Kirsten Hötting, Kishore Jagini, Lux Li, David Magezi, Elena Nava, Krista Overvliet, Kabilan Pitchaimuthu, Siddhart S. Rajendran, Ann-Kathrin Rogge, Ralf Sürig, Jonathan Tong, Sina Trautmann.

Current Postdocs: Hossein Abbasi, Cordula Hölig, Gargi Majumdar, José Ossandón, Rashmi Pant, Katarzyna Rączy, Diane Rekow.

PUBLICATIONS

Journals

2025

- P228. Bruns, P., Paumen, T., & Röder, B. (2025). Perceptual training of audiovisual simultaneity judgments generalizes across spatial locations. *Perception*, in press.
- P227. Bruns, P., Dinse, H. R., & Röder, B. (2025). Higher-order visual location learning does not explain multisensory enhancement of sound localization (Reply to Vroomen & Stekelenburg, 2021). *European Journal of Neuroscience*, 61, e70132. <https://doi.org/10.1111/ejn.70132>
- P226. Ossandón, J.P., Rossion, B., Dormal, G., Kekunnaya, R., & Röder, B. (2025). Impaired rapid neural face categorization after reversing long-lasting congenital blindness. *Cortex*, 187, 124-139. <https://doi.org/10.1016/j.cortex.2025.04.007>
- P225. Pant, P., Pitchaimuthu, K., Ossandón, J., Shareef, I., Lingareddy, S., Finsterbusch, J., Kekunnaya, R., & Röder, B. (2025). Altered visual cortex excitatory/inhibitory ratio following transient congenital visual deprivation in humans. *eLife*, 13, RP98143. <https://doi.org/10.7554/eLife.98143>

2024

- P224. Bruns, P., Thun, C., & Röder, B. (2024). Quantifying accuracy and precision from continuous response data in studies of spatial perception and crossmodal recalibration. *Behavior Research Methods*, 56(4):3814-3830. 56(4), 3814-3830. <https://doi.org/10.3758/s13428-024-02416-1>
- P223. Hötting, K., Shareef, I., Rogge, A.-K., Hamacher, D., Zech, A., Kekunnaya, R., Christy, B. & Röder, B. (2024). Posture control depends on early visual experience. *Journal of Vision*, 24(9), 3. <https://doi.org/10.1167/jov.24.9.3>
- P222. Overvliet, K., Postma, A., & Röder, B. (2024) Child development and the role of visual experience in the use of spatial and non-spatial features in haptic object perception. *Journal of Experimental Child Psychology*, 242, 10585. <https://doi.org/10.1016/j.jecp.2024.105885>
- P221. Schönberger, D., Bruns, P., & Röder B. (2024). Visual artificial grammar learning across one year in 7-year-olds and adults. *Journal of Experimental Child Psychology*, 241, 105864. <https://doi.org/10.1016/j.jecp.2024.105864>
- P220. Sourav, S., Kekunnaya, R., Bottari, D., Shareef, I., Pitchaimuthu, K., & Röder, B. (2024). Sound suppresses earliest visual cortical processing after sight recovery in congenitally blind humans. *Communications Biology*, 7(1), 118. <https://doi.org/10.1038/s42003-023-05749-3>
- P219. Sourav, S., Röder, B., Ambsdorf, F., Melissari, A., Arvaniti, M., & Vatakis, A. (2024). No evidence that sound-shape associations influence temporal resolution in humans: Five non-replications of Parise and Spence (2009) and meta-analyses.

Journal of Experimental Psychology: General. Advance online publication.
<https://dx.doi.org/10.1037/xge0001641>

- P218. Stroh, A.L., Overvliet, K., Zierul, B., Rösler, F., & Röder, B. (2024). Motor adaptation in deaf and hearing native signers. **Journal of Deaf Studies and Deaf Education**, 29(3), 335-349. <https://doi.org/10.1093/deafed/enae010>

2023

- P217. Bruns, P., & Röder, B. (2023). Development and experience-dependence of multisensory spatial processing. **Trends in Cognitive Sciences**, 27(10), 961-973.
<https://doi.org/10.1016/j.tics.2023.04.012>
- P216. Heitmann, C., Zhan, M., Linke, M., Hölig, C., Kekunnaya, R., van Hoof, R., Goebel, R., & Röder, B. (2023). Early visual experience refines the retinotopic organization within and across visual cortical regions. **Current Biology**, 33(22), 4950-4959.e4.
<https://doi.org/10.1016/j.cub.2023.10.010>
- P215. Hölig, C., Guerreiro, M.J.S., Lingareddy, S., Kekunnaya, R., & Röder, B. (2023). Sight restoration in congenitally blind humans does not restore visual brain structure. **Cerebral Cortex**, 33(5), 2152-2161.
<https://doi.org/10.1093/cercor/bhac197>
- P214. Kuhne, L.A., Ksiezarczyk, A.-M., Braumann, K.-M., Reer, R., Jacobs, T., Röder, B., & Hötting, K. (2022). Cardiovascular exercise, learning, memory, and cytokines: Results of a ten-week randomized controlled training study in young adults. **Biological Psychology**, 176, 108466.
<https://doi.org/10.1016/j.biopsycho.2022.108466>
- P213. Ossandón, J.P., Stange, L., Gudi-Mindermann, H., Rimmel, J.M., Sourav, S., Bottari, D., Kekunnaya, R., & Röder, B. (2023). The development of oscillatory and aperiodic resting state activity is linked to a sensitive period in humans. **NeuroImage**, 275, 120171. <https://doi.org/10.1016/j.neuroimage.2023.120171>
- P212. Pant, R., Ossandón, J.P., Stange, L., Shareef, I., Kekunnaya, R., & Röder, B. (2023). Stimulus-evoked and resting-state alpha oscillations show a linked dependence on patterned visual experience for development. **NeuroImage: Clinical**, 38, <https://doi.org/10.1016/j.nicl.2023.103375>
- P211. Stange, L., Ossandón, J.P., & Röder, B. (2023). Crossmodal visual predictions elicit spatially specific early visual cortex activity but later than real visual stimuli. **Philosophical Transactions of the Royal Society B**, 378(1886), 20220339.
<https://doi.org/10.1098/rstb.2022.0339>

2022

- P210. Bruns, P., Li, L., Guerreiro, M.J.S., Shareef, I., Rajendran, S.S., Pitchaimuthu, K., Kekunnaya, R., & Röder, B. (2022). Audiovisual spatial recalibration but not integration is shaped by early sensory experience. **iScience**, 25(6), 104439.

- <https://doi.org/10.1016/j.isci.2022.104439>
- P209. Guerreiro, M.J.S., Kekunnaya, R., & Röder, B. (2022). Top-down modulation of visual cortical processing after transient congenital blindness. *Neuropsychologia*, 174, 108338. <https://doi.org/10.1016/j.neuropsychologia.2022.108338>
- P208. Hänel-Faulhaber, B., Groen, M.A., Röder, B., & Friedrich, C.K. (2022). Ongoing sign processing facilitates written word recognition in deaf native signing children. *Frontiers in Psychology, Language Sciences*, 13, 917700. <https://doi.org/10.3389/fpsyg.2022.917700>
- P207. Ossandón, J., Zerr, P., Shareef, I., Kekunnaya, R., & Röder, B. (2022). Active vision in sight recovery individuals with a history of long-lasting congenital blindness. *eNeuro*, 9(5), ENEURO.0051-22.2022. <https://doi.org/10.1523/ENEURO.0051-22.2022>
- P206. Rączy, K., Hölig, C., Guerreiro, M.J.S., Lingareddy, S., Kekunnaya, R., & Röder, B. (2022). Typical resting state activity of the brain requires visual input during an early sensitive period. *Brain Communications*, 4(4), fcac146. <https://doi.org/10.1093/braincomms/fcac146>
- P205. Stroh, A.-L., Grin, K., Rösler, F., Bottari, D., Ossandón, J., Rossion, B., Röder, B. (2022). Developmental experiences alter the temporal processing characteristics of the visual cortex: Evidence from deaf and hearing native signers. *European Journal of Neuroscience*, 55(6), 1629-1644. <https://doi.org/10.1111/ejn.15629>
- P204. Villwock, A., Bottari, D., & Röder, B. (2022). Event-related potential correlates of visuo-tactile motion processing in congenitally deaf humans. *Neuropsychologia*, 170, 108209. <https://doi.org/10.1016/j.neuropsychologia.2022.108209>

2021

- P203. Guerreiro, M.J.S., Linke, M., Lingareddy, S., Kekunnaya, R., & Röder, B. (2021). The effect of congenital blindness on resting-state functional connectivity revisited. *Scientific Reports*, 11(1), 12433. <https://doi.org/10.1038/s41598-021-91976-9>
- P202. Hötting, K., Rogge, A.-K., Kuhne, L. A., & Röder, B. (2021). Balance expertise is associated with superior spatial perspective-taking skills. *Brain Sciences*, 11(11), 1401. <https://doi.org/10.3390/brainsci11111401>
- P201. Kuhne, L., Ksiezarczyk, A., Braumann, K.-M., Reer, R., Jacobs, T., Röder, B., & Hötting, K. (2021). The effects of acute cardiovascular exercise on memory and its associations with exercise-induced increases in neurotrophic factors. *Frontiers in Aging Neuroscience*, 13, 750401. <https://doi.org/10.3389/fnagi.2021.750401>
- P200. Lubinus, C., Orpella, J., Keitel, A., Gudi-Mindermann, H., Engel, A.K., Röder, B., Rimmele, J. M. (2021). Data-driven classification of spectral profiles reveals brain region-specific plasticity in blindness. *Cerebral Cortex*, 31(5), 2505-2522. <https://doi.org/10.1093/cercor/bhaa370>
- P199. Pant, R., Guerreiro, M.J.S., Ley, P., Bottari, D., Shareef, I., Kekunnaya, R., & Röder, B. (2021). The Size-Weight Illusion is unimpaired in individuals with a history of congenital visual deprivation. *Scientific Reports*, 11(1), 6693.

- <https://doi.org/10.1038/s41598-021-86227-w>
- P198. Pitchaimuthu, K., Dormal, G., Sourav, S., Shareef, I., Rajendran, S. S., Ossandón, J. P., Kekunnaya, R., & Röder, B. (2021). Steady state evoked potentials indicate changes in nonlinear neural mechanisms of vision in sight recovery individuals. *Cortex*, 144, 15-28. <https://doi.org/10.1016/j.cortex.2021.08.001>
- P197. Röder, B., and Kekunnaya, R. (2021). Visual experience dependent plasticity in humans. *Current Opinion in Neurobiology*, 67, 155-162. <https://doi.org/10.1016/j.conb.2020.11.011>
- P196. Röder, B., Kekunnaya, R. & Guerreiro, M.J.S. (2021). Neural mechanisms of visual sensitive periods in humans. *Neuroscience and Biobehavioral Reviews*, 120, 86-99. <https://doi.org/10.1016/j.neubiorev.2020.10.030>
- P195. Rogge, A.-K., Hamacher, D., Cappagli, G., Kuhne, L., Hötting, K., Zech, A., Gori, M., & Röder, B. (2021). Balance, gait, and navigation performance are related to physical exercise in blind and visually impaired children and adolescents. *Experimental Brain Research*, 239(4), 1111-1123. <https://doi.org/10.1007/s00221-021-06038-3>
- P194. Rohlf, S., Bruns, P., & Röder, B. (2021). The effects of cue reliability on crossmodal recalibration in adults and children. *Multisensory Research*, 34(7), 743-761. <https://doi.org/10.1163/22134808-bja10053>
- P193. Stroh, A.-L., Rösler, F., & Röder, B. (2021). The interaction of the visuo-spatial and the vestibular system depends on sensory experience in development. *Neuropsychologia*, 152, 107736. <https://doi.org/10.1016/j.neuropsychologia.2020.107736>

2020

- P192. Badde, S., Ley, P., Rajendran, S.S., Shareef, I., Kekunnaya, R., & Röder, B. (2020). Sensory experience during early sensitive periods shapes cross-modal temporal biases. *eLife*, 9, e61238. <https://doi.org/10.7554/eLife.61238>
- P191. Bottari, D., Bednaya, E., Dormal, G., Villwock, A., Dzhelyova, M., Grin, K., Pietrini, P., Ricciardi, E., Rossion, B., & Röder, B. (2020). EEG frequency-tagging demonstrates increased left hemispheric involvement and crossmodal plasticity for face processing in congenitally deaf signers. *NeuroImage*, 223, article 117315. <https://doi.org/10.1016/j.neuroimage.2020.117315>
- P190. Bruns, P., Dinse, H.R., & Röder, B. (2020). Differential effects of the temporal and spatial distribution of audiovisual stimuli on cross-modal spatial recalibration. *European Journal of Neuroscience*, 52(7), 3763-3775. <https://doi.org/10.1111/ejn.14779>
- P189. Gudi-Mindermann, H., Rimmele, J. M., Bruns, P., Kloosterman, N. A., Donner, T.H., Engel, A.K., & Röder, B. (2020). Post-training load-related changes of auditory working memory – An EEG study. *Frontiers in Human Neuroscience*, 14, 72. <https://doi.org/10.3389/fnhum.2020.00072>

- P188. Hartwigsen, G., Röder, B., Lischke, A., Kübler, A., Pauli, P. (2020). Fachgruppe Biologische Psychologie und Neuropsychologie: Neurobiologische Grundlagen von Entwicklung und Lernen über die Lebensspanne. Diskussionsforum: Kommentare zu Daum, M.M., et al. (2020). Positionspapier der Fachgruppe Entwicklungspsychologie: Versuch einer Standortbestimmung. **Psychologische Rundschau**, 71(1), 24-48 [Fachgruppe Biologische Psychologie und Neuropsychologie: 26-29].
- P187. Kramer, A., Röder, B., & Bruns, P. (2020). Feedback modulates audio-visual spatial recalibration. **Frontiers in Integrative Neuroscience**, 13, 74. <https://doi.org/10.3389/fnint.2019.00074>
- P186. Li, L., Rehr, R., Bruns, P., Gerkmann, T., & Röder, B. (2020). A survey on probabilistic models in human perception and machines. **Frontiers in Robotics and AI**, 7, 85. <https://doi.org/10.3389/frobt.2020.00085>
- P185. Rajendran, S.S., Bottari, D., Shareef, I., Pitchaimuthu, K., Sourav, S., Troje, N.F., Kekunnaya, R., & Röder, B. (2020). Biological action identification does not require early visual input for development. **eNeuro**, 7(5), ENEURO.0534-19.2020. <https://doi.org/10.1523/ENEURO.0534-19.2020>
- P184. Ricciardi, E., Bottari, D., Ptitto, M., Röder, B., & Pietrini, P. (2020). The sensory-deprived brain as a unique tool to understand brain development and function. [Editorial]. **Neuroscience and Biobehavioral Reviews**, 108, 78-82. <https://doi.org/10.1016/j.neubiorev.2019.10.017>
- P183. Rohlf, S., Li, L., Bruns, P., & Röder, B. (2020). Multisensory integration develops prior to crossmodal recalibration. **Current Biology**, 30(9), 1726-1732.e7. <https://doi.org/10.1016/j.cub.2020.02.048>
- P182. Sourav, S., Bottari, D., Shareef, I., Kekunnaya, R., & Röder, B. (2020). An electrophysiological biomarker for the classification of cataract-reversal patients: A case-control study. **EClinicalMedicine**, 27, 100559. <https://doi.org/10.1016/j.eclinm.2020.100559>
- P181. Tong, J.*, Li, L.*, Bruns, P., & Röder, B. (2020). Crossmodal associations modulate multisensory spatial integration. **Attention, Perception, & Psychophysics**, 82(7), 3490-3506. [*equal contribution]. <https://doi.org/10.3758/s13414-020-02083-2>
- P180. Zerr, P.*, Ossandón, J.P.*, Shareef, I., Van der Stigchel, S., Kekunnaya, R., & Röder, B. (2020). Successful visually guided eye movements following sight restoration after congenital cataracts. **Journal of Vision**, 20(7), 3. [*equal contribution]. <https://doi.org/10.1167/jov.20.7.3>

2019

- P179. Badde, S., Röder, B., & Heed, T. (2019). Feeling a touch to the hand on the foot. **Current Biology**, 29(9), 1491-1497.e4. <https://doi.org/10.1016/j.cub.2019.02.060>
- P178. Bruns, P., & Röder, B. (2019). Repeated but not incremental training enhances cross-modal recalibration. **Journal of Experimental Psychology: Human Perception and Performance**, 45(4), 435-440. <https://doi.org/10.1037/xhp0000642>

- P177. Bruns, P. & Röder, B. (2019). Spatial and frequency specificity of the ventriloquism aftereffect revisited. *Psychological Research*, 83(7), 1400-1415. <https://doi.org/10.1007/s00426-017-0965-4>
- P176. Föcker, J. & Röder, B. (2019). Event-related potentials reveal evidence for late integration of emotional prosody and facial expression in dynamic stimuli: An ERP study. *Multisensory Research*, 32(6), 473-497. <https://doi.org/10.1163/22134808-20191332>
- P175. Hense, H., Badde, S., Köhne, S., Dziobek, I., & Röder, B. (2019). Visual and proprioceptive influences on tactile spatial processing in adults with autism spectrum disorders. *Autism Research*, 12(12), 1745-1757. <https://doi.org/10.1002/aur.2202>
- P174. Hense, M., Badde, S., & Röder, B. (2019). Tactile motion biases visual motion perception in binocular rivalry. *Attention, Perception, & Psychophysics*, 81(5), 1715-1724. <https://doi.org/10.3758/s13414-019-01692-w>
- P173. Pitchaimuthu, K., Sourav, S., Bottari, D., Banerjee, S., Shareef, I., Kekunnaya, R., & Röder, B. (2019). Color vision in sight recovery individuals. *Restorative Neurology and Neuroscience*, 37(6), 583-590. <https://doi.org/10.3233/RNN-190928>
- P172. Rimmele, J., Gudi-Mindermann, H., Nolte, G., Röder, B. & Engel, A. (2019). Working memory training integrates visual cortex into beta-band networks in congenitally blind individuals. *NeuroImage*, 194, 259-271. <https://doi.org/10.1016/j.neuroimage.2019.03.003>
- P171. Rogge, A.-K., Hötting, K., Nagel, V., Zech, A., Hölig, C. & Röder, B. (2019). Improved balance performance accompanied by structural plasticity in blind adults after training. *Neuropsychologia*, 129, 318-330. <https://doi.org/10.1016/j.neuropsychologia.2019.04.005>
- P170. Schubert, J.T.W., Buchholz, V., Föcker, J., Engel, A., Röder, B., & Heed, T. (2019). Alpha-band oscillations reflect external spatial coding for tactile stimuli in sighted, but not in congenitally blind humans. *Scientific Reports*, 9(1), 9215. <https://doi.org/10.1038/s41598-019-45634-w>
- P169. Sourav, S., Kekunnaya, R., Shareef, I., Banerjee, S., Bottari, D., & Röder, B. (2019). A protracted sensitive period regulates the development of cross-modal sound-shape associations in humans. *Psychological Science*, 30(10), 1473-1482. <https://doi.org/10.1177/0956797619866625>
- P168. Stroh, A.-L., Rösler, F., Dormal, G., Salden, U., Skotara, N., Hänel-Faulhaber, B., & Röder, B. (2019). Neural correlates of semantic and syntactic processing in German Sign Language. *NeuroImage*, 200, 231-241. <https://doi.org/10.1016/j.neuroimage.2019.06.025>
- P167. Zierul, B., Tong, J., Bruns, P., & Röder, B. (2019). Reduced multisensory integration of self-initiated stimuli. *Cognition*, 182, 349-359. <https://doi.org/10.1016/j.cognition.2018.10.019>

2018

- P166. Badde, S., Röder, B., & Bruns, P. (2018). Task-irrelevant sounds influence both temporal order and apparent motion judgments about tactile stimuli applied to crossed and uncrossed hands. *Attention, Perception, & Psychophysics*, 80(3), 773-783. <https://doi.org/10.3758/s13414-017-1476-5>
- P165. Bottari, D., Kekunnaya, R., Hense, M., Troje, N., Sourav, S., & Röder, B. (2018). Motion processing after sight restoration: No competition between visual recovery and auditory compensation. *NeuroImage*, 167, 284-296. <https://doi.org/10.1016/j.neuroimage.2017.11.050>
- P164. Fengler, I., Delfau, P., & Röder, B. (2018). Early sign language experience goes along with an increased cross-modal gain for affective prosodic recognition in congenitally deaf CI users. *Journal of Deaf Studies and Deaf Education*, 23(2), 164-172. <https://doi.org/10.1093/deafed/enx051>
- P163. Gudi-Mindermann, H., Rimmele, J., Nolte, G., Bruns, P., Engel, A., & Röder, B. (2018). Working memory training in congenitally blind individuals results in an integration of occipital cortex in functional networks. *Behavioural Brain Research*, 348, 31-41. <https://doi.org/10.1016/j.bbr.2018.04.002>
- P162. Rogge, A., Röder, B., Zech, A., Nagel, V., Hollander, K., Braumann, K.-M., & Hötting, K. (2018). Author Correction: Balance training improves memory and spatial cognition in healthy adults. *Scientific Reports*, 8(1), 17434. <https://doi.org/10.1038/s41598-018-35957-5>
- P161. Rogge, A.-K., Röder, B., Zech, A. & Hötting, K. (2018). Exercise-induced neuroplasticity: Balance training increases cortical thickness in visual and vestibular cortical regions. *NeuroImage*, 179, 471-479. <https://doi.org/10.1016/j.neuroimage.2018.06.065>
- P160. Sourav, S., Bottari, D., Kekunnaya, R., & Röder, B. (2018) Evidence of a retinotopic organization of early visual cortex but impaired extrastriate processing in sight recovery individuals. *Journal of Vision*, 18(3), 22. <https://doi.org/10.1167/18.3.22>
- P159. Sürig, R., Bottari, D., & Röder, B. (2018). Transfer of audio-visual temporal training to temporal and spatial audio-visual tasks. *Multisensory Research*, 31(6), 556-578. <https://doi.org/10.1163/22134808-00002611>

2017

- P158. Bieler, M., Sieben, K., Cichon, N., Schildt, S., Röder, B., & Hanganu-Opatz, I. (2017). Rate and temporal coding convey multisensory information in primary sensory cortices. *eNeuro*, 4(2), ENEURO.0037-17.2017. <https://doi.org/10.1523/ENEURO.0037-17.2017>
- P157. Bieler, M., Sieben, K., Schildt, S., Röder, B., & Hanganu-Opatz, I. (2017). Visual-tactile processing in primary somatosensory cortex emerges before cross-modal experience. *Synapse*, 71(6). <https://doi.org/10.1002/syn.21958>

- P156. Fengler, I., Nava, E., Villwock, A., Büchner, A., Lenarz, Th., & Röder, B. (2017) Multisensory emotion perception in congenitally, early, and late deaf CI users. **PlosOne**, 12(10), e0185821. <https://doi.org/10.1371/journal.pone.0185821>
- P155. Habets, B., Bruns, P., & Röder, B. (2017) Experience with crossmodal statistics reduces the sensitivity for audio-visual temporal asynchrony. **Scientific Reports**, 7(1), 1486. <https://doi.org/10.1038/s41598-017-01252-y>
- P154. Hölig, C., Föcker, J., Röder, B. & Büchel, C. (2017). Activation in the angular gyrus and in the pSTS is modulated by face primes during voice recognition. **Human Brain Mapping**, 38(5), 2553-2565. <https://doi.org/10.1002/hbm.23540>
- P153. Katzakis, N., Tong, J., Nunez, O., Chen, L., Klinker, G., Röder, B., & Steinicke, F. (2017). Stylo and handifact: modulating haptic perception through visualisations for posture training in augmented reality. **Proceedings of the 5th Symposium on Spatial User Interaction**, 58-67. <https://doi.org/10.1145/3131277.3132181>
- P152. Rogge, A-K., Röder, B., Zech, A., Nagel, V. Hollander, K., Braumann, K-M., & Hötting, K. (2017). Balance training improves memory and spatial cognition in healthy adults. **Scientific Reports**, 7(1), 5661. <https://doi.org/10.1038/s41598-017-06071-9>
- P151. Rohlf, S.*, Habets, B.*, von Frieling, M., & Röder, B. (2017). Infants are superior in implicit crossmodal learning and use other learning mechanisms than adults. **eLife**, 6, e28166. <https://doi.org/10.7554/eLife.28166>. [* equal contribution]
- P150. Schubert, J.T.W., Badde, S., Röder, B., & Heed, T. (2017). Task demands affect spatial reference frame weighting during tactile localization in sighted and congenitally blind adults. **PLoS ONE**, 12(12), e0189067. <https://doi.org/10.1371/journal.pone.0189067>
- P149. Zhang, D., Hong, B., Gao, S., & Röder, B. (2017) Exploring the temporal dynamics of sustained and transient spatial attention using steady-state visual evoked potentials. **Experimental Brain Research**, 235(5), 1575-1591. <https://doi.org/10.1007/s00221-017-4907-6>
- P148. Zierul, B., Röder, B., Tempelmann, C., Bruns, P.*, Noesselt, T.* (2017). The role of auditory cortex in the spatial ventriloquism aftereffect. **NeuroImage**, 162, 257-268. <https://doi.org/10.1016/j.neuroimage.2017.09.002>. [*shared senior authorship]

2016

- P147. Badde, S., Heed, T., & Röder, B. (2016). Integration of anatomical and external response mappings explains crossing effects in tactile localization: A probabilistic modeling approach. **Psychonomic Bulletin & Review**, 23(2), 387-404. <https://doi.org/10.3758/s13423-015-0918-0>
- P146. Bottari, D. Troje F.N., Ley, P., Hense M., Kekunnaya R., & Röder B. (2016). Sight restoration after congenital blindness does not reinstate alpha oscillatory activity in humans. **Scientific Reports**, 6, 24683. <https://doi.org/10.1038/srep24683>.
- P145. Guerreiro, M. J. S., Putzar, L., & Röder, B. (2016). Persisting cross-modal changes

- in sight recovery individuals modulate visual perception. **Current Biology**, 26 (22), 3096-3100. <https://doi.org/10.1016/j.cub.2016.08.069>
- P144. Guerreiro, M., Putzar, L., & Röder, B. (2016). The effect of early visual deprivation on the neural bases of auditory processing. **Journal of Neuroscience**, 36 (5), 1620-1630. <https://doi.org/10.1523/JNEUROSCI.2559-15.2016>
- P143. Heed, T., Backhaus, J., Röder, B., & Badde, S. (2016). Disentangling the external reference frames relevant to tactile localization. **PLoS One**, 11(7), e0158829. <https://doi.org/10.1371/journal.pone.0158829>
- P142. Hötting, K., Schickert, N., Kaiser, J., Röder, B., Schmidt-Kassow, M. (2016). The effects of acute physical exercise on memory, peripheral BDNF, and cortisol in young adults". **Neural Plasticity**, 2016, 6860573. <https://doi.org/10.1155/2016/6860573>
- P141. Juravle, G., Heed, T., Spence, Ch., & Röder, B. (2015). Neural correlates of tactile perception during pre-, peri-, and post-movement. **Experimental Brain Research**, 234 (5), 1293-1305. <https://doi.org/10.1007/s00221-016-4589-5>

2015

- P140. Badde, S., Röder, B., & Heed, T. (2015). Flexibly weighted integration of tactile reference frames. **Neuropsychologia**, 70, 367-374. <https://doi.org/10.1016/j.neuropsychologia.2014.10.001>
- P139. Bottari D., Troje N.F., Ley P., Hense M., Kekunnaya R., & Röder B. (2015). The neural development of the biological motion processing system does not rely on early visual input. **Cortex**, 7, 359-367. <https://doi.org/10.1016/j.cortex.2015.07.029>
- P138. Bruns, P. & Röder, B. (2015). Sensory recalibration integrates information from the immediate and the cumulative past. **Scientific Reports**, 5, 12739. <https://doi.org/10.1038/srep12739>
- P137. Fengler, I., Nava, E., & Röder, B. (2015). Short-term visual deprivation reduces interference effects of task-irrelevant facial expressions on affective prosody judgments. **Frontiers in Integrative Neuroscience**, 9, 31. <https://doi.org/10.3389/fnint.2015.00031>
- P136. Föcker, J., Best, A., Hölig, C., & Röder, B. (2015). Neural plasticity of voice processing: Evidence from event-related potentials in late-onset blind and sighted individuals. **Restorative Neurology and Neuroscience**, 33, 15-30. <https://doi.org/10.3233/RNN-140406>
- P135. Guerreiro, M., Putzar, L., & Röder, B. (2015). The effect of early visual deprivation on the neural bases of multisensory processing, **Brain**, 138, 1499-1504. <https://doi.org/10.1093/brain/awv076>
- P134. Guerreiro, M., Erfort, M.V., Henssler, J., Putzar, L., & Röder, B. (2015). Increased visual cortical thickness in sight-recovery individuals. **Human Brain Mapping**, 36, 5265-5274. <https://doi.org/10.1002/hbm.23009>
- P133. Heed, T., Buchholz, V., Engel, A., & Röder, B. (2015). Tactile remapping: from coordinate transformation to integration in sensorimotor processing. **Trends in**

- Cognitive Sciences**, 19(5), 251-258. <https://doi.org/10.1016/j.tics.2015.03.001>
- P132. Heed, T., Möller, J., & Röder, B. (2015). Movement induces the use of external spatial coordinates for tactile localization in congenitally blind humans. **Multisensory Research**, 28, 173-194. <https://doi.org/10.1163/22134808-00002485>
- P131. Ley, P., Steinberg, U., Hanganu-Opatz, U., & Röder, B. (2015). ERP evidence for a dynamic (re-)weighting of somatotopic and external coordinates of touch during visual-tactile interactions. **European Journal of Neuroscience**, 41, 1466-1474. <https://doi.org/10.1111/ejn.12896>
- P130. Schubert, J.T.W., Buchholz, V., Föcker, J., Röder, B., Heed, T. (2015). Oscillatory activity reflects differential use of spatial reference frames by sighted and blind individuals in tactile attention. **NeuroImage**, 117, 417-428. <https://doi.org/10.1016/j.neuroimage.2015.05.068>
- P129. Sieben, K., Bieler, M., Röder, B., & Hanganu-Opatz, I. (2015). Neonatal restriction of tactile inputs leads to long-lasting impairments of cross-modal processing. **PLOS Biology**, 13(11), e1002304. <https://doi.org/10.1371/journal.pbio.1002304>

2014

- P128. Badde, S., Heed, T., & Röder, B. (2014). Processing load impairs coordinate integration for the localization of touch. **Attention, Perception, & Psychophysics**, 76, 1136-1150. <https://doi.org/10.3758/s13414-013-0590-2>
- P127. Badde, S., Röder, B., Heed, T. (2014). Multiple spatial representations determine touch localization. **Journal of Experimental Psychology: Human Perception and Performance**, 40(2), 784-801. <https://doi.org/10.1037/a0034690>
- P126. Bruns, P., Maiworm, M., & Röder, B. (2014) Reward expectation influences audiovisual spatial integration. **Attention, Perception, & Psychophysics**, 76, 1815-1827. <https://doi.org/10.3758/s13414-014-0699-y>
- P125. Bruns, P., Camargo, C.J., Campanella, H., Esteve, J., Dinse, H., & Röder, B. (2014). Tactile acuity charts: A reliable measure of spatial acuity. **PLOS one**, 9(2), e 87384. <https://doi.org/10.1371/journal.pone.0087384>
- P124. Hänel-Faulhaber, B. Skotara, N., Kügow, M., Salden, U., Bottari, D. & Röder, B. (2014). ERP correlates of German sign language processing in deaf native signers. **BMC Neuroscience**, 15, article 62. <https://doi.org/10.1186/1471-2202-15-62>
- P123. Heed, T., Röder, B. (2014). Motor coordination uses external spatial coordinates independent of developmental vision. **Cognition**, 132(1), 1-15. <https://doi.org/10.1016/j.cognition.2014.03.005>
- P122. Hölig, C., Föcker, J., Best, A., Röder, B., & Büchel, C. (2014). Crossmodal plasticity in the fusiform gyrus of late blind individuals during voice recognition. **NeuroImage**, 103, 374-382. <https://doi.org/10.1016/j.neuroimage.2014.09.050>
- P121. Hölig, C., Föcker, J., Best, A., Röder, B., & Büchel, C. (2014). Brain systems mediating voice identity processing in blind humans. **Human Brain Mapping**,

- 35(9), 4607-4619. <https://doi.org/10.1002/hbm.22498>
- P120. Johannsen, J. & Röder, B. (2014). Uni- and cross-modal refractory period effects of event-related potentials provide insights into the development of multisensory processing. *Frontiers in Human Neuroscience*, 8, 552. <https://doi.org/10.3389/fnhum.2014.00552>
- P119. Kassuba, T., Klinge, C., Hölig, C., Röder, B., & Siebner, H. (2014). Short-term plasticity of visuo-haptic object recognition. *Frontiers in Psychology*, 5, article 274. <https://doi.org/10.3389/fpsyg.2014.00274>
- P118. Ley, P., & Röder, B. (2014). Dissociating effects of movement preparation and spatial attention on visual processing: evidence from event-related potentials. *Multisensory Research*, 27(2), 139-160. <https://doi.org/10.1163/22134808-00002445>
- P117. Nava, E., Bottari, D., Villwock, A., Fengler, I., Büchner, A., Lenarz, T., & Röder, B. (2014). Audio-tactile integration in congenitally and late deaf cochlear implant users. *PLOS one*, 9(6): e99606. <https://doi.org/10.1371/journal.pone.0099606>
- P116. Nava, E., Steiger, T., & Röder, B. (2014). Both developmental and adult vision shape body representations. *Scientific Reports*, 4, 6622. <https://doi.org/10.1038/srep06622>
- P115. Röder, B., Heed, T., & Badde, S. (2014). Development of the spatial coding of touch: ability vs. automaticity (commentary). *Developmental Science*, 17(6), 944-945. <https://doi.org/10.1111/desc.12186>
- P114. Torras, N., Zinoviev, K.E., Camargo, C.J., Campo, E.M., Campanella, H., Esteve, J., Marshall, J.E., Terentjev, E.M., Omastová, M., Krupa, I., Teplický, P., Mamojka, B., Bruns, P., Röder, B., Vallribera, M., Malet, R., Zuffanelli, S., Soler, V., Roig, J., Walker, N., Wenn, D., Vossen, F., & Cromptvoets, F.M.H. (2014). Tactile device based on opto-mechanical actuation of liquid crystal elastomers. *Sensors and Actuators A: Physical*, 208, 104-112. <https://doi.org/10.1016/j.sna.2014.01.012>

2013

- P113. Gädecke, J. C., Föcker, J., Röder, B. (2013). Is the processing of affective prosody influenced by spatial attention? An ERP study. *BMC Neuroscience* 14, 14. <https://doi.org/10.1186/1471-2202-14-14>
- P112. Hawellek, D., Schepers, I., Röder, B., Engel, A., Siegel, M., & Hipp, J. (2013). Altered intrinsic neuronal interactions in the visual cortex of the blind. *Journal of Neuroscience*, 33(43), 17072-17080. <https://doi.org/10.1523/JNEUROSCI.1625-13.2013>
- P111. Hötting, K., Holzschneider, K., Stenzel, A., Wolbers, T., & Röder, B. (2013). Effects of a cognitive training on spatial learning and associated functional brain activations. *BMC Neuroscience*, 14, 73. <https://doi.org/10.1186/1471-2202-14-73>
- P110. Hötting, K. & Röder, B. (2013). Beneficial effects of physical exercise on neuroplasticity and cognition. *Neuroscience & Biobehavioral Reviews*, 37(9), 2243-2257. <https://doi.org/10.1016/j.neubiorev.2013.04.005>

- P109. Kassuba, T., Klinge, C., Hölig, C., Röder, B., & Siebner, H. (2013). Vision holds a greater share in visuo-haptic object recognition than touch. **NeuroImage**, 65, 59-68. <https://doi.org/10.1016/j.neuroimage.2012.09.054>
- P108. Kassuba, T., Menz, M., Röder, B., Siebner, H. (2013). Multisensory interactions between auditory and haptic object recognition. **Cerebral Cortex**, 23(5), 1097-1107. <https://doi.org/10.1093/cercor/bhs076>
- P107. Ley, P., Bottari, D., Shenoy, H.S., Kekunnaya, R., Röder, B. (2013). Partial recovery of visual-spatial remapping of touch after restoring vision in a congenitally blind man. **Neuropsychologia**, 51(6), 1119-1123. <https://doi.org/10.1016/j.neuropsychologia.2013.03.004>
- P106. Nava, E., Güntürkün, O., Röder, B. (2013). Experience-dependent emergence of functional asymmetries. **Laterality: Asymmetries of Body, Brain and Cognition**, 18(4), 407-415. <https://doi.org/10.1080/1357650X.2012.697170>
- P105. Ocklenburg, S., Wolf, C.C., Heed, T., Ball, A., Cramer, H., Röder, B., Güntürkün, O. (2013) Multisensory integration across the menstrual cycle. **Frontiers in Psychology**, 4, 666. <https://doi.org/10.3389/fpsyg.2013.00666>
- P104. Renzi, C., Bruns, P., Heise, K., Ziemermann, M., Feldheim, J.-F., Hummel, F., & Röder, B. (2013). Spatial remapping in the audio-tactile ventriloquism effect: A TMS investigation on the role of the ventral intraparietal area. **Journal of Cognitive Neuroscience**, 25(5), 790-801. https://doi.org/10.1162/jocn_a_00362
- P103. Röder, B., Ley, P., Shenoy, H.S., Kekunnaya, R., & Bottari, D. (2013). Sensitive periods for the functional specialization of the neural system for human face processing. **Proceedings of the National Academy of Science U.S.A. (PNAS)**, 110(42), 16760-16765. <https://doi.org/10.1073/pnas.1309963110>
- P102. Röder, B., Pagel, B., & Heed, T. (2013) The implicit use of spatial information develops later for crossmodal than for intramodal temporal processing. **Cognition**, 126(2), 301-306. <https://doi.org/10.1016/j.cognition.2012.09.009>
- P101. Sieben, K., Röder, B., & Hanganu-Opatz, I. (2013). Oscillatory entrainment of primary somatosensory cortex encodes visual control of tactile processing. **Journal of Neuroscience**, 33(13), 5736-5749. <https://doi.org/10.1523/JNEUROSCI.4432-12.2013>

2012

- P100. Föcker, J., Best, A., Hölig, C., & Röder, B. (2012). The superiority in voice processing of the blind arises from neural plasticity at sensory processing stages. **Neuropsychologia**, 50(8), 2056-2067. <https://doi.org/10.1016/j.neuropsychologia.2012.05.006>
- P99. Heed, T., Backhaus, J., & Röder, B. (2012). Integration of hand and finger location in external spatial coordinates for tactile localization. **Journal of Experimental Psychology: Human Perception and Performance**, 38(2), 386-401. <https://doi.org/10.1037/a0024059>

- P98. Hötting, K., Schauenburg, G., & Röder, B. (2012). Long-term effects of physical exercise on verbal learning and memory in middle-aged adults: Results of a one-year follow-up study. **Brain Sciences**, 2(3), 332-346. <https://doi.org/10.3390/brainsci2030332>
- P97. Hötting, K., Reich, B., Holzschneider, K., Kauschke, K., Schmidt, T., Reer, R., Braumann, K.-M., & Röder, B. (2012). Differential cognitive effects of a cycling vs. stretching/coordination training in middle-aged adults. **Health Psychology**, 31(2), 145-155. <https://doi.org/10.1037/a0025371>
- P96. Holzschneider, K., Wolbers, Th., Röder, B., & Hötting, K. (2012). Cardiovascular fitness modulates brain activation associated with spatial learning. **NeuroImage**, 59(3), 3003-3014. <https://doi.org/10.1016/j.neuroimage.2011.10.021>
- P95. Klinge, C., Röder, B., & Büchel, C. (2012). Does training or deprivation modulate amygdala activation? **NeuroImage**, 59(2), 1765-1771. <https://doi.org/10.1016/j.neuroimage.2011.08.046>
- P94. Maiworm, M., Bellantoni, M., Spence, C., & Röder, B. (2012). When emotional valence modulates audiovisual integration. **Attention, Perception, & Psychophysics**, 74(6), 1302-1311. <https://doi.org/10.3758/s13414-012-0310-3>
- P93. Occelli, V., Bruns, P., Zampini, M., Röder, B. (2012). Audiotactile integration is reduced in congenital blindness in a spatial ventriloquism task. **Neuropsychologia**, 50(1), 36-43. <https://doi.org/10.1016/j.neuropsychologia.2011.10.019>
- P92. Putzar, L., Gondan, M., & Röder, B. (2012). Basic multisensory functions can be acquired after congenital visual pattern deprivation in humans. **Developmental Neuropsychology**, 37(8), 697-711. <https://doi.org/10.1080/87565641.2012.696756>
- P91. Röder, B., & Manzey, D. (2012). Editorial: How to reconcile brain and mind. **Psychological Research**, 76(2), 129-130. <https://doi.org/10.1007/s00426-012-0416-1>
- P90. Schepers, I., Hipp, J., Scheider, T., Röder, B., & Engel, A. (2012). Functionally specific oscillatory activity correlates between visual and auditory cortex in the blind. **Brain**, 135(pt3), 922-934. <https://doi.org/10.1093/brain/aws014>
- P89. Schild, U., Röder, B., Friedrich, C. (2012). Neuronal spoken word recognition: The time course of processing variation in the speech signal. **Language and Cognitive Processes**, 27(2), 159-183. <https://doi.org/10.1080/01690965.2010.503532>
- P88. Skotara, N., Kügow, M., Salden, U., Hänel-Faulhaber, B., & Röder, B. (2012). The influence of language deprivation in early childhood on L2 processing: An ERP comparison of deaf native signers and deaf signers with a delayed language acquisition. **BMC Neuroscience**, 13, 44. <https://doi.org/10.1186/1471-2202-13-44>

2011

- P87. Bruns, P., Liebnau, R., & Röder, B. (2011). Crossmodal training induces changes in spatial representations early in the auditory processing pathway. **Psychological Science**, 22(9), 1120-1126. <https://doi.org/10.1177/0956797611416254>

- P86. Bruns, P., Spence, C., & Röder, B. (2011). Tactile recalibration of auditory spatial representations. *Experimental Brain Research*, 209(3), 333-344. <https://doi.org/10.1007/s00221-011-2543-0>
- P85. Föcker, J., Gondan, M., & Röder, B. (2011). Preattentive processing of audio-visual emotional signals. *Acta Psychologica*, 137(1), 36-47. <https://doi.org/10.1016/j.actpsy.2011.02.004>
- P84. Föcker, J., Hölig, C., Best, A., & Röder, B. (2011). Crossmodal interaction of facial and vocal person identity information: An event-related potential study. *Brain Research*, 1385, 229-245. <https://doi.org/10.1016/j.brainres.2011.02.021>
- P83. Heed, T., Beurze, S.M., Toni, I., Röder, B., Medendorp, W.P. (2011). Functional rather than effector-specific organization of human posterior parietal cortex. *Journal of Neuroscience*, 31(8), 3066-3076. <https://doi.org/10.1523/JNEUROSCI.4370-10.2011>
- P82. Kassuba, T., Klinge, C., Hölig, C., Menz, M.M., Petit, M., Röder, B., & Siebner, H. (2011). The left fusiform gyrus hosts trisensory representations of manipulable objects, *NeuroImage*, 56(3), 1566-1577. <https://doi.org/10.1016/j.neuroimage.2011.02.032>
- P81. Maiworm, M., König, P., & Röder, B. (2011). Integrative processing of perception and reward in an auditory localization paradigm. *Experimental Psychology*, 58(3), 217-226. <https://doi.org/10.1027/1618-3169/a000088>
- P80. Maiworm, M., & Röder, B. (2011). Suboptimal auditory dominance in audiovisual integration of temporal cues. *Tsinghua Science and Technology*, 16(2), 121-132. [https://doi.org/10.1016/S1007-0214\(11\)70019-0](https://doi.org/10.1016/S1007-0214(11)70019-0)
- P79. Nava, E., & Röder, B. (2011). Adaption and maladaption insights from brain plasticity. *Progress in Brain Research*, 191, 177-194. <https://doi.org/10.1016/B978-0-444-53752-2.00005-9>
- P78. Schild, U., Röder, B., Friedrich, C.K. (2011). Learning to read shapes patterns of neural lexical representations in the speech recognition pathway. *Developmental Cognitive Neuroscience*, 1(2), 163-174. <https://doi.org/10.1016/j.dcn.2010.11.002>
- P77. Skotara, N., Kügow, M., Salden, U., Hänel-Faulhaber, B., & Röder, B. (2011). ERP correlates of intramodal and crossmodal L2-acquisition. *BMC Neuroscience*, 12(1), 48. <https://doi.org/10.1186/1471-2202-12-48>
- P76. Wolf, C., Ocklenburg, D., Otto, T., Heed, T., Röder, B., & Güntürkün, O. (2011). Visuotactile interactions in the congenitally acallosal brain: evidence for early cerebral plasticity. *Neuropsychologia*, 49(14), 3908-3916. <https://doi.org/10.1016/j.neuropsychologia.2011.10.008>
- P75. Zhang, D., Hong, B., Gao, X., Gao, S., Röder, B. (2011). Exploring steady-state visual evoked potentials as an index for intermodal and crossmodal spatial attention. *Psychophysiology*, 48(5), 665-675. <https://doi.org/10.1111/j.1469-8986.2010.01132.x>

- P74. Bruns, P., & Röder, B. (2010). Tactile capture of auditory localization: An event-related potential study. *European Journal of Neuroscience*, 31(10), 1844-1857. <https://doi.org/10.1111/j.1460-9568.2010.07232.x>
- P73. Bruns, P., & Röder, B. (2010). Tactile capture of auditory localization is modulated by hand posture. *Experimental Psychology*, 57(4), 267-274. <https://doi.org/10.1027/1618-3169/a000032>
- P72. Collins, T., Heed, T., Doré-Mazars, K., & Röder, B. (2010). Presaccadic attention interferes with feature detection. *Experimental Brain Research*, 201(1), 111-117. <https://doi.org/10.1007/s00221-009-2003-2>
- P71. Collins, T., Heed, T., & Röder, B. (2010). Eye-movement-driven changes in the perception of auditory space. *Attention, Perception & Psychophysics*, 72(3), 736-746. <https://doi.org/10.3758/APP.72.3.736>
- P70. Collins, T., Heed, T., & Röder, B. (2010). Visual target selection and motor planning define attentional enhancement at perceptual processing stages. *Frontiers in Human Neuroscience*, 4, 14. <https://doi.org/10.3389/neuro.09.014.2010>
- P69. Föcker, J., Hötting, K., Gondan, M., & Röder, B. (2010). Unimodal and crossmodal gradients of spatial attention: Evidence from event-related potentials. *Brain Topography*, 23(1), 1-13. <https://doi.org/10.1007/s10548-009-0111-8>
- P68. Gallace, A., Zeeden, S., Röder, B., & Spence, C. (2010). Lost in the move? Secondary task performance impairs tactile change detection on the body, *Consciousness and Cognition*, 19(1), 215-229. <https://doi.org/10.1016/j.concog.2009.07.003>
- P67. Heed, T., & Röder, B. (2010). Common anatomical and external coding for hands and feet in tactile attention: Evidence from event-related potentials. *Journal of Cognitive Neuroscience*, 22(1), 184-202. <https://doi.org/10.1162/jocn.2008.21168>
- P66. Klinge, C., Röder, B., & Büchel, C. (2010). Increased amygdala activation to emotional auditory stimuli in the blind. *Brain*, 133, 1729-1736. <https://doi.org/10.1093/brain/awq102>
- P65. Klinge, C.E., Eippert, F., Röder, B., Büchel, C. (2010). Cortico-cortical connections mediate primary visual cortex BOLD responses to auditory stimulation in the blind. *Journal of Neuroscience*, 30(38), 12798-12805. <https://doi.org/10.1523/JNEUROSCI.2384-10.2010>
- P64. Putzar, L., Goerendt, I., Heed, T., Richard, G., Büchel, C., & Röder, B. (2010). The neural basis of lip-reading capabilities is altered by early visual deprivation. *Neuropsychologia*, 48(7), 2158-2166. <https://doi.org/10.1016/j.neuropsychologia.2010.04.007>
- P63. Putzar, L., Hötting, K., & Röder, B., (2010). Early visual deprivation affects the development of face recognition and audio-visual speech perception. *Restorative Neurology and Neuroscience*, 28(2), 251-257. <https://doi.org/10.3233/RNN-2010-0526>
- P62. Röder, B. & Wallace, M. (2010). Development and plasticity of multisensory

- functions. *Restorative Neurology and Neuroscience*, 28(2), 141-142.
<https://doi.org/10.3233/RNN-2010-0536>
- P61. Stein, B.E., Burr, D., Constantinidis, C., Laurienti, P. J., Meredith, M. A., Perrault Jr., T. J., Ramachandran, R., Röder, B., Rowland, B.A., Sathian, K., Schroeder, C.E., Shams, L., Stanford, T. R., Wallace, M. T., Yu, L., Lewkowicz, D.J. (2010). Semantic confusion regarding the development of multisensory integration: a practical solution. *European Journal of Neuroscience*, 31(10), 1713-1720.
<https://doi.org/10.1111/j.1460-9568.2010.07206.x>

2009

- P60. Capek, C., Grossi, G., Newman, A., McBurney, S., Corina, D., Röder, B. & Neville, H.J. (2009). Brain systems mediating semantic and syntactic processing in deaf native signers: Biological invariance and modality specificity. *Proceedings of the National Academy of Science U.S.A. (PNAS)* 106(21), 8784-8789.
<https://doi.org/10.1073/pnas.0809609106>
- P59. Fiehler, K., Burke, M., Bien, S., Röder, B., Rösler, F. (2009). The human dorsal action control system develops in the absence of vision. *Cerebral Cortex*, 19(1), 1-12. <https://doi.org/10.1093/cercor/bhn067>
- P58. Friedrich, C.K., Schild, U. & Röder, B. (2009). Electrophysiological indices of word fragment priming allow characterizing neural stages of speech recognition. *Biological Psychology*, 80(1), 105-113.
<https://doi.org/10.1016/j.biopsycho.2008.04.012>
- P57. Hötting, K., Friedrich, C., & Röder, B. (2009). Neural correlates of crossmodally induced changes in tactile awareness. *Journal of Cognitive Neuroscience*, 21(12), 2445-2461. <https://doi.org/10.1162/jocn.2008.21177>
- P56. Hötting, K., & Röder, B. (2009). Auditory and audio-tactile processing in congenitally blind humans. *Hearing Research*, 258, 165-174.
<https://doi.org/10.1016/j.heares.2009.07.012>
- P55. Pagel, B., Schicke, T., & Röder, B., (2009). Change of reference frame for tactile localization during child development. *Developmental Science*, 12(6), 929-937.
<https://doi.org/10.1111/j.1467-7687.2009.00845.x>
- P54. Röder, B. & Büchel, C. (2009). Multisensory interactions within and outside the focus of visual spatial attention (commentary). *European Journal of Neuroscience*, 29(6), 1245-1246. <https://doi.org/10.1111/j.1460-9568.2009.06715.x>
- P53. Schicke, T., Bauer, F. & Röder, B. (2009). Interactions of different body parts in peripersonal space: how vision of the foot influences tactile perception at the hand. *Experimental Brain Research*, 192(4), 703-715. <https://doi.org/10.1007/s00221-008-1587-2>
- P52. Spence, C., Senkowski, D., & Röder, B. (2009). Crossmodal processing. *Experimental Brain Research*, 198(2-3), 107-111.
<https://doi.org/10.1007/s00221-009-1973-4>

- P51. Stock, O., Röder, B., Burke, M., Bien, S., & Rösler, F. (2009). Cortical activation patterns during long-term memory retrieval of visually or haptically encoded objects and locations. **Journal of Cognitive Neuroscience**, 21(1), 58-82. <https://doi.org/10.1162/jocn.2009.21006>
- P50. Yue, Z., Bischof, N-G., Zhou, X., Spence, C., Röder, B. (2009). Spatial attention affects the processing of tactile and visual stimuli presented at the tip of a tool: An event-related potential study. **Experimental Brain Research**, 193(1), 119-128. <https://doi.org/10.1007/s00221-008-1599-y>

2008

- P49. Collins, T., Schicke, T., & Röder, B. (2008). Action goal selection and motor planning can be dissociated by tool use. **Cognition**, 109(3), 363-371. <https://doi.org/10.1016/j.cognition.2008.10.001>
- P48. Khader, P., Schicke, T., Röder, B., & Rösler, F. (2008). On the relationship between slow cortical potentials and BOLD signal changes in humans. **International Journal of Psychophysiology**, 67(3), 252-261. <https://doi.org/10.1016/j.ijpsycho.2007.05.018>
- P47. Pauli, W., & Röder, B. (2008). Emotional salience changes the focus of spatial attention. **Brain Research**, 1214, 94-104. <https://doi.org/10.1016/j.brainres.2008.03.048>
- P46. Röder, B., Föcker, J., Hötting, K., & Spence, C. (2008). Spatial coordinate systems for tactile spatial attention depend on developmental vision: Evidence from event-related potentials in sighted and blind adult humans. **European Journal of Neuroscience**, 28(3), 475-483. <https://doi.org/10.1111/j.1460-9568.2008.06352.x>

2007

- P45. Putzar, L., Goerendt, I., Lange, K., Rösler, F., Röder, B. (2007). Early visual deprivation impairs multisensory interactions in humans. **Nature Neuroscience**, 10(10), 1243-1245. <https://doi.org/10.1038/nn1978>
- P44. Putzar, L., Hötting, K., Rösler, F., & Röder, B. (2007). The development of visual feature binding processes after visual deprivation in early infancy. **Vision Research**, 47(20), 2616-2626. <https://doi.org/10.1016/j.visres.2007.07.002>
- P43. Röder, B., Krämer, U., & Lange, K. (2007). Congenitally blind humans use different stimulus selection strategies in hearing: An ERP study of spatial and temporal attention. **Restorative Neurology and Neuroscience**, 25(3-4), 311-322.
- P42. Röder, B., Kusmirek, A., Spence, C., & Schicke, T. (2007) Developmental vision determines the reference frame for the multisensory control of action. **Proceedings of the National Academy of Science U.S.A. (PNAS)** 104(11), 4753-4758. <https://doi.org/10.1073/pnas.0607158104>

2006

- P41. Fieger, A., Röder, B., Teder-Sälejärvi, W., Hillyard, S.A., & Neville, H.J. (2006). Auditory spatial tuning in late onset blindness in humans. **Journal of Cognitive Neuroscience**, 18(2), 149-157. <https://doi.org/10.1162/089892906775783697>
- P40. Gondan, M., & Röder, B. (2006). A new method for detecting interactions between the senses in event-related potentials. **Brain Research**, 1073-1074, 389-397. <https://doi.org/10.1016/j.brainres.2005.12.050>
- P39. Kriegseis, A., Hennighausen, E., Rösler, F., & Röder, B. (2006). Reduced EEG alpha activity over parieto-occipital brain areas in congenitally blind adults. **Clinical Neurophysiology**, 117(7), 1560-1573. <https://doi.org/10.1016/j.clinph.2006.03.030>
- P38. Lange, K., Krämer, U., & Röder, B. (2006). Attending points in time and space. **Experimental Brain Research**, 173(1), 130-140. <https://doi.org/10.1007/s00221-006-0372-3>
- P37. Lange, K., & Röder, B. (2006). Orienting attention to points in time improves stimulus processing both within and across modalities. **Journal of Cognitive Neuroscience**, 18(5), 715-729. <https://doi.org/10.1162/jocn.2006.18.5.715>
- P36. Schicke, T., Muckli, L., Beer, A. L., Wibral, M., Singer, W., Goebel, R., Rösler, F., & Röder, B. (2006). Tight covariation of BOLD signal changes and slow ERPs in the parietal cortex in a parametric spatial imagery task with haptic acquisition. **European Journal of Neuroscience**, 23(7), 1910-1918. <https://doi.org/10.1111/j.1460-9568.2006.04720.x>
- P35. Schicke, T., & Röder, B. (2006). Spatial remapping of touch: confusion of perceived stimulus order across hand and foot. **Proceedings of the National Academy of Science U.S.A. (PNAS)**, 103(31), 11808-11813. <https://doi.org/10.1073/pnas.0601486103>

2005

- P34. Beer, A., & Röder, B. (2005). Attending to visual or auditory motion affects perception within and across modalities: An event-related potential study. **European Journal of Neuroscience**, 21(4), 1116-1130. <https://doi.org/10.1111/j.1460-9568.2005.03927.x>
- P33. Gondan, M., Niederhaus, B., Rösler, F., & Röder, B. (2005). Multisensory processing in the redundant target effect: a behavioral and event-related potential study. **Perception & Psychophysics**, 67(4), 713-726. <https://doi.org/10.3758/bf03193527>
- P32. Zampini, M., Brown, T., Shore, D., Maravita, A., Röder, B., & Spence, C. (2005). Audiotactile temporal order judgments. **Acta Psychologica**, 118(3), 277-291. <https://doi.org/10.1016/j.actpsy.2004.10.017>

2004

- P31. Beer, A., & Röder, B. (2004). Attention to motion enhances processing of both visual and auditory stimuli: An event-related potential study. **Cognitive Brain Research**, 18(2), 205-225. <https://doi.org/10.1016/j.cogbrainres.2003.10.004>
- P30. Beer, A., & Röder, B. (2004). Unimodal and crossmodal effects of endogenous attention to visual and auditory motion. **Cognitive, Affective, and Behavioral Neuroscience**, 4(2), 230-240. <https://doi.org/10.3758/cabn.4.2.230>
- P29. Gondan, M., Lange, K., Rösler, F., & Röder, B. (2004). The redundant target effect is affected by modality switch costs. **Psychonomic Bulletin & Review**, 11(2), 307-313. <https://doi.org/10.3758/bf03196575>
- P28. Hötting, K., Rösler, F., & Röder, B. (2004). Altered multisensory interaction in congenitally blind humans: an event-related potential study. **Experimental Brain Research**, 159(3), 370-381. <https://doi.org/10.1007/s00221-004-1965-3>
- P27. Hötting, K., & Röder, B. (2004). Hearing cheats touch but less in the congenitally blind than in sighted individuals. **Psychological Science**, 15(1), 60-64. <https://doi.org/10.1111/j.0963-7214.2004.01501010.x>
- P26. Röder, B., Rösler, F., & Spence, C. (2004). Early vision impairs tactile perception in the blind. **Current Biology**, 14(2), 121-124. <https://doi.org/10.1016/j.cub.2003.12.054>
- P25. Röder, B., & Rösler, F. (2004). Kompensatorische Plastizität bei blinden Menschen: Was Blinde über die Adaptivität des Gehirns verraten. **Zeitschrift für Neuropsychologie**, 15(4), 243-264. <https://doi.org/10.1024/1016-264X.15.4.243>
- P24. Scherag, A., Demuth, L., Rösler, F., Neville, H.J., & Röder, B. (2004). The effects of late acquisition of L2 and the consequences of immigration on L1 for semantic and morpho-syntactic language aspects. **Cognition**, 93(3), B97-108. <https://doi.org/10.1016/j.cognition.2004.02.003>

2003

- P23. Hötting, K., Rösler, F., & Röder, B. (2003). Crossmodal and intermodal attention modulates event-related brain potentials to tactile and auditory stimuli. **Experimental Brain Research**, 148(1), 26-37. <https://doi.org/10.1007/s00221-002-1261-z>
- P22. Lange, K., Rösler, F., & Röder, B. (2003). Early processing stages are modulated when auditory stimuli are presented at an attended moment in time: An event-related potential study. **Psychophysiology**, 40(5), 806-817. <https://doi.org/10.1111/1469-8986.00081>
- P21. Röder, B., Demuth, L., Streb, J., & Rösler, F. (2003). Semantic and morpho-syntactic priming in auditory word recognition in congenitally blind adults. **Language and Cognitive Processes**, 18(1), 1-20. <https://doi.org/10.1080/01690960143000407>
- P20. Röder, B., & Rösler, F. (2003). Memory for environmental sounds in sighted congenitally blind and late blind adults: Evidence for cross-modal compensation.

International Journal of Psychophysiology, 50(1-2), 27-39.
[https://doi.org/10.1016/s0167-8760\(03\)00122-3](https://doi.org/10.1016/s0167-8760(03)00122-3)

2002

- P19. Röder, B., Spence, C., & Rösler, F. (2002). Assessing the effect of posture change on tactile inhibition-of-return. *Experimental Brain Research*, 143(4), 453-462. <https://doi.org/10.1007/s00221-002-1019-7>
- P18. Röder, B., Stock, O., Bien, S., Neville, H.J., & Rösler, F. (2002). Speech processing activates visual cortex in congenitally blind adults. *European Journal of Neuroscience*, 16(5), 930-936. <https://doi.org/10.1046/j.1460-9568.2002.02147.x>
- P17. Röder, B., Stock, O., Neville, H.J., Bien, S., & Rösler, F. (2002). Brain activation modulated by the comprehension of normal and pseudo-word sentences of different processing demands: a functional magnetic resonance imaging study. *NeuroImage*, 15(4), 1003-1014. <https://doi.org/10.1006/nimg.2001.1026>
- P16. Schicke, T., Demuth, L., & Röder, B. (2002). Influence of visual information on the auditory median plane of the head. *NeuroReport*, 13(13), 1627-1629. <https://doi.org/10.1097/00001756-200209160-00011>

2001

- P15. Röder, B., Rösler, F., & Neville, H.J. (2001). Auditory memory in congenitally blind adults: a behavioral-electrophysiological investigation. *Cognitive Brain Research*, 11(2), 289-303. [https://doi.org/10.1016/s0926-6410\(01\)00002-7](https://doi.org/10.1016/s0926-6410(01)00002-7)

2000

- P14. Röder, B., Rösler, F., & Neville, H.J. (2000). Event-related potentials during auditory language processing in congenitally blind and sighted people. *Neuropsychologia*, 38(11), 1482-1502. [https://doi.org/10.1016/s0028-3932\(00\)00057-9](https://doi.org/10.1016/s0028-3932(00)00057-9)
- P13. Röder, B., Schicke, T., Stock, O., Heberer, G., Neville, H.J., & Rösler, F. (2000). Word order effects in German sentences and German pseudo-word sentences. *Sprache und Kognition*, 19(1/2), 31-37. <https://econtent.hogrefe.com/doi/10.1024//0253-4533.19.12.31>
- P12. Röder, B., Spence, C., & Rösler, F. (2000). Inhibition of return and oculomotor control in the blind. *NeuroReport*, 11(13), 3043-3045. <https://doi.org/10.1097/00001756-200009110-00043>

1999

- P11. Röder, B., Rösler, F., & Neville, H.J.. (1999). Effects of interstimulus interval on auditory event-related potentials in congenitally blind and normally sighted humans. **Neuroscience Letters**, 264(1-), 53-56. [https://doi.org/10.1016/s0304-3940\(99\)00182-2](https://doi.org/10.1016/s0304-3940(99)00182-2)
- P10. Röder, B., Teder-Sälejärvi, W., Sterr, A., Rösler, F., Hillyard, S.A., & Neville, H.J. (1999). Improved auditory spatial tuning in blind humans. **Nature**, 400(6740), 162-166. <https://doi.org/10.1038/22106>
- P9. Teder-Sälejärvi, W., Hillyard, S.A., Röder, B., & Neville, H.J. (1999). Spatial attention to central and peripheral auditory stimuli as indexed by event-related potentials. **Cognitive Brain Research**, 8(3), 213-227. [https://doi.org/10.1016/s0926-6410\(99\)00023-3](https://doi.org/10.1016/s0926-6410(99)00023-3)

1998

- P8. Röder, B., & Rösler, F. (1998). Visual input does not facilitate the scanning of spatial images. **Journal of Mental Imagery**, 22(3-4), 127-144.
- P7. Rösler, F., Pechmann, T., Streb, J., Röder, B., & Hennighausen, E. (1998). Parsing of sentence in a language with varying word order: Word-by-word variations of processing demands are revealed by event-related brain potentials. **Journal of Memory and Language**, 38(2), 150-176. <https://doi.org/10.1006/jmla.1997.2551>

1997

- P6. Röder, B., Rösler, F., & Hennighausen, E. (1997). Different cortical activation patterns in blind and sighted humans during encoding and transformation of haptic images. **Psychophysiology**, 34(3), 292-307. <https://doi.org/10.1111/j.1469-8986.1997.tb02400.x>
- P5. Rösler, F., Bajric, J., Heil, M., Hennighausen, E., Niedeggen, M., Pechmann, T., Röder, B., Rüsseler, J., & Streb, J. (1997). Gedächtnisspuren im EEG. **Zeitschrift für Experimentelle Psychologie**, 44(1), 4-37.
- P4. Rösler, F., Heil, M., & Röder, B. (1997). Slow negative brain potentials as reflections of specific modular resources of cognition. **Biological Psychology**, 45(1), 109-141. [https://doi.org/10.1016/s0301-0511\(96\)05225-8](https://doi.org/10.1016/s0301-0511(96)05225-8)

before 1997

- P3. Röder, B., Rösler, F., Hennighausen, E., & Näcker, F. (1996). Event-related potentials during auditory and somatosensory discrimination in sighted and blind human subjects. **Cognitive Brain Research**, 4(2), 77-93.

- [https://doi.org/10.1016/0926-6410\(96\)00024-9](https://doi.org/10.1016/0926-6410(96)00024-9)
- P2. Röder, B., Rösler, F., Heil, M., & Hennighausen, E. (1993). Haptische mentale Rotation bei geburtsblinden, späterblindeten und normalsichtigen Personen. ***Zeitschrift für experimentelle und angewandte Psychologie***, 40, 153-177.
- P1. Rösler, F., Röder, B., Heil, M., & Hennighausen, E. (1993). Topographic differences of slow event-related brain potentials in blind and sighted adult human subjects during haptic mental rotation. ***Cognitive Brain Research***, 1(3), 145-159. [https://doi.org/10.1016/0926-6410\(93\)90022-w](https://doi.org/10.1016/0926-6410(93)90022-w)

Book chapters and conference proceedings

2024

- BC24. Bruns, P., & Röder, B. (2024). Improvement of sound localization after spatially congruent audiovisual exposure: A special case of crossmodal recalibration or higher-order visual location learning? ***Fortschritte der Akustik - DAGA 2024***, (pp. 237-240).

2022

- BC23. Röder, B., & Kekunnaya, R. (2022). Effects of Early Visual Deprivation. In: ***Oxford Research Encyclopedia of Psychology (published online: 18. July 2022)***. Oxford: University Press.
<https://doi.org/10.1093/acrefore/9780190236557.013.839>

2019

- BC22. Bruns, P., & Röder, B. (2019). Cross-modal learning in the auditory system. In A.K.C. Lee, M. Wallace, A. Coffin, A.N. Popper, & R.R. Fay (Eds.), ***Multisensory processes: The auditory perspective. Springer Handbook of Auditory Research***. (Vol. 68, pp. 221-242). Cham: Springer.

2017

- BC21. Li, X., Röder, B., & Zhang, J. (2017). An event-related complexity method for EEG data analysis. ***IEEE 2nd International Conference on Big Data Analysis (ICBDA), Beijing, 2017*** (pp. 903-908). DOI: 10.1109/ICBDA.2017.8078769.

2016

- BC20. Röder, B. & Rösler, F. (2016). Ein Blick in Gehirn und Geist. In W. Buchmüller & C. Jakobeit (Hrsg.), ***Erkenntnis, Wissenschaft und Gesellschaft. Wie Forschung Wissen schafft*** (pp. 85-100), Berlin, Heidelberg: Springer.

2015

- BC19. Röder, B. (2015). Altersabhängige Lernplastizität: Sensible und kritische Perioden in der neurokognitiven Entwicklung. ***Nova Acta Leopoldina NF 122, Nr. 410***, 125-139.

2013

- BC18. Torras, N., Zinoviev, K.E., Camargo, C.J., Campo, E.M., Campanella, H., Esteve, J., Marshal, J.E., Terentjev, E.M., Omastova, M., Krupa, I. Teplický, P., Mamojka,

B., Bruns, P., Röder, B., Vallribera, M., Malet, R., Zuffanelli, S., Soler, V., Roig, J., Walker, N., Wenn, D., Vossen, F., Crompvoets, F.M.H. (2013). Nematic opto-mechanical actuators for the fabrication of refreshable tactile systems. ***Transducers & Euroensors XXVII: The 17th International Conference on Solid-State Sensors, Actuators and Microsystems (TRANSDUCERS & EUROSENSORS XXVII), Barcelona, 2013*** (pp. 1691-1694). doi: 10.1109/Transducers.2013.6627111.

2012

- BC17. Röder, B. (2012). Funktionsanpassung im visuellen System nach peripherer Schädigung. In H.-O. Karnath & P. Thier (Eds.), ***Neuropsychologie*** (pp. 751-758), Berlin: Springer (3rd edition).
- BC16. Röder, B. (2012). Sensory deprivation and the development of multisensory integration. In A. Bremner, D. Lewkowicz, & Spence, C. (Eds.), ***Multisensory development*** (pp. 301-324), Oxford: Oxford University Press.
- BC15. Lewkowicz, D., & Röder B. (2012) Development of multisensory processes and the role of early experience. In B.E. Stein (ed.) ***The New Handbook of Multisensory Processing*** (pp. 607-626), Cambridge, MIT Press.
- BC14. Pavani F, & Röder B. (2012) Crossmodal plasticity as a consequence of sensory loss: Insights from blindness and deafness. In B.E. Stein (ed.) ***The New Handbook of Multisensory Processes*** (pp. 737-759), Cambridge, MIT Press.

2011

- BC13. Heed, T., & Röder, B. (2011). The body in a multisensory world In: M. Murray & M. Wallace, (Eds.). ***Frontiers in the neural bases of multisensory processes*** (pp. 557-580), CRC Press.

2010

- BC12. Lange, K., & Röder, B. (2010). Temporal orienting in audition, touch, and across modalities. In: K. Nobre, & J. Coull (Eds.). ***Attention and Time*** (pp. 393-405). Oxford: Oxford University Press.
- BC11. Hötting, K., & Röder, B. (2010). Bewegung und Kognition. In: K.-M. Braumann, & N. Stiller (Eds.), ***Bewegungstherapie bei internistischen Erkrankungen*** (pp. 211-221). Heidelberg: Springer.

2006

- BC10. Hötting, K., & Röder, B. (2006). Aufmerksamkeit und multisensorische Wahrnehmung. In K. Pawlik (Eds.). **Psychologie**. Heidelberg: Springer.

2005

- BC9. Röder, B. (2005). Blindness: A source and case of neuronal plasticity. In P.B. Baltes, P. Reuter-Lorenz, & F. Rösler (Eds.). **Lifespan development and the brain: The perspective of biocultural constructivism**. Cambridge University Press.

2004

- BC8. Röder, B., & Rösler, F. (2004). Compensatory plasticity as a consequence of sensory loss. In: G. Calvert, C. Spence, & B. Stein. **The handbook of multisensory processes** (pp. 719-747). Cambridge: MIT Press.
- BC7. Rösler, F., Röder, B., & Streb, J. (2004). Psychophysiologie semantischer und syntaktischer Verarbeitungsprozesse. In: **Neurokognition der Sprache**. Tübingen: Stauffenburg Verlag.

2003

- BC6. Röder, B., & Neville, H. J. (2003). Developmental plasticity. In: F. Boller, & J. Grafman (Eds.), **Plasticity and rehabilitation. Handbook of neuropsychology** (Vol. 9, pp 231-270). Amsterdam: Elsevier.
- BC5. Röder, B., & Rösler, F. (2003). The principle of brain plasticity. In: R. H. Kluwe, G. Lüer, & F. Rösler (Eds.), **The principle of learning and memory** (pp. 27-49). Basel: Birkhäuser.

before 2002

- BC4. Röder, B., & Rösler, F. (2001). Ein Vergleich haptischer Wahrnehmungsleistungen zwischen blinden und sehenden Personen. In: M. Grunwald & L. Beyer (Eds.), **Der bewegte Sinn: Grundlagen und Anwendung der haptischen Wahrnehmung** (pp 89-98). Basel: Birkhäuser Verlag.
- BC3. Röder, B., Rösler, F., & Hennighausen, E. (1997). Ereigniskorrelierte Potentiale während haptischer mentaler Rotation und akustischer und somatosensorischer Diskrimination bei sehenden und blinden Personen. In: H. Mandl (Ed.), **Proceedings for the 40th Meeting of the German Psychological Society (DGPs)**(Sept. 22-26, 1996, München, Germany) (pp. 114-124). Göttingen: Hogrefe.

- BC2. Röder, B. (1995). Ereigniskorrelierte Potentiale als Indikatoren neuronaler Plastizität bei blinden Menschen. Dissertation, Philipps-Universität Marburg, Fachbereich Psychologie.
- BC1. Röder, B., & Rösler, F. (1994). Kann die kognitive Psychophysiologie einen Beitrag zur Arbeitssicherheit leisten? In: F. Burkardt, & C. Winkelmeier (Eds.), **Psychologie der Arbeitssicherheit** (pp. 449-458). Heidelberg: Roland Asanger Verlag.

Books & Special issues

- B4. Röder, B., & Manzey, D. (2012): Special Issue: How to reconcile brain and mind? **Psychological Research, 76**.
- B3. Röder, B., & Wallace, M. (2010): Special issue: "Development and Plasticity of Multisensory Functions", **Restorative Neurology and Neuroscience, 28 (2)**.
- B2. Spence, C., Senkowski, D., & Röder, B. (2009): Special issue: "Crossmodal processing", **Experimental Brain Research**. 198 (2-3)
- B1. Rösler, F., Ranganath, C., Röder, B., & Kluwe, R. (Eds.) (2009). **Neuroimaging of human memory** – Linking cognitive processes to neural systems. Oxford University Press.

Abstracts

2025

- A329. Rekow, D., Arya, T., Bayir, D., Röder, B. (2025). In the blink of an eye: Neural face selectivity at a single glance emerges with adapted natural stimuli as early as 2 months of age. Poster presented at the *Budapest CEU Conference on Cognitive Development, BCCCD25, Budapest, Hungary, January 9-11, 2025*.

2024

- A328. Abbasi, H., King, C.D., Lovich, S., Röder, B., Groh, J.M., & Bruns, P. (2024). Dependence of eye movement-related eardrum oscillations (EMREO) on current sensory input and recent sensory experience. Poster presented at the *49th Annual Meeting „Psychologie und Gehirn“ (PuG), Hamburg, Germany, May 29-June 6, 2024*.
- A327. Bruns, P., & Röder, B. (2024). Improvement of sound localization after spatially congruent audiovisual exposure: A special case of crossmodal recalibration or higher-order visual location learning? Talk presented at the *50th Jahrestagung für Akustik (DAGA), Hanover, Germany, March 18-21, 2024*.
- A326. Bruns, P., & Röder, B. (2024). Simon effect reveals crossmodal spatial binding based on emotional congruence in audiovisual speech perception. Poster presented at the *65th Annual Meeting of the Psychonomic Society, New York, USA, November 21-24, 2024*.
- A325. Hötting, K., Kuhne, L.A., Ksiezarczyk, A., Braumann, K.-M., Reer, R., Jacobs, T., & Röder, B. (2024). Exercise-induced increase in cytokine levels correlates with implicit learning in young adults. Poster presented at the *53th Congress of the German Psychological Society (DGPs), Vienna (Austria), September 16-19, 2024*.
- A324. Kubetschek, C., Röder, B., & Bruns, P. (2024). Effects of visual saliency on the processing of audiovisual spatial information: An EEG study. Poster presented at the *49th Annual Meeting „Psychologie und Gehirn“ (PuG), Hamburg, Germany, May 29-June 6, 2024*.
- A323. Pant, R., Pitchaimuthu K., Ossandón J.P., Shareef I., Lingareddy S., Finsterbusch J., Kekunnaya R., & Röder B. (2024). Altered visual cortex excitatory/inhibitory ratio following transient congenital visual deprivation in humans. Poster presented at the *49th Annual Meeting „Psychologie und Gehirn“ (PuG), Hamburg, Germany, May 29-June 6, 2024*.
- A322. Rączy, K., Linke, M., van den Hurk, J., Heitmann, C., Guerreiro, M., Zhan, M., Kekunnaya, R., Goebel, R., Röder, B. (2024). Color-preferring regions of the ventral visual stream emerge after sight restoration in congenitally blind humans. Poster presented at the *49th Annual Meeting „Psychologie und Gehirn“ (PuG), Hamburg, Germany, May 29-June 6, 2024*.

- A321. Rekow, D., Arya, T., Bayir, D., Röder, B. (2024). Enhancing the EEG automatic response to varied natural faces in adults and very young infants: an image set validation for low-acuity vision. Poster presented at *49th Annual Meeting „Psychologie und Gehirn“ (PuG), Hamburg, Germany, May 29-June 6, 2024.*
- A320. Sourav, S., Röder, B., Ambsdorf, F., Melissari, A., Arvaniti, M., & Vatakis, A. (2024). No Evidence That Sound-Shape Associations Influence Temporal Resolution in Humans: Five Non-Replications of Parise and Spence (2009) and Meta-Analyses. *Poster and Talk presented at the 49th Annual Meeting „Psychologie und Gehirn“ (PuG), Hamburg, Germany, May 29-June 6, 2024.*
- A319. Wienholz, A., Schönberger, D., Jonasson, N., Püppke, R., Bruns, P., Buckenmeier, I., Röder, B., & Hänel-Faulhaber, B. (2024). Differences in visual statistical learning in deaf and hard-of-hearing early and late signing children. Poster presented at the *Interdisciplinary Advances in Statical Learning Conference, Basque Center on Cognition, Brain and Language, Donostio/San Sebastian (Spain), June 5-7, 2024.*

2023

- A318. Abbasi, H., King, C.D., Lovich, S., Röder, B., Groh, J. M., & Bruns, P. (2023). Audiovisual temporal recalibration modulates eye movement-related eardrum oscillations. Poster presented at the *21st International Multisensory Research Forum (IMRF), Brussels, Belgium, June 27-30, 2023.*
- A317. Bruns P., Ley, P., Badde, S., Lenarz, T., Kekunnaya, R., & Röder, B. (2023). Crossmodal temporal functions are unaffected by transient periods of blindness or deafness. Poster presented at the *21st International Multisensory Research Forum (IMRF), Brussels, Belgium, June 27-30, 2023.*
- A316. Feucht, M.E., Sourav, S., Kekunnaya, R., & Röder, B. (2023). EEG biomarkers based on task-related and resting state oscillatory activity for classifying sight restored individuals. Poster presented at the *Kongress der Deutschen Gesellschaft für Klinische Neurophysiologie und Funktionelle Bildgebung (DGKN), Hamburg, Germany, March, 2-4, 2023. Clinical Neurophysiology, 148, e63.*
- A315. Kubetschek, C., Röder, & B., Bruns, P. (2023). Effects of crossmodal association learning on the processing of audiovisual spatial Information: an EEG study. Poster presented at the *21st International Multisensory Research Forum (IMRF), Brussels, Belgium, June 27-30, 2023.*
- A314. Ossandón, J. P., Stange, L., Gudi-Mindermann, H., Rimmele, J. M., Sourav, S., Kekunnaya, R., & Röder, B. (2023). Development of oscillatory and aperiodic resting state activity is linked to a sensitive period in humans. Poster presented at the *Kongress der Deutschen Gesellschaft für Klinische Neurophysiologie und Funktionelle Bildgebung (DGKN), Hamburg, Germany, March, 2-4, 2023. Clinical Neurophysiology, 148, e64.*
- A313. Pant, R., Ossandón, J., Stange, L., Shareef, I., Kekunnaya, R. & Röder, B. (2023). Stimulus-evoked and endogenous alpha oscillations show a linked dependence

on patterned visual experience for development. Talk at the *21st International Multisensory Research Forum (IMRF)*, Brussels, Belgium, June 27-30, 2023.

- A312. Pant, R., Ossandón, J., Stange, L., Shareef, I., Kekunnaya, R., & Röder, B. (2023). Stimulus-evoked and resting-state alpha oscillations are jointly reduced in sight recovery individuals with a history of a congenital blindness. Poster presented at the *Kongress der Deutschen Gesellschaft für Klinische Neurophysiologie und Funktionelle Bildgebung (DGKN)*, Hamburg, Germany, March, 2-4, 2023. *Clinical Neurophysiology*, 148, e58.
- A311. Sourav, S., Kekunnaya, R., Bottari, D., Shareef, I., Pitchaimuthu, K., & Röder, B. (2023). Sound alters earliest visual cortical processing in sight-restored humans. Poster presented at the *Kongress der Deutschen Gesellschaft für Klinische Neurophysiologie und Funktionelle Bildgebung (DGKN)*, Hamburg, Germany, March, 2-4, 2023. *Clinical Neurophysiology*, 148, e60.

2022

- A310. Abbasi, H., King, C., Schlebusch, S., Röder, B., Groh, J., & Bruns, P. (2022). Eye movement-related eardrum oscillations do not require current visual input. Poster presented at the *20th International Multisensory Research Forum (IMRF)*, Ulm, Germany, July 4-7, 2022.
- A309. Brockhaus, C., Zhan, M., Linke, M., Hölig, C., Kekunnaya, R., van Hoof, R., Goebel, R. & Röder, B. (2022). Differences in retinotopic organization of early visual areas after temporary congenital blindness. Poster presented at the *Annual Meeting of the Organization for Human Brain Mapping (OHBM)*, Glasgow, United Kingdom, June 19-23, 2022.
- A308. Bruns, P., Li, L., Guerreiro, M.J.S., Shareef, I., Rajendran, S., Pitchaimuthu, K., Kekunnaya, R., & Röder, B. (2022). Audiovisual spatial integration and recalibration after sight restoration in humans. Talk at the *20th International Multisensory Research Forum (IMRF)*, Ulm, Germany, July 4-7, 2022.
- A307. Hötting, K., Kuhne, L.A., Ksiezarczyk, A., Braumann, K.-M., Reer, R., Jacobs, T., & Röder, B. (2022). Exercise-induced increase in cytokine levels correlates with implicit learning in young adults. Poster presented at the *47th Annual Meeting „Psychologie und Gehirn“ (PuG)*, Freiburg, Germany, June 16-18, 2022.
- A306. Kramer, A., Bruns, P., & Röder, B. (2022). Audio-visual spatial aftereffects are based on multisensory perception and approximately optimal recalibration. Poster presented at the *20th International Multisensory Research Forum (IMRF)*, Ulm, Germany, July 4-7, 2022.
- A305. Ossandón, J. P., Zerr, P., Shareef, I., Kekunnaya, R., & Röder, B. (2022). Active vision in sight recovery individuals with a history of long-lasting congenital visual deprivation. Talk at the *21st European conference on eye movements (ECEM)*, Leicester, UK, August, 21-25, 2022.
- A304. Pant, R., Ossandón, J., Stange, L., Shareef, I., Kekunnaya, R., & Röder, B. (2022). Stimulus-evoked and endogenous alpha oscillations show a linked dependence

- on patterned visual experience for development. *Journal of Vision*, 22(14), 3474-3474.
- A303. Schepanski, S., Zhang, T., Graute, S., Schönberger, D. K., Bonn, S., Heeren, J., Röder, B., Diemert, A., Hanganu-Opatz, I., & Arck, P. C. (2022). Prenatal immune challenges and cognitive development in childhood. Symposium talk at the 47th Annual Meeting „Psychologie und Gehirn“ (PuG), Freiburg, Germany, June 16-18, 2022.
- A302. Rączy, K., Hölig, C., Guerreiro, M.J.S., Lingareddy, S., Kekunnaya, R., & Röder, B. (2022). Typical resting state activity of the brain requires visual input during an early sensitive period. Poster presented at the 20th International Multisensory Research Forum (IMRF), Ulm, Germany, July 4-7, 2022.
- A301. Rimmele, J., Lubinus, C., Orpella, J., Keitel, A., Gudi-Mindermann, H., Engel, A., & Röder, B. (2022). Data-driven classification of spectral profiles reveals brain region-specific plasticity. Talk at the 20th International Multisensory Research Forum (IMRF), Ulm, Germany, July 4-7, 2022.
- A300. Röder, B. (2022). Brain mechanism of sight recovery. *Acta Ophthalmologica*, 100 (S275: Abstracts from the 2022 European Association for Vision and Eye Research Festival, 13-15 October 2022, Valencia). <https://doi.org/10.1111/j.1755-3768.2022.15620>
- A299. Röder, B., Dormal, G., Sourav, S., Shareef, I., Rajendran, S., Kekunnaya, R., & Pitchaimuthu, K. (2022). Visual and crossmodal activation after sight restoration in humans. Talk at the 20th International Multisensory Research Forum (IMRF), Ulm, Germany, July 4-7, 2022.
- A298. Schönberger, D. K., Bruns, P., & Röder, B. (2022). Visual sequence relearning after a one-year delay in 7-year-olds and adults. Poster presented at the International Advances in Statistical Learning Conference 2022. Donostia/San Sebastian, Spain, June 1-3, 2022.
- A297. Sourav, S., Röder, B., Ambsdorf, F., Melissari, A., Arvaniti, M., & Vatakis, A. (2022). Five Experiments, Including a Pre-Registered Replication, and Mini Meta-Analyses Find No Evidence That Sound-Shape Associations Modulate Audiovisual Temporal Order Judgements. Poster presented at the 20th International Multisensory Research Forum (IMRF), Ulm, Germany, July 4-7, 2022.
- A296. Stange, L., Ossandón, J., & Röder, B. (2022). Time course and specificity of crossmodal prediction in visual cortex. Talk at the 20th International Multisensory Research Forum (IMRF), Ulm, Germany, July 4-7, 2022.
- A295. Storm, S., Bruns, P., & Röder, B. (2022). The Effects of Stimulus Salience dominate audio-visual Spatial Integration both in children and adults. Poster presented at the 20th International Multisensory Research Forum (IMRF), Ulm, Germany, July 4-7, 2022.

2021

- A294. Hötting, K, Rogge, A.-K., & Röder, B. (2021). Structural brain plasticity after balance training in blind and sighted humans. *Sports, Medicine and Health Summit 2021, virtual congress, April 20-24, 2021*.
- A293. Schönberger, D. K., Fuchs, M., Bruns, P., & Röder, B. (2021). Repeated visual sequence learning and transfer to new surface features in 7-year-olds and adults. Poster presented at the *Biennial Meeting of the Society of Research in Child Development (SRCD21). virtual, April 7-9, 2021*.

2020

- A292. Schönberger, D. K., Bruns, P., & Röder, B. (2020). Visual sequence learning in children: Piloting an adaptive artificial grammar learning task. Poster presented at the *Conference on Cognitive Development (BCCCD20). Budapest, Hungary, January 9-11, 2020*.

2019

- A291. Bruns, P., & Röder, B. (2019). Visual recalibration of auditory spatial perception decays at different time scales. *Proceedings of the 23rd International Congress on Acoustics, Aachen, Germany, September 9-23, 2019*, 3915-3920.
- A290. Hänel-Faulhaber, B., Groen, M., Röder, B., & Friedrich, C. (2019). Foundations of reading in bimodal-bilingual deaf children: ERP evidence. Poster presented at the *Child Language Symposium, Sheffield, UK, July 10-12, 2019*.
- A289. Hölig, C., Guerreiro, M. J. S., Shareef, I., Lingareddy, S., Kekunnaya, R., & Röder, B. (2019). Cortical thickness in sight-recovery and congenitally blind individuals. Poster presented at the *Annual Meeting of the Society for Neuroscience (SfN), Chicago, IL, USA, October 19-23, 2019*.
- A288. Overvliet, K., Postma, A., Röder, B. (2019). Developmental trajectory and visual dependence in the use of different features in haptic object perception. Poster presented at the *42nd European Conference on Visual Perception, Leuven, Belgium, August 25-29, 2019*.
- A287. Stange, L., Ossandón, J., & Röder, B. (2019). Time course and spatial specificity of top-down visual predictions. Poster at the *Systems Neuroscience Symposium (SNS), Tübingen, Germany, September 14-15, 2019*.
- A286. Zerr, P., Ossandón, J., Kekunnaya, R., Shareef, I., Pitchaimuthu, K., van der Stigchel, S., & Röder, B. (2019). Eye movements in the formally blind. Oral presentation at the *42nd European Conference on Visual Perception, Leuven, Belgium, August 25-29, 2019*.

2018

- A285. Badde, S., Röder, B., & Heed, T. (2018). Feeling a touch to the hand on the foot. Talk at the *19th International Multisensory Research Forum (IMRF), Toronto, Canada, June 14-17, 2018*.
- A284. Badde, S., Landy, M.-S., Röder, B., & Bruns, P. (2018). The determinants of cross-modal learning: Insights from the ventriloquism aftereffect. Talk at the Invited Symposium "Multisensory processing and the neglected senses – an appetizer". *51st Meeting of the German Psychological Society (DGPs), Frankfurt am Main (Germany), September 15-20, 2018*.
- A283. Bednaya, E., Bottari, D., Dormal, G., Villwock, A., Dzhelyova, M. Grin, K., Pietrini, P., Ricciardi, E., Rossion, B., & Röder, B. (2018). Face processing in congenitally deaf signers. *BCBL WoRLD, San Sebastian, Spain, October 18-20, 2018*.
- A282. Bottari, D., Kekunnaya, R., Hense, M., Troje, N.F., Sourav, S., & Röder, B. (2018). Motion processing after sight restoration: No competition between visual recovery and auditory compensation. Poster presented at the *19th International Multisensory Research Forum (IMRF), Toronto, Canada, June 14-17, 2018*.
- A281. Bruns, P. & Röder, B. (2018). Differential effects of the temporal and spatial distribution of audiovisual stimuli on cross-modal spatial recalibration. Talk at the *19th International Multisensory Research Forum (IMRF), Toronto, Canada, June 14-17, 2018*.
- A280. Fengler, I. Müller, J., & Röder, B. (2018). Auditory and visual motion adaptation in congenitally deaf cochlear implant users: Evidence for typical crossmodal aftereffects. Poster presented at the *15th CI2018 Conference, Antwerpen, Belgium, June 27-30, 2018*.
- A279. Hänel-Faulhaber, B., Groen, M., Röder, B. & Friedrich, C. (2018). Neural foundation of reading in bimodal-bilingual deaf children. *ICSLA 2018: 20th International Conference on Sign Language and Acquisition, Toronto, Canada, June 21-22, 2018*.
- A278. Pitchaimuthu, K., Sourav, S., Bottari, D., Banerjee, S., Shareef, I., Kekunnaya, R., & Röder, B. (2018). Color vision in sight recovery individuals. Poster presented at the *5th International Conference "Low Vision and the Brain", Berlin, Germany, November 30 – December 2, 2018*.
- A277. Röder, B., Sourav, S., Kekunnaya, R., & Bottari, D. (2018). Visual and multisensory recovery in humans with a history of visual deprivation from birth. *11th FENS Forum of Neuroscience, Berlin, Germany, July 7-11, 2018*.
- A276. Rogge, A.-K., Hötting, K., Nagel, V., Zech, A., Hölig, C. & Röder, B. (2018). Balance training in the blind: Structural plasticity in vestibular and proprioceptive regions. Poster presented at the *Blind Brain Workshop on the Sensory Deprived Brain, Lucca, Italy, October 11-13, 2018*.
- A275. Rogge, A.-K., Röder, B., Zech, A., & Hötting, K. (2018). Exercise-induced neuroplasticity: Effects of a balance training. Talk at the *51. Kongress der Deutschen Gesellschaft für Psychologie, Frankfurt, Germany, October 17-20, 2018*.
- A274. Sourav, S., Bottari, D., Kekunnaya, R., & Röder, B. (2018). The P1 Wave as highly specific diagnostic biomarker for bilateral congenital visual deprivation. Poster

- presented at the *Blind Brain Workshop on the Sensory Deprived Brain, Lucca, Italy, October 11-13, 2018*.
- A273. Stroh, A.-L., Bottari, D., Grin, K., Rösler, F., & Röder, B. (2018). Steady-state visual evoked potentials in deaf and hearing individuals indicate an experience-dependence of the optimal driving rate. Poster presented at the *OSA Fall Vision Meeting, Reno, NV, USA, September 21-23, 2018*.
- A272. Stroh, A.-L., Overvliet, K., Rösler, F., & Röder, B. (2018). Visuo-motor skills in deaf native signers. Poster presented at *BCBL WoRLD, San Sebastian, Spain, October 18-20, 2018*.
- A271. Tong, J., Bruns, P., Kanellou, A., & Röder, B. (2018). Crossmodal associations modulate multisensory integration: modifying causal priors of simple auditory and visual stimuli. Poster presented at the *19th International Multisensory Research Forum (IMRF), Toronto, Canada, June 14-17, 2018*.
- A270. Topalidis, P., Schenk, T., Röder, B., & Föcker, J. (2018). Is attention necessary in order to process vocal prosody in congenitally blind individuals? *Visual Search and Selective Attention (VSSA4), Munich / Ammersee, July 13th-16th, 2018*.
- A269. Zerr, P., Kekunnaya, R., Shareef, I., Pitchaimuthu, K., van der Stigchel, S., Röder, B., & Ossandón, J. (2018). Eye tracker calibration in individuals with highly unstable gaze due to involuntary nystagmus. Poster presented at the *41st European Conference on Visual Perception ECVP, Trieste, Italy, August 26-30, 2018*.

2017

- A268. Bruns, P. & Röder, B. (2017). Repeated (but not incremental) training enhances cross-modal recalibration in the ventriloquism aftereffect. Poster presented at the *18th International Multisensory Research Forum (IMRF), Nashville, USA, May 19-22, 2017*.
- A267. Fengler, I., Nava, E., Delfau, P.-C., Villwock, A., & Röder, B. (2017). Auditory, visual, and auditory-visual emotion recognition in cochlear implant recipients. Talk presented at the *59th Conference of Experimental Psychologists (TeaP), Dresden, Germany, March 26-29, 2017*.
- A266. Guerreiro, M. J. S., Putzar, L., Goebel, R., Kekunnaya, R., & Röder, B. (2017). Structural brain changes in cataract reversal individuals. *Poster presented at the 4th World Congress of Paediatric Ophthalmology and Strabismus, Hyderabad, India, December 1-3, 2017*.
- A265. Hötting, K., Rogge, A.-K., Zech, A., Nagel, V., Hollander, K., Braumann, K.-M., & Röder, B. (2017). Bewegung und neuronale Plastizität: Ein Balancetraining steigert das Gedächtnis und räumliche Kognition. *49. Jahrestagung der Arbeitsgemeinschaft Sportpsychologie (asp), „Gelingende Entwicklung im Lebenslauf, Bern, Switzerland, May, 25-27, 2017*.

- A264. Hötting, K., Hölig, C., & Röder, B. (2017). Physical exercise prevents hippocampal volume loss in middle-aged adults. *13. International Conference for Cognitive Neuroscience (ICON), Amsterdam, The Netherlands, August 8, 2017.*
- A263. Li, X., Röder, B., & Zhang, J. (2017). An EEG based event-related complexity method for cognitive research. *2nd International Conference on Big Data Analysis (ICBDA), Beijing, China, March 10-12, 2017.*
- A262. Röder, B. (2017). The challenge to learn in development vs. adulthood. *INSA-Leopoldina Symposium, Hyderabad, India, November 28-29, 2017.*
- A261. Röder, B., Guerreiro, M. Putzar, L., Sourav, S., Bottari, D., & Kekunnaya, R. (2017). Neural mechanisms of visual recovery and crossmodal compensation after removing congenital total cataracts. *4th World Congress of Paediatric Ophthalmology and Strabismus, Hyderabad, India, December 1-3, 2017.*
- A260. Rohlf, S., Habets, B., Frieling, M.v., & Röder, B. (2017). Crossmodal learning mechanisms change from development to adulthood. *18th International Multisensory Research Forum (IMRF), Nashville, TN, USA, May 19-22, 2017.*

2016

- A259. Badde, S., Ley, P., Röder, B. (2016). Triggering the use of external space in congenitally blind individuals. *CNS 2016 Annual Meeting, New York, USA, April 2-5, 2016.*
- A258. Badde, S., Thomaschewski, L., Stoffregen, H., & Röder, B. (2016). Adapting to visual and auditory low frequency stimuli induces enhanced tactile frequency discrimination within the same frequency range. *46th Annual Meeting of the Society for Neuroscience (SfN), San Diego, Nov 12-16, 2016.*
- A257. Balachandar, R., Guerreiro, M.J.S., Kekunnaya, R., & Röder, B. (2016). "Hippocampal shape changes after sight restoration in congenital dense cataract patients." *10th Forum of the Federation of European Neurosciences Societies, Copenhagen, Denmark, July 2-6, 2016.*
- A256. Bottari, D., Troje, N.F., Hense, M., Kekunnaya, R., & Röder, B. (2016). "Independent developmental trajectories for biological motion and face processing". *Oral presentation at the Indian association for research in vision and ophthalmology (ARVO-India; Hyderabad, India), July 30-31, 2016.*
- A255. Bottari, D., Troje, N.F., Hense, M., Kekunnaya, R., & Röder, B. (2016). "The critical role of early visual input for the emergence of human alpha oscillatory activity". *Workshop on Early Experience and Sensitive Periods in Development, Ettore Majorana Foundation, Erice Italy, Aug 31 - Sept. 2016.*
- A254. Bottari, D., Kekunnaya, R., Hense, M., Sourav, S., Balachandar, R., Troje, N.F., & Röder, B. (2016). The effect of a transient congenital visual deprivation on the neural systems for visual and sound motion processing. *46th Annual Meeting of the Society for Neuroscience (SfN), San Diego, Nov 12-16, 2016.*
- A253. Bruns, P., Röder, B., & Badde, S. (2016). Interactions between time and space in tactile temporal order judgements are mediated by motion signals. *57th Annual Meeting of the Psychonomic Society, Boston, MA, USA, Nov 17-20, 2016.*

- A252. Fengler, I., Bottari, D., Sourav, S., Villwock, A., & Röder, B. (2016). Intra- and multisensory interactions in congenitally deaf CI users. *46th Annual Meeting of the Society for Neuroscience, November 12-16, San Diego, CA, USA.*
- A251. Guerreiro, M. J. S., Putzar, L., & Röder, B. (2016). Recovery of visual influence on auditory motion processing despite persisting cross-modal changes in sight-recovery individuals. *46th Annual Meeting of the Society for Neuroscience, November 12-16, San Diego, CA, USA.*
- A250. Rimmele, J.M., Gudi-Mindermann, H., Nolte, G., Röder, B. & Engel, A.K. (2016). Neuroplasticity in the congenitally blind: Large-scale interactions during working memory processing and training. Poster presented at the *23rd Annual Meeting of the Cognitive Science Society, New York City, USA, April 2-5, 2016.*
- A249. Röder, B., Guerreiro, M., Sourav, S., Bottari, D., & Kekunnaya, R. (2016) Experience-dependent development of (multi)sensory functions. *XXXIV Annual Meeting of Indian Academy of Neuroscience, Manasa, India, October 19-21, 2016.*
- A248. Rogge, A-K., Röder, B., Zech, A., Nagel, V., Hollander, K., Braumann, K-M., & Hötting, K. (2016). Successful balance training improves memory. *10th Forum of the Federation of European Neurosciences Societies, Copenhagen, Denmark, July 2-6, 2016.*
- A247. Rogge, A-K., Röder, B., Zech, A., Nagel, V., Hollander, K., Braumann, K-M., & Hötting, K. (2016). Successful balance training improves memory and spatial cognition. *46th Annual Meeting of the Society for Neuroscience (SfN), San Diego, Nov 12-16, 2016.*
- A246. Rohlf, Sophie, Habets, B., & Röder, B. (2016). Multisensory learning through passive exposure in six-months-old infants. *46th Annual Meeting of the Society for Neuroscience, November 12-16, San Diego, CA, USA.*
- A245. Sourav, S., Bottari, D., Balachandar, R., Kekunnaya, R., & Röder, B. (2016). Evidence for an intact retinotopic organization of early visual cortex but impaired extrastriate processing in sight recovery individuals. *46th Annual Meeting of the Society for Neuroscience (SfN), San Diego, Nov 12-16, 2016.*
- A244. Stroh, A.-L., Rösler, F., Dormal, G., Skotara, N., Hänel-Faulhaber, B., & Röder, B. (2016). Neural correlates of semantic and syntactic processing in sign language. *46th Annual Meeting of the Society for Neuroscience, November 12-16, San Diego, CA, USA.*
- A243. Sürig, R., Bottari, D., & Röder, B. (2016). Transfer of audio-visual training. *46th Annual Meeting of the Society for Neuroscience, November 12-16, San Diego, CA, USA.*
- A242. Villwock, A., Bottari, D., & Röder, B. (2016). The impact of congenital deafness on visuo-tactile motion processing. *Multimodal Multilingual Outcomes in Deaf and Hard-of-Hearing Children Workshop, Stockholm, Sweden, June 12-16, 2016.*

2015

- A241. Badde, S., Röder, B., & Heed, T. (2015). Assigning a touch on the hand to a foot: post hoc construction of tactile location. 45th Meeting of the Society for Neuroscience, Chicago, USA, October 17-21, 2015.
- A240. Bottari, D., Troje, N.F., Ley, P., Hense, M., Kekunnaya, R., & Röder, B. (2015). Sensitive periods for the functional specialization of visual processes. Independent developmental trajectories for biological motion and face processing. *16th International Multisensory Research Forum (IMRF), Pisa, Italy, June 13-16, 2015.*
- A239. Bruns, P. & Röder, B. (2015). Cross-modal recalibration integrates local and global stimulus history. 16th International Multisensory Research Forum (IMRF), Pisa, Italy, June 13-16, 2015.
- A238. Fengler, I., Villwock, A., Höfer, M., Lenarz, T. & Röder, B. (2015). Visual, Auditory and visuo-auditory emotion perception in congenitally, early, and late deaf cochlear implant users. *16th International Multisensory Research Forum (IMRF), Pisa, Italy, June 13-16, 2015.*
- A237. Gudi, H., Rimmele, J., Bruns, P., Engel, A.K., & Röder, B. (2015). Enhanced cortical connectivity following working memory training – An EEG study in congenitally blind individuals. 16th International Multisensory Research Forum (IMRF), Pisa, Italy, June 13-16, 2015.
- A236. Gudi, H., Rimmele, J., Bruns, P., Engel, A.K., & Röder, B. (2015). Load-dependent versus training-induced power changes within the working memory network – An EEG study. 45th Meeting of the Society for Neuroscience, Chicago, USA, October 17-21, 2015.
- A235. Guerreiro, M.J.S., Erfort, M.V., Henssler, J., Putzar, L. & Röder, B. (2015). Increased visual cortical thickness in sight-recovery individuals. 45th Meeting of the Society for Neuroscience, Chicago, USA, October 17-21, 2015.
- A234. Heed, T., Röder, B., Badde, S. (2015). Assigning a touch on the hand to a foot: post hoc construction of tactile location. 45th Meeting of the Society for Neuroscience, Chicago, USA, October 17-21, 2015.
- A233. Hense, M., Badde, S., Köhne, S., Habich, J., Dziobek, I., Röder, B. (2015). Tactile and crossmodal localization in adults with autism spectrum disorder. 45th Meeting of the Society for Neuroscience, Chicago, USA, October 17-21, 2015.
- A232. Rimmele, J., Gudi, H., Nolte, G., Röder, B., & Engel, A.K. (2015). Neuroplasticity in the congenitally blind: Working memory training alters large-scale interactions of visual cortex. 45th Meeting of the Society for Neuroscience, Chicago, USA, October 17-21, 2015.
- A231. Röder, B., Putzar, L., & Guerreiro, M. (2015). Altered multisensory processing after a transient period of total blindness from birth. 16th International Multisensory Research Forum (IMRF), Pisa, Italy, June 13-16, 2015.
- A230. Röder, B., Putzar, L., & Guerreiro, M. (2015). Neural correlates of functional recovery in humans with a history of visual deprivation from birth. 9th Meeting of the International Brain Research Organisation. July 7-11, 2015.
- A229. Rohlf, S., Habets, B., & Röder, B. (2015). Multisensory learning through passive audio-visual stimulation in six months old infants. 45th Meeting of the Society for Neuroscience, Chicago, USA, October 17-21, 2015.

- A228. Schubert, J.T.W., Badde, S., Röder, B., & Heed, T. (2015). Flexible use of spatial reference frames for touch in sighted and congenitally blind individuals. 16th International Multisensory Research Forum (IMRF), Pisa, Italy, June 13-16, 2015.
- A227. Zierul, B.H., Röder, B., Tempelmann, C., & Noesselt, T. (2015). The role of auditory cortex in the audiovisual ventriloquist aftereffect. 45th Meeting of the Society for Neuroscience, Chicago, USA, October 17-21, 2015.

2014

- A226. Badde, S., Heed, T., & Röder, B. (2014). Top-down controlled integration of tactile reference frames. 56. Tagung experimentell-arbeitender Psychologen, Giessen, Germany, March 31-April 2, 2014.
- A225. Bruns, P., Maiworm, M., & Röder, B. (2014). Reward expectation influences audiovisual spatial integration. Talk presented at the 56th Conference of Experimental Psychologists (TeaP), Giessen, Germany, March 31 – April 2, 2014.
- A224. Gudi, H., Rimmele, J., Kloostermann, N.A., Donner, T.H., Engel, A., & Röder, B. (2014). Fronto-parietal gamma-band activity is modulated by working memory training. Annual Meeting of the Organization for Human Brain Mapping, Hamburg, Germany, June 8-12, 2014.
- A223. Gudi, H., Rimmele, J., Kloostermann, N.A., Donner, T.H., Engel, A., & Röder, B. (2014). The functional role of theta-band activity before and after working memory training. *40th Annual Meeting "Psychologie und Gehirn", Lübeck, Germany, June 19-21, 2014.*
- A222. Guerreiro, M.J.S., Putzar, L., & Röder, B. (2014). The effect of early visual deprivation on the neural bases of multisensory processing. 44th Meeting of the Society for Neuroscience, Washington D.C., USA, November 15-19, 2014.
- A221. Habets, B., Frieling, M., & Röder, B. (2014). Multisensory learning through exposure. 15th International Multisensory Research Forum (IMRF), Amsterdam, The Netherlands, June 11-14, 2014.
- A220. Heed, T., Schubert, J.T.W., & Röder, B. (2014). Flexible Integration of spatial information depends on developmental vision. 15th International Multisensory Research Forum (IMRF), Amsterdam, The Netherlands, June 11-14, 2014.
- A219. Hölig, C., Föcker, J., Best, A., Röder, B., & Büchel, C. (2014). Brain systems mediating crossmodal interactions during person recognition. Annual Meeting of the Organization for Human Brain Mapping, Hamburg, Germany, June 8-12, 2014.
- A218. Mania, P. A., Schneider, T.R., Engel, A.K., Röder, B., & Heed, T. (2014). Direction-selective gamma band synchronization in PPC differs between hand and foot movement planning. Annual Meeting of the Society for the Neural Control of Movement, Amsterdam, The Netherlands, April 22-25, 2014.
- A217. Mania, P. A., Schneider, T.R., Engel, A.K., Röder, B., & Heed, T. (2014). Direction-selective gamma band synchronization in PPC differs between hand and foot movement planning. *40th Annual Meeting "Psychologie und Gehirn", Lübeck, Germany, June 19-21, 2014.*

- A216. Röder, B. (2014). Multisensorische Verarbeitung beim Menschen. Annual Meeting of the German Academy of Science Leopoldina, Halle, Germany, September 19-21, 2014.
- A215. Schubert, J.T.W., Buchholz, V.N., Föcker, J., Engel, A.K., Röder, B., & Heed, T. (2014). Oscillatory activity in the alpha and beta range reflect tactile spatial coordinates. *40th Annual Meeting "Psychologie und Gehirn", Lübeck, Germany, June 19-21, 2014.*
- A214. Schubert, J.T.W., Buchholz, V.N., Föcker, J., Engel, A.K., Röder, B., & Heed, T. (2014). EEG source-level oscillations reflect tactile spatial coordinates in sighted and in blind humans. Annual Meeting of the Organization for Human Brain Mapping, Hamburg, Germany, June 8-12, 2014.
- A213. Sürig, R., Bottari, D., & Röder, B. (2014). Transfer of audio-visual training. 15th International Multisensory Research Forum (IMRF), Amsterdam, The Netherlands, June 11-14, 2014.
- A212. Villwock, A.K., Bottari, D., Röder, B. (2014). Visual processing in human striate cortex as a result of congenital deafness. 44th Meeting of the Society for Neuroscience, Washington, D.C., November 15-19, 2014.

2013

- A211. Badde, S., Heed, T., & Röder, B. (2013). Touch localization under coordinate conflict. *Congress of the German Neuroscience Society, Göttingen, Germany, March 13-16, 2013.*
- A210. Badde, S., Heed, T., & Röder, B. (2013). Modelling body posture effects on reference frame integration. *In: Multisensory Research. Volume 26, Abstracts of the 14th International Multisensory Research Forum, The Hebrew University in Jerusalem, Israel, June 3–6, 2013.*
- A209. Bottari, D., Ley, P., Shenoy, B.H., Kekunnaya, R., & Röder, B. (2013). Sensitive periods for the functional specialization of multisensory and visual processes. Invited speaker at the symposium Functional Consequences of Sensory Loss and Restoration. FENS Regional meeting, Prague; September 13, 2013.
- A208. Bottari, D., Troje, N., Ley, P., Shenoy, B.H., Kekunnaya, R., & Röder, B. (2013). Early visual experience is necessary to shape global motion neural system but not biological motion. *Annual meeting of the Society for Neuroscience (SfN), San Diego, USA, November, 9-13, 2013.*
- A207. Bruns, P., Renzi, C., Heise, K.-F., Zimerman, M., Feldheim, J.-F., Hummel, F. C., & Röder, B. (2013). Spatial remapping in the audio-tactile ventriloquism effect: a TMS investigation on the role of the ventral intraparietal area. *5th International Conference on Non-Invasive Brain Stimulation, Leipzig, Germany, March 19-21, 2013.*
- A206. Johannsen, J., Gädeke, J., Pagel, B., & Röder, B. (2013). Intra and crossmodal refractory period effects in healthy children and adults: An ERP study. *39th annual meeting of the Society of Neuropediatrics, Innsbruck, Austria, April 25-28, 2013,*

- A205. Ley, P. & Röder, B. (2013). Dissociating sensory attention and motor preparation: an ERP study. *In: Multisensory Research. Volume 26, Abstracts of the 14th International Multisensory Research Forum, The Hebrew University in Jerusalem, Israel, June 3–6, 2013.*
- A204. Röder, B. (2013) Spatial remapping of sensory input depends on early visual input. *Biennial Meeting of the Society for Research in Child Development. Seattle, April 18-21, 2013.*
- A203. Röder, B., Ley, P., Shenoy, H.S., Kekunnaya, R., & Bottari, D. (2013). Functional recovery in cataract-reversal patients: Behavioral indices and neural correlates. *Asian ARVO, New Delhi, October 28-31, 2013.*
- A202. Schild, U., Röder, B., & Friedrich, C. (2013). Stress and phonemes processing in word comprehension in pre-reading preschoolers to beginning readers. *WILD – Workshop on infant language development of the Basque Center on Cognition, Brain and Languages, June 20-22, 2013.*
- A201. Schubert, J., Heed, T., Föcker, J., & Röder, B. (2013). External spatial coordinates for tactile spatial attention are reflected in prestimulus oscillations in sighted but not in blind individuals. *International Multisensory Research Forum (IMRF), Jerusalem, Israel, June 3-6, 2010.*
- A200. Sieben, K., Röder, B., & Hanganu-Opatz, I. (2013). The development of cross-modal processing in the rat primary somatosensory cortex. *Congress of the German Neuroscience Society, Göttingen, Germany, March 13-16, 2013.*

2012

- A199. Badde, S., Heed, T., & Röder, B. (2012). Touch remapping is automatic but top-down modulated. *Annual Meeting of the Society for Neuroscience (SfN), New Orleans, USA, October 13-17, 2012.*
- A198. Bottari, D., Rohlf, S., Hense, M., Habets, B., & Röder, B. (2012). Intramodal and crossmodal refractory effects: Evidence from oscillatory brain activity. *In: Seeing and Perceiving. Volume 25, Abstracts of the 13th International Multisensory Research Forum, University of Oxford, UK, June 19–22, 2012.*
- A197. Bottari, D., Ley, P., Shenoy, B.H., Kekunnaya, R., & Röder, B. (2012). Early visual experience for the development of the neural systems relating to holistic face processing. *Annual Meeting of the Society for Neuroscience (SfN), New Orleans, USA, October 13-17, 2012.*
- A196. Bruns, P., Camargo, C.J., Campanella, H., Esteve, J., & Röder, B. (2012). Tactile acuity charts: a reliable measure of spatial resolution. *54th Tagung experimentell arbeitender Psychologen (TeaP), Mannheim, Germany, April 1-4, 2012.*
- A195. Bruns, P. & Röder, B. (2012). Frequency and specificity of the ventriloquism aftereffect revisited. *4th International Conference on Auditory Cortex, Lausanne, Switzerland, September 1-3, 2012.*
- A194. Habets, B., Hense, M., Bottari, D., & Röder, B. (2012). Intra- and crossmodal refractory effects in auditory and somatosensory ERPs. *In: Seeing and Perceiving.*

Volume 25, Abstracts of the 13th International Multisensory Research Forum, University of Oxford, UK, June 19–22, 2012.

- A193. Heed, T. & Röder, B. (2012). Spatial codes for movement coordination do not depend on developmental vision. *In: Seeing and Perceiving. Volume 25, Abstracts of the 13th International Multisensory Research Forum, University of Oxford, UK, June 19–22, 2012.*
- A192. Hense, M., Habets, B., & Röder, B. (2012). Recovery periods of event-related potentials indicating crossmodal interactions between the visual, auditory and tactile system. *In: Seeing and Perceiving. Volume 25, Abstracts of the 13th International Multisensory Research Forum, University of Oxford, UK, June 19–22, 2012.*
- A191. Hötting, K., Holzschneider, K. & Röder, B. (2012). A combined physical exercise and cognitive training modulate functional brain activations during spatial learning. *48. Kongress der Deutschen Gesellschaft für Psychologie, Bielefeld, Germany, September 23.-27, 2012.*
- A190. Juravle, G., Heed, T., Spence, Ch., & Röder, B. (2012). Electrophysiological correlates of tactile and visual perception during goal-directed movement. *In: Seeing and Perceiving. Volume 25, Abstracts of the 13th International Multisensory Research Forum, University of Oxford, UK, June 19–22, 2012.*
- A189. Ley, P., Bottari, D., Hariprasad Shenoy, B., Kekunnaya, R., & Röder, B. (2012). *In: Seeing and Perceiving. Volume 25, Abstracts of the 13th International Multisensory Research Forum, University of Oxford, UK, June 19–22, 2012.*
- A188. Ley, P., Bottari, D., Shenoy, B.H., Hoetting, K., Kekunnaya, R., & Röder, B. (2012). Restricted recovery of external remapping of tactile stimuli after restoring vision in a congenitally blind man. *Annual Meeting of the Society for Neuroscience (SfN), New Orleans, USA, October 13-17, 2012.*
- A187. Maiworm, M., Bellantoni, M., Spence, Ch., & Röder, B. (2012). The size of the ventriloquist effect is modulated by emotional valence. *In: Seeing and Perceiving. Volume 25, Abstracts of the 13th International Multisensory Research Forum, University of Oxford, UK, June 19–22, 2012.*
- A186. Röder, B., Pagel, B., & Heed, T. (2012). The development of intramodal and crossmodal temporal order judgments. *In: Seeing and Perceiving. Volume 25, Abstracts of the 13th International Multisensory Research Forum, University of Oxford, UK, June 19–22, 2012.*
- A185. Schild, U., Röder, B., & Friedrich, C.K. Word stress and phoneme processing in congenitally blind adults. *CNS Annual Meeting, Chicago, USA, March 31 - April 03, 2012.*
- A184. Schild, U., Röder, B. & Friedrich, C.K. (2012). Independent processing of stress and phonemes in reading and non-reading children. *Neurobiology of Language Conference, San Sebastian, October 25-27, 2012.*
- A183. Schubert, J., Röder, B., & Heed, T. (2012). Remapping of touch in the blind for current, but not for planned postures. *In: Seeing and Perceiving. Volume 25, Abstracts of the 13th International Multisensory Research Forum, University of Oxford, UK, June 19–22, 2012.*

- A182. Sieben, K., Röder, B., & Hanganu-Opatz, I., (2012). Crossmodal stimulation influences communication in visual-somatosensory cortical networks of Brown Norway rat. In: *Seeing and Perceiving. Volume 25, Abstracts of the 13th International Multisensory Research Forum, University of Oxford, UK, June 19–22, 2012.*

2011

- A181. Bottari, D., Schneider, T., Engel, A., & Röder, B. (2011). Independency of language by the modality of acquisition and transmission: confirms from oscillations. *Munich Multisensory Perception Symposium, Holzhausen, Germany, June 24.-26, 2011.*
- A180. Bruns, P., Liebna, R., & Röder, B. (2011). Elektrophysiologische Korrelate des Ventriloquismus-Nacheffekts. *37th Annual Meeting "Psychologie und Gehirn", Heidelberg, Germany, June 23-25, 2011.*
- A179. Föcker, J., Best, A., Hölig, C. & Röder, B. (2011). Neural plasticity of voice processing: Evidence from event-related potentials in congenitally blind and sighted controls. *FENS IBRO Summer School, Lausanne, Geneva, Switzerland, August 28 – September 16, 2011.*
- A178. Heed, T., Leone, F., Toni, I., Röder, B., Medendorp, P. (2011). Testing effector specificity in posterior parietal cortex with repetition suppression fMRI. *Annual Meeting of the Society for Neuroscience (SfN), Washington D.C., USA, Nov. 12-16, 2011.*
- A177. Hötting K., Holzsneider K., & Röder B (2011). Effects of physical exercise and a cognitive training on cognition and functional brain activations in middle-aged humans. *Front. Hum. Neurosci. Conference Abstract: XI International Conference on Cognitive Neuroscience (ICON XI). doi: 10.3389/conf.fnhum. 2011.207.00607.*
- A176. Kassuba, T., Klinge C., Hölig C., Röder B., & Siebner H.R. (2011). Shaping visuo-haptic object representations with rTMS - an offline rTMS-fMRI study. *2nd North American Meeting on TMS and Neuroimaging in Cognition and Behavior, Quebec City, Canada, June 24-25, 2011.*
- A175. Kassuba, T., Menz M.M., Röder B., & Siebner H.R. (2011). Audio-haptic binding of conceptual object information. *Annual Meeting of the Organization for Human Brain Mapping, Quebec City, Canada, June 26-30, 2011.*
- A174. Nava, E., Güntürkün, O. & Röder, Brigitte (2011). Blind kiss: Lateralised behaviour in blind individuals. *Munich Multisensory Perception Symposium, Holzhausen, Germany, June 24.-26, 2011.*

2010

- A173. Bruns, P., Liebna, R., & Röder, B. (2010). Electrophysiological correlates of the ventriloquism aftereffect in humans. Poster presented at the *40th Annual Meeting of the Society for Neuroscience (SfN), San Diego, CA, USA, November 13-17,*

2010.

- A172. Bruns, P., Spence, C., & Röder, B. (2010). Taktile Rekalibrierung auditiver Raumrepräsentationen. In: C. Frings, A. Mecklinger, D. Wentura, & H. Zimmer (Eds.), *Beiträge zur 52. Tagung experimentell arbeitender Psychologen: 22. bis 24. März 2010 in Saarbrücken* (p. 25). Lengerich: Pabst Science Publishers.
- A171. Heed, T. & Röder, B. (2010). Eigenschaften und Entwicklung multisensorischer räumlicher Koordinatensysteme am Beispiel des Tastsinns. *47. Meeting of the German Society for Psychology, September, 26-30, 2010, Bremen, Germany.*
- A170. Heed, T., Röder, B., Collins, T. (2010). Multisensory influences of motor-related reference frames. *International Multisensory Research Forum (IMRF), June 16-19, 2010, Liverpool, Great Britain.*
- A169. Hölig, C., Föcker, J., Best, A., Röder, B., Büchel, C. (2010). Voice Priming Effects in the Fusiform Gyrus of the Blind. *Barcelona, 16th Annual Meeting of the Organization for Human Brain Mapping, June 6.-10, 2010.*
- A168. Hötting, K., Schauenburg, G. Holzschneider, K., Kauschke, K., Schmidt, T., Reer, R., Braumann, K.-M., & Röder, B. (2010). Long-term effects of physical exercise on cognition in humans. *7th Forum of European Neuroscience, July 3 – 7, 2010, Amsterdam, The Netherlands.*
- A167. Hötting, K., Schauenburg, G. Holzschneider, K., Kauschke, K., Schmidt, T., Reer, R., Braumann, K.-M., & Röder, B. (2010). Wie nachhaltig sind Effekte eines sechsmonatigen Bewegungstrainings auf Aufmerksamkeit und episodisches Gedächtnis im mittleren Erwachsenenalter? In: F. Petermann, H. & U. Koglin (Hrsg.), *47. Kongress der Deutschen Gesellschaft für Psychologie (S. 212).* Lengerich: Pabst Science Publishers.
- A166. Kassuba, T., Klinge, C.E., Hölig, C., Menz, M., Ptito, M., Röder, B., & Siebner, H.R. (2010). Sehen, Hören, und Ertasten von Objekten konvergieren im linken fusiformen Gyrus. In M.J. Naumer (Chair), *Neuronale Grundlagen der multisensorischen Objektwahrnehmung. Symposium conducted at the 36. Tagung 'Psychologie und Gehirn' der Deutschen Gesellschaft für Psychologie (DGP) und der Deutschen Gesellschaft für Psychophysiologie und ihre Anwendung (DGPA), June 10 – 12. 2010, Greifswald, Germany.*
- A165. Kassuba, T., Klinge, C.E., Hölig, C., Menz, M., Ptito, M., Röder, B., & Siebner, H.R. (2010). Left fusiform gyrus integrates visual, auditory and tactile cues of manipulable objects. *40th Annual Meeting of the Society for Neuroscience, November 13 – 17, 2010, San Diego, USA.*
- A164. Kügow, M., Skotara, N., Salden, U., Hänel-Faulhaber, B. & Röder, B. (2010). Bimodal bilingualism: Aspects of the functional organization of languages as revealed by German/German Sign Language bilinguals: An event-related potential study. *MIMS (Multilingual Individuals and Multilingual Societies), October 6 – 8, 2010, Hamburg, Germany.*
- A163. Occelli, V., Bruns, P., Zampini, M., & Röder, B. (2010). Audiotactile spatial ventriloquism in congenitally blind, late blind and sighted individuals. *Poster presented at the 11th International Multisensory Research Forum (IMRF), June 16-19, 2010, Liverpool, UK.*

- A162. Parise, C.V., Stewart, N., Föcker, J., Ngo, M., Röder, B., Spence, C., & Rogers, D. (2010). Emotional information enhances audio-visual speech integration. *International Multisensory Research Forum (IMRF), June 16-19, 2010, Liverpool, UK.*
- A161. Röder, B. (2010). Developmental plasticity of reference frames for touch. *Body Representation Workshop, Experimental Psychology Society, March 20 – 30, 2010, London, UK.*
- A160. Röder, B. (2010). Plasticity of language functions as a consequence of sensory deprivation. *International Neuropsychological Symposium, June 22-26, 2010. Ischia, Italy.*
- A159. Röder, B. & Bruns, P. (2010). Crossmodally generated shifts of auditory localization, *International Conference on Parietal lobe Functions, Amsterdam, September 20-21, 2010.*
- A158. Röder, B. & Hötting, K. (2010). Bewegung und kognitive Leistungsfähigkeit. 8. *Gemeinsames Symposium der dvs-Sektionen Biomechanik, Sportmotorik und Trainingswissenschaft, September 2 - 4, 2010, Hamburg, Germany.*
- A157. Schepers, I.M., Hipp, J.F., Schneider, T.R., Röder, B., Engel, A.K. (2010). Neural correlates of auditory processing in visual cortex of the blind. *Gordon Research Conference Neurobiology Of Cognition, August 01-06, 2010, Waterville Valley NH, USA.*
- A156. Schepers, I.M., Hipp, J.F., Schneider, T.R., Röder, B., Engel, A.K. (2010). Neural correlates of auditory processing in visual cortex of the blind. *Society for Neuroscience, November 13-17, 2010, San Diego, USA*
- A155. Schwarze, U., Reich, B., Holzsneider, K., Röder, B. & Hötting, K. (2010). Verbesserungen kognitiver Leistungen durch unterschiedliche Bewegungsprogramme im mittleren Lebensalter: eine Interventionsstudie. *Zeitschrift für Neuropsychologie, 21, 210.*
- A154. Zhang, L. & Röder, B. (2010). Effect of spatial attention on dynamic expression processing. *27th International Congress of Applied Psychology, July 11-16, 2010, Melbourne, Australia.*

2009

- A153. Bruns, P. & Röder, B. (2009). Tactile capture of auditory localization: An event-related potential study. In A. B. Eder, K. Rothermund, S. R. Schweinberger, M. C. Steffens, & H. Wiese (Eds.), 51. *Tagung experimentell arbeitender Psycholog|innen in Jena: 29. März bis 01. April 2009 (p. 36).* Lengerich: Pabst Science Publishers.
- A152. Bruns, P. & Röder, B. (in press). Tactile capture of auditory localization: An event-related potential study. *49th Annual Meeting of the Society for Psychophysiological Research. Berlin, German (October 21-24, 2009) Psychophysiology (Supplement).*

- A151. Föcker, J., Best, A., & Röder, B. (2009). Voice-processing in late-onset blind and sighted individuals: Evidence from event-related potentials *Abstract 'Rovereto Workshop on Crossmodal Plasticity', Rovereto, Italy (August 27-29, 2009)*.
- A150. Föcker, J., & Röder, B. (2009). Audio-visual integration of emotional processing: Evidence from event-related potential. *Abstract '10th International Multisensory Research Forum', New York, U.S. (June 29-July 2, 2009)*.
- A149. Friedrich, C.K., Schild, U. & Röder, B. (2009). Entwicklungsplastizität der Verarbeitung gesprochener Sprache. 35. Arbeitstagung Psychophysiologie und Methodik, Leipzig, 11.-13. Juni 2009 (p. 160).
- A148. Gädeke, J., & Röder, B. (2009). Is the Processing of Affective Prosody Influenced by Spatial Attention? An ERP Study. *49th Annual Meeting of the Society for Psychophysiological Research. Berlin, German (October 21-24, 2009) Psychophysiology (Supplement)*.
- A147. Holzsneider, K., Röder, B., Wolbers, T., & Hötting, K. (2009). Effects of aerobic fitness and a cognitive training on spatial learning capacities and functional brain activity. *Abstract '39th Annual Meeting of the Society for Neuroscience, Chicago, U.S. (October 17-21, 2009)*.
- A146. Hötting, K., Holzsneider, K., May, A., Kauschke, K., Schmidt, T., Reer, R., Braumann, K.-M., & Röder, B. Structural plasticity after six month of physical training in middle-aged humans *Abstract '39th Annual Meeting of the Society for Neuroscience, Chicago, U.S. (October 17-21, 2009)*
- A145. Hötting, K., Holzsneider, K., May, A., Kauschke, K., Schmidt, T., Reer, R., Braumann, K.-M., & Röder, B. (2009). Effekte einer kontrollierten Bewegungsintervention auf die strukturelle Plastizität des Gehirns im mittleren Erwachsenenalter. *Abstract ,82. Kongress der Deutschen Gesellschaft für Neurologie`, Nürnberg. Germany (September 23-26, 2009)*.
- A144. Kügow, M., Skotara, N., Salden, U., Hänel-Faulhaber, B. & Röder, B. (2009). Bimodal aspects of the functional organisation of language as revealed by German/German Sign Language bilinguals: An event-related potential. *Abstract '16th Meeting of the Society for Cognitive Neuroscience', San Francisco, U.S. (March 21-24, 2009)*.
- A143. Kügow, M., Skotara, N., Salden, U., Hänel-Faulhaber, B. & Röder, B. (2009). Crossmodal aspects of the functional organisation of languages as revealed by German/German Sign Language bilinguals: An event-related potential study. *Abstract 'Rovereto Workshop on Crossmodal Plasticity', Rovereto, Italy (August 27-29, 2009)*.
- A142. Maiworm, M., Röder, B. (2009). Do humans optimally integrate perceptual uncertainty and reward expectation? In A.B. Eder, K. Rothermund, S. R. Schweinberger, M. C. Steffens, & H. Wiese (Eds.), *51. Tagung experimentell arbeitender Psychologinnen in Jena: 29. März bis 01. April 2009. Lengerich: Pabst Science Publishers*.
- A141. Röder, B., Wolfram, M., Skotara, N., & Föcker, J. (2009). Affective expression as multisensory binding feature in a ventriloquist situation *Abstract '10th International Multisensory Research Forum', New York, U.S. (June 29-July 2, 2009)*.

- A140. Röder, B., Kügow, M., Skotara, N., Salden, U., & Hänel-Faulhaber, B. (2009). Processing German and German Sign Language as a function of age at acquisition. *Abstract 'Rovereto Workshop on Crossmodal Plasticity', Rovereto, Italy (August 27-29, 2009).*
- A139. Salden, U., Kügow, M., Skotara, N., Hänel-Faulhaber, B. & Röder, B. (2009). Is a delayed first language acquisition comparable to second language acquisition? An EPR study. *Abstract 'Rovereto Workshop on Crossmodal Plasticity', Rovereto, Italy (August 27-29, 2009).*
- A138. Skotara, N., Kügow, M., Salden, U., Hänel-Faulhaber, B. & Röder, B. (2009). Does a delayed sign language acquisition affect processing of written German differently than an on schedule acquisition? *Abstract 'Rovereto Workshop on Crossmodal Plasticity', Rovereto, Italy (August 27-29, 2009).*
- A137. Skotara, N., Kügow, M., Salden, U., Hänel-Faulhaber, B. & Röder, B. (2009). Neural correlates of language learning in exceptional circumstances: An event-related potential study. *Abstract '16th Meeting of the Society for Cognitive Neuroscience', San Francisco, U.S. (March 21-24, 2009).*
- A136. Yue, Z., Zhou, X. & Röder, B. (2009). Gradients of unimodal and crossmodal spatial attention under different processing loads. *Abstract '12th International Multisensory Research Forum', Shandong, China (November 5-8, 2009).*
- A135. Zhang, D, Hong, B, Röder, B., Gao., S. (2009). Auditory Stimuli Induce a Desynchronization of Steady-state Visual Evoked Potentials. *Abstract '10th International Multisensory Research Forum', New York, U.S. (June 29-July 2, 2009).*

2008

- A134. Bischof, G.-N., Hötting, K., & Röder, B. (2008). Aging effects on temporo-spatial perception: Behavioural and event-related potentials (ERPs) evidence. *CNS Annual Meeting, San Francisco, USA (April 12-15, 2008).*
- A133. Bruns, P. & Röder, B. (2008). Tactile capture of auditory localization is modulated by hand posture. *Abstract '9th International Multisensory Research Forum', Hamburg, Germany (July 16-19, 2008).*
- A132. Collins, T., Schicke, T. & Röder, B. (2008). Movement intention versus motor preparation in the orientation of visuo-spatial attention: The case of tool use. *Vision Sciences Society Annual Meeting, Naples, Florida, (May 19-14 2008).*
- A131. Föcker, J., Kusmirek, A. & Röder, B. (2008). An event-related potential study of person identity priming: Integration of human faces and voices. *In P. Khader, K. Jost, H. Lachnit, & F. Rösler (Hrsg.), Experimentelle Psychologie. Beiträge zur 50. Tagung experimentell arbeitender Psychologen, 3 bis 5. März in Marburg, (S.58). Lengerich: Papst Science Publishers.*
- A130. Föcker, J., Kusmirek, A. & Röder, B. (2008). Plasticity of voice-processing: Evidence from event-related potentials in late-onset blind and sighted people.

- Abstract '9th International Multisensory Research Forum', Hamburg, Germany (July 16-19, 2008).*
- A129. Friedrich, C., Schild, U. & Röder, B. (2008). Underspecification in neuronal word form activation. *CNS Annual Meeting, San Francisco, USA (April 12-15, 2008). Supplement of the Journal of Cognitive Neuroscience (2008), page 156.*
- A128. Friedrich, C., Schild, U. & Röder, B. (2008). Phonological traces in early speech recognition. *International Congress of Psychology', Berlin, Germany (July 20-25, 2008). In: International Journal of Psychology, 43 (3-4), 672.*
- A127. Groen, M. A., Hänel-Faulhaber, B., Friedrich, C.K. & Röder, B. (2008). Behavioural and electrophysiological indicators of interaction between German and German Sign Language in hearing-impaired children. *Abstract 'International Conference on Models in Bilinguals', Bangor, UK (October 24-26, 2008).*
- A126. Hagemann, C., Klinge, C., Röder, B. & Büchel, C. (2008). An fMRI study on crossmodal interactions during object processing. *Abstract 'XXIXth International Congress of Psychology', Berlin, Germany (July 20-25, 2008). In: International Journal of Psychology, 43 (3-4), 313.*
- A125. Hötting, K., Bischof, G.-N., & Röder, B. (2008). Spatial reference frames for tactile encoding in elderly adults. In: *Khader, P., Jost, K., Lachnit, H., & Rösler, F. (Eds). Beiträge zur 50. Tagung experimentell arbeitender Psychologen, 3.-5. März 2008 (p.16). Lengerich: Papst Science Publishers.*
- A124. Hötting, K., Friedrich, C. & Röder, B. (2008). Hearing cheats tactile deviant-detection: An event-related potential study. *Abstract '9th International Multisensory Research Forum', Hamburg, Germany (July 16-19, 2008).*
- A123. Klinge, C., Röder, B., & Büchel, Ch. (2008). Improved classification of emotional acoustic stimuli in congenitally blind volunteers is paralleled by enhanced amygdala activation. *Abstract '38th Annual Meeting of the Society for Neuroscience, Washington, USA (November 15-19, 2008).*
- A122. Kügow, M., Skotara, N., Röder, B. & Hänel, B. (2008). Hearing adults with deaf parents: bimodal-bilingual language impact on the brain. *Abstract 'Language Acquisition across the lifespan and across Generations', Hamburg, Germany (June 12-13, 2008).*
- A121. Putzar, L., Goerendt, I. Büchel, C., Schicke, T. & Röder, B. (2008). Critical periods for visual and multisensory functions in humans. *Abstract 'XXIXth International Congress of Psychology', Berlin, Germany (July 20-25, 2008). In: International Journal of Psychology, 43 (3-4), 803.*
- A120. Röder, B. (2008). Multisensory processes and how they emerge. *Abstract 'XXIXth International Congress of Psychology', Berlin, Germany (July 20-25, 2008). In: International Journal of Psychology, 43 (3-4), 708.*
- A119. Röder, B. (2008). Tactile reference frames for tactile perception. *Abstract 'Annual Meeting of the Tactile Research Group', Chicago, U.S. (November 13, 2008).*
- A118. Röder, B., Skotara, N., Kügow, M. & Hänel-Faulhaber, B. (2008). 'Sensitive phases for learning a first and a second language: An event-related potential study in German and German Sign Language' *Abstract '38th Annual Meeting of the Society for Neuroscience, Washington, U.S. (November 15-19, 2008).*

- A117. Schicke, T. & Röder, B. (2008). Interactions of different body parts in the peripersonal space and in the body schema. *Abstract '9th International Multisensory Research Forum', Hamburg, Germany (July 16-19, 2008).*
- A116. Schild, U., Röder, B. & Friedrich, C. (2008). Lesenlernen verändert neuronale Korrelate der auditiven Sprachwahrnehmung. In: Khader, P., Jost, K., Lachnit, H., & Rösler, F. (Eds). *Beiträge zur 50. Tagung experimentell arbeitender Psychologen*, 3.-5. März 2008 (p.42). Lengerich: Papst Science Publishers.
- A115. Schild, U., Röder, B. & Friedrich, C. (2008). Learning to read shapes speech recognition. *CNS Annual Meeting, San Francisco, USA (April 12-15, 2008). Supplement of the Journal of Cognitive Neuroscience (2008), page 161.*
- A114. Skotara, N., Hänel, B., Kügow, M. & Röder, B. (2008). Neural correlates of semantic and syntactic processes in German Sign Language (DGS). *Abstract '9th International Multisensory Research Forum', Hamburg, Germany (July 16-19, 2008).*
- A113. Yue, Z., Zhou, X. & Röder, B. (2008). Gradients of unimodal and crossmodal spatial attention under different processing loads. *Abstract '9th International Multisensory Research Forum', Hamburg, Germany (July 16-19, 2008).*
- A112. Yue, Z., Bischof, G.-N., Zhou, X., Spence, C. & Röder, B. (2008). Spatial attention affects the processing of tactile and visual stimuli presented at the tip of a tool: An event-related potential study. *Abstract 'XXIXth International Congress of Psychology', Berlin, Germany (July 20-25, 2008). In: International Journal of Psychology, 43 (3-4), 256.*

2007

- A111. Föcker, J., Hötting, K., Spence, Ch. & Röder, B. (2007). Spatial reference frames used for tactile attention depend on developmental vision: Evidence from event-related potentials. In: C. Frings, A. Mecklinger, B. Opitz, M. Pospeschill, D. Wentura & H.D. Zimmer (Hrsg.), *Beiträge zur 8. Jahrestagung der Gesellschaft für Kognitionswissenschaft.*
- A110. Hötting, K., Friedrich, C.K., & Röder, B. (2007). Wie Töne die taktile Wahrnehmung täuschen. In: Wender, K. F., Mecklenbräuker, S., Rey, G. D., Wehr, Th. (Eds.), *Beiträge zur 49. Tagung experimentell arbeitender Psychologen* (p. 270). Lengerich, Papst Science Publisher.
- A109. Hötting, K., Friedrich, C.K., & Röder, B. (2007). Auditory stimuli alter somatosensory deviant-detection: An event-related potential study. *CNS Annual Meeting, New York, USA (May 5-8, 2007).*
- A108. Kusmirek, A., Schicke, T., Spence, C. & Röder, B. (2007). Developmental vision determines the reference frame for multisensory action control. In: Wender, K. F., Mecklenbräuker, S., Rey, G. D., Wehr, Th. (Eds.), *Beiträge zur 49. Tagung experimentell arbeitender Psychologen* (p. 282). Lengerich, Papst Science Publisher.
- A107. Pagel, B., Schicke, T. & Röder, B. (2007). Verwendung räumlicher

- Referenzsysteme für die taktile Wahrnehmung bei Kindern. In: Wender, K. F., Mecklenbräuker, S., Rey, G. D., Wehr, Th. (Eds.), *Beiträge zur 49. Tagung experimentell arbeitender Psychologen* (p. 297). Lengerich, Pabst Science Publisher.
- A106. Röder, B. (2007). Der Einfluss des Sehens auf die multisensorische Wahrnehmung. *Abstract Annual Meeting „Psychologie und Gehirn“, Dortmund, Germany (June 7-9, 2007)*.
- A105. Röder, B. (2007). Neural correlates of critical periods. *Tagung „Streitfall Zweisprachigkeit“, Akademie der Wissenschaften in Hamburg (October 19-20, 2007)*.
- A104. Röder, B., Goerendt, I., Rösler, F. & Putzar, L. (2007). Early visual deprivation impairs multisensory processes in humans. *Abstract ‘37th Annual Meeting of the Society for Neuroscience, San Diego, USA (November 3-7, 2007)*.
- A103. Röder, B., Kusmirek, A., Spence, C. & Schicke, T. (2007). Visual input during development determines the multisensory control of actions. In: C. Frings, A. Mecklinger, B. Opitz, M. Pospeschill, D. Wentura & H.D. Zimmer (Hrsg.), *Beiträge zur 8. Jahrestagung der Gesellschaft für Kognitionswissenschaft*.
- A102. Röder, B., Pagel, B. & Schicke, T. (2007). Spatial coordinate systems for tactile localization in children between five and ten years. *Abstract ,Body Representation Workshop’, Rovereto, Italy (October 8-10, 2007)*.
- A101. Schicke, T. & Röder, B. (2007). Spatial remapping of touch across hands and feet: evidence from event-related potentials. *Abstract ,Body Representation Workshop’, Rovereto, Italy (October 8-10, 2007)*.
- A100. Schicke, T. & Röder, B. (2007). Automatic spatial remapping of touch across hands and feet: evidence from event-related potentials. *Abstract ‘37th Annual Meeting of the Society for Neuroscience, San Diego, USA (November 3-7, 2007)*.
- A99. Skotara, N., Hänel, B. & Röder, B. Event-related potentials associated with verb-agreement and semantic violations in German. In: C. Frings, A. Mecklinger, B. Opitz, M. Pospeschill, D. Wentura & H.D. Zimmer (Hrsg.), *Beiträge zur 8. Jahrestagung der Gesellschaft für Kognitionswissenschaft*.

2006

- A98. Röder, B., Föcker, J., Hötting, K. & Spence, Ch. (2006). Spatial reference frames used for tactile attention depend on developmental vision: Evidence from event-related potentials. *Abstract ‘7th International Multisensory Research Forum’, Dublin, Ireland (June 18-21, 2006)*.
- A97. Schicke, T. & Röder, B. (2006). Spatial remapping of touch: confusion of perceived stimulus order across hand and foot. In: H. Hecht, S. Berti, G. Meinhardt, M. Gamer (Eds.), *Beiträge zur 48. Tagung experimentell arbeitender Psychologen* (p. 302). Lengerich, Pabst Science Publishers.
- A96. Schicke, T. & Röder, B. (2006). Spatial remapping of touch: confusion of perceived stimulus order across hand and foot. *Abstract ‘Symposium on cortical control of*

- higher motor cognition*', Lübeck, Germany (May 19-20, 2006).
- A95. Schicke, T., Khader, P., Rösler, F. & Röder, B. (2006). Close correspondence of slow ERPs and BOLD signal changes during parametric task modulation. *Abstract Psychologie und Gehirn/APM, Dresden, Germany, (June 10-12, 2006)*,
- A94. Schicke, T. & Röder, B. (2006). A common external reference frame for tactile localization. *Abstract '7th International Multisensory Research Forum', Dublin, Ireland (June 18-21, 2006)*.

2005

- A93. Beer, A.L. & Röder, B. (2005). Attending to visual or auditory motion affects perception within and across modalities: An event-related potential study. *Poster presented at the 'Annual Meeting of the Vision Sciences Society', Sarasota, FL, USA (May 6-11, 2005)*.
- A92. Krämer, U., Lange, K. & Röder, B. (2005). Sowohl die Fokussierung der Aufmerksamkeit auf einen Zeitpunkt als auch auf eine Position im Raum führen zu einer Modulation der auditiven N1. In: K.W. Lange, K.-H. Bäuml, M.W. Greenlee, M. Hammerl, & A. Zimmer (Eds.), *Beiträge zur 47. Tagung experimentell arbeitender Psychologen* (p. 113). Lengerich, Pabst Science Publishers.
- A91. Kriegseis, A., Hennighausen, E., Rösler, F., & Röder, B. (2005). Reduzierte Alpha-Power bei geburtsblinden Menschen über parietookzipitalen Arealen. In: K.W. Lange, K.-H. Bäuml, M.W. Greenlee, M. Hammerl, & A. Zimmer (Eds.), *Beiträge zur 47. Tagung experimentell arbeitender Psychologen* (p. 116). Lengerich, Pabst Science Publishers.
- A90. Röder, B. (2005). Developmental plasticity of spatial functions as revealed by blind humans. *Abstract 'Society for Neuroscience 35th Annual Meeting' (Washington, DC, Nov. 12-16, 2005)*.
- A89. Röder, B., Demuth, L., Spence, Ch., & Rösler, F. (2005). Functional recovery after visual deprivation in early childhood. *Abstract 'Sixth meeting of the German Neuroscience Society'; 30th Göttinger Neurobiology Conference (Göttingen, Feb 17-20, 2005)*.
- A88. Röder, B. & Hötting, K. (2005). Cardiovascular fitness and cognitive functions. *Abstract '39. Kongress der Deutschen Gesellschaft für Sportmedizin und Prävention' (Hamburg, September, 14-17, 2005)*.

2004

- A87. Beer, A.L. & Röder, B. (2004). Attending to visual or auditory motion affects perception within and across modalities: An event-related potential study. *Abstract 'Annual Meeting of the Cognitive Neuroscience Society', San Francisco, USA (April 18-20, 2004)*.
- A86. Beer, A.L. & Röder, B. (2004). Visuelle oder auditive Aufmerksamkeit auf Bewegung verändert die Wahrnehmung innerhalb und quer über die Modalitäten:

- Eine Studie mit ereigniskorrelierten Potenzialen. In: *D. Kerzel, V. Franz, & K. Gegenfurtner (Eds.), Beiträge zur 46. Tagung experimentell arbeitender Psychologen (p.34). Lengerich, Pabst Science Publishers.*
- A85. Demuth, L.; Rösler, F. & Röder, B. (2004). Crossmodal temporal capture in dynamic displays. In: *D. Kerzel, V. Franz, & K. Gegenfurtner (Eds.), Beiträge zur 46. Tagung experimentell arbeitender Psychologen (p. 58). Lengerich, Pabst Science Publishers.*
- A84. Demuth, L.; Rösler, F.; Kroll, P. & Röder, B. (2004). Visual deprivation in early infancy: Effects on visual and multisensory perception. *Abstract '5th Annual meeting of the International Multisensory Research Forum', Barcelona, Spain (June 2 – 5, 2004).*
- A83. Föcker, J., Gondan, M., Hötting, K., Rösler, F., & Röder, B. (2004). Auditive, visuelle und cross-modale Aufmerksamkeitsgradienten: Eine Studie mit ereigniskorrelierten Potentialen. In: *D. Kerzel, V. Franz, & K. Gegenfurtner (Eds.), Beiträge zur 46. Tagung experimentell arbeitender Psychologen (p. 79). Lengerich, Pabst Science Publishers.*
- A82. Gondan, M. & Röder, B. (2004). Multisensorische Integration von redundanten Reizen erfordert räumliche Aufmerksamkeit. In: *D. Kerzel, V. Franz, & K. Gegenfurtner (Eds.), Beiträge zur 46. Tagung experimentell arbeitender Psychologen (p. 91). Lengerich, Pabst Science Publishers.*
- A81. Gondan, M. & Röder, B. (2004). Detecting multisensory interactions in event-related potentials. *Abstract '5th International Multisensory Research Forum', Barcelona, Spain (June 2-5, 2004).*
- A80. Hötting K. & Röder, B. (2004) Beeinflusst sensorische Erfahrung das Zusammenspiel unserer Sinnessysteme? Eine Studie zur Plastizität multisensorischer Wahrnehmung bei blinden Menschen. *Abstract '19. Jahrestagung der Gesellschaft für Neuropsychologie', München, Germany (September 2 – 5, 2004). Zeitschrift für Neuropsychologie, 15 (2), 123.*
- A79. Hötting, K. & Röder, B. (2004). Plasticity of auditory-tactile interactions: An event-related potential study in congenitally blind humans. *Abstract '5th International Multisensory Research Forum', Barcelona, Spain (June 2-5, 2004).*
- A78. Hötting, K. & Röder, B. (2004). Blinde Menschen lassen sich durch Töne weniger in der taktilen Wahrnehmung täuschen als sehende Menschen. In: *D. Kerzel, V. Franz, & K. Gegenfurtner (Eds.), Beiträge zur 46. Tagung experimentell arbeitender Psychologen (p. 116). Lengerich, Pabst Science Publishers.*
- A77. Lange, K., & Röder, B. (2004). Uni- and Crossmodal Effects of Orienting Attention to a Point in Time: An Event-Related Potential Study. In: *A. Widmann, E. Schröger, T. Jacobsen, T. Gruber, M.M. Müller, J. Jescheniak, A.D. Friederici, T.C. Gunter & C.S. Herrmann (Eds.), Evoked Potentials International Conference XIV. Leipzig Series in Cognitive Sciences 5 (p. 61-62). Leipzig, Leipziger Universitätsverlag.*
- A76. Lange, K., & Röder, B. (2004). Zeit als Medium der multisensorischen Integration: Eine EKP-Studie. In: *D. Kerzel, V. Franz, & K. Gegenfurtner (Eds.), Beiträge zur 46. Tagung experimentell arbeitender Psychologen (p. 153). Lengerich, Pabst Science Publishers.*

- A75. Röder, B. (2004). Die Rolle von Raum und Zeit für die multisensorische Integration *Abstract 'Kongress der Deutschen Gesellschaft für Psychologie' (Göttingen, September 26.-30., 2004)*.
- A74. Röder, B., Hötting, K., Schicke, T., & Spence, C. (2004). The role of visual input in multisensory integration. *Abstract '5th Annual Meeting of the International Multisensory Research Forum', Barcelona, Spain, (June 2-5, 2004)*.
- A73. Röder, B., Rösler, F., & Neville, H.J., (2004). Adaptive capacities of memory functions. *Abstract '28th International Congress of Psychology', Beijing, China (August 8-13, 2004)*. In press.
- A72. Schicke, T., Muckli, L., Beer, A.L., Singer, W., Goebel, R., Rösler, F., & Röder, B. (2004): How sighted and blind brains mentally scan a haptic image: Corresponding results from slow event-related potentials and fMRI. *NeuroImage, 22 (Supplement 1), S53*.

2003

- A71. Beer, A., & Röder, B. (2003). Attention to motion enhances processing of both visual and auditory stimuli: An event-related potential study. *Abstract 'Fourth International Multisensory Research Forum', Hamilton, Canada (June 14-17, 2003)*.
- A70. Capek, C.M., Corina, D., Grossi, G., McBurney, S.L., Neville, H.J., Newman, A., and Roeder, R. (2003). American Sign Language sentence processing: ERP evidence from adults with different ages of acquisition. *Abstract for the tenth Annual Meeting of the Cognitive Neuroscience Society, New York, U.S. (March 30- April 1, 2003)*.
- A69. Demuth, L., Rösler, F., Kroll, P., & Röder, B. (2003). Effects of visual deprivation in early infancy on visual and multisensory perception. *Abstract 'Fourth International Multisensory Research Forum', Hamilton, Canada (June 14-17, 2003)*.
- A68. Gondan, M., Lange, K., & Röder, B. (2003). Multisensory processing in the redundant target effect: a warning concerning modality switch costs. *Abstract 'Fourth International Multisensory Research Forum', Hamilton, Canada (June 14-17, 2003)*.
- A67. Hötting, K., & Röder, B. (2003). Altered auditory-tactile interaction in congenitally blind humans: An event-related potential study. *Acta Neurobiologiae Experimentalis, 63 (Supplement), p.80*.
- A66. Lange, K., & Röder, B. (2003). Early processing of auditory and tactile stimuli is modulated by orienting attention to a moment in time: uni- and crossmodal effects. *Abstract 'Fourth International Multisensory Research Forum', Hamilton, Canada (June 14-17, 2003)*.
- A65. Muckli, L., Schicke, T., Beer, A.L., Stock, O., Khader, P., Singer, W., Goebel, R., Rösler, F., & Röder, B. (2003): Slow brain potentials and parieto-frontal fMRI activity in blindfolded subjects performing an image scanning task. Program No.

- 912.6.2003 *Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2003. Online.
- A64. Röder, B. (2003). Blindness: A Source and Case of Neuronal Plasticity. *Abstract for the Meeting "Brain, Mind and Culture", Doeln, Germany, (August 6 -10, 2003)*.
- A63. Röder, B. (2003). The consequences of having no vision. *Abstract 'Fourth International Multisensory Research Forum', Hamilton, Canada (June 14-17, 2003)*.
- A62. Röder, B. (2003). Cross-modal plasticity of spatial functions in the blind. *Acta Neurobiologiae Experimentalis*, 63 (Supplement), p.13.
- A61. Röder, B., & Hötting, K. (2003). Hearing cheats touch but less in the congenitally blind. *Abstract 'Fourth International Multisensory Research Forum', Hamilton, Canada (June 14-17, 2003)*.
- A60. Schicke, T., Muckli, L., Beer, A., Singer, W., Goebel, R., Rösler, F., Röder, B. (2003). How the brain mentally scans a haptic image: Corresponding results from slow ERPs and fMRI. In: F. Schmalhofer, R.M. Young, & G. Katz (Eds.), *Proceedings of EuroCogSci 03 (S. 434)*. London, Lawrence Erlbaum Associates Publishers.

2002

- A59. Beer, A., & Röder, B. (2002). Unimodal and crossmodal effects of endogenous attention to visual and auditory motion. *Abstract 'Third International Multisensory Research Forum', Genf, Schweiz (May 24-26, 2002)*.
- A58. Capek, C.M., Corina, D., Grossi, G., McBurney, S.L., Mitchell, T.V., Neville, H.J., Newman, A.J., Röder, B., & Waligura, D. (2002). Electrophysiological evidence for the effects of age of acquisition on brain systems mediating semantic and syntactic processing in American Sign Language. *Abstract for the ninth Annual Meeting of the Cognitive Neuroscience Society, San Francisco, U.S. (April 14-16, 2002)*.
- A57. Demuth, L., Röder, B., & Rösler, F. (2002). Compensatory performance changes in auditory word recognition in congenitally blind adults. *Abstract 'Third International Multisensory Research Forum', Genf, Schweiz (May 24-26, 2002)*.
- A56. Gondan, M., Röder, B., & Rösler, F. (2002). Multisensory processing in the redundant target effect: A behavioral and ERP study. *Abstract 'Third International Multisensory Research Forum', Genf, Schweiz (May 24-26, 2002)*.
- A55. Gondan, M., Rösler, F. & Röder, B. (2002). Eine Verhaltens- und EEG-Untersuchung zur Verarbeitung bimodaler Reize. In: E. van der Meer, H. Hagendorf, R. Beyer, F. Krüger, A. Nuthmann & S. Schulz (Hrsg.), *Deutsche Gesellschaft für Psychologie, 43. Kongress, Programm. Abstracts (S. 157)*. Lengerich, Pabst Science Publishers.
- A54. Hötting, K., Röder, B., & Rösler, F. (2002) Audio-tactile links in sustained spatial attention: An ERP study. *Abstract 'Third International Multisensory Research Forum', Genf, Schweiz (May 24-26, 2002)*.
- A53. Hötting, K., Rösler, F., & Röder, B. (2002). Elektrophysiologische Korrelate crossmodaler auditiv-taktiler Aufmerksamkeit. In: E. van der Meer, H. Hagendorf,

- R. Beyer, F. Krüger, A. Nuthmann & S. Schulz (Hrsg.), *Deutsche Gesellschaft für Psychologie, 43. Kongress, Programm. Abstracts* (S. 231). Lengerich, Pabst Science Publishers.
- A52. Lange, K., Röder, B., & Rösler, F. (2002) Attending points in time. *Abstract 'Third International Multisensory Research Forum', Genf, Schweiz (May 24-26, 2002)*.
 - A51. Lange, K., Rösler, F., & Röder, B. (2002). Modulation auditorisch evozierter Potentiale durch die Fokussierung der Aufmerksamkeit auf einen Zeitpunkt. In: E. van der Meer, H. Hagendorf, R. Beyer, F. Krüger, A. Nuthmann & S. Schulz (Hrsg.), *Deutsche Gesellschaft für Psychologie, 43. Kongress, Programm. Abstracts* (S. 405). Lengerich, Pabst Science Publishers.
 - A50. Röder, B., & Rösler, F. (2002). Compensatory plasticity in congenitally blind humans. *Abstract 'Fifth Vitreoretinal Symposium', Marburg-Frankfurt, Germany (July 12)*.
 - A49. Röder, B., & Rösler, F. (2002). Cross-modal compensation of auditory long-term memory after early and late blindness. *Abstract 'Third International Multisensory Research Forum', Genf, Schweiz (May 24-26, 2002)*.
 - A48. Röder, B., & Rösler, F. (2002). Spatial skills in the congenitally blind and a method to test them haptically. *Abstract 'International Conference on Touch, Blindness and Neuroscience', Madrid, Spain (October 16-18, 2002)*.
 - A47. Röder, B., Rösler, F., & Neville, H.J. (2002) Neuronale Grundlagen kompensatorischer Gedächtnisleistungen untersucht am Modell blinder Menschen. Abstract for the 17th Annual Meeting of the German Society for Neuropsychology, Bochum, Germany (October 10-13, 2002). *Zeitschrift für Neuropsychologie*, 13(13), 245.
 - A46. Röder, B., Stock, O., Bien, S., Neville, H.J., & Rösler, F. (2002). The cerebral organization of language functions in late blind adults. *Abstract for the fourth Workshop on Cortical Plasticity, Schwetzingen, Germany (March 15-17)*.
 - A45. Rösler, F., & Röder, B. (2002). Critical periods for the development of visual functions. *Abstract 'Fifth Vitreoretinal Symposium', Marburg-Frankfurt, Germany (July 12)*.
 - A44. Schicke, T., & Röder, B. (2002). Influence of visual information on the displacement of the auditory median plane of the head (SAMP). *Abstract 'Third International Multisensory Research Forum', Genf, Schweiz (May 24-26, 2002)*.
 - A43. Stock, O., Röder, B., Bien, S., Neville, H.J., & Rösler, F. (2002). The cerebral reorganization of language functions in late blind adults as an example of cross-modal plasticity in adulthood. *Abstract 'Third International Multisensory Research Forum', Genf, Schweiz (May 24-26, 2002)*.

2001

- A42. Capek, C.M., Corina, D., Grossi, G., McBurney, S.L., Mitchell, T.V., Neville, H.J., Newman, A.J., Röder, B., & Waligura, D. (2001). Semantic and syntactic processing in American Sign Language: Electrophysiological evidence. *Abstract*

for the eighth Annual Meeting of the Cognitive Neuroscience Society, New York, U.S. (March 24-27, 2001).

- A41. Demuth, L., Röder, B., Streb, J., & Rösler, F. (2001). Semantic and syntactic priming in auditory word processing. In: *T. Arnold & C. Herrmann (Eds.), Cognitive Systems & Mechanisms. Abstracts of the 5th Meeting of the German Cognitive Science Society. Leipzig Series in Cognitive Sciences 2 (p. 79). Leipzig, Leipziger Universitätsverlag.*
- A40. Lange, K., Röder, B., Schicke, T., Demuth, L., & Rösler, F. (2001) Event-related brain potentials to words and pseudo-words. Abstract '27. Arbeitstagung Psychophysiologische Methodik', Marburg, Germany (June 14-16, 2001).
- A39. Röder, B., Rösler, F., & Neville, H.J. (2001). Memory functions in blind adults. In: *T. Arnold & C. Herrmann (Eds.), Cognitive Systems & Mechanisms. Abstracts of the 5th Meeting of the German Cognitive Science Society. Leipzig Series in Cognitive Sciences 2 (p. 79). Leipzig, Leipziger Universitätsverlag.*
- A38. Röder, B., Stock, O., Rösler, F., Bien, S., & Neville, H.J. (2001). Plasticity of language functions in blind humans: An fMRI study. *Abstract for the eight Annual Meeting of the Cognitive Neuroscience Society, New York, U.S. (March 24-27, 2001).*
- A37. Röder, B., Stock, O., Bien, S., Neville, H.J., & Rösler, F. (2001). Cerebral organization of language in congenitally blind adults. Abstract for the '27. Arbeitstagung Psychophysiologische Methodik', Marburg, Germany (June 14-16, 2001).
- A36. Rösler, F., Streb, F., Röder, B., Haan, H., Bien, S., & Niederhaus, B., (2001). Monitoring orthographic and visual image information processing by means of high-density ERP-recordings and current source density estimates. Abstract '27. Arbeitstagung Psychophysiologische Methodik', Marburg, Germany (June 14-16, 2001).
- A35. Stock, O., Röder, B., Bien, S., Neville, H.J., & Rösler, F. (2001). Neural correlates of semantic and syntactic language functions: An fMRI study. *Abstract for the eight Annual Meeting of the Cognitive Neuroscience Society, New York, U.S. (March 24-27, 2001).*
- A34. Stock, O., Röder, B., Bien, S., Neville, H.J., & Rösler, F. (2001). Neural correlates of semantic and syntactic language functions: An fMRI study. *Abstract '27. Arbeitstagung Psychophysiologische Methodik', Marburg, Germany (June 14-16, 2001).*

2000

- A33. Capek, C.M., Corina, D., Grossi, G., McBurney, S.L., Mitchell, T.V., Neville, H.J., Newman, A.J., Röder, B., & Waligura, D. (2000). Brain systems mediating American Sign Language sentence processing: An ERP study. *Abstract for the 30th Annual Meeting of the Society for Neuroscience, New Orleans, U.S. (November 4-9, 2000).*

- A32. Röder, B., & Rösler, F. (2000). Gedächtnis für Umweltgeräusche bei blinden im Vergleich zu sehenden Menschen. *Abstract '42. Kongreß der Deutschen Gesellschaft für Psychologie', Jena, Germany (September 24-28, 2000).*
- A31. Röder, B., Rösler, F., Bien, S., & Neville, H.J. (2000). Plasticity of language functions in blind humans. *Abstract '35. Jahrestagung der Deutschen Gesellschaft für Neuroradiologie', Marburg, Germany (September 6-9, 2000).*
- A30. Röder, B., Rösler, F., & Neville, H.J. (2000). Neural plasticity in blind humans. *Journal of Psychophysiology, 14, S11.*
- A29. Röder, B., Spence, C., Haan, H., & Rösler, F. (2000). "Inhibition of Return" mit taktilen Reizen bei sehenden und blinden Personen. *In: A. Vorberg, A. Fuchs, T. Fütterer, A. Heinecke, U. Heinrich, U. Mattler & S. Töllner (Hrsg.). Experimentelle Psychologie (S. 152). Lengerich, Pabst Science Publishers.*
- A28. Röder, B., Spence, C., & Rösler, F. (2000). Tactile inhibition-of-return in congenitally blind humans. *Abstract 'Second International Multisensory Research Forum', New York, U.S. (October 6-8, 2000).*
- A27. Stock, O., Röder, B., Neville, H.J., Bien, S., & Rösler, F. (2000). Neural correlates of semantic and syntactic language functions: An fMRI study. *Abstract '35. Jahrestagung der Deutschen Gesellschaft für Neuroradiologie', Marburg, Germany (September 6-9, 2000).*
- A26. Teder-Sälejärvi, W., Röder, B., Pierce, K., Courchesne, E., & Hillyard, S.A. (2000). Tuning of auditory attention in free field in normal, blind, and autistic subjects. *Psychophysiology, 37, S7.*

1999

- A25. Röder, B., Neville, H.J., & Rösler, F. (1999). Slow potentials indicating neural plasticity in blind humans. *Abstract for The Cognitive Neuroscience Society Meeting, Washington, U.S. (April 11-13, 1999).*
- A24. Röder, B., Rösler, F., & Neville, H.J. (1999). Event-related potentials during auditory language processing in congenitally blind and sighted people. *Abstract for The Cognitive Neuroscience Society Meeting, Washington, U.S. (April 11-13, 1999).*
- A23. Röder, B., Rösler, F., & Neville, H.J. (1999). An event-related potential study of auditory language processing in blind and sighted adults. *Abstract for The International Conference on Cognitive Neuroscience (ICON VII), Budapest, Hungaria (June 29 - July 3, 1999).*
- A22. Röder, B., Rösler, F., Teder-Sälejärvi, W., Hillyard, S.A., & Neville, H.J. (1999). Spatial representation and cross-modal compensation in blind humans. *Abstract for the Workshop on Cross-modal Attention & Multisensory Integration, Oxford, U.K. (October 1-2, 1999).*

1998

- A21. Haan, H., Streb, J., Röder, B., Bien, S., & Rösler, F. (1998). Kortikale Quellenlokalisation des semantischen N400-Effektes bei Verben und Substantiven. *Abstract for the 'Tagung der experimentell arbeitenden Psychologen (TEAP)', Marburg, Germany (April 6-9, 1998).*
- A20. Murray, S.O., Newman, A.J., Röder, B., Mitchell, T.V., Takahashi, T., & H.J. Neville (1998). Functional organization of auditory motion processing in humans using fMRI. *Abstract for the 28th Annual Meeting of the Society for Neuroscience, Los Angeles, U.S. (November 7-12, 1998).*
- A19. Röder, B., Rösler, F., & Neville, H.J. (1998). Auditive Gedächtnisfunktionen bei sehenden und geburtsblinden Personen. *Abstract 'Tagung der experimentell arbeitenden Psychologen (TEAP)', Marburg, Germany (April 6-9, 1998).*
- A18. Röder, B., Rösler, F., & Neville, H.J. (1998). Behavioral and electrophysiological indices of auditory memory for words in sighted and blind adults. *Abstract for the 12. International Conference on Event-Related Potentials of the Brain (EPIC XII), Boston, U.S. (July 19-23, 1998).*
- A17. Wolber, M., Röder, B., & Neville, H.J. (1998). Gedächtnis für Stimmen bei sehenden und blinden Personen. *Abstract 'Tagung der experimentell arbeitenden Psychologen (TEAP)', Marburg, Germany (April 6-9, 1998).*

1997

- A16. Röder, B., Rösler, F., & Neville, H.J. (1997). Cerebral activation patterns during spatial imagery in sighted and blind subjects. *Abstract for the Meeting of the Society for Research in Child Development, DC, U.S. (April 3-6, 1997).*
- A15. Röder, B., Teder, W., Sterr, A., Rösler, F., Hillyard, S.A., & Neville, H.J. (1997). Auditory spatial attention in sighted and blind humans. *Abstract for The Cognitive Neuroscience Society Meeting, Boston, U.S. (March 23-25, 1997).*
- A14. Röder, B., Teder-Sälejärvi, W., Sterr, A., Rösler, F., Hillyard, S.A., & Neville, H.J. (1997). Auditory-spatial tuning in sighted and blind adults: Behavioral and electrophysiological evidence. *Abstract for the 27th Annual Meeting of the Society for Neuroscience, New Orleans, U.S. (October 25-30, 1997).*
- A13. Röder, B., Teder-Sälejärvi, W., Sterr, A., Rösler, F., Hillyard, S.A., & Neville, H.J. (1997). Auditory compensation in blind humans: Behavioral and electrophysiological evidence. *Abstract for the 2nd Berlin Workshop on cortical plasticity, Berlin, Germany, (November 27-30, 1997).*
- A12. Rösler, F., Pechmann, T., Streb, J., Röder, B., & Hennighausen, E. (1998). ERP correlates of sentence parsing in a language with varying word order. *Abstract for the 37th Annual Meeting of the Society of Psychophysiological Research, Cape Cod, U.S., (October 15-19, 1997).*

1996

- A11. Gölz, H., Rösler, F., Röder, B., & Hennighausen, E. (1996). Segregation of spatiotemporal components of auditory event-related potentials. *Abstract for the Hans Berger Meeting, Jena, (November 1996)*.
- A10. Röder, B., Rösler, F., Hennighausen, E., & Näcker, F. (1996). Slow and phasic ERP-correlates of auditory and somatosensory discrimination in sighted and blind human subjects. *Abstract for The Cognitive Neuroscience Society Meeting, San Francisco, U.S. (March 31- April 2, 1996)*.
- A9. Röder, B., Rösler, F., & Hennighausen, E. (1996). Cerebral activation patterns in blind and sighted human subjects during encoding and transformation of haptic images. *Abstract for The 6th International Conference on Cognitive Neuroscience, San Francisco, U.S. (May 28 - June 2, 1996)*.

1995

- A8. Röder, B., Rösler, F., Näcker, F., & Hennighausen, E. (1995). Cross-modal intrusion in the blind? *Journal of Psychophysiology*, 9, 367-368.
- A7. Rösler, F., Röder, B., Bajric, J., & Heil, M. (1995). Modality-specific and modality-unspecific patterns of cortical activation during visual and haptic mental imagery. *Abstract for The Cognitive Neuroscience Society Meeting, San Francisco, U.S. (March 26-28, 1995)*.

1994

- A6. Röder, B., Rösler, F., Heil, M., & Hennighausen, E. (1994). "Visual imagery" in blind and sighted subjects. *Proceedings of the Fifth European Workshop on Imagery and Cognition. Saarbrücken (23-27 July, 1994)*.
- A5. Röder, B., Rösler, F., Näcker, F., Hennighausen, E., & Heil, M. (1994). Event-related potentials indicate intermodal neuronal plasticity of the visually deprived human brain. *Proceedings of the Brain Topography Meeting in Magdeburg, Germany, 1994*. Boston: Birkhäuser.
- A4. Röder, B., Rösler, F., Näcker, F., Hennighausen, E., & Heil, M. (1994). Ereigniskorrelierte Potentiale als Indikatoren neuronaler Plastizität bei Menschen nach visueller Deprivation. In: K. Pawlik (Ed.), *Abstracts zum 39. Kongreß der Deutschen Gesellschaft für Psychologie (pp. 582-583)*. Hamburg.
- A3. Rösler, F., & Röder, B. (1994). Evidence for intermodal neuronal plasticity in blind subjects: Topographic analysis of slow event-related activity during tactile and auditory information processing. *Psychophysiology*, 31(Suppl. 1), S9.

1993

- A2. Röder, B., Rösler, F., Heil, M., & Hennighausen, E. (1993). DC-Correlates of haptic

- mental rotation in blind and sighted subjects. *Psychophysiology*, 30(Suppl. 1), 55.
- A1. Rösler, F., Röder, B., Heil, M., & Hennighausen, E. (1993). Electrical activity in the occipital cortex of congenitally blind and adventitiously blind subjects during a haptic mental rotation task. *European Journal of Neuroscience*. Supplement 6, 228.