

Curriculum Vitae of **FRIEDEMANN PULVERMÜLLER**



EDUCATION

<i>Dr. rer.soc. (Ph.D.)</i>	Psychology, Universität Konstanz	1999
<i>Habilitation</i>	Psychology, Universität Konstanz	1998
<i>Habilitation</i>	Behavioral Neuroscience, Universität Tübingen	1995
<i>Dr. phil. (Ph.D.)</i>	Linguistics, Universität Tübingen	1989
<i>Staatsexamen (M.A.)</i>	Biology, German Linguistics, Universität Tübingen	1985

SCIENTIFIC APPOINTMENTS AND TEACHING

<i>Professor (W3) in Neuroscience of Language and Pragmatics</i>		
	Dept of Philosophy and Humanities, Freie Universität Berlin	2011—
<i>Head of MEG</i>	MRC Cognition & Brain Sciences Unit, Cambridge	2007-2011
<i>Programme Leader in the Cognitive Neuroscience of Language</i>		
	MRC Cognition & Brain Sciences Unit, Cambridge	2000-2011
<i>Heisenberg Fellow</i>	Department of Psychology, Universität Konstanz	1996-2000
<i>Helmholtz Fellow</i>	Medical School, Universität Tübingen	1993-1996
<i>Post-doctoral fellow</i>	Dept. of Applied Linguistics, UCLA	1991-1993
<i>Research Associate</i>	Max-Planck-Institute of Biological Cybernetics	1990-1991
<i>Doctoral Fellow</i>	Linguistics, Universität Tübingen	1986-1990
<i>Lecturer</i>	Linguistics, Universität Tübingen	1986

MAJOR RESEARCH GRANTS

1. Principal Investigator: F. Pulvermüller
Topic: *Neurobiology of Word Processing* 1993-1995
Granting agency: Deutsche Forschungsgemeinschaft, DFG Pu 97/2-1
Amount of funding: ca. 100,000 €
2. Principal Investigator: F. Pulvermüller
Topic: *Lexical Deficits after Stroke* 1995-1998
Granting agency: Deutsche Forschungsgemeinschaft, DFG Pu 97/2-2)
Amount of funding: ca. 180,000 €
3. Principal Investigator: F. Pulvermüller
Topic: *Neurobiology of Word Processing II* 1996-1999
Granting agency: Deutsche Forschungsgemeinschaft, DFG Pu 97/2-3)
Amount of funding: ca. 100,000 €
4. Principal Investigator: F. Pulvermüller
Topic: *Activity Dynamics of Cortical Representations* 1997-2001
Granting agency: Deutsche Forschungsgemeinschaft, DFG Pu 97/10-1)
Amount of funding: ca. 70,000 €
5. Principal Investigator: F. Pulvermüller
Topic: *Psychophysiology of Word Meaning* 1998-2001
Granting agency: Deutsche Forschungsgemeinschaft, DFG Pu 97/11-1)
Amount of funding: ca. 70,000 €
6. Principal Investigator: F. Pulvermüller
Topic: *The right hemisphere's role in word processing* 2000--2001
Granting agency: Universität Konstanz
Amount of funding: ca. 40,000 €
7. Principal Investigator: F. Pulvermüller
Topic: *Neural basis of words, meaning and syntax* 2000--2004
Granting agency: Medical Research Council, MC_US_A060_0034
Amount of funding: ca. € 1.2 Mio
8. Principal Investigators: B. Rockstroh & F. Pulvermüller
Topic: *Constraint-Induced Aphasia Therapy* 2001--2002
Granting agency: Stiftung ZNS (German CNS foundation)
Amount of funding: ca. 50,000 €
9. Principal Investigator: F. Pulvermüller, Group coordinator: Stefan Wermter
Topic: *Mirrorbot: Language, action and perception in monkeys, humans and artifacts* 2002--2005
Granting agency: European Union
Amount of funding: ca. € 1.7 Mio. overall, € 435,000 to Cambridge part
10. Principal Investigator: F. Pulvermüller
Topic: *Neural basis of words, meaning and syntax* 2004--2009
Granting agency: Medical Research Council MC_US_A060_0034
Amount of funding: ca. € 1.5 Mio

11. Application team: W. Marslen-Wilson, F. Pulvermüller, R. Henson, Y. Shtyrov
Equipment: MEG device Elekta-Neuromag Vectorview + MSR 2006
Granting agency: Medical Research Council
Amount of funding: ca. €2.16 Mio

12. Principal Investigator: F. Pulvermüller, Group coordinator: S. Wermter
Topic: NESTcom: What it means to Communicate
Cambridge Part On Cognitive Neuroscience 2006--2008
Granting agency: European Union NEST-2005-PATH-HUM 043374
Amount of funding: ca. € 249,000 overall, € 82,000 to Cambridge part

13. Principal Investigator: W. Marslen-Wilson, F. Pulvermüller, R. Henson, Y. Shtyrov
Topic: MRC-Elekta MEG Clinical Research Collaboration 2007--2010
Granting agency: Elekta-Neuromag, Stockholm/Helsinki
Amount of funding: ca. € 150,000

14. Principal Investigator: F. Pulvermüller, Y. Shtyrov (for MRC Cambridge)
Topic: MEG Biomarkers of Schizophrenia 2008--2011
Granting agency: Gaxo-Smith-Kline
Amount of funding: ca. € 200,000

15. Principal Investigator: F. Pulvermüller
Topic: Brain dynamics of language in time and space 2009--2013
Granting agency: Medical Research Council U1055.04.003.00001.01
Amount of funding: ca. € 2.35 Mio.

16. Principal Investigator: F. Pulvermüller
Topic: Startup grant 2011--2016
Granting agency: Freie Universität Berlin
Amount of funding: ca. € 610,000

17. Principal Investigator: H Kappelhoff et al., PI; F Pulvermüller, group coordinator
Topic: Interaction between motor, perceptual and linguistic systems
Granting agency: Deutsche Forschungsgemeinschaft 2012--2014
Amount of funding: ca. € 6.1 Mio overall, ca. € 305,000 for group

18. Principal Investigator: F. Pulvermüller
Topic: Bioinspired Architecture for Brain Embodied Language: BABEL
Granting agency: EPSRC (UK), EP/J004561/1 2012--2017
Amount of funding: ca. € 550,000

19. Principle Investigator: Marian Brady, Glasgow; Germany coordinator: F. Pulvermüller
Topic: COST Action Collaboration of Aphasia Trialists 2013--2017
Granting agency: European Union
Amount of funding: ca. € 512,000

20. Principle Investigator: Sue Denham, Plymouth; FU Berlin partner: F. Pulvermüller
Topic: CogNovo Project, FP7-PEOPLE-2013-ITN 2013--2016
Granting agency: European Union
Amount of funding: ca. € 4.07 Mio

21. Principle Investigator: F. Pulvermüller
Topic: Constructions and Combinations 2014--2017
Granting agency: Deutsche Forschungsgemeinschaft, DFG Pu 97/16-1
Amount of funding: ca. € 300,000
22. Principle Investigators: F. Pulvermüller & B. Mohr
Topic: Intensive Language Action Therapy 2014--2021
Granting agency: Deutsche Forschungsgemeinschaft, DFG Pu 97/15-1 and 2
Amount of funding: ca. € 700,000
23. Principle Investigator: F. Pulvermüller
Topic: The sound of meaning 2017--2020
Granting agency: Deutsche Forschungsgemeinschaft, DFG Pu 97/22-1
Amount of funding: ca. € 500,000
24. Principle Investigator: F. Pulvermüller
Topic: XPrag.de: Brain Signatures of Communication 2017--2020
Granting agency: Deutsche Forschungsgemeinschaft, DFG Pu 97/23-1
Amount of funding: ca. € 330,000

TEACHING AT GRADUATE AND UNDERGRADUATE LEVELS IN THE AREAS OF

Cognitive Neuroscience, Psychophysiology, Neuropsychology
Linguistics, Psycholinguistics, Neurolinguistics, Neuroscience of Language
General Psychology (attention, emotion, language, memory, perception)
Research Methods in Cognitive Science, Neuroimaging, especially MEG, EEG

ADMINISTRATIVE ACTIVITIES

Member of administrative committees at MRC CBSU, including
Unit Management Committee
Imaging Management Committee
Graduate Student Admission and Evaluation Committee
MEG Management Committee (Chair)
At Freie Universität Berlin:
Head, Brain Language Laboratory
Deputy member, Institute Management Committee, Inst Dt Ndl Philology
At Berlin School of Mind and Brain:
Member, Committee for Early Career Support
Member, Curriculum Committee and Teaching Board

PROFESSIONAL ORGANIZATION MEMBERSHIPS

Cognitive Neuroscience Society (CNS), USA
Experimental Psychology Society (EPS), UK
Society for Psychophysiological Research (SPR), USA
Society for Neuroscience (SfN), USA

World Federation of Neurology (WFN) – Research Group on Aphasia and Cognitive Disorders (RGACD)
Society for the Neurobiology of Language (NBL), USA

EDITORIAL ACTIVITIES

Guest Editor, <i>Cortex</i>	2009-2012
Guest Editor, <i>Brain and Language</i>	2008-2011
Guest Editor, <i>Neural Networks</i>	2007-2009
Editorial Board, <i>Biolinguistics</i>	2010—
Review Editor, <i>Frontiers in Human Neuroscience</i>	2007—
Editorial Board, <i>Brain and Language</i>	2007—
Editorial Board, <i>Brain Topography</i>	2007—
Editorial Board, <i>Aphasiology</i>	1999—

REFEREE FOR SCIENTIFIC ORGANIZATIONS

Biotechnology and Biological Sciences Research Council (BBSRC), UK
Deutsche Forschungsgemeinschaft (DFG), Germany
Dutch Science Foundation, The Netherlands
Engineering and Physical Sciences Research Council (EPSRC), UK
Finnish Academy of Science, Finland
Medical Research Council (MRC), UK
National Science Foundation (NSF), USA
Stiftung ZNS, Germany
Stroke Association, UK
Wellcome Trust, UK
and many others

REFEREE FOR SCIENTIFIC JOURNALS (EXAMPLES)

Aphasiology
Behavioral and Brain Sciences
Biological Psychology
Brain and Language
Brain Research/Cognitive Brain Research
Clinical Neurophysiology/ Electroencephalography and Clinical Neurophysiology
Cognitive Neuropsychology
Cognitive Psychology
Cognitive Science
Connection Science
Current Biology
European Journal of Neuroscience
Experimental Brain Research
International Journal of Psychophysiology
Issues in Applied Linguistics
Journal of Cognitive Neuroscience
Journal of Neuroscience
Journal of Psychophysiology

Language and Cognitive Processes
Nature, Nature Neuroscience, Nature Reviews Neuroscience, Nature Communications
Neural Networks
Neurocase
Neuroimage
Neuron
Neuropsychologia
Proceedings of the National Academy of Sciences, USA
Psychophysiology
Trends in Cognitive Sciences
Science, Scientific Reports
and many others

BIBLIOGRAPHICAL INFORMATION

Number of publications: >280, incl. >220 peer reviewed journal papers, 9 books and edited volumes
Hirsch (h) index: 77; Number of citations: > 25,000 (google scholar, 1.7.2018)
ORCHID-ID; 0000-0003-3210-7112; Researcher-ID: I-2830-2017

List of Publications

[A] BOOKS, DISSERTATIONS, EDITED VOLUMES

1. Pulvermüller, F. 1990. ***Aphasische Kommunikation. Grundfragen ihrer Analyse und Therapie. Sprachtherapie 2.*** [Aphasic Communication. Key questions of its analysis and therapy]. Gunter Narr Verlag: Tübingen.
2. Pulvermüller, F. 1996. ***Neurobiologie der Sprache*** [Neurobiology Of Language]. ***Gehirntheoretische Überlegungen und empirische Befunde zur Sprachverarbeitung. Psychologia Universalis 1.*** Pabst Science Publishers: Lengerich, Berlin.
3. Pulvermüller, F. 2001. ***Neuronal grammar. An essay on brain mechanisms of serial order.*** Doctoral dissertation, University of Konstanz.
4. Pulvermüller, F. 2003. ***The Neuroscience Of Language: On Brain Circuits Of Words and Serial Order.*** Cambridge University Press, Cambridge, UK.
5. Shtyrov, Y. & Pulvermüller, F. (eds.) 2006. ***Fourth Conference On Mismatch Negativity (MMN) And Its Clinical And Scientific Applications***, April 22-26, 2006. MRC Cognition and Brain Sciences Unit, Cambridge, UK.
6. Wermter, S., Page, M., Knowles, M., Gallese, V., Pulvermüller, F., & Taylor, J. (eds.) 2009. ***Multimodal communication in animals, humans and robots.*** Special issue of the journal *Neural Networks*, **22** (2).
7. Knoeferle, P., Crocker, M. W., & Pulvermüller, F. (eds.) 2010. ***Embodied sentence processing.*** Special issue of the journal *Brain and Language*, **112** (3).
8. Cappa, S., & Pulvermüller, F. (eds.) 2012. ***Language and the Motor System.*** Special Issue of the Journal *Cortex*, **48** (7).
9. Berthier, M. L., Green, C., Juárez, R., Lara, J. P., & Pulvermüller, F. 2014. ***REGIA: Rehabilitación grupal intensiva de la afasia.*** Madrid: TEA Ediciones, S.A.

[B] ARTICLES IN REFEREED INTERNATIONAL JOURNALS

1991

10. Pulvermüller, F. & Preißl, H. 1991: A cell assembly model of language. *Network: Computation in Neural Systems* **2**, 455-468.
11. Pulvermüller, F. & Roth, V.M. 1991: Communicative aphasia treatment as a further development of PACE-therapy. *Aphasiology* **5**, 39-50.

1992

12. Pulvermüller, F. 1992: Constituents of a neurological theory of language. *Concepts in Neuroscience* **3**, 157-200.
13. Braitenberg, V. & Pulvermüller, F. 1992: Entwurf einer neurologischen Theorie der Sprache. *Naturwissenschaften* **79**, 103-117.

1993

14. Pulvermüller, F. & Schönle, P.-W. 1993: Behavioral and neuronal changes during treatment of mixed transcortical aphasia. *Cognition* **48**, 139-161.

1994

15. Pulvermüller, F. 1994: Why cell assembly ignition should lead to gamma band responses. *Psycoloquy* **5 (65)**, 1-6.
16. Pulvermüller, F. & Lutzenberger, W. 1994: Specific gamma-band depression and linguistic units. *Psycoloquy* **5 (68)**, 1-8.
17. Pulvermüller, F. & Preißl, H. 1994: Explaining aphasias in neuronal terms. *Journal of Neurolinguistics* **8**, 75-81
18. Pulvermüller, F. Preißl, H., Eulitz, C., Pantev, C., Lutzenberger, W., Elbert, T. & Birbaumer, N. 1994: Brain rhythms, cell assemblies and cognition: evidence from the processing of words and pseudowords. *Psycoloquy* **5 (48)**, 1-30.
19. Pulvermüller, F., Preißl, H., Lutzenberger, W. & Birbaumer, N. 1994: Simple models first. *Psycoloquy* **5 (66)**, 1-4.
20. Pulvermüller, F. & Schumann, J.H. 1994: Neurobiological mechanisms of language acquisition. *Language Learning* **44**, 681-734.
21. Lutzenberger, W., Pulvermüller, F. & Birbaumer, N. 1994: Words and pseudowords elicit distinct patterns of 30-Hz EEG responses in humans. *Neuroscience Letters* **176**, 115-118.
22. Lutzenberger, W., Pulvermüller, F., Elbert, T. & Birbaumer, N. 1994: Increased gamma-band power: new data against old prejudices. *Psycoloquy* **5 (67)**, 1-9.
23. Mohr, B., Pulvermüller, F., Rayman, J. & Zaidel, E. 1994: Interhemispheric cooperation during lexical processing is mediated by the corpus callosum: evidence from the split-brain. *Neuroscience Letters* **181**, 17-21.
24. Mohr, B., Pulvermüller, F. & Zaidel, E. 1994: Lexical decision after left, right, and bilateral presentation of content words, function words, and non-words: evidence for interhemispheric interaction. *Neuropsychologia* **32**, 105-124.

1995

25. Pulvermüller, F. 1995: Agrammatism: behavioral description and neurobiological explanation. *Journal of Cognitive Neuroscience* **7**, 165-181.
26. Pulvermüller, F. 1995: What neurobiology can buy language theory. *Studies in Second Language Acquisition* **17**, 73-77.
27. Pulvermüller, F. 1995: Neurobiologie der Wortverarbeitung. *Naturwissenschaften* **82**, 279-287.
28. Pulvermüller, F., Lutzenberger, W. & Birbaumer, N. 1995: Electrocortical distinction of vocabulary types. *Electroencephalography and Clinical Neurophysiology* **94**, 357-370.
29. Pulvermüller, F., Lutzenberger, W. Preißl, H. & Birbaumer, N. 1995: Motor programming in both hemispheres: an EEG study of the human brain. *Neuroscience Letters* **189**, 5-8.
30. Pulvermüller, F., Lutzenberger, W. Preißl, H. & Birbaumer, N. 1995: Spectral responses in the gamma-band: physiological signs of higher cognitive processes? *NeuroReport* **6**, 2059-2064.
31. Pulvermüller, F. & Preißl, H. 1995: Local or transcortical assemblies? Evidence from cognitive neuroscience (Response to D. Amit). *Behavioral and Brain Sciences* **18**, 640-641.
32. Pulvermüller, F. & Schumann, J.H. 1995: On the interpretation of earlier recovery of the second language after injection of sodium Amytal in the left middle cerebral artery. *Language Learning* **45**, 729-73
33. Lutzenberger, W., Preißl, H. & Pulvermüller, F. 1995: Fractal dimension of EEG time series and underlying brain processes. *Biological Cybernetics* **73**, 477-482.
34. Lutzenberger, W., Pulvermüller, F., Elbert, T. & Birbaumer, N. 1995: Visual stimulation alters local 40-Hz responses in humans: an EEG study. *Neuroscience Letters* **183**, 39-42.
35. Preißl, H., Pulvermüller, F., Lutzenberger, W. & Birbaumer, N. 1995: Evoked potentials distinguish between nouns and verbs. *Neuroscience Letters* **197**, 81-83.

1996

36. Pulvermüller, F. 1996: Hebb's concept of cell assemblies and the psychophysiology of word processing. *Psychophysiology* **33**, 317-333.
37. Pulvermüller, F., Eulitz, C., Pantev, C., Mohr, B., Feige, B., Lutzenberger, W., Elbert, T. & Birbaumer, N. 1996: High-frequency cortical responses reflect lexical processing: an MEG study. *Electroencephalography and Clinical Neurophysiology* **98**, 76-85.

38. Pulvermüller, F., Lutzenberger, W., Müller, V., Mohr, B., Dichgans, J. & Birbaumer, N. 1996: P3 and contingent negative variation in Parkinson's disease. *Electroencephalography and Clinical Neurophysiology* **98**, 456-467.
39. Pulvermüller, F. & Mohr, B. 1996: Transcortical cell assemblies: A key to the understanding of cortical lateralization and interhemispheric interaction. *Neuroscience and Biobehavioral Reviews* **30**, 557-566.
40. Pulvermüller, F., Mohr, B. & Preißl, H. 1996: Biology of language: principles, predictions, and evidence. *Behavioral and Brain Sciences* **19**, 643-644.
41. Pulvermüller, F., Mohr, B., Sedat, N., Hadler, B. & Rayman, J. 1996: Word class specific deficits in Wernicke's aphasia. *Neurocase* **2**, 203-212.
42. Pulvermüller, F., Preißl, H., Lutzenberger, W. & Birbaumer, N. 1996: Brain rhythms of language: nouns versus verbs. *European Journal of Neuroscience* **8**, 937-941.
43. Mohr, B., Pulvermüller, F., Mittelstädt, K. & Rayman, J. 1996: Multiple simultaneous stimulus presentation facilitates lexical processing. *Neuropsychologia* **34**, 1003-1013.
44. Mohr, B., Müller, V., Mattes, R., Rosin, R., Federmann, B., Strehl, U., Pulvermüller, F., Müller, F. & Birbaumer, N. 1996: Behavioral treatment of Parkinson's disease leads to improvement of motor skills and to tremor reduction. *Behavior Therapy* **27**, 235-255.
45. Montoya, P., Larbig, W., Pulvermüller, F., Flor, H. & Birbaumer, N. 1996: Cortical correlates of semantic classical conditioning. *Psychophysiology* **33**, 644-649.
46. Preißl, H., Lutzenberger, W. & Pulvermüller, F. 1996: Is there chaos in the brain? *Behavioral and Brain Sciences* **19**, 307-308.

1997

47. Pulvermüller, F. 1997: Aspects of language mechanisms: a Hebbian perspective. *European Review* **5**, 23-37.
48. Pulvermüller, F. 1997: Brain-theoretical perspectives on language. *Theoretical Linguistics* **23**, 281-302.
49. Pulvermüller, F., Birbaumer, N., Lutzenberger, W. & Mohr, B. 1997: High-frequency cortical activity: its possible role in attention, gestalt processing and language. *Progress in Neurobiology* **52**, 427-445.
50. Lutzenberger, W., Preißl, H., Birbaumer, N. & Pulvermüller, F. 1997: High-frequency cortical responses: do they not exist if they are small? *Electroencephalography and Clinical Neurophysiology* **102**, 64-66.

51. Müller, V., Mohr, B., Rosin, R., Pulvermüller, F., Müller, F. & Birbaumer, N. 1997: Short-term effects of behavioural treatment on movement initiation and postural control in Parkinson's disease: a controlled clinical study. *Movement Disorders* **12**, 306-314.
52. Preißl, H., Lutzenberger, W., Pulvermüller, F. & Birbaumer, N. 1997: Fractal dimensions of short EEG time series in humans. *Neuroscience Letters* **225**, 77-80.

1998

53. Pulvermüller, F. 1998: On the matter of rules. Past tense-formation and its relevance for cognitive neuroscience. *Network: Computation in Neural Systems* **9**, 1-52.
54. Mohr, B., Pulvermüller, F. & Schleichert, H. 1998: Learned changes of brain states alter cognitive processing in humans. *Neuroscience Letters* **253**, 159-162.
55. Dobel, C., Hauk, O., Zobel, E., Eulitz, C., Pulvermüller, F., Cohen, R., Schönle, P.W., Elbert, T. & Rockstroh, B. 1998: Monitoring brain activity of human subjects during delayed matching to sample tasks comparing verbal and pictorial stimuli with modal and cross-modal presentation: an event related potential study employing a source reconstruction method. *Neuroscience Letters* **253**, 179-182.

1999

56. Pulvermüller, F. 1999: Words in the brain's language (Target Article). *Behavioral and Brain Sciences* **22**, 253-279.
57. Pulvermüller, F. 1999: Toward a Cognitive Neuroscience of Language (Response to Commentaries). *Behavioral and Brain Sciences* **22**, 301-336.
58. Pulvermüller, F. 1999: Lexical access as a brain mechanism (Commentary on Levelt). *Behavioral and Brain Sciences* **22**, 50-52.
59. Pulvermüller, F. 1999: Mind the brain, and brain the mind! (Commentary on Clahsen). *Behavioral and Brain Sciences* **22**, 1035-1036.
60. Pulvermüller, F., Keil, A. & Elbert, T. 1999: High-frequency brain activity: perception or active memory? *Trends in Cognitive Sciences*, **3**, 250-252.
61. Pulvermüller, F., Preißl, H. & Lutzenberger, W. 1999: Nouns and verbs in the intact brain: evidence from event-related potentials and high-frequency cortical responses. *Cerebral Cortex*, **9**, 497-506.
62. Pulvermüller, F., Mohr, B. & Schleichert, H. 1999: Semantic or lexico-syntactic factors: What determines word-class-specific activity in the human brain? *Neuroscience Letters*, **275**, 81-84.

2000

63. Pulvermüller, F. 2000: Syntactic circuits: How does the brain create serial order in sentences? *Brain and Language*, **71**, 194-199.
64. Pulvermüller, F., Härle & Hummel, F. 2000: Neurophysiological distinction of semantic verb categories. *NeuroReport*, **11**, 2789-2793.
65. Pulvermüller, F., Mohr, B., Schleichert, H. & Veit, R. 2000: Operant conditioning of left-hemispheric slow cortical potentials and its effect on word processing. *Biological Psychology*, **53**, 177-215.
66. Mohr, B., Pulvermüller, F., Cohen, R. & Rockstroh, B. 2000: Interhemispheric cooperation during word processing: evidence for callosal dysfunction in schizophrenic patients. *Schizophrenia Research*, **46**, 231-239.

2001

67. Pulvermüller, F. 2001: Brain reflections of words and their meaning. *Trends in Cognitive Sciences*, **5**, 517-524.
68. Pulvermüller, F. 2001: Mutual access and mutual dependence of conceptual components. (Commentary on Humphreys and Forde.) *Behavioral and Brain Sciences*, **24**, 490-492.
69. Pulvermüller, F., Assadollahi, R. & Elbert, T. 2001: Neuromagnetic evidence for early semantic access in word recognition. *European Journal of Neuroscience*, **13**, 201-205.
70. Pulvermüller, F., Neining, B., Elbert, T., Mohr, B., Rockstroh, B., Koebbel, P. & Taub, E. 2001: Constraint-induced therapy of chronic aphasia following stroke. *Stroke*, **32**, 1621-1626.
71. Pulvermüller, F., Härle, M. & Hummel, F. 2001: Walking or talking?: Behavioral and electrophysiological correlates of action verb processing. *Brain and Language*, **78**, 143-168.
72. Pulvermüller, F., Kujala, T., Shtyrov, Y., Simola, J., Tiitinen, H., Alku, P., Alho, K., Martinkauppi, S., Ilmoniemi, R. J. & Näätänen, R. 2001: Memory traces for words as revealed by the Mismatch Negativity (MMN). *NeuroImage*, **14**, 107-116.
73. Assadollahi, R. & Pulvermüller, F. 2001: Neuromagnetic evidence for early access to cognitive representations. *Neuroreport*, **12**, 207-213.
74. Dobel, C., Pulvermüller, F., Härle, M., Cohen, R., Koebbel, P., Schonle, P.W. & Rockstroh, B. 2001: Syntactic and semantic processing in the healthy and aphasic human brain. *Experimental Brain Research*, **140**, 77-85.
75. Mohr, B., Heim, S., Pulvermüller, F. & Rockstroh, B. 2001: Functional asymmetry in schizophrenic patients during auditory speech processing. *Schizophrenia Research*, **52**, 69-78.

76. Müller, V., Lutzenberger, W., Pulvermüller, F. & Mohr, B. 2001: Investigation of brain dynamics in Parkinson's disease by methods derived from nonlinear dynamics. *Experimental Brain Research*, **137**, 103-110.
77. Neininger, B. & Pulvermüller, F. 2001: The right hemisphere's role in action verb processing: A double case study. *Neurocase*, **7**, 103-317.

2002

78. Pulvermüller, F. 2002: A brain perspective on language mechanisms: from discrete neuronal ensembles to serial order. *Progress in Neurobiology*, **67**, 85-111.
79. Mohr, B. & Pulvermüller, F. 2002: Redundancy gains and costs in cognitive processing: the effect of short SOAs. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, **28**(6), 1200-1223.
80. Shtyrov, Y. & Pulvermüller, F. 2002: Processing of an inflectional affix by the human brain as revealed by the Mismatch Negativity (MMN). *European Journal of Neuroscience*, **15**, 1085-1091.
81. Shtyrov, Y. & Pulvermüller, F. 2002: Neurophysiological evidence for memory traces for words in the human brain. *Neuroreport*, **13**, 521-525.

2003

82. Pulvermüller, F. 2003: Sequence detectors as a basis of grammar in the brain. *Theory in Biosciences*, **122**, 87-103.
83. Pulvermüller, F. & Shtyrov, Y. 2003: Automatic processing of grammar in the human brain as revealed by the Mismatch Negativity. *Neuroimage*, **20**, 1020-1025.
84. Pulvermüller, F., Shtyrov, Y. & Ilmoniemi, R. 2003: Spatio-temporal patterns of neural language processing: an MEG study using Minimum-Norm Current Estimates. *Neuroimage*, **20**, 159-172.
85. Assadollahi, R. & Pulvermüller, F. 2003: Early influences of word length and frequency: a group study in the MEG. *Neuroreport*, **14**, 1183-1187.
86. Micheyl, C., Carlyon, R.P., Shtyrov, Y., Hauk, O., Dodson, T. & Pulvermüller, F. 2003: Neurophysiological correlates of a perceptual illusion: A Mismatch Negativity study. *Journal of Cognitive Neuroscience*, **15**, 747-758.
87. Müller, V., Lutzenberger, W., Preißl, H., Pulvermüller, F. & Birbaumer, N. 2003: Complexity of visual stimuli and non-linear EEG dynamics in humans. *Cognitive Brain Research*, **16**, 104-110.
88. Neininger, B. & Pulvermüller, F. 2003: Word category specific deficits after right-hemispheric lesions. *Neuropsychologia*, **41**, 53-70.

89. Shtyrov, Y., Pulvermüller, F., Näätänen, R. & Ilmoniemi, R. 2003: Grammar processing outside the focus of attention: an MEG study. *Journal of Cognitive Neuroscience*, **15**, 1195-1206.

2004

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