

Hanno Wuerbel

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3800743/publications.pdf>

Version: 2024-02-01

127
papers

12,558
citations

53794

45
h-index

28297

105
g-index

137
all docs

137
docs citations

137
times ranked

12047
citing authors

#	ARTICLE	IF	CITATIONS
1	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. PLoS Biology, 2020, 18, e3000410.	5.6	2,209
2	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. Experimental Physiology, 2020, 105, 1459-1466.	2.0	1,300
3	Reporting animal research: Explanation and elaboration for the ARRIVE guidelines 2.0. PLoS Biology, 2020, 18, e3000411.	5.6	1,069
4	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research*. Journal of Cerebral Blood Flow and Metabolism, 2020, 40, 1769-1777.	4.3	546
5	Ideal homes? Housing effects on rodent brain and behaviour. Trends in Neurosciences, 2001, 24, 207-211.	8.6	389
6	Environmental standardization: cure or cause of poor reproducibility in animal experiments?. Nature Methods, 2009, 6, 257-261.	19.0	336
7	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. British Journal of Pharmacology, 2020, 177, 3617-3624.	5.4	326
8	Dissociable effects of isolation rearing and environmental enrichment on exploration, spatial learning and HPA activity in adult rats. Pharmacology Biochemistry and Behavior, 2002, 73, 209-224.	2.9	247
9	Developmental plasticity of HPA and fear responses in rats: A critical review of the maternal mediation hypothesis. Hormones and Behavior, 2006, 50, 667-680.	2.1	220
10	Dissociation in the effects of neonatal maternal separations on maternal care and the offspring's HPA and fear responses in rats. European Journal of Neuroscience, 2004, 20, 1017-1024.	2.6	215
11	Cage enrichment and mouse behaviour. Nature, 2004, 432, 821-822.	27.8	214
12	Reproducibility of animal research in light of biological variation. Nature Reviews Neuroscience, 2020, 21, 384-393.	10.2	193
13	Reproducibility of preclinical animal research improves with heterogeneity of study samples. PLoS Biology, 2018, 16, e2003693.	5.6	186
14	Enrichment-dependent differences in novelty exploration in rats can be explained by habituation. Behavioural Brain Research, 2001, 121, 11-20.	2.2	185
15	Systematic variation improves reproducibility of animal experiments. Nature Methods, 2010, 7, 167-168.	19.0	185
16	Behaviour and the standardization fallacy. Nature Genetics, 2000, 26, 263-263.	21.4	182
17	The ARRIVE guidelines 2.0: updated guidelines for reporting animal research. Journal of Physiology, 2020, 598, 3793-3801.	2.9	177
18	Behavioral phenotyping enhanced - beyond (environmental) standardization. Genes, Brain and Behavior, 2002, 1, 3-8.	2.2	162

#	ARTICLE	IF	CITATIONS
19	Reproducibility and replicability of rodent phenotyping in preclinical studies. <i>Neuroscience and Biobehavioral Reviews</i> , 2018, 87, 218-232.	6.1	153
20	Effect of feed and environmental enrichment on development of stereotypic wire-gnawing in laboratory mice. <i>Applied Animal Behaviour Science</i> , 1998, 60, 69-81.	1.9	141
21	The ARRIVE guidelines 2.0: Updated guidelines for reporting animal research. <i>BMC Veterinary Research</i> , 2020, 16, 242.	1.9	136
22	Attentional set-shifting in mice: modification of a rat paradigm, and evidence for strain-dependent variation. <i>Behavioural Brain Research</i> , 2002, 132, 95-102.	2.2	128
23	Animal neuropsychology: Validation of the Intra-Dimensional Extra-Dimensional set shifting task for mice. <i>Behavioural Brain Research</i> , 2006, 173, 53-61.	2.2	127
24	Effect of Population Heterogenization on the Reproducibility of Mouse Behavior: A Multi-Laboratory Study. <i>PLoS ONE</i> , 2011, 6, e16461.	2.5	126
25	Double dissociation of social and environmental stimulation on spatial learning and reversal learning in rats. <i>Behavioural Brain Research</i> , 2004, 152, 307-314.	2.2	117
26	The ARRIVE guidelines 2.0: updated guidelines for reporting animal researchThe ARRIVE guidelines 2.0: updated guidelines for reporting animal research. <i>BMJ Open Science</i> , 2020, 44, e100115.	1.7	114
27	Stereotypies in Laboratory Mice – Quantitative and Qualitative Description of the Ontogeny of “Wire-gnawing” and “Jumping” in Zurich:ICR and Zurich:ICR nu. <i>Ethology</i> , 1996, 102, 371-385.	1.1	98
28	Maternal separation and maternal care act independently on the development of HPA responses in male rats. <i>Behavioural Brain Research</i> , 2008, 191, 227-234.	2.2	96
29	Modification of aviary design reduces incidence of falls, collisions and keel bone damage in laying hens. <i>Applied Animal Behaviour Science</i> , 2015, 165, 112-123.	1.9	93
30	Understanding behaviour: the relevance of ethological approaches in laboratory animal science. <i>Applied Animal Behaviour Science</i> , 2003, 81, 245-264.	1.9	89
31	More than 3Rs: the importance of scientific validity for harm-benefit analysis of animal research. <i>Lab Animal</i> , 2017, 46, 164-166.	0.4	88
32	Refinement of Experimental Design and Conduct in Laboratory Animal Research. <i>ILAR Journal</i> , 2014, 55, 383-391.	1.8	86
33	Effects of Cage Enrichment on Behavior, Welfare and Outcome Variability in Female Mice. <i>Frontiers in Behavioral Neuroscience</i> , 2018, 12, 232.	2.0	81
34	Facial Indicators of Positive Emotions in Rats. <i>PLoS ONE</i> , 2016, 11, e0166446.	2.5	77
35	Preference for structured environment in zebrafish (<i>Danio rerio</i>) and checker barbs (<i>Puntius Tj ETQq1</i>)	1.9	74
36	Reproducibility Crisis: Are We Ignoring Reaction Norms?. <i>Trends in Pharmacological Sciences</i> , 2016, 37, 509-510.	8.7	73

#	ARTICLE	IF	CITATIONS
37	Soft Perches in an Aviary System Reduce Incidence of Keel Bone Damage in Laying Hens. PLoS ONE, 2015, 10, e0122568.	2.5	71
38	Repeated Blood Collection in the Laboratory Mouse by Tail Incision—Modification of an Old Technique. Physiology and Behavior, 1996, 60, 1565-1568.	2.1	67
39	Age and weight at weaning affect corticosterone level and development of stereotypies in ICR-mice. Animal Behaviour, 1997, 53, 891-900.	1.9	67
40	Cage-induced stereotypies, perseveration and the effects of environmental enrichment in laboratory mice. Behavioural Brain Research, 2012, 234, 61-68.	2.2	64
41	Early social deprivation disrupts attentional, but not affective, shifts in rats.. Behavioral Neuroscience, 2001, 115, 437-442.	1.2	61
42	Authorization of Animal Experiments Is Based on Confidence Rather than Evidence of Scientific Rigor. PLoS Biology, 2016, 14, e2000598.	5.6	59
43	Addressing reproducibility in single-laboratory phenotyping experiments. Nature Methods, 2017, 14, 462-464.	19.0	53
44	The Researchers™ View of Scientific Rigor—Survey on the Conduct and Reporting of In Vivo Research. PLoS ONE, 2016, 11, e0165999.	2.5	53
45	Cage-induced stereotypies in female ICR CD-1 mice do not correlate with recurrent perseveration. Behavioural Brain Research, 2011, 216, 613-620.	2.2	52
46	Ethology applied to animal ethics. Applied Animal Behaviour Science, 2009, 118, 118-127.	1.9	51
47	Reverse-translational biomarker validation of Abnormal Repetitive Behaviors in mice: An illustration of the 4P's modeling approach. Behavioural Brain Research, 2011, 219, 189-196.	2.2	50
48	A cross-species judgement bias task: integrating active trial initiation into a spatial Go/No-go task. Scientific Reports, 2018, 8, 5104.	3.3	48
49	Prevention of stereotypy in laboratory mice: Effects on stress physiology and behaviour. Physiology and Behavior, 1996, 59, 1163-1170.	2.1	46
50	Effects of variation in postnatal maternal environment on maternal behaviour and fear and stress responses in rats. Animal Behaviour, 2007, 73, 171-184.	1.9	45
51	Variations in the postnatal maternal environment in mice: Effects on maternal behaviour and behavioural and endocrine responses in the adult offspring. Physiology and Behavior, 2008, 93, 395-407.	2.1	44
52	Differences in facial expressions during positive anticipation and frustration in dogs awaiting a reward. Scientific Reports, 2019, 9, 19312.	3.3	44
53	Are Eyes a Mirror of the Soul? What Eye Wrinkles Reveal about a Horse™s Emotional State. PLoS ONE, 2016, 11, e0164017.	2.5	41
54	Genetic selection to increase bone strength affects prevalence of keel bone damage and egg parameters in commercially housed laying hens. Poultry Science, 2016, 95, 975-984.	3.4	41

#	ARTICLE	IF	CITATIONS
55	Social dominance hierarchy type and rank contribute to phenotypic variation within cages of laboratory mice. <i>Scientific Reports</i> , 2019, 9, 13650.	3.3	41
56	Phenotypic variability between Social Dominance Ranks in laboratory mice. <i>Scientific Reports</i> , 2018, 8, 6593.	3.3	40
57	Systematic review of guidelines for internal validity in the design, conduct and analysis of preclinical biomedical experiments involving laboratory animalsSystematic review of guidelines for internal validity in the design, conduct and analysis of preclinical biomedical experiments involving laboratory animals. <i>BMJ Open Science</i> , 2020, 44, e100046.	1.7	40
58	Non-invasively Assessing Disturbance and Stress in Laboratory Rats by Scoring Chromodacryorrhoea. <i>ATLA Alternatives To Laboratory Animals</i> , 2004, 32, 153-159.	1.0	38
59	Feeding enrichment in an opportunistic carnivore: The red fox. <i>Applied Animal Behaviour Science</i> , 2009, 116, 260-265.	1.9	38
60	Effects of foraging demand on maternal behaviour and adult offspring anxiety and stress response in C57BL/6 mice. <i>Behavioural Brain Research</i> , 2009, 196, 192-199.	2.2	37
61	Influence of Strain and Parity on the Risk of Litter Loss in Laboratory Mice. <i>Reproduction in Domestic Animals</i> , 2013, 48, 292-296.	1.4	36
62	Revision of the ARRIVE guidelines: rationale and scope. <i>BMJ Open Science</i> , 2018, 2, e000002.	1.7	36
63	Early environmental cues affect object recognition memory in adult female but not male C57BL/6 mice. <i>Behavioural Brain Research</i> , 2009, 203, 312-315.	2.2	33
64	Use of space by domestic chicks housed in complex aviaries. <i>Applied Animal Behaviour Science</i> , 2016, 181, 115-121.	1.9	33
65	An Exploration Based Cognitive Bias Test for Mice: Effects of Handling Method and Stereotypic Behaviour. <i>PLoS ONE</i> , 2015, 10, e0130718.	2.5	33
66	Effects of stereotypic behaviour and chronic mild stress on judgement bias in laboratory mice. <i>Applied Animal Behaviour Science</i> , 2016, 174, 162-172.	1.9	32
67	Prevention of stereotypic wire-gnawing in laboratory mice: Effects on behaviour and implications for stereotypy as a coping response. <i>Behavioural Processes</i> , 1998, 42, 61-72.	1.1	30
68	Effect of Cage-Induced Stereotypies on Measures of Affective State and Recurrent Perseveration in CD-1 and C57BL/6 Mice. <i>PLoS ONE</i> , 2016, 11, e0153203.	2.5	30
69	Physical condition at weaning affects exploratory behaviour and stereotypy development in laboratory mice. <i>Behavioural Processes</i> , 1998, 43, 61-69.	1.1	29
70	Evaluation of the effects of space allowance on measures of animal welfare in laboratory mice. <i>Scientific Reports</i> , 2018, 8, 713.	3.3	29
71	Physical Health Problems and Environmental Challenges Influence Balancing Behaviour in Laying Hens. <i>PLoS ONE</i> , 2016, 11, e0153477.	2.5	29
72	Publications should include an animal-welfare section. <i>Nature</i> , 2007, 446, 257-257.	27.8	28

#	ARTICLE	IF	CITATIONS
73	The standardization fallacy. <i>Nature Methods</i> , 2021, 18, 5-7.	19.0	28
74	Effects of group stability on aggression, stress and injuries in breeding rabbits. <i>Applied Animal Behaviour Science</i> , 2012, 142, 182-188.	1.9	26
75	Qualitative Behaviour Assessment of horses exposed to short-term emotional treatments. <i>Applied Animal Behaviour Science</i> , 2017, 196, 44-51.	1.9	26
76	The motivational basis of caged rodents' stereotypies.. , 2006, , 86-120.		26
77	Simply a nest? Effects of different enrichments on stereotypic and anxiety-related behaviour in mice. <i>Applied Animal Behaviour Science</i> , 2011, 134, 239-245.	1.9	25
78	Effects of weaning age and housing conditions on phenotypic differences in mice. <i>Scientific Reports</i> , 2020, 10, 11684.	3.3	25
79	Effects of rat odour and shelter on maternal behaviour in C57BL/6 dams and on fear and stress responses in their adult offspring. <i>Physiology and Behavior</i> , 2008, 94, 393-404.	2.1	24
80	Towards humane end points: behavioural changes precede clinical signs of disease in a Huntington's disease model. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2008, 275, 1865-1874.	2.6	24
81	Does nest size matter to laying hens?. <i>Applied Animal Behaviour Science</i> , 2014, 155, 66-73.	1.9	23
82	Regrouping rabbit does in a familiar or novel pen: Effects on agonistic behaviour, injuries and core body temperature. <i>Applied Animal Behaviour Science</i> , 2011, 135, 121-127.	1.9	22
83	Perch use by broiler breeders and its implication on health and production. <i>Poultry Science</i> , 2017, 96, 3539-3549.	3.4	22
84	Contextâ€dependent individual differences in playfulness in male rats. <i>Developmental Psychobiology</i> , 2017, 59, 460-472.	1.6	20
85	Feeder space affects access to the feeder, aggression, and feed conversion in laying hens in an aviary system. <i>Applied Animal Behaviour Science</i> , 2018, 198, 75-82.	1.9	20
86	Do multiple experimenters improve the reproducibility of animal studies?. <i>PLoS Biology</i> , 2022, 20, e3001564.	5.6	20
87	Behavioral profiles of genetically selected aggressive and nonaggressive male wild house mice in two anxiety tests. <i>Behavior Genetics</i> , 2000, 30, 439-446.	2.1	19
88	Internal consistency and compatibility of the 3Rs and 3Vs principles for project evaluation of animal research. <i>Laboratory Animals</i> , 2021, 55, 233-243.	1.0	19
89	Play in Rats: Association across Contexts and Types, and Analysis of Structure. <i>Animal Behavior and Cognition</i> , 2014, 1, 489-501.	1.0	19
90	Effects of variation in nest curtain design on pre-laying behaviour of domestic hens. <i>Applied Animal Behaviour Science</i> , 2015, 170, 34-43.	1.9	18

#	ARTICLE	IF	CITATIONS
91	Use of aerial perches and perches on aviary tiers by broiler breeders. <i>Applied Animal Behaviour Science</i> , 2018, 203, 24-33.	1.9	18
92	Nest choice in laying hens: Effects of nest partitions and social status. <i>Applied Animal Behaviour Science</i> , 2015, 169, 43-50.	1.9	17
93	Incentive motivation in pet dogs – preference for constant vs varied food rewards. <i>Scientific Reports</i> , 2018, 8, 9756.	3.3	17
94	A reaction norm perspective on reproducibility. <i>Theory in Biosciences</i> , 2021, 140, 169-176.	1.4	16
95	Perseveration in a guessing task by laying hens selected for high or low levels of feather pecking does not support classification of feather pecking as a stereotypy. <i>Applied Animal Behaviour Science</i> , 2015, 168, 56-60.	1.9	14
96	Feather-pecking response of laying hens to feather and cellulose-based rations fed during rearing. <i>Poultry Science</i> , 2012, 91, 1514-1521.	3.4	13
97	A Systematic Review and Meta-Analysis of the Relationship Between Social Dominance Status and Common Behavioral Phenotypes in Male Laboratory Mice. <i>Frontiers in Behavioral Neuroscience</i> , 2020, 14, 624036.	2.0	11
98	The state of ethological approaches to the assessment of animal suffering and welfare. <i>Applied Animal Behaviour Science</i> , 2009, 118, 105-107.	1.9	10
99	Benefits of intraspecific social exposure in adult Swiss military dogs. <i>Applied Animal Behaviour Science</i> , 2018, 201, 54-60.	1.9	10
100	Pododermatitis in group housed rabbit does in Switzerland – Prevalence, severity and risk factors. <i>Preventive Veterinary Medicine</i> , 2018, 158, 114-121.	1.9	10
101	Horned and dehorned dairy cows differ in the pattern of agonistic interactions investigated under different space allowances. <i>Applied Animal Behaviour Science</i> , 2019, 218, 104819.	1.9	10
102	Development of the “Highly Sensitive Dog” questionnaire to evaluate the personality dimension “Sensory Processing Sensitivity” in dogs. <i>PLoS ONE</i> , 2017, 12, e0177616.	2.5	10
103	Reply to: “Reanalysis of Richter et al. (2010) on reproducibility”. <i>Nature Methods</i> , 2013, 10, 374-374.	19.0	9
104	What can be learnt from wheel-running by wild mice, and how can we identify when wheel-running is pathological?. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2016, 283, 20150738.	2.6	9
105	Variation in stress reactivity affects cage-induced stereotypies in female CD-1 (ICR) mice. <i>Applied Animal Behaviour Science</i> , 2011, 133, 101-108.	1.9	8
106	Can body nosing in artificially reared piglets be reduced by sucking and massaging dummies?. <i>Applied Animal Behaviour Science</i> , 2018, 202, 20-27.	1.9	8
107	Play like me: Similarity in playfulness promotes social play. <i>PLoS ONE</i> , 2019, 14, e0224282.	2.5	8
108	Parallels in the interactive effect of highly sensitive personality and social factors on behaviour problems in dogs and humans. <i>Scientific Reports</i> , 2020, 10, 5288.	3.3	8

#	ARTICLE	IF	CITATIONS
109	Toward a Choice-Based Judgment Bias Task for Horses. <i>Journal of Applied Animal Welfare Science</i> , 2017, 20, 123-136.	1.0	7
110	Feeding from perches in an aviary system reduces aggression and mortality in laying hens. <i>Applied Animal Behaviour Science</i> , 2018, 202, 53-62.	1.9	7
111	“Puppy Dog Eyes”™ Are Associated With Eye Movements, Not Communication. <i>Frontiers in Psychology</i> , 2021, 12, 568935.	2.1	7
112	Protocol for a systematic review of guidelines for rigour in the design, conduct and analysis of biomedical experiments involving laboratory animals. <i>BMJ Open Science</i> , 2018, 2, e000004.	1.7	6
113	Progression and risk factors of pododermatitis in part-time group housed rabbit does in Switzerland. <i>Preventive Veterinary Medicine</i> , 2019, 166, 56-64.	1.9	6
114	Breakdown of the ideal free distribution under conditions of severe and low competition. <i>Behavioral Ecology and Sociobiology</i> , 2021, 75, 1.	1.4	5
115	Environmental enrichment does not disrupt standardisation of animal experiments. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2007, 24 Spec No, 70-3.	1.5	5
116	Reply to “It is time for an empirically informed paradigm shift in animal research”™. <i>Nature Reviews Neuroscience</i> , 2020, 21, 661-662.	10.2	4
117	No evidence for detrimental effect of chemical castration on working ability in Swiss military dogs. <i>Applied Animal Behaviour Science</i> , 2019, 211, 84-87.	1.9	3
118	Rights for Sentient Animals. <i>Science</i> , 2011, 332, 917-917.	12.6	2
119	The effect of perches and aviary tiers on the mating behaviour of two hybrids of broiler breeders. <i>Applied Animal Behaviour Science</i> , 2020, 233, 105145.	1.9	2
120	Mouse Enrichment. , 2012, , 547-566.		1
121	P37 DIFFERENCES IN HABITAT QUALITY MODIFY PATTERNS OF NEST ATTENDANCE AND ADJUST OFFSPRING??S HYPOTHALAMIC??PITUITARY??ADRENAL (HPA) AXIS STRESS REACTIVITY, MEMORY PERFORMANCE AND FEAR RESPONSES IN FEMALE RATS. <i>Behavioural Pharmacology</i> , 2004, 15, A19.	1.7	0
122	Play like me: Similarity in playfulness promotes social play. , 2019, 14, e0224282.		0
123	Play like me: Similarity in playfulness promotes social play. , 2019, 14, e0224282.		0
124	Play like me: Similarity in playfulness promotes social play. , 2019, 14, e0224282.		0
125	Play like me: Similarity in playfulness promotes social play. , 2019, 14, e0224282.		0
126	Play like me: Similarity in playfulness promotes social play. , 2019, 14, e0224282.		0

#	ARTICLE	IF	CITATIONS
127	Early social deprivation disrupts attentional, but not affective, shifts in rats.. Behavioral Neuroscience, 2001, 115, 437-442.	1.2	0