Lore Becker

List of Publications by Year
in descending order

88 papers	5,368 citations	117625 34 h-index	88630 70 g-index
91 all docs	91 docs citations	91 times ranked	9726 citing authors

#	Article	IF	Citations
1	A Humanized Version of Foxp2 Affects Cortico-Basal Ganglia Circuits in Mice. Cell, 2009, 137, 961-971.	28.9	555
2	Aberrant methylation of t<scp>RNA</scp>s links cellular stress to neuroâ€developmental disorders. EMBO Journal, 2014, 33, 2020-2039.	7.8	490
3	A comparative phenotypic and genomic analysis of C57BL/6J and C57BL/6N mouse strains. Genome Biology, 2013, 14, R82.	9.6	403
4	Post-Stroke Inhibition of Induced NADPH Oxidase Type 4 Prevents Oxidative Stress and Neurodegeneration. PLoS Biology, 2010, 8, e1000479.	5.6	377
5	Rapamycin extends murine lifespan but has limited effects on aging. Journal of Clinical Investigation, 2013, 123, 3272-3291.	8.2	333
6	Neuron-glia communication via EphA4/ephrin-A3 modulates LTP through glial glutamate transport. Nature Neuroscience, 2009, 12, 1285-1292.	14.8	258
7	Introducing the German Mouse Clinic: open access platform for standardized phenotyping. Nature Methods, 2005, 2, 403-404.	19.0	176
8	Neuronal 3â€²,3,5-Triiodothyronine (T₃) Uptake and Behavioral Phenotype of Mice Deficient inMct8, the Neuronal T₃Transporter Mutated in Allanâ€“Herndonâ€“Dudley Syndrome. Journal of Neuroscience, 2009, 29, 9439-9449.	3.6	172
9	Analysis of mammalian gene function through broad-based phenotypic screens across a consortium of mouse clinics. Nature Genetics, 2015, 47, 969-978.	21.4	137
10	Mouse phenotyping. Methods, 2011, 53, 120-135.	3.8	128
11	Life span extension by targeting a link between metabolism and histone acetylation in Drosophila. EMBO Reports, 2016, 17, 455-469.	4.5	116
12	Mitochondrial Dysfunction and Decrease in Body Weight of a Transgenic Knock-in Mouse Model for TDP-43. Journal of Biological Chemistry, 2014, 289, 10769-10784.	3.4	100
13	Spinal poly-GA inclusions in a C9orf72 mouse model trigger motor deficits and inflammation without neuron loss. Acta Neuropathologica, 2017, 134, 241-254.	7.7	99
14	The rRNA m⁶A methyltransferase METTL5 is involved in pluripotency and developmental programs. Genes and Development, 2020, 34, 715-729.	5.9	93
15	Requirement of the RNA-editing Enzyme ADAR2 for Normal Physiology in Mice. Journal of Biological Chemistry, 2011, 286, 18614-18622.	3.4	91
16	Every-other-day feeding extends lifespan but fails to delay many symptoms of aging in mice. Nature Communications, 2017, 8, 155.	12.8	87
17	MIM-Induced Membrane Bending Promotes Dendritic Spine Initiation. Developmental Cell, 2015, 33, 644-659.	7.0	84
18	Inhibition of LTÎ²R signalling activates WNT-induced regeneration in lung. Nature, 2020, 588, 151-156.	27.8	81

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19	Systemic First-Line Phenotyping. Methods in Molecular Biology, 2009, 530, 463-509.	0.9	70
20	Cytochromecoxidase subunit 4 isoform 2â€knockout mice show reduced enzyme activity, airway hyporeactivity, and lung pathology. FASEB Journal, 2012, 26, 3916-3930.	0.5	62
21	Iron homeostasis in the brain: complete iron regulatory protein 2 deficiency without symptomatic neurodegeneration in the mouse. Nature Genetics, 2006, 38, 967-969.	21.4	58
22	Large-Scale Phenotyping of an Accurate Genetic Mouse Model of JNCL Identifies Novel Early Pathology Outside the Central Nervous System. PLoS ONE, 2012, 7, e38310.	2.5	56
23	Srgap3 ^{â€“/â€“} mice present a neurodevelopmental disorder with schizophreniaâ€related intermediate phenotypes. FASEB Journal, 2012, 26, 4418-4428.	0.5	51
24	Laboratory mouse housing conditions can be improved using common environmental enrichment without compromising data. PLoS Biology, 2018, 16, e2005019.	5.6	48
25	Abnormal Brain Iron Metabolism in Irp2 Deficient Mice Is Associated with Mild Neurological and Behavioral Impairments. PLoS ONE, 2014, 9, e98072.	2.5	45
26	Claudin-12 is not required for bloodâ€“brain barrier tight junction function. Fluids and Barriers of the CNS, 2019, 16, 30.	5.0	45
27	Disease-Specific Human Glycine Receptor Î±1 Subunit Causes Hyperekplexia Phenotype and Impaired Glycine- and GABAA-Receptor Transmission in Transgenic Mice. Journal of Neuroscience, 2002, 22, 2505-2512.	3.6	44
28	MTO1 mediates tissue specificity of OXPHOS defects via tRNA modification and translation optimization, which can be bypassed by dietary intervention. Human Molecular Genetics, 2015, 24, 2247-2266.	2.9	43
29	Genes Whose Gain or Loss-Of-Function Increases Skeletal Muscle Mass in Mice: A Systematic Literature Review. Frontiers in Physiology, 2018, 9, 553.	2.8	43
30	"Sighted C3H" mice - a tool for analysing the influence of vision on mouse behaviour?. Frontiers in Bioscience - Landmark, 2008, Volume, 5810.	3.0	41
31	Innovations in phenotyping of mouse models in the German Mouse Clinic. Mammalian Genome, 2012, 23, 611-622.	2.2	40
32	<scp>M</scp>i<scp>R</scp>â€34a deficiency accelerates medulloblastoma formation in vivo. International Journal of Cancer, 2015, 136, 2293-2303.	5.1	40
33	High Mobility Group N Proteins Modulate the Fidelity of the Cellular Transcriptional Profile in a Tissue- and Variant-specific Manner. Journal of Biological Chemistry, 2013, 288, 16690-16703.	3.4	37
34	Microphthalmia, parkinsonism, and enhanced nociception in Pitx3 416insG mice. Mammalian Genome, 2010, 21, 13-27.	2.2	36
35	A Broad Phenotypic Screen Identifies Novel Phenotypes Driven by a Single Mutant Allele in Huntingtonâ€™s Disease CAG Knock-In Mice. PLoS ONE, 2013, 8, e80923.	2.5	36
36	Interplay between H1 and HMGN epigenetically regulates OLIG1&2 expression and oligodendrocyte differentiation. Nucleic Acids Research, 2017, 45, 3031-3045.	14.5	36

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37	Pleiotropic effects in Eya3knockout mice. BMC Developmental Biology, 2008, 8, 118.	2.1	35
38	Propofol Restores the Function of â€œHyperekplexicâ€•Mutant Glycine Receptors inXenopusOocytes and Mice. Journal of Neuroscience, 2004, 24, 2322-2327.	3.6	33
39	Neurobeachin, a Regulator of Synaptic Protein Targeting, Is Associated with Body Fat Mass and Feeding Behavior in Mice and Body-Mass Index in Humans. PLoS Genetics, 2012, 8, e1002568.	3.5	33
40	Systematic, standardized and comprehensive neurological phenotyping of inbred mice strains in the German Mouse Clinic. Journal of Neuroscience Methods, 2006, 157, 82-90.	2.5	32
41	Understanding gene functions and disease mechanisms: Phenotyping pipelines in the German Mouse Clinic. Behavioural Brain Research, 2018, 352, 187-196.	2.2	31
42	Neurological phenotype and reduced lifespan in heterozygous Tim23 knockout mice, the first mouse model of defective mitochondrial import. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 371-376.	1.0	30
43	Neuron-specific inactivation ofWt1alters locomotion in mice and changes interneuron composition in the spinal cord. Life Science Alliance, 2018, 1, e201800106.	2.8	28
44	Genetic Evidence for the Adhesion Protein IgSF9/Dasm1 to Regulate Inhibitory Synapse Development Independent of its Intracellular Domain. Journal of Neuroscience, 2014, 34, 4187-4199.	3.6	27
45	Meis1 effects on motor phenotypes and the sensorimotor system in mice. DMM Disease Models and Mechanisms, 2017, 10, 981-991.	2.4	25
46	Transient neuromotor phenotype in transgenic spastic mice expressing low levels of glycine receptor Î²-subunit: an animal model of startle disease. European Journal of Neuroscience, 2000, 12, 27-32.	2.6	24
47	The mouse Trm1-like gene is expressed in neural tissues and plays a role in motor coordination and exploratory behaviour. Gene, 2007, 389, 174-185.	2.2	24
48	SMC6 is an essential gene in mice, but a hypomorphic mutant in the ATPase domain has a mild phenotype with a range of subtle abnormalities. DNA Repair, 2013, 12, 356-366.	2.8	24
49	Genes Whose Gain or Loss-of-Function Increases Endurance Performance in Mice: A Systematic Literature Review. Frontiers in Physiology, 2019, 10, 262.	2.8	22
50	A comprehensive and comparative phenotypic analysis of the collaborative founder strains identifies new and known phenotypes. Mammalian Genome, 2020, 31, 30-48.	2.2	22
51	Extensive identification of genes involved in congenital and structural heart disorders and cardiomyopathy. , 2022, 1, 157-173.		22
52	Mouse mutant phenotyping at scale reveals novel genes controlling bone mineral density. PLoS Genetics, 2020, 16, e1009190.	3.5	19
53	Dll1 Haploinsufficiency in Adult Mice Leads to a Complex Phenotype Affecting Metabolic and Immunological Processes. PLoS ONE, 2009, 4, e6054.	2.5	17
54	MTO1-Deficient Mouse Model Mirrors the Human Phenotype Showing Complex I Defect and Cardiomyopathy. PLoS ONE, 2014, 9, e114918.	2.5	17

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55	A mouse model for intellectual disability caused by mutations in the X-linked 2â€²â€²Oâ€²methyltransferase Ftsj1 gene. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2019, 1865, 2083-2093.	3.8	17
56	Does a Hypertrophying Muscle Fibre Reprogramme its Metabolism Similar to a Cancer Cell?. Sports Medicine, 2022, 52, 2569-2578.	6.5	17
57	Pleiotropic Functions for Transcription Factor Zscan10. PLoS ONE, 2014, 9, e104568.	2.5	16
58	RNase H2 Loss in Murine Astrocytes Results in Cellular Defects Reminiscent of Nucleic Acid-Mediated Autoinflammation. Frontiers in Immunology, 2018, 9, 587.	4.8	14
59	Generation and Standardized, Systemic Phenotypic Analysis of Pou3f3L423P Mutant Mice. PLoS ONE, 2016, 11, e0150472.	2.5	14
60	Low catalytic activity is insufficient to induce disease pathology in triosephosphate isomerase deficiency. Journal of Inherited Metabolic Disease, 2019, 42, 839-849.	3.6	13
61	Overexpression of the mitochondrial methyltransferase TFB1M in the mouse does not impact mitoribosomal methylation status or hearing. Human Molecular Genetics, 2015, 24, 7286-7294.	2.9	12
62	Serum Response Factor (SRF) Ablation Interferes with Acute Stress-Associated Immediate and Long-Term Coping Mechanisms. Molecular Neurobiology, 2017, 54, 8242-8262.	4.0	12
63	The <scp>BEACH</scp> protein <scp>LRBA</scp> is required for hair bundle maintenance in cochlear hair cells and for hearing. EMBO Reports, 2017, 18, 2015-2029.	4.5	12
64	Female mice lacking Pald1 exhibit endothelial cell apoptosis and emphysema. Scientific Reports, 2017, 7, 15453.	3.3	12
65	Analysis of locomotor behavior in the German Mouse Clinic. Journal of Neuroscience Methods, 2018, 300, 77-91.	2.5	12
66	In-depth phenotyping reveals common and novel disease symptoms in a hemizygous knock-in mouse model (Mut-ko/ki) of mut-type methylmalonic aciduria. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165622.	3.8	12
67	Fgf9 Y162C Mutation Alters Information Processing and Social Memory in Mice. Molecular Neurobiology, 2018, 55, 4580-4595.	4.0	11
68	Rapid and transient oxygen consumption increase following acute HDAC/KDAC inhibition in Drosophila tissue. Scientific Reports, 2018, 8, 4199.	3.3	9
69	The heterozygous R155C VCP mutation: Toxic in humans! Harmless in mice?. Biochemical and Biophysical Research Communications, 2018, 503, 2770-2777.	2.1	9
70	CRN2 binds to TIMP4 and MMP14 and promotes perivascular invasion of glioblastoma cells. European Journal of Cell Biology, 2019, 98, 151046.	3.6	9
71	Soft windowing application to improve analysis of high-throughput phenotyping data. Bioinformatics, 2020, 36, 1492-1500.	4.1	9
72	The First Scube3 Mutant Mouse Line with Pleiotropic Phenotypic Alterations. G3: Genes, Genomes, Genetics, 2016, 6, 4035-4046.	1.8	9

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73	Standardized, Systemic Phenotypic Analysis of UmodC93F and UmodA227T Mutant Mice. PLoS ONE, 2013, 8, e78337.	2.5	8
74	Standardized, systemic phenotypic analysis reveals kidney dysfunction as main alteration of Kctd1 I27N mutant mice. Journal of Biomedical Science, 2017, 24, 57.	7.0	8
75	Does enamelin have pleiotropic effects on organs other than the teeth? Lessons from a phenotyping screen of two enamelinâ€mutant mouse lines. European Journal of Oral Sciences, 2012, 120, 269-277.	1.5	6
76	Standardized, systemic phenotypic analysis of Slc12a1 I299F mutant mice. Journal of Biomedical Science, 2014, 21, 68.	7.0	6
77	Viable Ednra Y129F mice feature human mandibulofacial dysostosis with alopecia (MFDA) syndrome due to the homologue mutation. Mammalian Genome, 2016, 27, 587-598.	2.2	5
78	Characterising a homozygous twoâ€exon deletion in UQCRH : comparing human and mouse phenotypes. EMBO Molecular Medicine, 2021, 13, e14397.	6.9	5
79	A comprehensive phenotypic characterization of a whole-body Wdr45 knock-out mouse. Mammalian Genome, 2021, 32, 332-349.	2.2	4
80	N471D WASH complex subunit strumpellin knockâ€in mice display mild motor and cardiac abnormalities and BPTF and KLHL11 dysregulation in brain tissue. Neuropathology and Applied Neurobiology, 2022, 48, .	3.2	4
81	Dietary intervention improves health metrics and life expectancy of the genetically obese Titan mouse. Communications Biology, 2022, 5, 408.	4.4	4
82	Physiological relevance of the neuronal isoform of inositol-1,4,5-trisphosphate 3-kinases in mice. Neuroscience Letters, 2020, 735, 135206.	2.1	3
83	Skeletal muscle phenotyping of Hippo gene-mutated mice reveals that Lats1 deletion increases the percentage of type I muscle fibers. Transgenic Research, 2022, 31, 227-237.	2.4	3
84	Post-synaptic scaffold protein TANC2 in psychiatric and somatic disease risk. DMM Disease Models and Mechanisms, 2022, 15, .	2.4	3
85	The German Mouse Clinic â€“ Running an Open Access Platform. , 2011, , 11-44.		2
86	Mouse Genetics and Metabolic Mouse Phenotyping. , 2012, , 85-106.		1
87	Measuring and Interpreting Oxygen Consumption Rates in Whole Fly Head Segments. Journal of Visualized Experiments, 2019, , .	0.3	1
88	Mouse Models of Hyperekplexia. , 2005, , 467-477.		0