Ralf Khn

List of Publications by Citations

133 papers	20,842 citations	53 h-index	144 g-index
149 ext. papers	22,733 ext. citations	11.8 avg, IF	6.23 L-index

#	Paper	IF	Citations
133	Interleukin-10-deficient mice develop chronic enterocolitis. *Cell*, **1993**, 75, 263-74	56.2	3546
132	Inducible gene targeting in mice. *Science*, **1995**, 269, 1427-9	33.3	1586
131	A B cell-deficient mouse by targeted disruption of the membrane exon of the immunoglobulin mu chain gene. *Nature*, **1991**, 350, 423-6	50.4	1540
130	Generation and analysis of interleukin-4 deficient mice. *Science*, **1991**, 254, 707-10	33.3	1117
129	In vivo ablation of surface immunoglobulin on mature B cells by inducible gene targeting results in rapid cell death. *Cell*, **1997**, 90, 1073-83	56.2	946
128	Enterocolitis and colon cancer in interleukin-10-deficient mice are associated with aberrant cytokine production and CD4(+) TH1-like responses. *Journal of Clinical Investigation*, **1996**, 98, 1010-20	15.9	883
127	Increasing the efficiency of homology-directed repair for CRISPR-Cas9-induced precise gene editing in mammalian cells. *Nature Biotechnology*, **2015**, 33, 543-8	44.5	771
126	Requirement of mammalian DNA polymerase-beta in base-excision repair. *Nature*, **1996**, 379, 183-6	50.4	751
125	Essential role for TrkB receptors in hippocampus-mediated learning. *Neuron*, **1999**, 24, 401-14	13.9	666
124	Loss of a mammalian circular RNA locus causes miRNA deregulation and affects brain function. *Science*, **2017**, 357,	33.3	649
123	BACE knockout mice are healthy despite lacking the primary beta-secretase activity in brain: implications for Alzheimer's disease therapeutics. *Human Molecular Genetics*, **2001**, 10, 1317-24	5.6	571
122	MHC class I expression in mice lacking the proteasome subunit LMP-7. *Science*, **1994**, 265, 1234-7	33.3	444
121	Interleukin-10 is a central regulator of the response to LPS in murine models of endotoxic shock and the Shwartzman reaction but not endotoxin tolerance. *Journal of Clinical Investigation*, **1995**, 96, 2339-47	15.9	426
120	Limbic corticotropin-releasing hormone receptor 1 mediates anxiety-related behavior and hormonal adaptation to stress. *Nature Neuroscience*, **2003**, 6, 1100-7	25.5	381
119	Conditional gene targeting. *Journal of Clinical Investigation*, **1996**, 98, 600-3	15.9	346
118	T helper cell 1-type CD4+ T cells, but not B cells, mediate colitis in interleukin 10-deficient mice. *Journal of Experimental Medicine*, **1996**, 184, 241-51	16.6	344
117	DNA hypomethylation perturbs the function and survival of CNS neurons in postnatal animals. *Journal of Neuroscience*, **2001**, 21, 788-97	6.6	311

116	Inducible gene deletion in astroglia and radial glia--a valuable tool for functional and lineage analysis. *Glia*, **2006**, 54, 21-34	9	284
115	Leishmania promastigotes selectively inhibit interleukin 12 induction in bone marrow-derived macrophages from susceptible and resistant mice. *Journal of Experimental Medicine*, **1996**, 183, 515-26	16.6	265
114	Rapid generation of inducible mouse mutants. *Nucleic Acids Research*, **2003**, 31, e12	20.1	243
113	Gene targeting by homologous recombination in mouse zygotes mediated by zinc-finger nucleases. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 15022-6	11.5	229
112	Actin pedestal formation by enteropathogenic Escherichia coli and intracellular motility of Shigella flexneri are abolished in N-WASP-defective cells. *EMBO Reports*, **2001**, 2, 850-7	6.5	222
111	Interleukin 10 but not interleukin 4 is a natural suppressant of cutaneous inflammatory responses. *Journal of Experimental Medicine*, **1995**, 182, 99-108	16.6	216
110	IL-9 production of naive CD4+ T cells depends on IL-2, is synergistically enhanced by a combination of TGF-beta and IL-4, and is inhibited by IFN-gamma. *Journal of Immunology*, **1994**, 153, 3989-96	5.3	197
109	Development of an intein-mediated split-Cas9 system for gene therapy. *Nucleic Acids Research*, **2015**, 43, 6450-8	20.1	194
108	Temporally and spatially regulated somatic mutagenesis in mice. *Nucleic Acids Research*, **1998**, 26, 1427-32	20.1	157
107	Efficient generation of Rosa26 knock-in mice using CRISPR/Cas9 in C57BL/6 zygotes. *BMC Biotechnology*, **2016**, 16, 4	3.5	133
106	Induction of interleukin 4 (IL-4) expression in T helper (Th) cells is not dependent on IL-4 from non-Th cells. *Journal of Experimental Medicine*, **1994**, 179, 1349-53	16.6	133
105	Development and proliferation of lymphocytes in mice deficient for both interleukins-2 and -4. *European Journal of Immunology*, **1994**, 24, 281-4	6.1	131
104	Cre/loxP recombination system and gene targeting. *Methods in Molecular Biology*, **2002**, 180, 175-204	1.4	125
103	Direct production of mouse disease models by embryo microinjection of TALENs and oligodeoxynucleotides. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 3782-7	11.5	122
102	Csk controls antigen receptor-mediated development and selection of T-lineage cells. *Nature*, **1998** , 394, 901-4	50.4	119
101	Male and female mice derived from the same embryonic stem cell clone by tetraploid embryo complementation. *Nature Biotechnology*, **2002**, 20, 455-9	44.5	110
100	Enhanced efficiency through nuclear localization signal fusion on phage PhiC31-integrase: activity comparison with Cre and FLPe recombinase in mammalian cells. *Nucleic Acids Research*, **2002**, 30, 2299-306	20.1	95
99	Cell-type-specific profiling of brain mitochondria reveals functional and molecular diversity. *Nature Neuroscience*, **2019**, 22, 1731-1742	25.5	93

98	Single copy shRNA configuration for ubiquitous gene knockdown in mice. *Nucleic Acids Research*, **2005**, 33, e67	20.1	93
97	Conditional brain-specific knockdown of MAPK using Cre/loxP regulated RNA interference. *Nucleic Acids Research*, **2007**, 35, e90	20.1	83
96	Plasmodium chabaudi chabaudi: differential susceptibility of gene-targeted mice deficient in IL-10 to an erythrocytic-stage infection. *Experimental Parasitology*, **1996**, 84, 253-63	2.1	83
95	A large scale hearing loss screen reveals an extensive unexplored genetic landscape for auditory dysfunction. *Nature Communications*, **2017**, 8, 886	17.4	81
94	Interleukin-4 transgenic mice of resistant background are susceptible to Leishmania major infection. *European Journal of Immunology*, **1993**, 23, 566-9	6.1	81
93	Impaired immunosuppressive response to ultraviolet radiation in interleukin-10-deficient mice. *Journal of Investigative Dermatology*, **1996**, 107, 553-7	4.3	73
92	Interleukin (IL)-4-independent immunoglobulin class switch to immunoglobulin (Ig)E in the mouse. *Journal of Experimental Medicine*, **1996**, 184, 1651-61	16.6	73
91	Phenotypic annotation of the mouse X chromosome. *Genome Research*, **2010**, 20, 1154-64	9.7	70
90	Common cytokine receptor gamma chain (gamma c)-dependent cytokines: understanding in vivo functions by gene targeting. *Immunological Reviews*, **1995**, 148, 19-34	11.3	67
89	Efficient CRISPR-mediated mutagenesis in primary immune cells using CrispRGold and a C57BL/6 Cas9 transgenic mouse line. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 12514-12519	11.5	65
88	Forebrain-specific knockout of B-raf kinase leads to deficits in hippocampal long-term potentiation, learning, and memory. *Journal of Neuroscience Research*, **2006**, 83, 28-38	4.4	61
87	Mutations in Disordered Regions Can Cause Disease by Creating Dileucine Motifs. *Cell*, **2018**, 175, 239-253.e17	36.2	58
86	CD19-independent instruction of murine marginal zone B-cell development by constitutive Notch2 signaling. *Blood*, **2011**, 118, 6321-31	2.2	57
85	Highly efficient targeted mutagenesis in mice using TALENs. *Genetics*, **2013**, 195, 703-13	4	54
84	Modeling disease mutations by gene targeting in one-cell mouse embryos. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 9354-9	11.5	54
83	The functional annotation of mammalian genomes: the challenge of phenotyping. *Annual Review of Genetics*, **2009**, 43, 305-33	14.5	54
82	Generating conditional knockout mice. *Methods in Molecular Biology*, **2011**, 693, 205-31	1.4	53
81	Antiviral immune responses in mice deficient for both interleukin-2 and interleukin-4. *Journal of Virology*, **1995**, 69, 4842-6	6.6	52

80	Generation of targeted mouse mutants by embryo microinjection of TALEN mRNA. *Nature Protocols*, **2013**, 8, 2355-79	18.8	50
79	Identification of genetic elements in metabolism by high-throughput mouse phenotyping. *Nature Communications*, **2018**, 9, 288	17.4	48
78	Pink1-deficiency in mice impairs gait, olfaction and serotonergic innervation of the olfactory bulb. *Experimental Neurology*, **2012**, 235, 214-27	5.7	48
77	Control of gene editing by manipulation of DNA repair mechanisms. *Mammalian Genome*, **2017**, 28, 262-274	3.4	42
76	Advances in gene targeting methods. *Current Opinion in Immunology*, **1997**, 9, 183-8	7.8	41
75	N-desalkylquetiapine activates ERK1/2 to induce GDNF release in C6 glioma cells: a putative cellular mechanism for quetiapine as antidepressant. *Neuropharmacology*, **2012**, 62, 209-16	5.5	39
74	Differential mRNA distribution of components of the ERK/MAPK signalling cascade in the adult mouse brain. *Journal of Comparative Neurology*, **2007**, 500, 542-56	3.4	38
73	Major histocompatibility complex class II hyperexpression on B cells in interleukin 4-transgenic mice does not lead to B cell proliferation and hypergammaglobulinemia. *European Journal of Immunology*, **1991**, 21, 921-5	6.1	37
72	Creation of targeted genomic deletions using TALEN or CRISPR/Cas nuclease pairs in one-cell mouse embryos. *FEBS Open Bio*, **2015**, 5, 26-35	2.7	36
71	Oscillations of MyoD and Hes1 proteins regulate the maintenance of activated muscle stem cells. *Genes and Development*, **2019**, 33, 524-535	12.6	34
70	Connexin43 is not expressed in principal cells of mouse cortex and hippocampus. *European Journal of Neuroscience*, **2003**, 18, 267-74	3.5	33
69	MAPK signaling determines anxiety in the juvenile mouse brain but depression-like behavior in adults. *PLoS ONE*, **2012**, 7, e35035	3.7	32
68	Gene editing in mouse zygotes using the CRISPR/Cas9 system. *Methods*, **2017**, 121-122, 55-67	4.6	30
67	Enhancement of Precise Gene Editing by the Association of Cas9 With Homologous Recombination Factors. *Frontiers in Genetics*, **2019**, 10, 365	4.5	30
66	Neuron-specific ablation of PDGF-B is compatible with normal central nervous system development and astroglial response to injury. *Neurochemical Research*, **2003**, 28, 271-9	4.6	30
65	Simultaneous Cre-mediated conditional knockdown of two genes in mice. *Genesis*, **2008**, 46, 144-51	1.9	29
64	Gene editing and clonal isolation of human induced pluripotent stem cells using CRISPR/Cas9. *Methods*, **2017**, 121-122, 29-44	4.6	28
63	Generation of Cre recombinase-specific monoclonal antibodies, able to characterize the pattern of Cre expression in cre-transgenic mouse strains. *Journal of Immunological Methods*, **1997**, 207, 203-12	2.5	27

62	Hybrid embryonic stem cell-derived tetraploid mice show apparently normal morphological, physiological, and neurological characteristics. *Molecular and Cellular Biology*, **2003**, 23, 3982-9	4.8	27
61	Generation of shRNA transgenic mice. *Methods in Molecular Biology*, **2009**, 530, 101-29	1.4	26
60	Elevated glutaric acid levels in Dhtkd1-/Gcdh- double knockout mice challenge our current understanding of lysine metabolism. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2017** , 1863, 2220-2228	6.9	23
59	Efficient generation of rat induced pluripotent stem cells using a non-viral inducible vector. *PLoS ONE*, **2013**, 8, e55170	3.7	22
58	A resource of targeted mutant mouse lines for 5,061 genes. *Nature Genetics*, **2021**, 53, 416-419	36.3	22
57	Genetic mouse models for behavioral analysis through transgenic RNAi technology. *Genes, Brain and Behavior*, **2008**, 7, 821-30	3.6	21
56	Conditional RNAi in mice. *Methods*, **2011**, 53, 142-50	4.6	20
55	Sall4 isoforms act during proximal-distal and anterior-posterior axis formation in the mouse embryo. *Genesis*, **2008**, 46, 463-77	1.9	20
54	Fusion of SpCas9 to E. coli Rec A protein enhances CRISPR-Cas9 mediated gene knockout in mammalian cells. *Journal of Biotechnology*, **2017**, 247, 42-49	3.7	19
53	FGF/FGFR2 signaling regulates the generation and correct positioning of Bergmann glia cells in the developing mouse cerebellum. *PLoS ONE*, **2014**, 9, e101124	3.7	18
52	Signal requirements for growth and differentiation of activated murine B lymphocytes. *Journal of Immunology*, **1985**, 135, 1213-9	5.3	18
51	Novel caspase-suicide proteins for tamoxifen-inducible apoptosis. *Genesis*, **2008**, 46, 530-6	1.9	17
50	Resistance to murine acquired immunodeficiency syndrome (MAIDS). *Science*, **1994**, 265, 264	33.3	17
49	Defective metabolic programming impairs early neuronal morphogenesis in neural cultures and an organoid model of Leigh syndrome. *Nature Communications*, **2021**, 12, 1929	17.4	17
48	Overview on mouse mutagenesis. *Methods in Molecular Biology*, **2009**, 530, 1-12	1.4	16
47	Somatic hypermutation occurs in B cells of terminal deoxynucleotidyl transferase-, CD23-, interleukin-4-, IgD- and CD30-deficient mouse mutants. *European Journal of Immunology*, **1996**, 26, 1966-9	6.1	16
46	Generation of targeted mouse mutants by embryo microinjection of TALENs. *Methods*, **2014**, 69, 94-101	4.6	14
45	The Parkinson's disease-linked Leucine-rich repeat kinase 2 (LRRK2) is required for insulin-stimulated translocation of GLUT4. *Scientific Reports*, **2019**, 9, 4515	4.9	12

44	Conditional knockout mice. *Methods in Molecular Biology*, **2003**, 209, 159-85	1.4	12
43	Efficient and Precise CRISPR/Cas9-Mediated MECP2 Modifications in Human-Induced Pluripotent Stem Cells. *Frontiers in Genetics*, **2019**, 10, 625	4.5	11
42	Characterization of the melanocortin-4-receptor nonsense mutation W16X in vitro and in vivo. *Pharmacogenomics Journal*, **2013**, 13, 80-93	3.5	11
41	Efficient Gene Editing of Human Induced Pluripotent Stem Cells Using CRISPR/Cas9. *Methods in Molecular Biology*, **2019**, 1961, 137-151	1.4	10
40	Caspase-mediated apoptosis induction in zebrafish cerebellar Purkinje neurons. *Development (Cambridge)*, **2016**, 143, 4279-4287	6.6	10
39	CRISPR-Cas9-Mediated ELANE Mutation Correction in Hematopoietic Stem and Progenitor Cells to Treat Severe Congenital Neutropenia. *Molecular Therapy*, **2020**, 28, 2621-2634	11.7	10
38	In vivo functional requirement of the mouse Ifitm1 gene for germ cell development, interferon mediated immune response and somitogenesis. *PLoS ONE*, **2012**, 7, e44609	3.7	9
37	Constitutive and conditional RNAi transgenesis in mice. *Methods*, **2011**, 53, 430-6	4.6	9
36	Development of a species-specific RNA polymerase I-based shRNA expression vector. *Nucleic Acids Research*, **2007**, 35, e10	20.1	9
35	Gene knockdown in the mouse through RNAi. *Methods in Enzymology*, **2010**, 477, 387-414	1.7	7
34	Regulation of the Natriuretic Peptide Receptor 2 (Npr2) by Phosphorylation of Juxtamembrane Serine and Threonine Residues Is Essential for Bifurcation of Sensory Axons. *Journal of Neuroscience*, **2018**, 38, 9768-9780	6.6	7
33	Efficient CRISPR/Cas9-Mediated Gene Knockin in Mouse Hematopoietic Stem and Progenitor Cells. *Cell Reports*, **2019**, 28, 3510-3522.e5	10.6	6
32	Chronic CD30 signaling in B cells results in lymphomagenesis by driving the expansion of plasmablasts and B1 cells. *Blood*, **2019**, 133, 2597-2609	2.2	6
31	Interleukin-4-deficient mice. *Research in Immunology*, **1993**, 144, 637-8		6
30	In vivo dissection of a clustered-CTCF domain boundary reveals developmental principles of regulatory insulation		6
29	Base editing repairs an SGCA mutation in human primary muscle stem cells. *JCI Insight*, **2021**, 6,	9.9	6
28	Pop in, pop out: a novel gene-targeting strategy for use with CRISPR-Cas9. *Genome Biology*, **2015**, 16, 244	18.3	5
27	Reversible and tissue-specific activation of MAP kinase signaling by tamoxifen in Braf(V637)ER(T2) mice. *Genesis*, **2013**, 51, 448-55	1.9	5

26	Design and Generation of Gene-Targeting Vectors. *Current Protocols in Mouse Biology*, **2011**, 1, 199-211	1.1	5
25	Local knockdown of ERK2 in the adult mouse brain via adeno-associated virus-mediated RNA interference. *Molecular Biotechnology*, **2009**, 41, 263-9	3	5
24	Target validation in mice by constitutive and conditional RNAi. *Methods in Molecular Biology*, **2013**, 986, 307-23	1.4	4
23	Humanized c-Myc mouse. *PLoS ONE*, **2012**, 7, e42021	3.7	4
22	Enhancement of CRISPR-Cas9 induced precise gene editing by targeting histone H2A-K15 ubiquitination. *BMC Biotechnology*, **2020**, 20, 57	3.5	4
21	Genome wide conditional mouse knockout resources. *Drug Discovery Today: Disease Models*, **2016**, 20, 3-12	1.3	3
20	Requirement of mammalian DNA polymerase-□n base-excision repair. *Nature*, **1996**, 379, 848-848	50.4	3
19	Microglia sense neuronal activity via GABA in the early postnatal hippocampus.. *Cell Reports*, **2021**, 37, 110128	10.6	3
18	Genome Editing in Mice Using TALE Nucleases. *Methods in Molecular Biology*, **2016**, 1338, 229-43	1.4	2
17	Simple derivation of transgene-free iPS cells by a dual recombinase approach. *Molecular Biotechnology*, **2014**, 56, 697-713	3	2
16	Leishmania major and Toxoplasma gondii have opposite effects on cytokine synthesis by macrophages. *Memorias Do Instituto Oswaldo Cruz*, **1994**, 89, 649-50	2.6	2
15	Genome engineering in rodents - status quo and perspectives. *Laboratory Animals*, **2021**, 236772211051842	2.2	2
14	Profound functional and molecular diversity of mitochondria revealed by cell type-specific profiling in vivo		2
13	A homology independent sequence replacement strategy in human cells using a CRISPR nuclease. *Open Biology*, **2021**, 11, 200283	7	2
12	Gene Editing in One-Cell Embryos by Zinc-Finger and TAL Nucleases. *Current Protocols in Mouse Biology*, **2012**, 2, 347-64	1.1	2
11	An RNAi-based approach to down-regulate a gene family in vivo. *PLoS ONE*, **2013**, 8, e80312	3.7	1
10	Generation of a -mScarlet Red Fluorescent Reporter Human iPSC Line for Live Cell Imaging and Flow Cytometric Analysis and Sorting Using CRISPR-Cas9-Mediated Gene Editing.. *Cells*, **2022**, 11,	7.9	1
9	Susceptibility to diet-induced obesity at thermoneutral conditions is independent of UCP1.. *American Journal of Physiology - Endocrinology and Metabolism*, **2021**,	6	1

List of Publications

8	Interleukin-10 Deficient Mice. *Molecular Biology Intelligence Unit*, **1995**, 141-148		1
7	A deletion containing a CTCF-element in intron 8 of the Bbs7 gene is partially responsible for juvenile obesity in the Berlin Fat Mouse.. *Mammalian Genome*, **2021**, 1	3.2	0
6	Genetic Models of Parkinson's Disease. *Neuromethods*, **2011**, 243-265	0.4	
5	Gezielte Manipulation des Genoms mit Zinkfingernukleasen. *BioSpektrum*, **2011**, 17, 537-540	0.1	
4	Gene targeting in immunology. *Research in Immunology*, **1997**, 148, 447-9		
3	Knock out Mice Models for Immunodeficiency Diseases **1993**, 561-570		
2	High Efficiency Gene Correction in Hematopoietic Cells By Template-Free Crispr/Cas9 Genome Editing. *Blood*, **2016**, 128, 3507-3507	2.2	
1	Genetisch veränderte Tiere **2012**, 149-167		