Bernhard Schermer

List of Publications by Year
in descending order

131	12,226	41323 49	26591 107
papers	citations	h-index	g-index

146	146	146	16717
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Mammalian microRNA Expression Atlas Based on Small RNA Library Sequencing. Cell, 2007, 129, 1401-1414.	13.5	3,390
2	Inversin, the gene product mutated in nephronophthisis type II, functions as a molecular switch between Wnt signaling pathways. Nature Genetics, 2005, 37, 537-543.	9.4	680
3	Mutations in INVS encoding inversin cause nephronophthisis type 2, linking renal cystic disease to the function of primary cilia and left-right axis determination. Nature Genetics, 2003, 34, 413-420.	9.4	582
4	Nephrin and CD2AP Associate with Phosphoinositide 3-OH Kinase and Stimulate AKT-Dependent Signaling. Molecular and Cellular Biology, 2003, 23, 4917-4928.	1.1	348
5	Exome Capture Reveals ZNF423 and CEP164 Mutations, Linking Renal Ciliopathies to DNA Damage Response Signaling. Cell, 2012, 150, 533-548.	13.5	347
6	Mutations in a novel gene, NPHP3, cause adolescent nephronophthisis, tapeto-retinal degeneration and hepatic fibrosis. Nature Genetics, 2003, 34, 455-459.	9.4	345
7	Podocyte-Specific Deletion of Dicer Alters Cytoskeletal Dynamics and Causes Glomerular Disease. Journal of the American Society of Nephrology: JASN, 2008, 19, 2150-2158.	3.0	300
8	Loss of Nephrocystin-3 Function Can Cause Embryonic Lethality,ÂMeckel-Gruber-like Syndrome, Situs Inversus, and Renal-Hepatic-Pancreatic Dysplasia. American Journal of Human Genetics, 2008, 82, 959-970.	2.6	294
9	Podocin and MEC-2 bind cholesterol to regulate the activity of associated ion channels. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17079-17086.	3.3	262
10	Trafficking of TRPP2 by PACS proteins represents a novel mechanism of ion channel regulation. EMBO Journal, 2005, 24, 705-716.	3.5	237
11	PDZD7 is a modifier of retinal disease and a contributor to digenic Usher syndrome. Journal of Clinical Investigation, 2010, 120, 1812-1823.	3.9	203
12	Repression of the genome organizer SATB1 in regulatory T cells is required for suppressive function and inhibition of effector differentiation. Nature Immunology, 2011, 12, 898-907.	7.0	179
13	Mutations in KIF7 link Joubert syndrome with Sonic Hedgehog signaling and microtubule dynamics. Journal of Clinical Investigation, 2011, 121, 2662-2667.	3.9	173
14	The von Hippel-Lindau tumor suppressor protein controls ciliogenesis by orienting microtubule growth. Journal of Cell Biology, 2006, 175, 547-554.	2.3	165
15	Tracking the fate of glomerular epithelial cells in vivo using serial multiphoton imaging in new mouse models with fluorescent lineage tags. Nature Medicine, 2013, 19, 1661-1666.	15.2	143
16	NPHP4, a cilia-associated protein, negatively regulates the Hippo pathway. Journal of Cell Biology, 2011, 193, 633-642.	2.3	142
17	A Single-Cell Transcriptome Atlas of the Mouse Glomerulus. Journal of the American Society of Nephrology: JASN, 2018, 29, 2060-2068.	3.0	137
18	Nephrocystin Specifically Localizes to the Transition Zone of Renal and Respiratory Cilia and Photoreceptor Connecting Cilia. Journal of the American Society of Nephrology: JASN, 2006, 17, 2424-2433.	3.0	133

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19	The ciliary membraneâ€associated proteome reveals actinâ€binding proteins as key components of cilia. EMBO Reports, 2017, 18, 1521-1535.	2.0	119
20	The Carboxyl Terminus of Neph Family Members Binds to the PDZ Domain Protein Zonula Occludens-1. Journal of Biological Chemistry, 2003, 278, 13417-13421.	1.6	112
21	KIBRA Modulates Directional Migration of Podocytes. Journal of the American Society of Nephrology: JASN, 2008, 19, 1891-1903.	3.0	112
22	Anaerobic Glycolysis Maintains the Glomerular Filtration Barrier Independent of Mitochondrial Metabolism and Dynamics. Cell Reports, 2019, 27, 1551-1566.e5.	2.9	106
23	14-3-3 Interacts with Regulator of G Protein Signaling Proteins and Modulates Their Activity. Journal of Biological Chemistry, 2000, 275, 28167-28172.	1.6	104
24	A molecular mechanism explaining albuminuria in kidney disease. Nature Metabolism, 2020, 2, 461-474.	5.1	99
25	Neph-Nephrin Proteins Bind the Par3-Par6-Atypical Protein Kinase C (aPKC) Complex to Regulate Podocyte Cell Polarity. Journal of Biological Chemistry, 2008, 283, 23033-23038.	1.6	97
26	Dysregulated Autophagy Contributes to Podocyte Damage in Fabryâ€™s Disease. PLoS ONE, 2013, 8, e63506.	1.1	97
27	DAF-16/FOXO and EGL-27/GATA promote developmental growth in response to persistent somatic DNA damage. Nature Cell Biology, 2014, 16, 1168-1179.	4.6	97
28	Genome-Wide Analysis of Wilmsâ€™ Tumor 1-Controlled Gene Expression in Podocytes Reveals Key Regulatory Mechanisms. Journal of the American Society of Nephrology: JASN, 2015, 26, 2097-2104.	3.0	97
29	Phosphorylation by casein kinase 2 induces PACS-1 binding of nephrocystin and targeting to cilia. EMBO Journal, 2005, 24, 4415-4424.	3.5	92
30	Listeria monocytogenes Infection in Macrophages Induces Vacuolar-Dependent Host miRNA Response. PLoS ONE, 2011, 6, e27435.	1.1	90
31	Mutations in NEK8 link multiple organ dysplasia with altered Hippo signalling and increased c-MYC expression. Human Molecular Genetics, 2013, 22, 2177-2185.	1.4	84
32	Discovery of microvascular miRNAs using public gene expression data: miR-145 is expressed in pericytes and is a regulator of Fli1. Genome Medicine, 2009, 1, 108.	3.6	82
33	Podocin Organizes Ion Channel-Lipid Supercomplexes: Implications for Mechanosensation at the Slit Diaphragm. Nephron Experimental Nephrology, 2007, 106, e27-e31.	2.4	81
34	A Multi-layered Quantitative InÂVivo Expression Atlas of the Podocyte Unravels Kidney Disease Candidate Genes. Cell Reports, 2018, 23, 2495-2508.	2.9	81
35	An optimized electroporation approach for efficient CRISPR/Cas9 genome editing in murine zygotes. PLoS ONE, 2018, 13, e0196891.	1.1	74
36	Upregulation of RGS7 may contribute to tumor necrosis factor-induced changes in central nervous function. Nature Medicine, 1999, 5, 913-918.	15.2	71

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37	The ciliopathy disease protein NPHP9 promotes nuclear delivery and activation of the oncogenic transcriptional regulator TAZ. Human Molecular Genetics, 2012, 21, 5528-5538.	1.4	69
38	Intrinsic proinflammatory signaling in podocytes contributes to podocyte damage and prolonged proteinuria. American Journal of Physiology - Renal Physiology, 2012, 303, F1473-F1485.	1.3	63
39	The Cleaved Cytoplasmic Tail of Polycystin-1 Regulates Src-Dependent STAT3 Activation. Journal of the American Society of Nephrology: JASN, 2014, 25, 1737-1748.	3.0	61
40	Inhibition of insulin/<scp>IGF</scp>â€1 receptor signaling protects from mitochondriaâ€mediated kidneyÂfailure. EMBO Molecular Medicine, 2015, 7, 275-287.	3.3	61
41	YAP-mediated mechanotransduction determines the podocyteâ€™s response to damage. Science Signaling, 2017, 10, .	1.6	61
42	Label-free quantitative proteomic analysis of the YAP/TAZ interactome. American Journal of Physiology - Cell Physiology, 2014, 306, C805-C818.	2.1	59
43	Inhibition of the production of endothelium-derived hyperpolarizing factor by cannabinoid receptor agonists. British Journal of Pharmacology, 1999, 126, 949-960.	2.7	58
44	Rapid SARS-CoV-2 testing in primary material based on a novel multiplex RT-LAMP assay. PLoS ONE, 2020, 15, e0238612.	1.1	58
45	Breaking the chain at the membrane: paraoxonase 2 counteracts lipid peroxidation at the plasma membrane. FASEB Journal, 2014, 28, 1769-1779.	0.2	57
46	Lipidâ€“Protein Interactions along the Slit Diaphragm of Podocytes. Journal of the American Society of Nephrology: JASN, 2009, 20, 473-478.	3.0	55
47	The proteome microenvironment determines the protective effect of preconditioning in cisplatin-induced acute kidney injury. Kidney International, 2019, 95, 333-349.	2.6	55
48	Single-cell RNA sequencing reveals the mesangial identity and species diversity of glomerular cell transcriptomes. Nature Communications, 2021, 12, 2141.	5.8	55
49	AATF/Che-1 acts as a phosphorylation-dependent molecular modulator to repress p53-driven apoptosis. EMBO Journal, 2012, 31, 3961-3975.	3.5	53
50	Interaction of 14-3-3 Protein with Regulator of G Protein Signaling 7 Is Dynamically Regulated by Tumor Necrosis Factor-Î±. Journal of Biological Chemistry, 2002, 277, 32954-32962.	1.6	51
51	The Ciliary Protein Nephrocystin-4 Translocates the Canonical Wnt Regulator Jade-1 to the Nucleus to Negatively Regulate Î²-Catenin Signaling. Journal of Biological Chemistry, 2012, 287, 25370-25380.	1.6	49
52	Single-nephron proteomes connect morphology and function in proteinuric kidney disease. Kidney International, 2018, 93, 1308-1319.	2.6	49
53	Extracellular Phosphorylation of Collagen XVII by Ecto-Casein Kinase 2 Inhibits Ectodomain Shedding. Journal of Biological Chemistry, 2007, 282, 22737-22746.	1.6	48
54	Altered lipid metabolism in the aging kidney identified by three layered omic analysis. Aging, 2016, 8, 441-454.	1.4	46

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55	The von Hippel Lindau Tumor Suppressor Limits Longevity. Journal of the American Society of Nephrology: JASN, 2009, 20, 2513-2517.	3.0	45
56	The ubiquitin ligase Ubr4 controls stability of podocin/MEC-2 supercomplexes. Human Molecular Genetics, 2016, 25, 1328-1344.	1.4	45
57	The Centrosomal Kinase Plk1 Localizes to the Transition Zone of Primary Cilia and Induces Phosphorylation of Nephrocystin-1. PLoS ONE, 2012, 7, e38838.	1.1	44
58	WT1 targetsGas1to maintain nephron progenitor cells by modulating FGF signals. Development (Cambridge), 2015, 142, 1254-1266.	1.2	42
59	N-Degradomic Analysis Reveals a Proteolytic Network Processing the Podocyte Cytoskeleton. Journal of the American Society of Nephrology: JASN, 2017, 28, 2867-2878.	3.0	41
60	Light Microscopic Visualization of Podocyte Ultrastructure Demonstrates Oscillating Glomerular Contractions. American Journal of Pathology, 2013, 182, 332-338.	1.9	40
61	Phosphoproteomic Analysis Reveals Regulatory Mechanisms at the Kidney Filtration Barrier. Journal of the American Society of Nephrology: JASN, 2014, 25, 1509-1522.	3.0	40
62	Clinical spectrum and pathogenesis of nephronophthisis. Current Opinion in Nephrology and Hypertension, 2012, 21, 272-278.	1.0	38
63	Conditional loss of kidney microRNAs results in congenital anomalies of the kidney and urinary tract (CAKUT). Journal of Molecular Medicine, 2013, 91, 739-748.	1.7	37
64	Three-layered proteomic characterization of a novelACTN4mutation unravels its pathogenic potential in FSGS. Human Molecular Genetics, 2016, 25, 1152-1164.	1.4	36
65	p35, the non-cyclin activator of Cdk5, protects podocytes against apoptosis in vitro and in vivo. Kidney International, 2010, 77, 690-699.	2.6	33
66	Vasopressin-2 Receptor Signaling and Autosomal Dominant Polycystic Kidney Disease. Journal of the American Society of Nephrology: JASN, 2014, 25, 1140-1147.	3.0	33
67	Low-Molecular Weight Heparin Increases Circulating sFlt-1 Levels and Enhances Urinary Elimination. PLoS ONE, 2014, 9, e85258.	1.1	31
68	Quantitative deep mapping of the cultured podocyte proteome uncovers shifts in proteostatic mechanisms during differentiation. American Journal of Physiology - Cell Physiology, 2016, 311, C404-C417.	2.1	31
69	The proteomic landscape of small urinary extracellular vesicles during kidney transplantation. Journal of Extracellular Vesicles, 2020, 10, e12026.	5.5	30
70	Comparative analysis of Neph gene expression in mouse and chicken development. Histochemistry and Cell Biology, 2012, 137, 355-366.	0.8	29
71	Cysteine S-Glutathionylation Promotes Stability and Activation of the Hippo Downstream Effector Transcriptional Co-activator with PDZ-binding Motif (TAZ). Journal of Biological Chemistry, 2016, 291, 11596-11607.	1.6	28
72	Enzyme Replacement Therapy Clears Gb3 Deposits from a Podocyte Cell Culture Model of Fabry Disease but Fails to Restore Altered Cellular Signaling. Cellular Physiology and Biochemistry, 2019, 52, 1139-1150.	1.1	28

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73	AATF suppresses apoptosis, promotes proliferation and is critical for Kras-driven lung cancer. Oncogene, 2018, 37, 1503-1518.	2.6	26
74	Preoperative Shortâ€Term Calorie Restriction for Prevention of Acute Kidney Injury After Cardiac Surgery: A Randomized, Controlled, Openâ€Label, Pilot Trial. Journal of the American Heart Association, 2018, 7, .	1.6	26
75	The Integrated RNA Landscape of Renal Preconditioning against Ischemia-Reperfusion Injury. Journal of the American Society of Nephrology: JASN, 2020, 31, 716-730.	3.0	26
76	Magnetic resonance T2 mapping and diffusion-weighted imaging for early detection of cystogenesis and response to therapy in a mouse model of polycystic kidney disease. Kidney International, 2017, 92, 1544-1554.	2.6	24
77	mTOR-Activating Mutations in RRAGD Are Causative for Kidney Tubulopathy and Cardiomyopathy. Journal of the American Society of Nephrology: JASN, 2021, 32, 2885-2899.	3.0	24
78	Injured Podocytes Are Sensitized to Angiotensin Iiâ€“Induced Calcium Signaling. Journal of the American Society of Nephrology: JASN, 2020, 31, 532-542.	3.0	23
79	Proteome Analysis of Isolated Podocytes Reveals Stress Responses in Glomerular Sclerosis. Journal of the American Society of Nephrology: JASN, 2020, 31, 544-559.	3.0	23
80	Nephrocystin-4 Regulates Pyk2-induced Tyrosine Phosphorylation of Nephrocystin-1 to Control Targeting to Monocilia. Journal of Biological Chemistry, 2011, 286, 14237-14245.	1.6	22
81	Targeted deletion of the AAA-ATPase Ruvbl1 in mice disrupts ciliary integrity and causes renal disease and hydrocephalus. Experimental and Molecular Medicine, 2018, 50, 1-17.	3.2	22
82	Urine-derived cells: a promising diagnostic tool in Fabry disease patients. Scientific Reports, 2018, 8, 11042.	1.6	22
83	Loss of Dgcr8-mediated microRNA expression in the kidney results in hydronephrosis and renal malformation. BMC Nephrology, 2015, 16, 55.	0.8	21
84	Comparative phosphoproteomic analysis of mammalian glomeruli reveals conserved podocin C-terminal phosphorylation as a determinant of slit diaphragm complex architecture. Proteomics, 2015, 15, 1326-1331.	1.3	21
85	Putting the brakes on p53-driven apoptosis. Cell Cycle, 2012, 11, 4122-4128.	1.3	20
86	Transition zone proteins and cilia dynamics. Nature Genetics, 2011, 43, 723-724.	9.4	19
87	Casein Kinase 1 Î± Phosphorylates the Wnt Regulator Jade-1 and Modulates Its Activity. Journal of Biological Chemistry, 2014, 289, 26344-26356.	1.6	19
88	Network for Early Onset Cystic Kidney Diseasesâ€”A Comprehensive Multidisciplinary Approach to Hereditary Cystic Kidney Diseases in Childhood. Frontiers in Pediatrics, 2018, 6, 24.	0.9	19
89	A protein-RNA interaction atlas of the ribosome biogenesis factor AATF. Scientific Reports, 2019, 9, 11071.	1.6	19
90	Characterization of a short isoform of the kidney protein podocin in human kidney. BMC Nephrology, 2013, 14, 102.	0.8	18

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91	A fast and simple clearing and swelling protocol for 3D in-situ imaging of the kidney across scales. Kidney International, 2021, 99, 1010-1020.	2.6	18
92	GFPT2/GFAT2 and AMDHD2 act in tandem to control the hexosamine pathway. ELife, 2022, 11, .	2.8	18
93	An approach to cystic kidney diseases: the clinician's view. Nature Reviews Nephrology, 2014, 10, 687-699.	4.1	17
94	Neph2/Kirrel3 regulates sensory input, motor coordination, and homeâ€cage activity in rodents. Genes, Brain and Behavior, 2018, 17, e12516.	1.1	17
95	A Disease-causing Mutation Illuminates the Protein Membrane Topology of the Kidney-expressed Prohibitin Homology (PHB) Domain Protein Podocin. Journal of Biological Chemistry, 2014, 289, 11262-11271.	1.6	16
96	Challenges in establishing genotypeâ€“phenotype correlations in ARPKD: case report on a toddler with two severe PKHD1 mutations. Pediatric Nephrology, 2017, 32, 1269-1273.	0.9	16
97	The RNA-Protein Interactome of Differentiated Kidney Tubular Epithelial Cells. Journal of the American Society of Nephrology: JASN, 2019, 30, 564-576.	3.0	16
98	Transcriptional profiling reveals progeroid Ercc1 -/Î” mice as a model system for glomerular aging. BMC Genomics, 2013, 14, 559.	1.2	15
99	Protein halfâ€life determines expression of proteostatic networks in podocyte differentiation. FASEB Journal, 2018, 32, 4696-4713.	0.2	15
100	Hippo signalingâ€”a central player in cystic kidney disease?. Pediatric Nephrology, 2020, 35, 1143-1152.	0.9	15
101	The BAR Domain Protein PICK1 Regulates Cell Recognition and Morphogenesis by Interacting with Neph Proteins. Molecular and Cellular Biology, 2011, 31, 3241-3251.	1.1	14
102	Mice lacking microRNAs in Pax8-expressing cells develop hypothyroidism and end-stage renal failure. BMC Molecular Biology, 2016, 17, 11.	3.0	14
103	Affinity-Enhanced Multimeric VEGF (Vascular Endothelial Growth Factor) and PlGF (Placental Growth) Tj ETQq1 1 0.784314 rgBT /Ove Hypertension, 2020, 76, 1176-1184.	1.3	14
104	Characterization of a splice-site mutation in the tumor suppressor gene FLCN associated with renal cancer. BMC Medical Genetics, 2017, 18, 53.	2.1	13
105	Inactivation of Apoptosis Antagonizing Transcription Factor in tubular epithelial cells induces accumulation of DNA damage and nephronophthisis. Kidney International, 2019, 95, 846-858.	2.6	13
106	Loss of the <scp>B</scp>irtâ€“<scp>H</scp>oggâ€“<scp>D</scp>ubÃ© gene product folliculin induces longevity in a hypoxiaâ€inducible factorâ€“dependent manner. Aging Cell, 2013, 12, 593-603.	3.0	12
107	Prohibitin-2 Depletion Unravels Extra-Mitochondrial Functions at the Kidney Filtration Barrier. American Journal of Pathology, 2016, 186, 1128-1139.	1.9	12
108	Single and Transient Ca2+ Peaks in Podocytes do not induce Changes in Glomerular Filtration and Perfusion. Scientific Reports, 2016, 6, 35400.	1.6	12

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109	Par3A is dispensable for the function of the glomerular filtration barrier of the kidney. American Journal of Physiology - Renal Physiology, 2016, 311, F112-F119.	1.3	10
110	The carboxyâ€terminus of the human ARPKD protein fibrocystin can control STAT3 signalling by regulating SRCâ€activation. Journal of Cellular and Molecular Medicine, 2020, 24, 14633-14638.	1.6	10
111	Jade-1S phosphorylation induced by CK1Î± contributes to cell cycle progression. Cell Cycle, 2016, 15, 1034-1045.	1.3	9
112	Construction of a viral T2A-peptide based knock-in mouse model for enhanced Cre recombinase activity and fluorescent labeling of podocytes. Kidney International, 2017, 91, 1510-1517.	2.6	9
113	Oral Supplementation of Glucosamine Fails to Alleviate Acute Kidney Injury in Renal Ischemia-Reperfusion Damage. PLoS ONE, 2016, 11, e0161315.	1.1	9
114	A mathematical estimation of the physical forces driving podocyte detachment. Kidney International, 2021, 100, 1054-1062.	2.6	8
115	The NF-ÎºB essential modulator (NEMO) controls podocyte cytoskeletal dynamics independently of NF-ÎºB. American Journal of Physiology - Renal Physiology, 2015, 309, F617-F626.	1.3	7
116	Expanding the Spectrum of FAT1 Nephropathies by Novel Mutations That Affect Hippo Signaling. Kidney International Reports, 2021, 6, 1368-1378.	0.4	7
117	The Atypical Cyclin-Dependent Kinase 5 (Cdk5) Guards Podocytes from Apoptosis in Glomerular Disease While Being Dispensable for Podocyte Development. Cells, 2021, 10, 2464.	1.8	7
118	Super-Resolution Imaging of the Filtration Barrier Suggests a Role for Podocin R229Q in Genetic Predisposition to Glomerular Disease. Journal of the American Society of Nephrology: JASN, 2022, 33, 138-154.	3.0	7
119	Three-Dimensional Super-Resolved Imaging of Paraffin-Embedded Kidney Samples. Kidney360, 2022, 3, 446-454.	0.9	7
120	Scaffold polarity proteins Par3A and Par3B share redundant functions while Par3B acts independent of atypical protein kinase C/Par6 in podocytes to maintain the kidney filtration barrier. Kidney International, 2022, 101, 733-751.	2.6	7
121	Prolineâ€dependent and basophilic kinases phosphorylate human TRPC6 at serine 14 to control channel activity through increased membrane expression. FASEB Journal, 2018, 32, 208-219.	0.2	6
122	Activation of Hypoxia-Inducible Factor Signaling Modulates the RNA Protein Interactome in Caenorhabditis elegans. IScience, 2019, 22, 466-476.	1.9	5
123	A systematic analysis of diet-induced nephroprotection reveals overlapping changes in cysteine catabolism. Translational Research, 2022, 244, 32-46.	2.2	4
124	Caloric restriction reduces the pro-inflammatory eicosanoid 20-hydroxyeicosatetraenoic acid to protect from acute kidney injury. Kidney International, 2022, 102, 560-576.	2.6	4
125	Targeted deletion of Ruvbl1 results in severe defects of epidermal development and perinatal mortality. Molecular and Cellular Pediatrics, 2021, 8, 1.	1.0	3
126	PDZD7 is a modifier of retinal disease and a contributor to digenic Usher syndrome. Journal of Clinical Investigation, 2011, 121, 821-821.	3.9	3

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127	Endothelial cilia protect against atherosclerosis. EMBO Reports, 2016, 17, 125-126.	2.0	2
128	CALINCAâ€"A Novel Pipeline for the Identification of lncRNAs in Podocyte Disease. Cells, 2021, 10, 692.	1.8	2
129	Modulation of Endocannabinoids by Caloric Restriction Is Conserved in Mice but Is Not Required for Protection from Acute Kidney Injury. International Journal of Molecular Sciences, 2021, 22, 5485.	1.8	2
130	KrÃ¼ppel-like Factor 4 (Klf4) in human and mouse lung development: Regulation of ATII Cell Homeostasis in Lungs of Newborn Mice Exposed to HYX. , 2018, , .		1
131	MAGED2 controls vasopressin-induced aquaporin-2 expression in collecting duct cells. Journal of Proteomics, 2022, 252, 104424.	1.2	1