Gavin Iain Welsh

List of Publications by Year
in descending order

69 papers	3,770 citations	159358 30 h-index	128067 60 g-index
69 all docs	69 docs citations	69 times ranked	5022 citing authors

#	Article	IF	Citations
1	Insulin Signaling to the Glomerular Podocyte Is Critical for Normal Kidney Function. Cell Metabolism, 2010, 12, 329-340.	7.2	376
2	Regulation of eukaryotic initiation factor eIF2B: glycogen synthase kinase-3 phosphorylates a conserved serine which undergoes dephosphorylation in response to insulin. FEBS Letters, 1998, 421, 125-130.	1.3	264
3	The Human Glomerular Podocyte Is a Novel Target for Insulin Action. Diabetes, 2005, 54, 3095-3102.	0.3	256
4	The podocyte cytoskeletonâ€"key to a functioning glomerulus in health and disease. Nature Reviews Nephrology, 2012, 8, 14-21.	4.1	208
5	Simultaneous Sequencing of 24 Genes Associated with Steroid-Resistant Nephrotic Syndrome. Clinical Journal of the American Society of Nephrology: CJASN, 2013, 8, 637-648.	2.2	152
6	Saturated fatty acids induce insulin resistance in human podocytes: implications for diabetic nephropathy. Nephrology Dialysis Transplantation, 2009, 24, 3288-3296.	0.4	134
7	GSK3: a SHAGGY frog story. Trends in Cell Biology, 1996, 6, 274-279.	3.6	133
8	Nephrin Is Critical for the Action of Insulin on Human Glomerular Podocytes. Diabetes, 2007, 56, 1127-1135.	0.3	132
9	Molecular and Cellular Events Mediating Glomerular Podocyte Dysfunction and Depletion in Diabetes Mellitus. Frontiers in Endocrinology, 2014, 5, 151.	1.5	121
10	VEGF regulates local inhibitory complement proteins in the eye and kidney. Journal of Clinical Investigation, 2016, 127, 199-214.	3.9	121
11	Matrix metalloproteinase 9â€mediated shedding of syndecan 4 in response to tumor necrosis factor Î±: a contributor to endothelial cell glycocalyx dysfunction. FASEB Journal, 2014, 28, 4686-4699.	0.2	111
12	Role for the microtubule cytoskeleton in GLUT4 vesicle trafficking and in the regulation of insulin-stimulated glucose uptake. Biochemical Journal, 2000, 352, 267-276.	1.7	111
13	Hemopexin Induces Nephrin-Dependent Reorganization of the Actin Cytoskeleton in Podocytes. Journal of the American Society of Nephrology: JASN, 2008, 19, 2140-2149.	3.0	106
14	Nephrinâ€"signature molecule of the glomerular podocyte?. Journal of Pathology, 2010, 220, 328-337.	2.1	102
15	Fatty acid-induced defects in insulin signalling, in myotubes derived from children, are related to ceramide production from palmitate rather than the accumulation of intramyocellular lipid. Journal of Cellular Physiology, 2007, 211, 244-252.	2.0	65
16	Peptide Substrates Suitable for Assaying Glycogen Synthase Kinase-3 in Crude Cell Extracts. Analytical Biochemistry, 1997, 244, 16-21.	1.1	63
17	Active proteases in nephrotic plasma lead to a podocinâ€dependent phosphorylation of <scp>VASP</scp> in podocytes via protease activated receptorâ€1. Journal of Pathology, 2013, 229, 660-671.	2.1	62
18	TRPC6 Binds to and Activates Calpain, Independent of Its Channel Activity, and Regulates Podocyte Cytoskeleton, Cell Adhesion, and Motility. Journal of the American Society of Nephrology: JASN, 2019, 30, 1910-1924.	3.0	60

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19	Nerve and Epidermal Growth Factor Induce Protein Synthesis and eIF2B Activation in PC12 Cells. Journal of Biological Chemistry, 1998, 273, 5536-5541.	1.6	57
20	Proteome analysis of adipogenesis. Proteomics, 2004, 4, 1042-1051.	1.3	57
21	Podocyte Dedifferentiation: A Specialized Process for a Specialized Cell. Frontiers in Endocrinology, 2014, 5, 148.	1.5	56
22	An In Vitro Model of the Glomerular Capillary Wall Using Electrospun Collagen Nanofibres in a Bioartificial Composite Basement Membrane. PLoS ONE, 2011, 6, e20802.	1.1	50
23	Aldosterone induces albuminuria via matrix metalloproteinaseâ€“dependent damage of the endothelial glycocalyx. Kidney International, 2019, 95, 94-107.	2.6	49
24	VEGFC Reduces Glomerular Albumin Permeability and Protects Against Alterations in VEGF Receptor Expression in Diabetic Nephropathy. Diabetes, 2019, 68, 172-187.	0.3	47
25	Glycosaminoglycan Regulation by VEGFA and VEGFC of the Glomerular Microvascular Endothelial Cell Glycocalyx inAVitro. American Journal of Pathology, 2013, 183, 604-616.	1.9	46
26	Prolonged exposure of mouse and human podocytes to insulin induces insulin resistance through lysosomal and proteasomal degradation of the insulin receptor. Diabetologia, 2017, 60, 2299-2311.	2.9	44
27	Blocking matrix metalloproteinase-mediated syndecan-4 shedding restores the endothelial glycocalyx and glomerular filtration barrier functionÂin early diabetic kidney disease. Kidney International, 2020, 97, 951-965.	2.6	42
28	Rip11 is a Rab11- and AS160-RabGAP-binding protein required for insulin-stimulated glucose uptake in adipocytes. Journal of Cell Science, 2007, 120, 4197-4208.	1.2	40
29	TBC1D8B Loss-of-Function Mutations Lead to X-Linked Nephrotic Syndrome via Defective Trafficking Pathways. American Journal of Human Genetics, 2019, 104, 348-355.	2.6	40
30	Flufenamic acid is a tool for investigating TRPC6-mediated calcium signalling in human conditionally immortalised podocytes and HEK293 cells. Cell Calcium, 2009, 45, 384-390.	1.1	36
31	A novel assay provides sensitive measurement of physiologically relevant changes in albumin permeability in isolated human and rodent glomeruli. Kidney International, 2018, 93, 1086-1097.	2.6	32
32	Establishment of conditionally immortalized human glomerular mesangial cells in culture, with unique migratory properties. American Journal of Physiology - Renal Physiology, 2011, 301, F1131-F1138.	1.3	30
33	IQGAP1 Interacts with Components of the Slit Diaphragm Complex in Podocytes and Is Involved in Podocyte Migration and Permeability In Vitro. PLoS ONE, 2012, 7, e37695.	1.1	30
34	Functional consequence of targeting protein kinase B/Akt to GLUT4 vesicles. Journal of Cell Science, 2002, 115, 2857-2866.	1.2	30
35	High fat feeding promotes obesity and renal inflammation and protects against post cardiopulmonary bypass acute kidney injury in swine. Critical Care, 2013, 17, R262.	2.5	29
36	Response to First Course of Intensified Immunosuppression in Genetically Stratified Steroid Resistant Nephrotic Syndrome. Clinical Journal of the American Society of Nephrology: CJASN, 2020, 15, 983-994.	2.2	29

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37	Carboxymethyl lysine induces EMT in podocytes through transcription factor ZEB2: Implications for podocyte depletion and proteinuria in diabetes mellitus. Archives of Biochemistry and Biophysics, 2016, 590, 10-19.	1.4	28
38	Effects of hypoxia and hyperoxia on the differential expression of VEGF-A isoforms and receptors in Idiopathic Pulmonary Fibrosis (IPF). Respiratory Research, 2018, 19, 9.	1.4	28
39	Podocytes, glucose and insulin. Current Opinion in Nephrology and Hypertension, 2010, 19, 379-384.	1.0	27
40	Solution fibre spinning technique for the fabrication of tuneable decellularised matrix-laden fibres and fibrous micromembranes. Acta Biomaterialia, 2018, 78, 111-122.	4.1	27
41	The complex interplay between kidney injury and inflammation. CKJ: Clinical Kidney Journal, 2021, 14, 780-788.	1.4	27
42	RNA sequencing analysis of human podocytes reveals glucocorticoid regulated gene networks targeting non-immune pathways. Scientific Reports, 2016, 6, 35671.	1.6	25
43	Reversal of anemia with allogenic RBC transfusion prevents post-cardiopulmonary bypass acute kidney injury in swine. American Journal of Physiology - Renal Physiology, 2011, 301, F605-F614.	1.3	24
44	Phosphorylation of only serine-51 in protein synthesis initiation factor-2 is associated with inhibition of peptide-chain initiation in reticulocyte lysates. Biochemical and Biophysical Research Communications, 1991, 176, 993-999.	1.0	21
45	Evidence for a role for protein kinase C in the stimulation of protein synthesis by insulin in swiss 3T3 fibroblasts. FEBS Letters, 1993, 316, 241-246.	1.3	20
46	Podocytes Produce and Secrete Functional Complement C3 and Complement Factor H. Frontiers in Immunology, 2020, 11, 1833.	2.2	19
47	A Composite Hydrogel Scaffold Permits Selfâ€Organization and Matrix Deposition by Cocultured Human Glomerular Cells. Advanced Healthcare Materials, 2019, 8, e1900698.	3.9	17
48	Generating Conditionally Immortalised Podocyte Cell Lines from Wild-Type Mice. Nephron, 2015, 129, 128-136.	0.9	16
49	Disease causing mutations in inverted formin 2 regulate its binding to G-actin, F-actin capping protein (CapZ Î±-1) and profilin 2. Bioscience Reports, 2016, 36, e00302.	1.1	16
50	IGFBP-1 expression is reduced in human type 2 diabetic glomeruli and modulates Î²1-integrin/FAK signalling in human podocytes. Diabetologia, 2021, 64, 1690-1702.	2.9	16
51	Endothelial glycocalyx is damaged in diabetic cardiomyopathy: angiopoietin 1 restores glycocalyx and improves diastolic function in mice. Diabetologia, 2022, 65, 879-894.	2.9	15
52	Podocyte RhoGTPases: new therapeutic targets for nephrotic syndrome?. F1000Research, 2019, 8, 1847.	0.8	14
53	Depot-specific effects of fatty acids on lipid accumulation in childrenâ€™s adipocytes. Biochemical and Biophysical Research Communications, 2007, 361, 356-361.	1.0	13
54	A role for NPY-NPY2R signaling in albuminuric kidney disease. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15862-15873.	3.3	12

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55	GlomSpheres as a 3D co-culture spheroid model of the kidney glomerulus for rapid drug-screening. Communications Biology, 2021, 4, 1351.	2.0	12
56	The competitive nature of signal transducer and activator of transcription complex formation drives phenotype switching of <scp>T</scp> cells. Immunology, 2018, 153, 488-501.	2.0	11
57	Renal Consequences of Therapeutic Interventions in Premature Neonates. Nephron, 2019, 142, 117-124.	0.9	11
58	Cytoskeletal protein degradation in brain death donor kidneys associates with adverse posttransplant outcomes. American Journal of Transplantation, 2022, 22, 1073-1087.	2.6	9
59	Functional distinctions in cytosolic calcium regulation between cells of the glomerular filtration barrier. Cell Calcium, 2010, 48, 44-53.	1.1	8
60	A Systems Model of Phosphorylation for Inflammatory Signaling Events. PLoS ONE, 2014, 9, e110913.	1.1	8
61	Nuclear translocation of IQGAP1 protein upon exposure to puromycin aminonucleoside in cultured human podocytes: ERK pathway involvement. Cellular Signalling, 2016, 28, 1470-1478.	1.7	7
62	Metabolite Changes in Maternal and Fetal Plasma Following Spontaneous Labour at Term in Humans Using Untargeted Metabolomics Analysis: A Pilot Study. International Journal of Environmental Research and Public Health, 2019, 16, 1527.	1.2	5
63	Exploring the relevance of NUP93 variants in steroid-resistant nephrotic syndrome using next generation sequencing and a fly kidney model. Pediatric Nephrology, 2022, 37, 2643-2656.	0.9	5
64	An information theoretic approach to insulin sensing by human kidney podocytes. Molecular and Cellular Endocrinology, 2020, 518, 110976.	1.6	3
65	Kinetic regulation of multi-ligand binding proteins. BMC Systems Biology, 2016, 10, 32.	3.0	2
66	VEGF-A regulates glomerular endothelial cell expression of protective complement regulators involved in the pathogenesis of atypical haemolytic uraemic syndrome. Immunobiology, 2012, 217, 1215.	0.8	1
67	Editorial: Podocyte Pathology and Nephropathy. Frontiers in Endocrinology, 2015, 6, 145.	1.5	1
68	The Podocyte in Diabetic Nephropathy: Recent Advances. , 2019, , 171-182.		1
69	Proteolytic Enzymes as Biomarkers of Focal Segmental Glomerulosclerosis. Drug Development Research, 2013, 74, 81-91.	1.4	0