James G Burchfield

List of Publications by Year in Descending Order

42 papers	1,343 citations	21 h-index	36 g-index
49 ext. papers	1,659 ext. citations	7.1 avg, IF	3.84 L-index

#	Paper	IF	Citations
42	Akt phosphorylates insulin receptor substrate to limit PI3K-mediated PIP3 synthesis. *ELife*, **2021**, 10,	8.9	2
41	A co-receptor that represses beta-cell insulin action. *Nature Metabolism*, **2021**, 3, 126-127	14.6	
40	Signaling Heterogeneity is Defined by Pathway Architecture and Intercellular Variability in Protein Expression. *IScience*, **2021**, 24, 102118	6.1	8
39	CASK modulates the assembly and function of the Mint1/Munc18-1 complex to regulate insulin secretion. *Cell Discovery*, **2020**, 6, 92	22.3	3
38	Mitochondrial oxidants, but not respiration, are sensitive to glucose in adipocytes. *Journal of Biological Chemistry*, **2020**, 295, 99-110	5.4	10
37	Regulation of hepatic insulin signaling and glucose homeostasis by sphingosine kinase 2. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 24434-24442	11.5	12
36	Serine 474 phosphorylation is essential for maximal Akt2 kinase activity in adipocytes. *Journal of Biological Chemistry*, **2019**, 294, 16729-16739	5.4	21
35	Phosphoproteomics reveals conserved exercise-stimulated signaling and AMPK regulation of store-operated calcium entry. *EMBO Journal*, **2019**, 38, e102578	13	22
34	Global redox proteome and phosphoproteome analysis reveals redox switch in Akt. *Nature Communications*, **2019**, 10, 5486	17.4	36
33	Autoencoder-based cluster ensembles for single-cell RNA-seq data analysis. *BMC Bioinformatics*, **2019**, 20, 660	3.6	18
32	High dietary fat and sucrose results in an extensive and time-dependent deterioration in health of multiple physiological systems in mice. *Journal of Biological Chemistry*, **2018**, 293, 5731-5745	5.4	42
31	Mitochondrial oxidative stress causes insulin resistance without disrupting oxidative phosphorylation. *Journal of Biological Chemistry*, **2018**, 293, 7315-7328	5.4	69
30	Glucose Transport: Methods for Interrogating GLUT4 Trafficking in Adipocytes. *Methods in Molecular Biology*, **2018**, 1713, 193-215	1.4	5
29	Mitochondrial CoQ deficiency is a common driver of mitochondrial oxidants and insulin resistance. *ELife*, **2018**, 7,	8.9	61
28	The amino acid transporter, SLC1A3, is plasma membrane-localised in adipocytes and its activity is insensitive to insulin. *FEBS Letters*, **2017**, 591, 322-330	3.8	7
27	Multiplexed Temporal Quantification of the Exercise-regulated Plasma Peptidome. *Molecular and Cellular Proteomics*, **2017**, 16, 2055-2068	7.6	32
26	An improved Akt reporter reveals intra- and inter-cellular heterogeneity and oscillations in signal transduction. *Journal of Cell Science*, **2017**, 130, 2757-2766	5.3	12

25	A generalised enzyme kinetic model for predicting the behaviour of complex biochemical systems. *FEBS Open Bio*, **2015**, 5, 226-39	2.7	9
24	Global Phosphoproteomic Analysis of Human Skeletal Muscle Reveals a Network of Exercise-Regulated Kinases and AMPK Substrates. *Cell Metabolism*, **2015**, 22, 922-35	24.6	233
23	Proteomic Analysis of GLUT4 Storage Vesicles Reveals Tumor Suppressor Candidate 5 (TUSC5) as a Novel Regulator of Insulin Action in Adipocytes. *Journal of Biological Chemistry*, **2015**, 290, 23528-42	5.4	35
22	Direction pathway analysis of large-scale proteomics data reveals novel features of the insulin action pathway. *Bioinformatics*, **2014**, 30, 808-14	7.2	20
21	DOC2 isoforms play dual roles in insulin secretion and insulin-stimulated glucose uptake. *Diabetologia*, **2014**, 57, 2173-82	10.3	20
20	Systemic VEGF-A neutralization ameliorates diet-induced metabolic dysfunction. *Diabetes*, **2014**, 63, 2656-67	0.9	24
19	The role of the Niemann-Pick disease, type C1 protein in adipocyte insulin action. *PLoS ONE*, **2014**, 9, e95598	3.7	14
18	Novel systems for dynamically assessing insulin action in live cells reveals heterogeneity in the insulin response. *Traffic*, **2013**, 14, 259-73	5.7	23
17	A framework for generating realistic synthetic sequences of total internal reflection fluorescence microscopy images **2013**,		8
16	Glucose homeostasis in mice is transglutaminase 2 independent. *PLoS ONE*, **2013**, 8, e63346	3.7	19
15	The Rab GTPase-activating protein TBC1D4/AS160 contains an atypical phosphotyrosine-binding domain that interacts with plasma membrane phospholipids to facilitate GLUT4 trafficking in adipocytes. *Molecular and Cellular Biology*, **2012**, 32, 4946-59	4.8	51
14	Using Total Internal Reflection Fluorescence Microscopy (TIRFM) to Visualise Insulin Action. *Neuromethods*, **2012**, 97-109	0.4	3
13	Quantitative proteomic analysis of the adipocyte plasma membrane. *Journal of Proteome Research*, **2011**, 10, 4970-82	5.6	25
12	Exocytotic vesicle behaviour assessed by total internal reflection fluorescence microscopy. *Traffic*, **2010**, 11, 429-39	5.7	51
11	Cluster analysis of insulin action in adipocytes reveals a key role for Akt at the plasma membrane. *Journal of Biological Chemistry*, **2010**, 285, 2245-57	5.4	41
10	Deletion of PKCepsilon selectively enhances the amplifying pathways of glucose-stimulated insulin secretion via increased lipolysis in mouse beta-cells. *Diabetes*, **2009**, 58, 1826-34	0.9	38
9	Identification of a distal GLUT4 trafficking event controlled by actin polymerization. *Molecular Biology of the Cell*, **2009**, 20, 3918-29	3.5	62
8	Variations in the requirement for v-SNAREs in GLUT4 trafficking in adipocytes. *Journal of Cell Science*, **2009**, 122, 3472-80	5.3	61

7	Diverse roles for protein kinase C delta and protein kinase C epsilon in the generation of high-fat-diet-induced glucose intolerance in mice: regulation of lipogenesis by protein kinase C delta. *Diabetologia*, **2009**, 52, 2616-20	10.3	41
6	Automatic identification of fusion events in TIRF microscopy image sequences **2009**,		7
5	Towards fully automated identification of vesicle-membrane fusion events in TIRF microscopy. *International Journal of Computer Aided Engineering and Technology*, **2009**, 1, 502	0.5	5
4	The diverse roles of protein kinase C in pancreatic beta-cell function. *Biochemical Society Transactions*, **2008**, 36, 916-9	5.1	26
3	Dilinoleoyl-phosphatidic acid mediates reduced IRS-1 tyrosine phosphorylation in rat skeletal muscle cells and mouse muscle. *Diabetologia*, **2007**, 50, 1732-42	10.3	18
2	Inhibition of PKCepsilon improves glucose-stimulated insulin secretion and reduces insulin clearance. *Cell Metabolism*, **2007**, 6, 320-8	24.6	77
1	Akt mediates insulin-stimulated phosphorylation of Ndrg2: evidence for cross-talk with protein kinase C theta. *Journal of Biological Chemistry*, **2004**, 279, 18623-32	5.4	67