Michelle E Kimple

List of Publications by Year
in descending order

65 papers	2,532 citations	257450 24 h-index	206112 48 g-index
71 all docs	71 docs citations	71 times ranked	3819 citing authors

#	Article	IF	Citations
1	Decreased Consumption of Branched-Chain Amino Acids Improves Metabolic Health. Cell Reports, 2016, 16, 520-530.	6.4	334
2	Structural determinants for GoLoco-induced inhibition of nucleotide release by GÎ± subunits. Nature, 2002, 416, 878-881.	27.8	252
3	Restoration of metabolic health by decreased consumption of branchedâ€chain amino acids. Journal of Physiology, 2018, 596, 623-645.	2.9	242
4	Overview of Affinity Tags for Protein Purification. Current Protocols in Protein Science, 2013, 73, 9.9.1-9.9.23.	2.8	205
5	Alternative rapamycin treatment regimens mitigate the impact of rapamycin on glucose homeostasis and the immune system. Aging Cell, 2016, 15, 28-38.	6.7	144
6	Involvement of a Mitochondrial Phosphatase in the Regulation of ATP Production and Insulin Secretion in Pancreatic Î² Cells. Molecular Cell, 2005, 19, 197-207.	9.7	138
7	Prostaglandin E2 Receptor, EP3, Is Induced in Diabetic Islets and Negatively Regulates Glucose- and Hormone-Stimulated Insulin Secretion. Diabetes, 2013, 62, 1904-1912.	0.6	96
8	Overview of Affinity Tags for Protein Purification. Current Protocols in Protein Science, 2004, 36, Unit 9.9.	2.8	82
9	Phenotypic Characterization of MIP-CreERT1Lphi Mice With Transgene-Driven Islet Expression of Human Growth Hormone. Diabetes, 2015, 64, 3798-3807.	0.6	77
10	Shortâ€term methionine deprivation improves metabolic health <i>via</i> sexually dimorphic, mTORC1â€independent mechanisms. FASEB Journal, 2018, 32, 3471-3482.	0.5	73
11	Pancreatic Î²-Cells From Mice Offset Age-Associated Mitochondrial Deficiency With Reduced KATP Channel Activity. Diabetes, 2016, 65, 2700-2710.	0.6	59
12	Glucagon-Like Peptide-1 Regulates Cholecystokinin Production in Î²-Cells to Protect From Apoptosis. Molecular Endocrinology, 2015, 29, 978-987.	3.7	46
13	Opposing effects of prostaglandin E 2 receptors EP3 and EP4 on mouse and human Î²-cell survival and proliferation. Molecular Metabolism, 2017, 6, 548-559.	6.5	45
14	A Role for Gz in Pancreatic Islet Î²-Cell Biology. Journal of Biological Chemistry, 2005, 280, 31708-31713.	3.4	44
15	GÎ±z Negatively Regulates Insulin Secretion and Glucose Clearance. Journal of Biological Chemistry, 2008, 283, 4560-4567.	3.4	44
16	Inhibitory G proteins and their receptors: emerging therapeutic targets for obesity and diabetes. Experimental and Molecular Medicine, 2014, 46, e102-e102.	7.7	43
17	A Method for Mouse Pancreatic Islet Isolation and Intracellular cAMP Determination. Journal of Visualized Experiments, 2014, , e50374.	0.3	41
18	Enriching Islet Phospholipids With Eicosapentaenoic Acid Reduces Prostaglandin E2 Signaling and Enhances Diabetic Î²-Cell Function. Diabetes, 2017, 66, 1572-1585.	0.6	41

#	Article	IF	Citations
19	Deletion of GÎ±Z Protein Protects against Diet-induced Glucose Intolerance via Expansion of Î²-Cell Mass. Journal of Biological Chemistry, 2012, 287, 20344-20355.	3.4	39
20	Rap1 Promotes Multiple Pancreatic Islet Cell Functions and Signals through Mammalian Target of Rapamycin Complex 1 to Enhance Proliferation. Journal of Biological Chemistry, 2010, 285, 15777-15785.	3.4	36
21	Tcf19 is a novel islet factor necessary for proliferation and survival in the INS-1 Î²-cell line. American Journal of Physiology - Endocrinology and Metabolism, 2013, 305, E600-E610.	3.5	33
22	A single-islet microplate assay to measure mouse and human islet insulin secretion. Islets, 2015, 7, e1076607.	1.8	32
23	Radiomanganese PET Detects Changes in Functional Î²-Cell Mass in Mouse Models of Diabetes. Diabetes, 2017, 66, 2163-2174.	0.6	32
24	Complement 1q-like-3 protein inhibits insulin secretion from pancreatic Î²-cells via the cell adhesion G proteinâ€“coupled receptor BAI3. Journal of Biological Chemistry, 2018, 293, 18086-18098.	3.4	31
25	Synergy Between GÎ±z Deficiency and GLP-1 Analog Treatment in Preserving Functional Î²-Cell Mass in Experimental Diabetes. Molecular Endocrinology, 2016, 30, 543-556.	3.7	26
26	Spontaneous Tumor Lysis Syndrome. Journal of Investigative Medicine High Impact Case Reports, 2015, 3, 232470961560319.	0.6	25
27	The Inhibitory G Protein Î±-Subunit, GÎ±z, Promotes Type 1 Diabetes-Like Pathophysiology in NOD Mice. Endocrinology, 2017, 158, 1645-1658.	2.8	21
28	A human pancreatic ECM hydrogel optimized for 3-D modeling of the islet microenvironment. Scientific Reports, 2022, 12, 7188.	3.3	21
29	EPACâ€“RAP1 Axis-Mediated Switch in the Response of Primary and Metastatic Melanoma to Cyclic AMP. Molecular Cancer Research, 2017, 15, 1792-1802.	3.4	18
30	Age-Dependent Protection of Insulin Secretion in Diet Induced Obese Mice. Scientific Reports, 2018, 8, 17814.	3.3	16
31	Systemic Metabolic Alterations Correlate with Islet-Level Prostaglandin E2 Production and Signaling Mechanisms That Predict Î²-Cell Dysfunction in a Mouse Model of Type 2 Diabetes. Metabolites, 2021, 11, 58.	2.9	16
32	Effects of Arachidonic Acid and Its Metabolites on Functional Beta-Cell Mass. Metabolites, 2022, 12, 342.	2.9	16
33	Ultrahigh-Resolution Mass Spectrometry-Based Platform for Plasma Metabolomics Applied to Type 2 Diabetes Research. Journal of Proteome Research, 2021, 20, 463-473.	3.7	15
34	Dietary polyunsaturated fatty acids and their metabolites: Implications for diabetes pathophysiology, prevention, and treatment. Nutrition and Healthy Aging, 2017, 4, 127-140.	1.1	14
35	Agonist-independent GÎ±z activity negatively regulates beta-cell compensation in a diet-induced obesity model of type 2 diabetes. Journal of Biological Chemistry, 2021, 296, 100056.	3.4	14
36	Pharmacological blockade of the EP3 prostaglandin E2 receptor in the setting of type 2 diabetes enhances Î²-cell proliferation and identity and relieves oxidative damage. Molecular Metabolism, 2021, 54, 101347.	6.5	14

#	Article	IF	Citations
37	The EP3 Receptor/Gz Signaling Axis as a Therapeutic Target for Diabetes and Cardiovascular Disease. AAPS Journal, 2017, 19, 1276-1283.	4.4	12
38	Targeting dysfunctional beta-cell signaling for the potential treatment of type 1 diabetes mellitus. Experimental Biology and Medicine, 2018, 243, 586-591.	2.4	12
39	Platelet Dysfunction in Type 1 Diabetes: Stressing the Thromboxanes. Diabetes, 2016, 65, 349-351.	0.6	11
40	Rat prostaglandin EP3 receptor is highly promiscuous and is the sole prostanoid receptor family member that regulates INSâ€1 (832/3) cell glucoseâ€stimulated insulin secretion. Pharmacology Research and Perspectives, 2021, 9, e00736.	2.4	11
41	Human Islet Expression Levels of Prostaglandin E₂ Synthetic Enzymes, But Not Prostaglandin EP3 Receptor, Are Positively Correlated with Markers of Î²-Cell Function and Mass in Nondiabetic Obesity. ACS Pharmacology and Translational Science, 2021, 4, 1338-1348.	4.9	10
42	The gastrin-releasing peptide analog bombesin preserves exocrine and endocrine pancreas morphology and function during parenteral nutrition. American Journal of Physiology - Renal Physiology, 2015, 309, G431-G442.	3.4	9
43	Differential Expression of Ormdl Genes in the Islets of Mice and Humans with Obesity. IScience, 2020, 23, 101324.	4.1	9
44	Signaling Through Gz. , 2010, , 1649-1653.		7
45	Bombesin Preserves Goblet Cell Resistin-Like Molecule Î² During Parenteral Nutrition but Not Other Goblet Cell Products. Journal of Parenteral and Enteral Nutrition, 2016, 40, 1042-1049.	2.6	7
46	The influence of intermittent hypoxia, obesity, and diabetes on male genitourinary anatomy and voiding physiology. American Journal of Physiology - Renal Physiology, 2021, 321, F82-F92.	2.7	7
47	Prostaglandin EP3 receptor signaling is required to prevent insulin hypersecretion and metabolic dysfunction in a non-obese mouse model of insulin resistance. American Journal of Physiology - Endocrinology and Metabolism, 2021, 321, E479-E489.	3.5	4
48	The EP3 Receptor: Exploring a New Target for Type 2 Diabetes Therapeutics. Journal of Endocrinology, Diabetes & Obesity, 2013, 1, .	0.7	4
49	The effects of GÎ±z signaling on pancreatic Î²â€cell function and mass. FASEB Journal, 2012, 26, 615.7.	0.5	1
50	Identification of key signaling molecules downstream of cAMP that regulate insulin secretion. FASEB Journal, 2013, 27, 1031.24.	0.5	0
51	Elucidating the role of inhibitory Gâ€protein, Gz, in Î²â€cell preservation and regeneration (1062.3). FASEB Journal, 2014, 28, 1062.3.	0.5	0
52	Altering betaâ€cell phospholipid composition affects diabetic betaâ€cell dysfunction (796.15). FASEB Journal, 2014, 28, 796.15.	0.5	0
53	Mimicking the Diabetic State in the Nonâ€Diabetic Î²â€cell to Elucidate Critical Pathways in Î²â€cell Dysfunction. FASEB Journal, 2015, 29, 974.16.	0.5	0
54	The Inhibitory Gâ€protein, G z , Accelerates the Progression of Insulitis and Hyperglycemia in a Type 1 Diabetes Mouse Model. FASEB Journal, 2015, 29, 973.1.	0.5	0

#	Article	IF	Citations
55	Betaâ€cellâ€specific loss of the inhibitory G protein, GÎ± z , prevents development of Type 1 Diabetes in NOD mice.. FASEB Journal, 2018, 32, 661.5.	0.5	0
56	Coordinated Crossâ€talk between calcium and cAMP in regulating pulsatile insulin secretion: A novel role for the unique inhibitory Gâ€protein, GÎ±z, in regulating Î²â€cell function. FASEB Journal, 2018, 32, 666.9.	0.5	0
57	Loss of the unique inhibitory Gâ€protein, GÎ± z , in the pancreatic Î²â€cell protects against dietâ€induced glucose intolerance by enhancing insulin secretion, but is not Î²â€cell autonomous. FASEB Journal, 2018, 32, 661.9.	0.5	0
58	Role of the heterotrimeric inhibitory Gâ€protein, GÎ±z, and its unique Gâ€protein coupled receptor, EP3, in the progression and pathophysiology of Type 2 Diabetes. FASEB Journal, 2019, 33, 514.16.	0.5	0
59	Increasing the dietary ratio of omega 3:omega 6 polyunsaturated fatty acids positively impacts inflammation and islet outcomes in Type 1 Diabetes. FASEB Journal, 2019, 33, 680.9.	0.5	0
60	Betaâ€cellâ€specific loss of the inhibitory G protein, GÎ± z , alters development and pathophysiology of Type 1 Diabetes. FASEB Journal, 2019, 33, 680.14.	0.5	0
61	SAT-168 A Secreted Protein Complement 1q Like-3 Protein Inhibits Insulin Secretion by an Adhesion G-Protein Coupled Receptor, BAI3 in Pancreatic Î²-Cells. Journal of the Endocrine Society, 2019, 3, .	0.2	0
62	The inhibitory heterotrimeric G protein, G z , regulates alphaâ€cell active glucagonâ€like peptide 1 (GLPâ€1) levels. FASEB Journal, 2019, 33, 809.3.	0.5	0
63	Loss of Î²â€cell GÎ± z protects against highâ€fat diet induced glucose intolerance by preserving incretin responsiveness and enhancing insulin secretion. FASEB Journal, 2020, 34, 1-1.	0.5	0
64	Betaâ€cellâ€specific Loss of the Inhibitory G protein, GÎ±_z, has Sexâ€dependent Effects on Development and Pathophysiology of Type 1 Diabetes. FASEB Journal, 2020, 34, 1-1.	0.5	0
65	Affinity Tag for Protein Purification and Detection Based on the Disulfide-Linked Complex of InaD and NorpA. BioTechniques, 2002, 33, 578-590.	1.8	0