Peter SpÃ©gel

List of Publications by Year
in descending order

69 papers	4,519 citations	126907 33 h-index	106344 65 g-index
69 all docs	69 docs citations	69 times ranked	6733 citing authors

#	Article	IF	Citations
1	Novel subgroups of adult-onset diabetes and their association with outcomes: a data-driven cluster analysis of six variables. Lancet Diabetes and Endocrinology,the, 2018, 6, 361-369.	11.4	1,430
2	Common variant in MTNR1B associated with increased risk of type 2 diabetes and impaired early insulin secretion. Nature Genetics, 2009, 41, 82-88.	21.4	642
3	Molecularly imprinted microparticles for capillary electrochromatographic enantiomer separation of propranolol. Analyst, The, 2000, 125, 1899-1901.	3.5	127
4	Selectivity toward Multiple Predetermined Targets in Nanoparticle Capillary Electrochromatography. Analytical Chemistry, 2003, 75, 6608-6613.	6.5	105
5	Molecularly imprinted polymer formats for capillary electrochromatography. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2004, 804, 3-12.	2.3	97
6	Molecularly imprinted microparticles for capillary electrochromatography: Studies on microparticle synthesis and electrolyte composition. Electrophoresis, 2001, 22, 3833-3841.	2.4	88
7	Approaches to molecular imprinting based selectivity in capillary electrochromatography. Electrophoresis, 2001, 22, 4053-4063.	2.4	88
8	Nanoparticles as Pseudostationary Phase in Capillary Electrochromatography/ESI-MS. Analytical Chemistry, 2002, 74, 4595-4601.	6.5	85
9	Molecularly imprinted polymers in capillary electrochromatography: Recent developments and future trends. Electrophoresis, 2003, 24, 3892-3899.	2.4	85
10	The pathogenetic role of Î²-cell mitochondria in type 2 diabetes. Journal of Endocrinology, 2018, 236, R145-R159.	2.6	83
11	Time-resolved metabolomics analysis of Î²-cells implicates the pentose phosphate pathway in the control of insulin release. Biochemical Journal, 2013, 450, 595-605.	3.7	82
12	The mosaic oat genome gives insights into a uniquely healthy cereal crop. Nature, 2022, 606, 113-119.	27.8	70
13	Nanoparticle-Based Continuous Full Filling Capillary Electrochromatography/Electrospray Ionization-Mass Spectrometry for Separation of Neutral Compounds. Analytical Chemistry, 2006, 78, 6088-6095.	6.5	69
14	Gastric Bypass Improves Î²-Cell Function and Increases Î²-Cell Mass in a Porcine Model. Diabetes, 2014, 63, 1665-1671.	0.6	67
15	Development and optimization of a metabolomic method for analysis of adherent cell cultures. Analytical Biochemistry, 2010, 404, 30-39.	2.4	66
16	Coordinate Changes in Histone Modifications, mRNA Levels, and Metabolite Profiles in Clonal INS-1 832/13 Î²-Cells Accompany Functional Adaptations to Lipotoxicity. Journal of Biological Chemistry, 2013, 288, 11973-11987.	3.4	66
17	NFATc3 Regulates Trypsinogen Activation, Neutrophil Recruitment, and Tissue Damage in Acute Pancreatitis in Mice. Gastroenterology, 2012, 143, 1352-1360.e7.	1.3	58
18	Genotype-based treatment of type 2 diabetes with an Î± _{2A} -adrenergic receptor antagonist. Science Translational Medicine, 2014, 6, 257ra139.	12.4	58

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19	Fumarate Hydratase Deletion in Pancreatic Î² Cells Leads to Progressive Diabetes. Cell Reports, 2017, 20, 3135-3148.	6.4	57
20	Dysregulation of Glucagon Secretion by Hyperglycemia-Induced Sodium-Dependent Reduction of ATP Production. Cell Metabolism, 2019, 29, 430-442.e4.	16.2	57
21	Characterization of Stimulus-Secretion Coupling in the Human Pancreatic EndoC-Î²H1 Beta Cell Line. PLoS ONE, 2015, 10, e0120879.	2.5	54
22	Loss of TFB1M results in mitochondrial dysfunction that leads to impaired insulin secretion and diabetes. Human Molecular Genetics, 2014, 23, 5733-5749.	2.9	51
23	Metabolomic and Proteomic Analysis of a Clonal Insulin-Producing Î²-Cell Line (INS-1 832/13). Journal of Proteome Research, 2008, 7, 400-411.	3.7	46
24	Ultra-high-performance supercritical fluid chromatography with quadrupole-time-of-flight mass spectrometry (UHPSFC/QTOF-MS) for analysis of lignin-derived monomeric compounds in processed lignin samples. Analytical and Bioanalytical Chemistry, 2017, 409, 7049-7061.	3.7	43
25	Molecularly imprinted polymers. Analytical and Bioanalytical Chemistry, 2002, 372, 37-38.	3.7	42
26	Metabolomic analysis of a human oral glucose tolerance test reveals fatty acids as reliable indicators of regulated metabolism. Metabolomics, 2010, 6, 56-66.	3.0	42
27	Metabolomic analyses reveal profound differences in glycolytic and tricarboxylic acid cycle metabolism in glucose-responsive and -unresponsive clonal Î²-cell lines. Biochemical Journal, 2011, 435, 277-284.	3.7	41
28	Metabolite Profiling Reveals Normal Metabolic Control in Carriers of Mutations in the Glucokinase Gene (MODY2). Diabetes, 2013, 62, 653-661.	0.6	39
29	Metabolite profile deviations in an oral glucose tolerance test-a comparison between lean and obese individuals. Obesity, 2014, 22, 2388-2395.	3.0	37
30	Chronic High Glucose and Pyruvate Levels Differentially Affect Mitochondrial Bioenergetics and Fuel-stimulated Insulin Secretion from Clonal INS-1 832/13 Cells. Journal of Biological Chemistry, 2014, 289, 3786-3798.	3.4	35
31	NNT reverse mode of operation mediates glucose control of mitochondrial NADPH and glutathione redox state in mouse pancreatic Î²-cells. Molecular Metabolism, 2017, 6, 535-547.	6.5	35
32	Effects of Ingestion Routes on Hormonal and Metabolic Profiles in Gastric-Bypassed Humans. Journal of Clinical Endocrinology and Metabolism, 2013, 98, E856-E861.	3.6	34
33	Inhibition of Nuclear Factor of Activated T-Cells (NFAT) Suppresses Accelerated Atherosclerosis in Diabetic Mice. PLoS ONE, 2013, 8, e65020.	2.5	34
34	Identification of lignin oligomers in Kraft lignin using ultra-high-performance liquid chromatography/high-resolution multiple-stage tandem mass spectrometry (UHPLC/HRMSn). Analytical and Bioanalytical Chemistry, 2018, 410, 7803-7814.	3.7	32
35	Inhibition of the malateâ€“aspartate shuttle in mouse pancreatic islets abolishes glucagon secretion without affecting insulin secretion. Biochemical Journal, 2015, 468, 49-63.	3.7	27
36	Cognitive Impairment and Metabolite Profile Alterations in the Hippocampus and Cortex of Male and Female Mice Exposed to a Fat and Sugar-Rich Diet are Normalized by Diet Reversal. , 2022, 13, 267.		27

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37	Pressurized carbon dioxide as a potential tool for decellularization of pulmonary arteries for transplant purposes. Scientific Reports, 2020, 10, 4031.	3.3	26
38	Pyruvate dehydrogenase kinase 1 controls mitochondrial metabolism and insulin secretion in INS-1 832/13 clonal Î²-cells. Biochemical Journal, 2010, 429, 205-213.	3.7	25
39	Metabolic Effects of Gastric Bypass Surgery: Is It All About Calories?. Diabetes, 2020, 69, 2027-2035.	0.6	24
40	A review of green solvent extraction techniques and their use in antibiotic residue analysis. Journal of Pharmaceutical and Biomedical Analysis, 2022, 209, 114487.	2.8	24
41	Novel Vinylpyridine Based Cationic MIP Monoliths for Enantiomer Separation in CEC. Chromatographia, 2009, 69, 277-285.	1.3	23
42	Development of a gas chromatography/mass spectrometry based metabolomics protocol by means of statistical experimental design. Metabolomics, 2012, 8, 50-63.	3.0	23
43	Unique and Shared Metabolic Regulation in Clonal Î²-Cells and Primary Islets Derived From Rat Revealed by Metabolomics Analysis. Endocrinology, 2015, 156, 1995-2005.	2.8	23
44	Screening of stationary phase selectivities for global lipid profiling by ultrahigh performance supercritical fluid chromatography. Journal of Chromatography A, 2018, 1548, 76-82.	3.7	23
45	Glutamine-Elicited Secretion of Glucagon-Like Peptide 1 Is Governed by an Activated Glutamate Dehydrogenase. Diabetes, 2018, 67, 372-384.	0.6	20
46	Metabolite Profiling of LADA Challenges the View of a Metabolically Distinct Subtype. Diabetes, 2017, 66, 806-814.	0.6	18
47	Treatment of Swedish Patients with Graves' Hyperthyroidism Is Associated with Changes in Acylcarnitine Levels. Thyroid, 2017, 27, 1109-1117.	4.5	17
48	Probiotic fruit beverages with different polyphenol profiles attenuated early insulin response. Nutrition Journal, 2018, 17, 34.	3.4	16
49	Metabolomics Analysis of Nutrient Metabolism in Î²-Cells. Journal of Molecular Biology, 2020, 432, 1429-1445.	4.2	16
50	Deletion of glycerol channel aquaporin-9 (Aqp9) impairs long-term blood glucose control in C57BL/6 leptin receptor-deficient (db/db) obese mice. Physiological Reports, 2015, 3, e12538.	1.7	15
51	Changes in glucose-elicited blood metabolite responses following weight loss and long term weight maintenance in obese individuals with impaired glucose tolerance. Diabetes Research and Clinical Practice, 2016, 113, 187-197.	2.8	13
52	The Transcriptional Co-Repressor Myeloid Translocation Gene 16 Inhibits Glycolysis and Stimulates Mitochondrial Respiration. PLoS ONE, 2013, 8, e68502.	2.5	12
53	Nontargeted Analysis Strategy for the Identification of Phenolic Compounds in Complex Technical Lignin Samples. ChemSusChem, 2020, 13, 4605-4612.	6.8	12
54	Continuous full filling capillary electrochromatography: Chromatographic performance and reproducibility. Journal of Chromatography A, 2007, 1154, 386-389.	3.7	11

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55	Continuous full filling capillary electrochromatography: Nanoparticle synthesis and evaluation. Journal of Chromatography A, 2007, 1154, 379-385.	3.7	10
56	Alterations in the plasma metabolite profile associated with improved hepatic function and glycemia in mice fed lingonberry supplemented highâ€fat diets. Molecular Nutrition and Food Research, 2017, 61, 1600442.	3.3	10
57	The impact of Roux-en-Y gastric bypass surgery on normal metabolism in a porcine model. PLoS ONE, 2017, 12, e0173137.	2.5	10
58	Short- and Long-Term Hormonal and Metabolic Consequences of Reversing Gastric Bypass to Normal Anatomy in a Type 2 Diabetes Patient. Obesity Surgery, 2015, 25, 180-185.	2.1	8
59	Liver nucleotide biosynthesis is linked to protection from vascular complications in individuals with long-term type 1 diabetes. Scientific Reports, 2020, 10, 11561.	3.3	8
60	Discriminative Prediction of A-To-I RNA Editing Events from DNA Sequence. PLoS ONE, 2016, 11, e0164962.	2.5	7
61	Glycogen metabolism in the glucoseâ€sensing and supplyâ€driven Î²â€cell. FEBS Letters, 2016, 590, 4242-4251.	2.8	6
62	Metabolite profiling paradoxically reveals favorable levels of lipids, markers of oxidative stress and unsaturated fatty acids in a diabetes susceptible group of Middle Eastern immigrants. Acta Diabetologica, 2020, 57, 597-603.	2.5	6
63	Chiral Separations by Capillary Electrochromatography Using Molecularly Imprinted Polymers. , 2004, 243, 411-424.		4
64	Pressurized carbon dioxide combined with aqueous ethanol as cosolvent induces efficient delipidation of porcine retina for their use as bioscaffolds. Journal of CO2 Utilization, 2019, 34, 700-708.	6.8	4
65	Continuous full filling capillary electrochromatographyâ€“electrospraying chromatographic nanoparticles. Electrophoresis, 2011, 32, 261-267.	2.4	2
66	Branched-chain amino acids are associated with odd-chain fatty acids in normoglycaemic individuals. Diabetes and Metabolism, 2017, 43, 475-479.	2.9	2
67	Population-Level Analysis to Determine Parameters That Drive Variation in the Plasma Metabolite Profiles. Metabolites, 2018, 8, 78.	2.9	2
68	Glucose-dependent insulinotropic polypeptide lowers branched chain amino acids in hyperglycemic rats. Regulatory Peptides, 2014, 189, 11-16.	1.9	0
69	Alterations in levels of intermediate-chained acylcarnitines associate with weight-gain following reestablishment of euthyroidism in Gravesâ€™ disease. Endocrine, 2019, 63, 164-166.	2.3	0