Rana K Gupta

List of Publications by Year
in descending order

52 papers	5,201 citations	147566 31 h-index	182168 51 g-index
57 all docs	57 docs citations	57 times ranked	6232 citing authors

#	Article	IF	Citations
1	Tracking adipogenesis during white adipose tissue development, expansion and regeneration. Nature Medicine, 2013, 19, 1338-1344.	15.2	988
2	Transcriptional control of preadipocyte determination by Zfp423. Nature, 2010, 464, 619-623.	13.7	438
3	Zfp423 Expression Identifies Committed Preadipocytes and Localizes to Adipose Endothelial and Perivascular Cells. Cell Metabolism, 2012, 15, 230-239.	7.2	362
4	Contribution of adipogenesis to healthy adipose tissue expansion in obesity. Journal of Clinical Investigation, 2019, 129, 4022-4031.	3.9	326
5	PdgfrÎ²+ Mural Preadipocytes Contribute to Adipocyte Hyperplasia Induced by High-Fat-Diet Feeding and Prolonged Cold Exposure in Adult Mice. Cell Metabolism, 2016, 23, 350-359.	7.2	259
6	Identification of functionally distinct fibro-inflammatory and adipogenic stromal subpopulations in visceral adipose tissue of adult mice. ELife, 2018, 7, .	2.8	227
7	Zfp423 Maintains White Adipocyte Identity through Suppression of the Beige Cell Thermogenic Gene Program. Cell Metabolism, 2016, 23, 1167-1184.	7.2	187
8	An Adipose Tissue Atlas: An Image-Guided Identification of Human-like BAT and Beige Depots in Rodents. Cell Metabolism, 2018, 27, 252-262.e3.	7.2	174
9	Warming Induces Significant Reprogramming of Beige, but Not Brown, Adipocyte Cellular Identity. Cell Metabolism, 2018, 27, 1121-1137.e5.	7.2	168
10	A PRDM16-Driven Metabolic Signal from Adipocytes Regulates Precursor Cell Fate. Cell Metabolism, 2019, 30, 174-189.e5.	7.2	141
11	Reversible De-differentiation of Mature White Adipocytes into Preadipocyte-like Precursors during Lactation. Cell Metabolism, 2018, 28, 282-288.e3.	7.2	116
12	De novo adipocyte differentiation from PdgfrÎ²+ preadipocytes protects against pathologic visceral adipose expansion in obesity. Nature Communications, 2018, 9, 890.	5.8	113
13	Dermal adipose tissue has high plasticity and undergoes reversible dedifferentiation in mice. Journal of Clinical Investigation, 2019, 129, 5327-5342.	3.9	112
14	Distinct regulatory mechanisms governing embryonic versus adult adipocyte maturation. Nature Cell Biology, 2015, 17, 1099-1111.	4.6	111
15	Sorting out adipocyte precursors and their role in physiology and disease. Genes and Development, 2017, 31, 127-140.	2.7	104
16	Impact of tamoxifen on adipocyte lineage tracing: Inducer of adipogenesis and prolonged nuclear translocation of Cre recombinase. Molecular Metabolism, 2015, 4, 771-778.	3.0	103
17	Cellular Origins of Beige Fat Cells Revisited. Diabetes, 2019, 68, 1874-1885.	0.3	98
18	PARP-1 Controls the Adipogenic Transcriptional Program by PARylating C/EBPÎ² and Modulating Its Transcriptional Activity. Molecular Cell, 2017, 65, 260-271.	4.5	88

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19	Connexin 43 Mediates White Adipose Tissue Beiging by Facilitating the Propagation of Sympathetic Neuronal Signals. Cell Metabolism, 2016, 24, 420-433.	7.2	80
20	Adiponectin is essential for lipid homeostasis and survival under insulin deficiency and promotes Î²-cell regeneration. ELife, 2014, 3, .	2.8	74
21	Improved methodologies for the study of adipose biology: insights gained and opportunities ahead. Journal of Lipid Research, 2014, 55, 605-624.	2.0	68
22	The expanding problem of adipose depot remodeling and postnatal adipocyte progenitor recruitment. Molecular and Cellular Endocrinology, 2017, 445, 95-108.	1.6	62
23	Activation of natriuretic peptides and the sympathetic nervous system following Roux-en-Y gastric bypass is associated with gonadal adipose tissues browning. Molecular Metabolism, 2015, 4, 427-436.	3.0	60
24	Pathologic HIF1Î± signaling drives adipose progenitor dysfunction in obesity. Cell Stem Cell, 2021, 28, 685-701.e7.	5.2	57
25	Fetal development of subcutaneous white adipose tissue is dependent on Zfp423. Molecular Metabolism, 2017, 6, 111-124.	3.0	56
26	Perivascular mesenchymal cells control adipose-tissue macrophage accrual in obesity. Nature Metabolism, 2020, 2, 1332-1349.	5.1	53
27	ERÎ± upregulates Phd3 to ameliorate HIF-1 induced fibrosis and inflammation in adipose tissue. Molecular Metabolism, 2014, 3, 642-651.	3.0	39
28	Directing visceral white adipocyte precursors to a thermogenic adipocyte fate improves insulin sensitivity in obese mice. ELife, 2017, 6, .	2.8	39
29	Functional Interplay between Histone H2B ADP-Ribosylation and Phosphorylation Controls Adipogenesis. Molecular Cell, 2020, 79, 934-949.e14.	4.5	38
30	Acute loss of adipose tissue-derived adiponectin triggers immediate metabolic deterioration in mice. Diabetologia, 2018, 61, 932-941.	2.9	37
31	Adiponectin preserves metabolic fitness during aging. ELife, 2021, 10, .	2.8	37
32	Adipocyte Xbp1s overexpression drives uridine production and reduces obesity. Molecular Metabolism, 2018, 11, 1-17.	3.0	34
33	Peroxisome Proliferator-Activated Receptor <i>Î³</i> and Its Role in Adipocyte Homeostasis and Thiazolidinedione-Mediated Insulin Sensitization. Molecular and Cellular Biology, 2018, 38, .	1.1	33
34	Mitochondrial metabolism is a key regulator of the fibro-inflammatory and adipogenic stromal subpopulations in white adipose tissue. Cell Stem Cell, 2021, 28, 702-717.e8.	5.2	33
35	Regulator of Calcineurin 1 helps coordinate wholeâ€body metabolism and thermogenesis. EMBO Reports, 2018, 19, .	2.0	30
36	Adipocytes. Current Biology, 2014, 24, R988-R993.	1.8	25

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37	Visceral Adipose Tissue Mesothelial Cells: Living on the Edge or Just Taking Up Space?. Trends in Endocrinology and Metabolism, 2015, 26, 515-523.	3.1	25
38	Hepatic GALE Regulates Whole-Body Glucose Homeostasis by Modulating <i>Tff3</i> Expression. Diabetes, 2017, 66, 2789-2799.	0.3	24
39	Multilayered omics reveal sex- and depot-dependent adipose progenitor cell heterogeneity. Cell Metabolism, 2022, 34, 783-799.e7.	7.2	24
40	Identifying Novel Transcriptional Components Controlling Energy Metabolism. Cell Metabolism, 2011, 14, 739-745.	7.2	20
41	Do Adipocytes Emerge from Mural Progenitors?. Cell Stem Cell, 2017, 20, 585-586.	5.2	20
42	Transcriptional brakes on the road to adipocyte thermogenesis. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2019, 1864, 20-28.	1.2	19
43	Role of Fractionated Fat in Blending the Lid-Cheek Junction. Plastic and Reconstructive Surgery, 2018, 142, 56-65.	0.7	17
44	Cold-responsive adipocyte progenitors couple adrenergic signaling to immune cell activation to promote beige adipocyte accrual. Genes and Development, 2021, 35, 1333-1338.	2.7	17
45	Adipose tissue hyaluronan production improves systemic glucose homeostasis and primes adipocytes for CL 316,243-stimulated lipolysis. Nature Communications, 2021, 12, 4829.	5.8	15
46	ZFP423 controls EBF2 coactivator recruitment and PPARÎ³ occupancy to determine the thermogenic plasticity of adipocytes. Genes and Development, 2021, 35, 1461-1474.	2.7	15
47	Regulation of cold-induced thermogenesis by the RNA binding protein FAM195A. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	13
48	The next decade of metabolism. Nature Metabolism, 2019, 1, 2-4.	5.1	8
49	Isolation of Adipogenic and Fibro-Inflammatory Stromal Cell Subpopulations from Murine Intra-Abdominal Adipose Depots. Journal of Visualized Experiments, 2020, , .	0.2	6
50	Introduction to the Thematic Review Series: Adipose Biology. Journal of Lipid Research, 2019, 60, 1646-1647.	2.0	2
51	Cellular and molecular brakes on adipogenesis. Nature Metabolism, 2022, 4, 13-14.	5.1	1
52	Single-Cell RNA Sequencing Identifies Functionally Distinct Fibro-inflammatory and Adipogenic Pdgfrr Progenitor Subpopulations in Visceral Adipose Tissue. SSRN Electronic Journal, 0, , .	0.4	0