Rohan Lewis

List of Publications by Year
in descending order

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		172207	205818
93	2,774	29	48
papers	citations	h-index	g-index

108	108	108	2903
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Early programming of weight gain in mice prevents the induction of obesity by a highly palatable diet. Clinical Science, 2004, 106, 141-145.	1.8	139
2	Effect of maternal iron restriction during pregnancy on renal morphology in the adult rat offspring. British Journal of Nutrition, 2003, 90, 33-39.	1.2	132
3	The Mechanisms and Regulation of Placental Amino Acid Transport to the Human Foetus. Journal of Neuroendocrinology, 2008, 20, 419-426.	1.2	127
4	Effects of maternal iron restriction in the rat on hypoxia-induced gene expression and fetal metabolite levels. British Journal of Nutrition, 2001, 85, 193-201.	1.2	117
5	Effects of maternal iron restriction in the rat on blood pressure, glucose tolerance, and serum lipids in the 3-month-old offspring. Metabolism: Clinical and Experimental, 2001, 50, 562-567.	1.5	113
6	The influence of placental metabolism on fatty acid transfer to the fetus. Journal of Lipid Research, 2017, 58, 443-454.	2.0	86
7	Long-term programming of blood pressure by maternal dietary iron restriction in the rat. British Journal of Nutrition, 2002, 88, 283-290.	1.2	82
8	Facilitated transporters mediate net efflux of amino acids to the fetus across the basal membrane of the placental syncytiotrophoblast. Journal of Physiology, 2011, 589, 987-997.	1.3	80
9	Review: Placenta, evolution and lifelong health. Placenta, 2012, 33, S28-S32.	0.7	75
10	Transfer and Metabolism of Cortisol by the Isolated Perfused Human Placenta. Journal of Clinical Endocrinology and Metabolism, 2018, 103, 640-648.	1.8	74
11	Placental calcium transporter (PMCA3) gene expression predicts intrauterine bone mineral accrual. Bone, 2007, 40, 1203-1208.	1.4	71
12	The Placental Exposome: Placental Determinants of Fetal Adiposity and Postnatal Body Composition. Annals of Nutrition and Metabolism, 2013, 63, 208-215.	1.0	70
13	Effects of Maternal Iron Restriction on Placental Vascularization in the Rat. Placenta, 2001, 22, 534-539.	0.7	52
14	Low Serine Hydroxymethyltransferase Activity in the Human Placenta Has Important Implications for Fetal Glycine Supply. Journal of Clinical Endocrinology and Metabolism, 2005, 90, 1594-1598.	1.8	51
15	Placental Composition and Surface Area but not Vascularization are Altered by Maternal Protein Restriction in the Rat. Placenta, 2003, 24, 34-38.	0.7	49
16	Placental Lipid and Fatty Acid Transfer in Maternal Overnutrition. Annals of Nutrition and Metabolism, 2017, 70, 228-231.	1.0	47
17	Whole organ vascular casting and microCT examination of the human placental vascular tree reveals novel alterations associated with pregnancy disease. Scientific Reports, 2017, 7, 4144.	1.6	46
18	Measurement of Housekeeping Genes in Human Placenta. Placenta, 2009, 30, 1002-1003.	0.7	45

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19	Human placental oxygenation in late gestation: experimental and theoretical approaches. Journal of Physiology, 2018, 596, 5523-5534.	1.3	44
20	A systems perspective on placental amino acid transport. Journal of Physiology, 2018, 596, 5511-5522.	1.3	43
21	What factors determine placental glucose transfer kinetics?. Placenta, 2013, 34, 953-958.	0.7	42
22	Placental fatty acid transfer. Current Opinion in Clinical Nutrition and Metabolic Care, 2018, 21, 78-82.	1.3	42
23	Modification of fetal plasma amino acid composition by placental amino acid exchangersin vitro. Journal of Physiology, 2007, 582, 871-882.	1.3	41
24	Placental amino acid transport may be regulated by maternal vitamin D and vitamin D-binding protein: results from the Southampton Women's Survey. British Journal of Nutrition, 2015, 113, 1903-1910.	1.2	40
25	Maternal dietary iron restriction modulates hepatic lipid metabolism in the fetuses. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2005, 288, R104-R111.	0.9	36
26	l-Serine Uptake by Human Placental Microvillous Membrane Vesicles. Placenta, 2007, 28, 445-452.	0.7	35
27	Review: Modelling placental amino acid transferÂâˆ’ From transporters to placental function. Placenta, 2013, 34, S46-S51.	0.7	34
28	Computational modelling of amino acid transfer interactions in the placenta. Experimental Physiology, 2010, 95, 829-840.	0.9	32
29	New perspectives on placental fatty acid transfer. Prostaglandins Leukotrienes and Essential Fatty Acids, 2018, 138, 24-29.	1.0	32
30	Maternal muscle mass may influence system A activity in human placenta. Placenta, 2010, 31, 418-422.	0.7	31
31	Integration of computational modeling with membrane transport studies reveals new insights into amino acid exchange transport mechanisms. FASEB Journal, 2015, 29, 2583-2594.	0.2	31
32	Placental uptake and metabolism of 25(OH)vitamin D determine its activity within the fetoplacental unit. ELife, 2022, 11, .	2.8	31
33	Partitioning of glutamine synthesised by the isolated perfused human placenta between the maternal and fetal circulations. Placenta, 2013, 34, 1223-1231.	0.7	29
34	Maternal Factors Are Associated with the Expression of Placental Genes Involved in Amino Acid Metabolism and Transport. PLoS ONE, 2015, 10, e0143653.	1.1	29
35	Ursodeoxycholic acid inhibits uptake and vasoconstrictor effects of taurocholate in human placenta. FASEB Journal, 2019, 33, 8211-8220.	0.2	29
36	Perinatal Growth Disturbance in the Spontaneously Hypertensive Rat. Pediatric Research, 1997, 42, 758-764.	1.1	28

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37	Computational modelling of amino acid exchange and facilitated transport in placental membrane vesicles. Journal of Theoretical Biology, 2015, 365, 352-364.	0.8	27
38	Computational modelling of placental amino acid transfer as an integrated system. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 1451-1461.	1.4	27
39	Modelling the effect of intervillous flow on solute transfer based on 3D imaging of the human placental microstructure. Placenta, 2017, 60, 21-27.	0.7	25
40	Sex Differences in the mRNA Levels of Housekeeping Genes in Human Placenta. Placenta, 2010, 31, 556-557.	0.7	24
41	Relationship between placental expression of the imprinted PHLDA2 gene, intrauterine skeletal growth and childhood bone mass. Bone, 2012, 50, 337-342.	1.4	22
42	Serial blockâ€face scanning electron microscopy reveals novel intercellular connections in human term placental microvasculature. Journal of Anatomy, 2020, 237, 241-249.	0.9	21
43	DNA methylation of amino acid transporter genes in the human placenta. Placenta, 2017, 60, 64-73.	0.7	20
44	A massively multi-scale approach to characterizing tissue architecture by synchrotron micro-CT applied to the human placenta. Journal of the Royal Society Interface, 2021, 18, 20210140.	1.5	20
45	Immune Response Gene Profiles in the Term Placenta Depend Upon Maternal Muscle Mass. Reproductive Sciences, 2012, 19, 1041-1056.	1.1	19
46	Quantitated transcript haplotypes (QTH) ofAGTR1, reduced abundance of mRNA haplotypes containing 1166C (rs5186:A>C), and relevance to metabolic syndrome traits. Human Mutation, 2007, 28, 365-373.	1.1	18
47	In vivo kinetic study of maternoâ€fetal fatty acid transfer in obese and normal weight pregnant women. Journal of Physiology, 2019, 597, 4959-4973.	1.3	18
48	Human placental villi contain stromal macrovesicles associated with networks of stellate cells. Journal of Anatomy, 2020, 236, 132-141.	0.9	18
49	Phenylalanine transfer across the isolated perfused human placenta: an experimental and modeling investigation. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 310, R828-R836.	0.9	17
50	Multiscale three-dimensional imaging of the placenta. Placenta, 2020, 102, 55-60.	0.7	17
51	Fetal rat lung epithelium has a functional growth hormone receptor coupled to tyrosine kinase activity and insulin-like growth factor binding protein-2 production. Journal of Molecular Endocrinology, 1998, 21, 73-84.	1.1	16
52	Glutamate cycling may drive organic anion transport on the basal membrane of human placental syncytiotrophoblast. Journal of Physiology, 2015, 593, 4549-4559.	1.3	16
53	Placental perfusion and mathematical modelling. Placenta, 2020, 93, 43-48.	0.7	16
54	Placental Inositol Reduced in Gestational Diabetes as Glucose Alters Inositol Transporters and IMPA1 Enzyme Expression. Journal of Clinical Endocrinology and Metabolism, 2021, 106, e875-e890.	1.8	16

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55	Umbilical venousâ€“arterial plasma composition differences suggest differential incorporation of fatty acids in NEFA and cholesteryl ester pools. British Journal of Nutrition, 2011, 106, 463-467.	1.2	14
56	Pericytes on placental capillaries in terminal villi preferentially cover endothelial junctions in regions furthest away from the trophoblast. Placenta, 2021, 104, 1-7.	0.7	14
57	Endocytosis in the placenta: An undervalued mediator of placental transfer. Placenta, 2021, 113, 67-73.	0.7	14
58	â€˜Fetal sideâ€™ of the placenta: anatomical mis-annotation of carbon particle â€˜transferâ€™ across the human placenta. Nature Communications, 2021, 12, 7049.	5.8	14
59	High placental inositol content associated with suppressed pro-adipogenic effects of maternal glycaemia in offspring: the GUSTO cohort. International Journal of Obesity, 2021, 45, 247-257.	1.6	13
60	IFPA Meeting 2009 Workshops Report. Placenta, 2010, 31, S4-S20.	0.7	12
61	Estrone sulphate uptake by the microvillous membrane of placental syncytiotrophoblast is coupled to glutamate efflux. Biochemical and Biophysical Research Communications, 2018, 506, 237-242.	1.0	12
62	Placental mobilization of free fatty acids contributes to altered materno-fetal transfer in obesity. International Journal of Obesity, 2021, 45, 1114-1123.	1.6	12
63	Relation of placental alkaline phosphatase expression in human term placenta with maternal and offspring fat mass. International Journal of Obesity, 2018, 42, 1202-1210.	1.6	11
64	Maternal Obesity during Pregnancy Alters Daily Activity and Feeding Cycles, and Hypothalamic Clock Gene Expression in Adult Male Mouse Offspring. International Journal of Molecular Sciences, 2019, 20, 5408.	1.8	11
65	Metabolism of 13C-Labeled Fatty Acids in Term Human Placental Explants by Liquid Chromatographyâ€“Mass Spectrometry. Endocrinology, 2019, 160, 1394-1408.	1.4	11
66	Investigating a suitable model for the study of vitamin D mediated regulation of human placental gene expression. Journal of Steroid Biochemistry and Molecular Biology, 2020, 199, 105576.	1.2	11
67	The placental exposome, placental epigenetic adaptations and lifelong cardio-metabolic health. Molecular Aspects of Medicine, 2022, 87, 101095.	2.7	11
68	Serial blockâ€face scanning electron microscopy of erythrocytes protruding through the human placental syncytiotrophoblast. Journal of Anatomy, 2017, 231, 634-637.	0.9	9
69	Myo-inositol alters 13C-labeled fatty acid metabolism in human placental explants. Journal of Endocrinology, 2019, 243, 73-84.	1.2	9
70	Folding of the syncytiotrophoblast basal plasma membrane increases the surface area available for exchange in human placenta. Placenta, 2022, 117, 57-63.	0.7	9
71	Relation of FTO gene variants to fetal growth trajectories: Findings from the Southampton Women's survey. Placenta, 2016, 38, 100-106.	0.7	8
72	Placental 13C-DHA metabolism and relationship with maternal BMI, glycemia and birthweight. Molecular Medicine, 2021, 27, 84.	1.9	8

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73	Computational modelling of fatty acid transport in the human placenta. , 2015, 2015, 8054-7.		7
74	ExÂvivo dual perfusion of an isolated human placenta cotyledon: Towards protocol standardization and improved inter-centre comparability. Placenta, 2022, 126, 83-89.	0.7	7
75	Fetal and placental glucose and amino acid uptake in the spontaneously hypertensive rat. Placenta, 1998, 19, 403-408.	0.7	6
76	Effects of maternal captopril treatment on growth, blood glucose and plasma insulin in the fetal spontaneously hypertensive rat. Reproduction, Fertility and Development, 1999, 11, 403.	0.1	6
77	The role of the placenta in the developmental origins of health and diseaseâ€"Implications for practice. Reviews in Gynaecological and Perinatal Practice, 2006, 6, 70-79.	0.3	6
78	Comparison of l-serine uptake by human placental microvillous membrane vesicles and placental villous fragments. Placenta, 2010, 31, 456-459.	0.7	6
79	Development of the Human Placental Villus. , 2018, , .		6
80	Maternal and Fetal Genetic Variation in Vitamin D Metabolism and Umbilical Cord Blood 25-Hydroxyvitamin D. Journal of Clinical Endocrinology and Metabolism, 2022, 107, e3403-e3410.	1.8	6
81	The Placenta and Developmental Origins of Health and Disease. , 2016, , 439-461.		4
82	Glibenclamide transfer across the perfused human placenta is determined by albumin binding not transporter activity. European Journal of Pharmaceutical Sciences, 2020, 152, 105436.	1.9	4
83	Automated 3D Labelling of Fibroblasts and Endothelial Cells in SEM-Imaged Placenta using Deep Learning. , 2020, , .		4
84	Microvillous tip vesicles may be an origin of placental extracellular vesicles. Placenta, 2022, 123, 24-30.	0.7	4
85	Glucocorticoid activity in the fetal spontaneously hypertensive rat. Reproduction, Fertility and Development, 1998, 10, 341.	0.1	2
86	A computer program to aid in the preparation of reagent solutions. Computers in Biology and Medicine, 1990, 20, 103-104.	3.9	1
87	Modelling nutrient transfer based on 3D imaging of the human placental microstructure. , 2016, 2016, 5953-5956.		1
88	N-acetylcysteine, xCT and suppression of Maxi-chloride channel activity in human placenta. Placenta, 2021, 110, 46-55.	0.7	1
89	Placental polar lipid composition is associated with placental gene expression and neonatal body composition. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2021, 1866, 158971.	1.2	1
90	The placental role in fetal programming. , 2011, , 1039-1049.		0

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91	The Placental Role in Developmental Programming. , 2017, , 1245-1258.		0
92	In vivo kinetic study of the materno-fetal fatty acid transfer in obese and normal weight pregnant women. Proceedings of the Nutrition Society, 2020, 79, .	0.4	0
93	The placental role in developmental programming. , 2022, , 1325-1338.		0