Pierre De Meyts

List of Publications by Year
in descending order

94 papers	7,524 citations	71061 41 h-index	53190 85 g-index
95 all docs	95 docs citations	95 times ranked	4257 citing authors

#	Article	IF	Citations
1	Insulin: A 100-Year-Old Discovery With a Fascinating History. Endocrine Reviews, 2021, 42, 503-527.	8.9	16
2	Pancreatic Hormones. , 2020, , 383-423.		2
3	Viral insulin-like peptides activate human insulin and IGF-1 receptor signaling: A paradigm shift for hostâ€“microbe interactions. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2461-2466.	3.3	63
4	How ligand binds to the type 1 insulin-like growth factor receptor. Nature Communications, 2018, 9, 821.	5.8	99
5	Structures of insect Imp-L2 suggest an alternative strategy for regulating the bioavailability of insulin-like hormones. Nature Communications, 2018, 9, 3860.	5.8	22
6	Drosophila Insulin-Like Peptides DILP2 and DILP5 Differentially Stimulate Cell Signaling and Glycogen Phosphorylase to Regulate Longevity. Frontiers in Endocrinology, 2018, 9, 245.	1.5	72
7	Total Solid-Phase Synthesis of Biologically Active Drosophila Insulin-Like Peptide 2 (DILP2). Australian Journal of Chemistry, 2017, 70, 208.	0.5	18
8	Structural basis for the poisonous activity of a predator's venom insulin. Nature Structural and Molecular Biology, 2016, 23, 872-874.	3.6	2
9	Pancreatic Î±-cell hyperplasia and hyperglucagonemia due to a glucagon receptor splice mutation. Endocrinology, Diabetes and Metabolism Case Reports, 2016, 2016, .	0.2	36
10	Insulin/receptor binding: The last piece of the puzzle?. BioEssays, 2015, 37, 389-397.	1.2	110
11	Receptor Tyrosine Kinase Signal Transduction and the Molecular Basis of Signalling Specificity. , 2015, , 51-76.		2
12	p38 MAPK activation upregulates proinflammatory pathways in skeletal muscle cells from insulin-resistant type 2 diabetic patients. American Journal of Physiology - Endocrinology and Metabolism, 2015, 308, E63-E70.	1.8	48
13	Down-regulation of cyclin G2 by insulin, IGF-I (insulin-like growth factor 1) and X10 (AspB10 insulin): role in mitogenesis. Biochemical Journal, 2014, 457, 69-77.	1.7	16
14	IGF-I, IGF-II, and Insulin Stimulate Different Gene Expression Responses through Binding to the IGF-I Receptor. Frontiers in Endocrinology, 2013, 4, 98.	1.5	39
15	Receptor Oligomerization in Family B1 of G-Protein-Coupled Receptors: Focus on BRET Investigations and the Link between GPCR Oligomerization and Binding Cooperativity. Frontiers in Endocrinology, 2012, 3, 62.	1.5	31
16	The Insulin Receptor Isoform A: A Mitogenic Proinsulin Receptor?. Endocrinology, 2012, 153, 2054-2056.	1.4	8
17	Agonism and Antagonism at the Insulin Receptor. PLoS ONE, 2012, 7, e51972.	1.1	45
18	Separation of Fast from Slow Anabolism by Site-specific PEGylation of Insulin-like Growth Factor I (IGF-I). Journal of Biological Chemistry, 2011, 286, 19501-19510.	1.6	40

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19	Insight into the molecular basis for the kinetic differences between the two insulin receptor isoforms. Biochemical Journal, 2011, 440, 397-403.	1.7	29
20	Structural and Biological Properties of the Drosophila Insulin-like Peptide 5 Show Evolutionary Conservation. Journal of Biological Chemistry, 2011, 286, 661-673.	1.6	61
21	Gene Expression in Skeletal Muscle Biopsies from People with Type 2 Diabetes and Relatives: Differential Regulation of Insulin Signaling Pathways. PLoS ONE, 2009, 4, e6575.	1.1	92
22	Crystal Structure of a â€œNonfoldableâ€•Insulin. Journal of Biological Chemistry, 2009, 284, 35259-35272.	1.6	34
23	Dimerization and Negative Cooperativity in the Relaxin Family Peptide Receptors. Annals of the New York Academy of Sciences, 2009, 1160, 54-59.	1.8	15
24	Structural Basis of Allosteric Ligandâ€“Receptor Interactions in the Insulin/Relaxin Peptide Family. Annals of the New York Academy of Sciences, 2009, 1160, 45-53.	1.8	30
25	Structural Basis of the Aberrant Receptor Binding Properties of Hagfish and Lamprey Insulins. Biochemistry, 2009, 48, 11283-11295.	1.2	14
26	Insulin-like growth factor I (IGF-I) is a more potent regulator of gene expression than insulin in primary human myoblasts and myotubes. Growth Hormone and IGF Research, 2009, 19, 168-178.	0.5	22
27	Harmonic oscillator model of the insulin and IGF1 receptorsâ€™ allosteric binding and activation. Molecular Systems Biology, 2009, 5, 243.	3.2	144
28	Chapter 3 Molecular Mechanisms of Differential Intracellular Signaling From the Insulin Receptor. Vitamins and Hormones, 2009, 80, 51-75.	0.7	59
29	The insulin receptor: a prototype for dimeric, allosteric membrane receptors?. Trends in Biochemical Sciences, 2008, 33, 376-384.	3.7	149
30	Negative cooperativity in H2 relaxin binding to a dimeric relaxin family peptide receptor 1. Molecular and Cellular Endocrinology, 2008, 296, 10-17.	1.6	44
31	Alanine Scanning of a Putative Receptor Binding Surface of Insulin-like Growth Factor-I. Journal of Biological Chemistry, 2008, 283, 20821-20829.	1.6	59
32	Structural Basis for the Lower Affinity of the Insulin-like Growth Factors for the Insulin Receptor. Journal of Biological Chemistry, 2008, 283, 2604-2613.	1.6	58
33	Cooperative Binding of Insulin-Like Peptide 3 to a Dimeric Relaxin Family Peptide Receptor 2. Endocrinology, 2008, 149, 1113-1120.	1.4	48
34	Structural Biology of Insulin and IGF-1 Receptors. Novartis Foundation Symposium, 2008, , 160-176.	1.2	33
35	Activation of the insulin receptor (IR) by insulin and a synthetic peptide has different effects on gene expression in IR-transfected L6 myoblasts. Biochemical Journal, 2008, 412, 435-445.	1.7	33
36	Timing-Dependent Modulation of Insulin Mitogenic Versus Metabolic Signalling. Novartis Foundation Symposium, 2008, 227, 46-60.	1.2	10

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37	Activation of the Insulin Receptor by Insulin and a Synthetic Peptide Leads to Divergent Metabolic and Mitogenic Signaling and Responses. Journal of Biological Chemistry, 2007, 282, 35179-35186.	1.6	69
38	A Novel Binding Site for the Human Insulin-like Growth Factor-II (IGF-II)/Mannose 6-Phosphate Receptor on IGF-II. Journal of Biological Chemistry, 2007, 282, 18886-18894.	1.6	35
39	The A-chain of Insulin Contacts the Insert Domain of the Insulin Receptor. Journal of Biological Chemistry, 2007, 282, 35337-35349.	1.6	43
40	DOK4/IRS-5 expression is altered in clear cell renal cell carcinoma. International Journal of Cancer, 2007, 121, 992-998.	2.3	7
41	Insulin and IGF-I Receptor Structure and Binding Mechanism. , 2007, , 1-32.		7
42	Role of histone and transcription factor acetylation in diabetes pathogenesis. Diabetes/Metabolism Research and Reviews, 2005, 21, 416-433.	1.7	129
43	News. IET Systems Biology, 2005, 152, 53.	2.0	1
44	Insulin and its receptor: structure, function and evolution. BioEssays, 2004, 26, 1351-1362.	1.2	274
45	How Insulin Binds: the B-Chain Î±-Helix Contacts the L1 Î²-Helix of the Insulin Receptor. Journal of Molecular Biology, 2004, 341, 529-550.	2.0	74
46	IRS-4 mediated mitogenic signalling by insulin and growth hormone in LB cells, a murine T-cell lymphoma devoid of IGF-I receptors. Cellular Signalling, 2003, 15, 385-394.	1.7	9
47	Insulin and insulin-like growth factors: the paradox of signaling specificity. Growth Hormone and IGF Research, 2002, 12, 81-83.	0.5	14
48	Preparation and expression of biologically active prolactin and growth hormone receptors and suppressor of cytokine signaling proteins 1, 2, 3, and 6 tagged with cyan and yellow fluorescent proteins. Protein Expression and Purification, 2002, 25, 456-464.	0.6	13
49	Structural biology of insulin and IGF1 receptors: implications for drug design. Nature Reviews Drug Discovery, 2002, 1, 769-783.	21.5	506
50	Modelling of the disulphide-swapped isomer of human insulin-like growth factor-1: implications for receptor binding. Protein Engineering, Design and Selection, 1999, 12, 297-303.	1.0	27
51	Timing-dependence of insulin-receptor mitogenic versus metabolic signalling: a plausible model based on coincidence of hormone and effector binding. Biochemical Journal, 1999, 339, 675.	1.7	14
52	Inhibition by Insulin of Glucocorticoid-Induced Gene Transcription: Involvement of the Ligand-Binding Domain of the Glucocorticoid Receptor and Independence from the Phosphatidylinositol 3-Kinase and Mitogen-Activated Protein Kinase Pathways. Molecular Endocrinology, 1998, 12, 1343-1354.	3.7	25
53	Insulin and Insulin-like Growth Factor-I Receptor Mediated Differentiation of 3T3-F442A Cells into Adipocytes: Effect of PI 3-Kinase Inhibition. Biochemical and Biophysical Research Communications, 1998, 246, 426-430.	1.0	35
54	Genetic engineering in mice: impact on insulin signalling and action. Biochemical Journal, 1998, 335, 193-204.	1.7	53

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55	Logical analysis of timing-dependent receptor signalling specificity: application to the insulin receptor metabolic and mitogenic signalling pathways. Biochemical Journal, 1997, 326, 463-469.	1.7	58
56	Biological effects of human growth hormone in rat adipocyte precursor cells and newly differentiated adipocytes in primary culture. Metabolism: Clinical and Experimental, 1996, 45, 34-42.	1.5	53
57	Engineering the C-region of human insulin-like growth factor-1: implications for receptor binding. Protein Engineering, Design and Selection, 1996, 9, 1011-1019.	1.0	31
58	Biosensor Measurement of the Binding of Insulin-like Growth Factors I and II and Their Analogues to the Insulin-like Growth Factor-binding Protein-3. Journal of Biological Chemistry, 1996, 271, 13948-13952.	1.6	56
59	P-13: The importance of the exon six encoded domain of the IR and IGF-I-R in ligand binding. Experimental and Clinical Endocrinology and Diabetes, 1996, 104, 78-78.	0.6	0
60	P-8: Logical analysis of the effect of timing of receptor binding on signalling specificity. Experimental and Clinical Endocrinology and Diabetes, 1996, 104, 72-73.	0.6	1
61	O-42: Mitogenic signalling by insulin in a T-cell lymphoma, the LB cell line, devoid of IGF-I receptors: evidence for the lack of involvement of the RAS-MAP kinase pathway and for a possibly novel IRS-like molecule. Experimental and Clinical Endocrinology and Diabetes, 1996, 104, 52-53.	0.6	6
62	P-5: Insulin dose-response curves and IGF-I cross-reactivity in cells expressing only one receptor type: evidence for different requirements for monovalent versus bivalent insulin binding of metabolic and mitogenic signaling. Experimental and Clinical Endocrinology and Diabetes, 1996, 104, 68-70.	0.6	7
63	P-7: Kinetic and equilibrium properties of a cross-linking model of insulin receptor binding. Experimental and Clinical Endocrinology and Diabetes, 1996, 104, 71-72.	0.6	0
64	Mitogenic and Antiadipogenic Properties of Human Growth Hormone in Differentiating Human Adipocyte Precursor Cells in Primary Culture1. Pediatric Research, 1996, 40, 450-456.	1.1	59
65	Role of the time factor in signaling specificity: Application to mitogenic and metabolic signaling by the insulin and insulin-like growth factor-I receptor tyrosine kinases. Metabolism: Clinical and Experimental, 1995, 44, 2-11.	1.5	59
66	Mechanism of Insulin and IGF-I.. Annals of the New York Academy of Sciences, 1995, 766, 388-401.	1.8	66
67	Mitogenic Potential of Insulin on Lymphoma Cells Lacking IGF-1 Receptor. Annals of the New York Academy of Sciences, 1995, 766, 409-414.	1.8	17
68	The Insulin-Like Growth Factor-I Receptor. Hormone Research, 1994, 42, 152-169.	1.8	230
69	The Diabetogenes Concept of NIDDM. Advances in Experimental Medicine and Biology, 1993, 334, 89-100.	0.8	18
70	Structure of growth hormone and its receptor: an unexpected stoichiometry. Trends in Biochemical Sciences, 1992, 17, 169-170.	3.7	8
71	Measuring Growth Hormone Activity through Receptor and Binding Protein Assays. Hormone Research, 1991, 36, 21-26.	1.8	10
72	Identification of a Ligand-Binding Region of the Human Insulin Receptor Encoded by the Second Exon of the Gene. Molecular Endocrinology, 1990, 4, 409-416.	3.7	91

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73	Binding kinetics of mutated insulin receptors in transfected cells grown in suspension culture: Application to the Tyr â†' Phe 960 insulin receptor mutant. Biochemical and Biophysical Research Communications, 1989, 164, 191-198.	1.0	8
74	Acridine orange, an inhibitor of protein kinase C, abolishes insulin and growth hormone stimulation of lipogenesis in rat adipocytes. FEBS Letters, 1989, 244, 465-468.	1.3	24
75	Reversal of insulin-induced negative cooperativity by monoclonal antibodies that stabilize the slowly dissociating (â€œKsuperâ€) state of the insulin receptor. Biochemical and Biophysical Research Communications, 1988, 150, 694-701.	1.0	28
76	Role of kinase C in the insulin-like effects of human growth hormone in rat adipocytes. Biochemical and Biophysical Research Communications, 1987, 147, 1232-1240.	1.0	53
77	The receptor binding properties of the 20K variant of human growth hormone explain its discrepant insulin-like and growth promoting activities. Biochemical and Biophysical Research Communications, 1986, 134, 159-165.	1.0	39
78	A rapid method for the preparation of 1251-labelled human growth hormone for receptor studies, using reverse-phase high performance liquid chromatography. Biochemical and Biophysical Research Communications, 1986, 134, 671-677.	1.0	5
79	Carbohydrate metabolism in women who used oral contraceptives containing levonorgestrel or desogestrel: a 6-month prospective study. Fertility and Sterility, 1986, 45, 635-642.	0.5	56
80	Glycosylation of cell surface receptors: Tunicamycin treatment decreases insulin and growth hormone binding to different levels in cultured lymphocytes. Biochemical and Biophysical Research Communications, 1981, 101, 22-29.	1.0	39
81	Impaired negative cooperativity of the semisynthetic analogues human [LeuB24]- and [LeuB25]-insulins. Biochemical and Biophysical Research Communications, 1981, 100, 1229-1236.	1.0	41
82	The Insulin Receptor in Vertebrates Is Functionally More Conserved during Evolution than Insulin Itself. Endocrinology, 1979, 104, 1393-1402.	1.4	167
83	Regulation of Receptor by Homologous Hormone Enhances Sensitivity and Broadens Scope of Radioreceptor Assay for Human Growth Hormone. Journal of Clinical Endocrinology and Metabolism, 1979, 49, 262-268.	1.8	20
84	Mapping of the residues responsible for the negative cooperativity of the receptor-binding region of insulin. Nature, 1978, 273, 504-509.	13.7	251
85	THE STRUCTURAL BASIS OF INSULIN-RECEPTOR BINDING AND COOPERATIVE INTERACTIONS. , 1978, , 319-323.		0
86	Insulin-induced dissociation of its receptor into subunits: Possible molecular concomitant of negative cooperativity. Biochemical and Biophysical Research Communications, 1976, 73, 1068-1074.	1.0	98
87	Cooperative properties of hormone receptors in cell membranes. Journal of Supramolecular Structure, 1976, 4, 241-258.	2.3	167
88	Fluctuations in the affinity and concentration of insulin receptors on circulating monocytes of obese patients: effects of starvation, refeeding, and dieting.. Journal of Clinical Investigation, 1976, 58, 1123-1135.	3.9	401
89	Cooperative Regulation of Hormone Binding Affinity for Cell Surface Receptors. , 1976, , 215-226.		0
90	Cooperativity in ligand binding: A new graphic analysis. Biochemical and Biophysical Research Communications, 1975, 66, 1118-1126.	1.0	410

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91	Î²-Adrenergic receptors: Evidence for negative cooperativity. Biochemical and Biophysical Research Communications, 1975, 64, 1160-1168.	1.0	191
92	Receptors for Insulin, NSILA-s, and Growth Hormone: Applications to Disease States in Man. , 1975, 31, 95-139.		90
93	Insulin-Dependent Regulation of Insulin Receptor Concentrations: A Direct Demonstration in Cell Culture. Proceedings of the National Academy of Sciences of the United States of America, 1974, 71, 84-88.	3.3	999
94	Insulin interactions with its receptors: Experimental evidence for negative cooperativity. Biochemical and Biophysical Research Communications, 1973, 55, 154-161.	1.0	726