Isabel Varela-Nieto

List of Publications by Year
in descending order

129 papers	9,818 citations	94381 37 h-index	37183 96 g-index
136 all docs	136 docs citations	136 times ranked	19550 citing authors

#	Article	IF	Citations
1	Editorial: The Role of Cellular Senescence in Health and Disease. Frontiers in Cellular Neuroscience, 2022, 16, 882417.	1.8	1
2	Editorial: Otologic Trauma, Pathology, and Therapy. Frontiers in Cellular Neuroscience, 2022, 16, 900074.	1.8	0
3	Editorial: Neuroimmunology of the Inner Ear. Frontiers in Neurology, 2021, 12, 635359.	1.1	8
4	Therapeutic efficiency of the APAFâ€1 antagonist LPT99 in a rat model of cisplatinâ€induced hearing loss. Clinical and Translational Medicine, 2021, 11, e363.	1.7	6
5	Ceramide Kinase Inhibition Blocks IGF-1-Mediated Survival of Otic Neurosensory Progenitors by Impairing AKT Phosphorylation. Frontiers in Cell and Developmental Biology, 2021, 9, 678760.	1.8	6
6	IGF-1 Haploinsufficiency Causes Age-Related Chronic Cochlear Inflammation and Increases Noise-Induced Hearing Loss. Cells, 2021, 10, 1686.	1.8	12
7	Dual-Specificity Phosphatase 1 (DUSP1) Has a Central Role in Redox Homeostasis and Inflammation in the Mouse Cochlea. Antioxidants, 2021, 10, 1351.	2.2	11
8	Use of Radical Oxygen Species Scavenger Nitrones to Treat Oxidative Stress-Mediated Hearing Loss: State of the Art and Challenges. Frontiers in Cellular Neuroscience, 2021, 15, 711269.	1.8	2
9	Insulin-like Growth Factor 1 Signaling in Mammalian Hearing. Genes, 2021, 12, 1553.	1.0	10
10	The Value of Mouse Models of Rare Diseases: A Spanish Experience. Frontiers in Genetics, 2020, 11, 583932.	1.1	12
11	<i>G6PD</i>overexpression protects from oxidative stress and ageâ€related hearing loss. Aging Cell, 2020, 19, e13275.	3.0	37
12	Drug development for noise-induced hearing loss. Expert Opinion on Drug Discovery, 2020, 15, 1457-1471.	2.5	20
13	Otic Neurogenesis Is Regulated by TGFÎ² in a Senescence-Independent Manner. Frontiers in Cellular Neuroscience, 2020, 14, 217.	1.8	2
14	Folic acid as preventive therapy for hearing loss: effect of ototoxic drug consumption. Proceedings of the Nutrition Society, 2020, 79, .	0.4	0
15	Biomarkers in Vestibular Schwannomaâ€"Associated Hearing Loss. Frontiers in Neurology, 2019, 10, 978.	1.1	26
16	Solid Lipid Nanoparticles Loaded with Glucocorticoids Protect Auditory Cells from Cisplatin-Induced Ototoxicity. Journal of Clinical Medicine, 2019, 8, 1464.	1.0	36
17	Complementary and distinct roles of autophagy, apoptosis and senescence during early inner ear development. Hearing Research, 2019, 376, 86-96.	0.9	17
18	TGFÎ²2-induced senescence during early inner ear development. Scientific Reports, 2019, 9, 5912.	1.6	42

#	Article	IF	Citations
19	Neuroglial Involvement in Abnormal Glutamate Transport in the Cochlear Nuclei of the Igf1âˆ’/âˆ’ Mouse. Frontiers in Cellular Neuroscience, 2019, 13, 67.	1.8	11
20	Betaineâ€homocysteine <i>S</i> â€methyltransferase deficiency causes increased susceptibility to noiseâ€induced hearing loss associated with plasma hyperhomocysteinemia. FASEB Journal, 2019, 33, 5942-5956.	0.2	7
21	Modelling physical resilience in ageing mice. Mechanisms of Ageing and Development, 2019, 177, 91-102.	2.2	13
22	Deficit of mitogen-activated protein kinase phosphatase 1 (DUSP1) accelerates progressive hearing loss. ELife, 2019, 8, .	2.8	21
23	The expression of oxidative stress response genes is modulated by a combination of resveratrol and N-acetylcysteine to ameliorate ototoxicity in the rat cochlea. Hearing Research, 2018, 358, 10-21.	0.9	23
24	Editorial: Hormones and Neural Aging: Lessons From Experimental Models. Frontiers in Aging Neuroscience, 2018, 10, 374.	1.7	0
25	MPZL2, Encoding the Epithelial Junctional Protein Myelin Protein Zero-like 2, Is Essential for Hearing in Man and Mouse. American Journal of Human Genetics, 2018, 103, 74-88.	2.6	34
26	Tackling frailty and functional decline: Background of the action group A3 of the European innovation partnership for active and healthy ageing. Maturitas, 2018, 115, 69-73.	1.0	20
27	Mutations in L-type amino acid transporter-2 support SLC7A8 as a novel gene involved in age-related hearing loss. ELife, 2018, 7, .	2.8	38
28	A Comparative Study of Drug Delivery Methods Targeted to the Mouse Inner Ear: Bullostomy Versus Transtympanic Injection. Journal of Visualized Experiments, 2017, , .	0.2	12
29	Usefulness of Electrical Auditory Brainstem Responses to Assess the Functionality of the Cochlear Nerve Using an Intracochlear Test Electrode. Otology and Neurotology, 2017, 38, e413-e420.	0.7	34
30	Autophagy in the Vertebrate Inner Ear. Frontiers in Cell and Developmental Biology, 2017, 5, 56.	1.8	22
31	The Role of Insulin-Like Growth Factor 1 in the Progression of Age-Related Hearing Loss. Frontiers in Aging Neuroscience, 2017, 9, 411.	1.7	31
32	Cochlear Homocysteine Metabolism at the Crossroad of Nutrition and Sensorineural Hearing Loss. Frontiers in Molecular Neuroscience, 2017, 10, 107.	1.4	29
33	Long-Term Dietary Folate Deficiency Accelerates Progressive Hearing Loss on CBA/Ca Mice. Frontiers in Aging Neuroscience, 2016, 8, 209.	1.7	12
34	Wbp2 is required for normal glutamatergic synapses in the cochlea and is crucial for hearing. EMBO Molecular Medicine, 2016, 8, 191-207.	3.3	41
35	Autophagy resolves early retinal inflammation in <i>Igf1</i>-deficient mice. DMM Disease Models and Mechanisms, 2016, 9, 965-74.	1.2	17
36	Frailty in mouse ageing: A conceptual approach. Mechanisms of Ageing and Development, 2016, 160, 34-40.	2.2	39

#	Article	IF	Citations
37	IGF-1 deficiency causes atrophic changes associated with upregulation of VGluT1 and downregulation of MEF2 transcription factors in the mouse cochlear nuclei. Brain Structure and Function, 2016, 221, 709-734.	1.2	10
38	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222.	4.3	4,701
39	Mild cognitive decline. A position statement of the Cognitive Decline Group of the European Innovation Partnership for Active and Healthy Ageing (EIPAHA). Maturitas, 2016, 83, 83-93.	1.0	39
40	Long-term omega-3 fatty acid supplementation prevents expression changes in cochlear homocysteine metabolism and ameliorates progressive hearing loss in C57BL/6J mice. Journal of Nutritional Biochemistry, 2015, 26, 1424-1433.	1.9	29
41	Public investment in biomedical research in Europe. Lancet, The, 2015, 386, 1335.	6.3	6
42	Comparative gene expression study of the vestibular organ of the Igf1 deficient mouse using whole-transcript arrays. Hearing Research, 2015, 330, 62-77.	0.9	12
43	Swept-sine noise-induced damage as a hearing loss model for preclinical assays. Frontiers in Aging Neuroscience, 2015, 7, 7.	1.7	25
44	Transforming growth factor ÃŽÂ²1 inhibition protects from noise-induced hearing loss. Frontiers in Aging Neuroscience, 2015, 7, 32.	1.7	34
45	Editorial: Aging, neurogenesis and neuroinflammation in hearing loss and protection. Frontiers in Aging Neuroscience, 2015, 7, 138.	1.7	4
46	C-Raf deficiency leads to hearing loss and increased noise susceptibility. Cellular and Molecular Life Sciences, 2015, 72, 3983-3998.	2.4	16
47	Loss of lysophosphatidic acid receptor LPA1 alters oligodendrocyte differentiation and myelination in the mouse cerebral cortex. Brain Structure and Function, 2015, 220, 3701-3720.	1.2	36
48	Differential organ phenotypes after postnatal Igf1r gene conditional deletion induced by tamoxifen in UBC-CreERT2; Igf1r fl/fl double transgenic mice. Transgenic Research, 2015, 24, 279-294.	1.3	23
49	Targeting Cholesterol Homeostasis to Fight Hearing Loss: A New Perspective. Frontiers in Aging Neuroscience, 2015, 7, 3.	1.7	29
50	Age-regulated function of autophagy in the mouse inner ear. Hearing Research, 2015, 330, 39-50.	0.9	36
51	Folic acid deficiency induces premature hearing loss through mechanisms involving cochlear oxidative stress and impairment of homocysteine metabolism. FASEB Journal, 2015, 29, 418-432.	0.2	49
52	Early Development of the Vertebrate Inner Ear. , 2014, , 1-30.		6
53	Treatment with N- and C-Terminal Peptides of Parathyroid Hormone-Related Protein Partly Compensate the Skeletal Abnormalities in IGF-I Deficient Mice. PLoS ONE, 2014, 9, e87536.	1.1	20
54	Programmed Cell Senescence during Mammalian Embryonic Development. Cell, 2013, 155, 1104-1118.	13.5	1,081

#	Article	IF	Citations
55	IGF-I deficiency and hearing loss: molecular clues and clinical implications. Pediatric Endocrinology Reviews, 2013, 10, 460-72.	1.2	36
56	Early otic development depends on autophagy for apoptotic cell clearance and neural differentiation. Cell Death and Disease, 2012, 3, e394-e394.	2.7	51
57	Early Development of the Vertebrate Inner Ear. Anatomical Record, 2012, 295, 1775-1790.	0.8	39
58	AKT Signaling Mediates IGF-I Survival Actions on Otic Neural Progenitors. PLoS ONE, 2012, 7, e30790.	1.1	54
59	Autophagy During Vertebrate Development. Cells, 2012, 1, 428-448.	1.8	41
60	Insulin Receptor Substrate 2 (IRS2)-Deficient Mice Show Sensorineural Hearing Loss That Is Delayed by Concomitant Protein Tyrosine Phosphatase 1B (PTP1B) Loss of Function. Molecular Medicine, 2012, 18, 260-269.	1.9	34
61	Age-related functional and structural retinal modifications in the Igf1â^'/â^' null mouse. Neurobiology of Disease, 2012, 46, 476-485.	2.1	35
62	Drug Delivery to the Inner Ear: Strategies and Their Therapeutic Implications for Sensorineural Hearing Loss. Current Drug Delivery, 2012, 9, 231-242.	0.8	43
63	The Role of Insulin-Like Growth Factor-I in the Physiopathology of Hearing. Frontiers in Molecular Neuroscience, 2011, 4, 11.	1.4	44
64	European Scientific, Ethical, and Legal Issues on Human Stem Cell Research and Regenerative Medicine. Stem Cells, 2010, 28, 1005-1007.	1.4	29
65	A comparative study of age-related hearing loss in wild type and insulin-like growth factor I deficient mice. Frontiers in Neuroanatomy, 2010, 4, 27.	0.9	57
66	Melanin precursors prevent premature age-related and noise-induced hearing loss in albino mice. Pigment Cell and Melanoma Research, 2010, 23, 72-83.	1.5	78
67	Comparison of different aminoglycoside antibiotic treatments to refine ototoxicity studies in adult mice. Laboratory Animals, 2010, 44, 124-131.	0.5	47
68	RNA Microarray Analysis in Prenatal Mouse Cochlea Reveals Novel IGF-I Target Genes: Implication of MEF2 and FOXM1 Transcription Factors. PLoS ONE, 2010, 5, e8699.	1.1	79
69	RAF Kinase Activity Regulates Neuroepithelial Cell Proliferation and Neuronal Progenitor Cell Differentiation during Early Inner Ear Development. PLoS ONE, 2010, 5, e14435.	1.1	36
70	Design of a reverberant chamber for noise exposure experiments with small animals. Applied Acoustics, 2009, 70, 1034-1040.	1.7	13
71	Behavioral phenotype of maLPA₁â€null mice: increased anxietyâ€like behavior and spatial memory deficits. Genes, Brain and Behavior, 2009, 8, 772-784.	1.1	74
72	RasGRF1 disruption causes retinal photoreception defects and associated transcriptomic alterations. Journal of Neurochemistry, 2009, 110, 641-652.	2.1	40

#	Article	IF	Citations
73	Direct drug application to the round window: A comparative study of ototoxicity in rats. Otolaryngology - Head and Neck Surgery, 2009, 141, 584-590.	1.1	17
74	Spatial and temporal segregation of auditory and vestibular neurons in the otic placode. Developmental Biology, 2008, 322, 109-120.	0.9	82
75	Anti-Apoptotic Actions of Insulin-Like Growth Factors: Lessons from Development and Implications in Neoplastic Cell Transformation. Current Pharmaceutical Design, 2007, 13, 687-703.	0.9	28
76	A network of growth and transcription factors controls neuronal differentation and survival in the developing ear. International Journal of Developmental Biology, 2007, 51, 557-570.	0.3	63
77	Pollen-induced airway inflammation, hyper-responsiveness and apoptosis in a murine model of allergy. Clinical and Experimental Allergy, 2007, 37, 331-338.	1.4	25
78	Sensorineural hearing loss in insulin-like growth factorâ€ƒI-null mice: a new model of human deafness. European Journal of Neuroscience, 2006, 23, 587-590.	1.2	110
79	Glycosyl-phosphatidylinositol Cleavage Products in Signal Transduction. , 2005, , 101-119.		1
80	Regulation of Vertebrate Sensory Organ Development: A Scenario for Growth Hormone and Insulin-Like Growth Factors Action. Advances in Experimental Medicine and Biology, 2005, 567, 221-242.	0.8	1
81	Phosphorylation of glycosyl-phosphatidylinositol by phosphatidylinositol 3-kinase changes its properties as a substrate for phospholipases. FEBS Letters, 2005, 579, 59-65.	1.3	7
82	Jejunal microvilli atrophy and reduced nutrient transport in rats with advanced liver cirrhosis: improvement by Insulin-like Growth Factor I. BMC Gastroenterology, 2004, 4, 12.	0.8	22
83	Trophic effects of insulin-like growth factor-I (IGF-I) in the inner ear. Hearing Research, 2004, 196, 19-25.	0.9	58
84	Acidic sphingomyelinase downregulates the liver-specific methionine adenosyltransferase 1A, contributing to tumor necrosis factorâ€“induced lethal hepatitis. Journal of Clinical Investigation, 2004, 113, 895-904.	3.9	32
85	Acidic sphingomyelinase downregulates the liver-specific methionine adenosyltransferase 1A, contributing to tumor necrosis factorâ€“induced lethal hepatitis. Journal of Clinical Investigation, 2004, 113, 895-904.	3.9	61
86	Hematotesticular barrier is altered from early stages of liver cirrhosis: Effect of insulin-like growth factor 1. World Journal of Gastroenterology, 2004, 10, 2529.	1.4	33
87	Cell Death in the Nervous System: Lessons from Insulin and Insulin-Like Growth Factors. Molecular Neurobiology, 2003, 28, 23-50.	1.9	42
88	Insulin-like growth factor 1 is required for survival of transit-amplifying neuroblasts and differentiation of otic neurons. Developmental Biology, 2003, 262, 242-253.	0.9	63
89	Growth Factors and Early Development of Otic Neurons: Interactions between Intrinsic and Extrinsic Signals. Current Topics in Developmental Biology, 2003, 57, 177-206.	1.0	26
90	Programmed cell death in the developing inner ear is balanced by nerve growth factor and insulin-like growth factor I. Journal of Cell Science, 2003, 116, 475-486.	1.2	35

#	Article	IF	Citations
91	Lipid signalling: cellular events and their biophysical mechanisms. FEBS Letters, 2002, 531, 1-1.	1.3	2
92	Expression and function of phospholipase A2in brain. FEBS Letters, 2002, 531, 12-17.	1.3	73
93	Serum deprivation increases ceramide levels and induces apoptosis in undifferentiated HN9.10e cells. Neurochemistry International, 2002, 40, 327-336.	1.9	43
94	Cochlear abnormalities in insulin-like growth factor-1 mouse mutants. Hearing Research, 2002, 170, 2-11.	0.9	65
95	Liver cell proliferation requires methionine adenosyltransferase 2A mRNA up-regulation. Hepatology, 2002, 35, 1381-1391.	3.6	38
96	Short-chain ceramide regulates hepatic methionine adenosyltransferase expression. Journal of Hepatology, 2001, 34, 192-201.	1.8	13
97	Purification and Characterization of Insulin-Mimetic Inositol Phosphoglycan-Like Molecules From Grass Pea (Lathyrus sativus) Seeds. Molecular Medicine, 2001, 7, 454-460.	1.9	13
98	Delayed Inner Ear Maturation and Neuronal Loss in Postnatal<i>Igf-1</i>-Deficient Mice. Journal of Neuroscience, 2001, 21, 7630-7641.	1.7	164
99	c-Raf Regulates Cell Survival and Retinal Ganglion Cell Morphogenesis during Neurogenesis. Journal of Neuroscience, 2000, 20, 3254-3262.	1.7	45
100	Role of diffusible and transcription factors in inner ear development: implications in regeneration. Histology and Histopathology, 2000, 15, 657-66.	0.5	13
101	Diabetes and the Role of Inositol-Containing Lipids in Insulin Signaling. Molecular Medicine, 1999, 5, 505-514.	1.9	65
102	Involvement of Insulin-Like Growth Factor-I in Inner Ear Organogenesis and Regeneration. Hormone and Metabolic Research, 1999, 31, 126-132.	0.7	21
103	Strict regulation of c-Raf kinase levels is required for early organogenesis of the vertebrate inner ear. Oncogene, 1999, 18, 429-437.	2.6	28
104	Introduction to structural and functional studies on nerve growth factor. , 1999, 45, 206-206.		0
105	Glycosyl Inositol Derivatives Related to Inositolphosphoglycan Mediators: Synthesis, Structure, and Biological Activity. Chemistry - A European Journal, 1999, 5, 320-336.	1.7	58
106	Towards the in vitro reconstitution of caveolae. Asymmetric incorporation of glycosylphosphatidylinositol (GPI) and gangliosides into liposomal membranes. FEBS Letters, 1999, 457, 71-74.	1.3	16
107	Induction of cell growth by insulin and insulin-like growth factor-I is associated with jun expression in the otic vesicle. , 1998, 398, 323-332.		32
108	Glycosyl phosphatidylinositol (GPI)/inositolphosphate glycan (GPI): An intracellular signalling system involved in the control of thyroid cell proliferation. Biochimie, 1998, 80, 1063-1067.	1.3	5

#	Article	IF	Citations
109	The role of glycosylâ€“phosphatidylinositol in signal transduction1Dedicated to Dr. Antonio Sanchez-Bueno.1. International Journal of Biochemistry and Cell Biology, 1998, 30, 313-326.	1.2	103
110	Pattern of methionine adenosyltransferase isoenzyme expression during rat liver regeneration after partial hepatectomy. FEBS Letters, 1998, 426, 305-308.	1.3	14
111	Phospholipase cleavage of glycosylphosphatidylinositol reconstituted in liposomal membranes. FEBS Letters, 1998, 432, 150-154.	1.3	13
112	Stimulation of DNA synthesis by natural ceramide 1-phosphate. Biochemical Journal, 1997, 325, 435-440.	1.7	125
113	Glycosyl-phosphatidylinositol-phospholipase Type D: A Possible Candidate for the Generation of Second Messengers. Biochemical and Biophysical Research Communications, 1997, 233, 432-437.	1.0	42
114	Inositol-phosphoglycan inhibits calcium oscillations in hepatocytes by reducing calcium entry. Cell Calcium, 1997, 21, 125-133.	1.1	17
115	Isolation and Partial Characterisation of Insulin-Mimetic Inositol Phosphoglycans from Human Liver. Biochemical and Molecular Medicine, 1997, 61, 214-228.	1.5	48
116	Cell signalling by inositol phosphoglycans from different species. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 1996, 115, 223-241.	0.7	92
117	Signalling at the epidermal growth factor receptor: role of glycosyl-phosphatidylinositol hydrolysis. Biochemical Society Transactions, 1995, 23, 174S-174S.	1.6	0
118	Intracellular mediators of insulin-like growth factor I during otic vesicle development. Biochemical Society Transactions, 1995, 23, 185S-185S.	1.6	3
119	Role of glycosyl-phosphatidylinositol hydrolysis as a mitogenic signal for epidermal growth factor. Cellular Signalling, 1995, 7, 411-421.	1.7	25
120	Synthesis and investigation of the possible insulin-like activity of 1d-4-O- and 1d-6-O-(2-amino-2-deoxy-Î±-d-glucopyranosyl) myo-inositol 1-phosphate and 1d-6-O-(2-amino-2-deoxy-Î±-d-glucopyranosyl) myo-inositol 1,2-(cyclic phosphate). Carbohydrate Research, 1994, 264, 21-31.	1.1	30
121	Mannosamine is an unspecific inhibitor of glycosyl-phosphatidylinositol biosynthesis in T-lymphocytes. Biochemical Society Transactions, 1994, 22, 11S-11S.	1.6	1
122	Brain-Derived Neurotrophic Factor and Neurotrophin-3 Induce Cell Proliferation in the Cochleovestibular Ganglion through a Glycosyl-Phosphatidylinositol Signaling System. Developmental Biology, 1993, 159, 257-265.	0.9	42
123	Brain-Derived Neurotrophic Factor and Neurotrophin-3 Support the Survival and Neuritogenesis Response of Developing Cochleovestibular Ganglion Neurons. Developmental Biology, 1993, 159, 266-275.	0.9	98
124	Glycosyl-Phosphatidylinositol: Role in Neurotrophic Factors Signalling. , 1993, , 103-113.		0
125	Role of the glycosylphosphatidylinositol/inositol phosphoglycan system in human fibroblast proliferation. Experimental Cell Research, 1992, 200, 439-443.	1.2	11
126	An inositol phosphoglycan stimulates glycolysis in human platelets. Biochemical and Biophysical Research Communications, 1991, 180, 1041-1047.	1.0	6

#	Article	IF	Citations
127	Inositol phospho-oligosaccharide stimulates cell proliferation in the early developing inner ear. Developmental Biology, 1991, 143, 432-435.	0.9	21
128	Glycosyl-phosphatidylinositol/inositol phosphoglycan: a signaling system for the low-affinity nerve growth factor receptor.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 8016-8019.	3.3	60
129	Insulin-Like Effects of Inositol Phosphate-Glycan on Messenger RNA Expression in Rat Hepatocytes. Molecular Endocrinology, 1991, 5, 1062-1068.	3.7	22