JosÃ© C GarcÃ-a-BorrÃ³n

List of Publications by Year
in descending order

107 papers	5,643 citations	71102 41 h-index	79698 73 g-index
109 all docs	109 docs citations	109 times ranked	4930 citing authors

#	Article	IF	Citations
1	Tyrosinase related protein 1 (TRP1) functions as a DHICA oxidase in melanin biosynthesis.. EMBO Journal, 1994, 13, 5818-5825.	7.8	417
2	Melanins and melanogenesis: methods, standards, protocols. Pigment Cell and Melanoma Research, 2013, 26, 616-633.	3.3	365
3	Melanins and melanogenesis: from pigment cells toÂhuman health and technological applications. Pigment Cell and Melanoma Research, 2015, 28, 520-544.	3.3	347
4	Melanocortin-1 receptor structure and functional regulation. Pigment Cell & Melanoma Research, 2005, 18, 051103015727002.	3.6	265
5	A new enzymatic function in the melanogenic pathway. The 5,6-dihydroxyindole-2-carboxylic acid oxidase activity of tyrosinase-related protein-1 (TRP1).. Journal of Biological Chemistry, 1994, 269, 17993-18000.	3.4	238
6	Molecular Anatomy of Tyrosinase and its Related Proteins: Beyond the Histidine-Bound Metal Catalytic Center. Pigment Cell & Melanoma Research, 2002, 15, 162-173.	3.6	221
7	Regulation of mammalian melanogenesis I: partial purification and characterization of a dopachrome converting factor: dopachrome tautomerase. Biochimica Et Biophysica Acta - General Subjects, 1990, 1035, 266-275.	2.4	163
8	Melanocortin Receptor Ligands: New Horizons for Skin Biology and Clinical Dermatology. Journal of Investigative Dermatology, 2006, 126, 1966-1975.	0.7	149
9	<scp>MC</scp>1R, the c<scp>AMP</scp> pathway, and the response to solar <scp>UV</scp>: extending the horizon beyond pigmentation. Pigment Cell and Melanoma Research, 2014, 27, 699-720.	3.3	146
10	The 5,6-dihydroxyindole-2-carboxylic acid (DHICA) oxidase activity of human tyrosinase. Biochemical Journal, 2001, 354, 131-139.	3.7	111
11	Mechanisms of melanogenesis inhibition by tumor necrosis factorâ€Î± in B16/F10 mouse melanoma cells. FEBS Journal, 1998, 255, 139-146.	0.2	101
12	Identification of Active Site Residues Involved in Metal Cofactor Binding and Stereospecific Substrate Recognition in Mammalian Tyrosinase. Implications to the Catalytic Cycle. Biochemistry, 2002, 41, 679-686.	2.5	100
13	Molecular cloning and functional characterization of a unique multipotent polyphenol oxidase from Marinomonas mediterranea. BBA - Proteins and Proteomics, 2001, 1547, 104-116.	2.1	95
14	MC1R variants increased the risk of sporadic cutaneous melanoma in darkerâ€pigmented <scp>C</scp>aucasians: A pooledâ€analysis from the Mâ€SKIP project. International Journal of Cancer, 2015, 136, 618-631.	5.1	92
15	Signaling from the Human Melanocortin 1 Receptor to ERK1 and ERK2 Mitogen-Activated Protein Kinases Involves Transactivation of cKIT. Molecular Endocrinology, 2011, 25, 138-156.	3.7	91
16	Regulation of the final phase of mammalian melanogenesis. FEBS Journal, 1992, 208, 155-163.	0.2	88
17	Tyrosinase isoenzymes in mammalian melanocytes. 1. Biochemical characterization of two melanosomal tyrosinases from B16 mouse melanoma. FEBS Journal, 1993, 217, 549-556.	0.2	87
18	MC1R signaling. Intracellular partners and pathophysiological implications. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2017, 1863, 2448-2461.	3.8	85

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19	The 5,6-dihydroxyindole-2-carboxylic acid (DHICA) oxidase activity of human tyrosinase. Biochemical Journal, 2001, 354, 131.	3.7	84
20	Dimerization of the Human Melanocortin 1 Receptor: Functional Consequences and Dominant-Negative Effects. Journal of Investigative Dermatology, 2006, 126, 172-181.	0.7	80
21	Comparative action of dopachrome tautomerase and metal ions on the rearrangement of dopachrome. Biochimica Et Biophysica Acta - General Subjects, 1991, 1115, 1-5.	2.4	71
22	Transforming Growth Factor-Î²1 Inhibits Basal Melanogenesis in B16/F10 Mouse Melanoma Cells by Increasing the Rate of Degradation of Tyrosinase and Tyrosinase-related Protein-1. Journal of Biological Chemistry, 1997, 272, 3967-3972.	3.4	70
23	Anti-inflammatory and anti-invasive effects of Î±-melanocyte-stimulating hormone in human melanoma cells. British Journal of Cancer, 2003, 89, 2004-2015.	6.4	65
24	Agonist-Independent, High Constitutive Activity of the Human Melanocortin 1 Receptor. Pigment Cell & Melanoma Research, 2004, 17, 386-395.	3.6	64
25	The dioxin receptor has tumor suppressor activity in melanoma growth and metastasis. Carcinogenesis, 2013, 34, 2683-2693.	2.8	63
26	Loss-of-function variants of the human melanocortin-1 receptor gene in melanoma cells define structural determinants of receptor function. FEBS Journal, 2002, 269, 6133-6141.	0.2	59
27	MC1R variants as melanoma risk factors independent of at-risk phenotypic characteristics: a pooled analysis from the M-SKIP project. Cancer Management and Research, 2018, Volume 10, 1143-1154.	1.9	57
28	A new spectrophotometric assay for dopachrome tautomerase. Journal of Proteomics, 1990, 21, 35-46.	2.4	55
29	Identification and functional analysis of novel variants of the human melanocortin 1 receptor found in melanoma patients. Human Mutation, 2009, 30, 811-822.	2.5	54
30	The mouse silver locus encodes a single transcript truncated by the silver mutation. Mammalian Genome, 1999, 10, 1168-1171.	2.2	53
31	Molecular mechanism for catalysis by a new zinc-enzyme, dopachrome tautomerase. Biochemical Journal, 1996, 313, 447-453.	3.7	52
32	The Melanogenic System of Xenopus laevis.. Archives of Histology and Cytology, 1998, 61, 305-316.	0.2	52
33	Thr40 and Met122 are new partial loss-of-function natural mutations of the human melanocortin 1 receptor. FEBS Letters, 2001, 508, 44-48.	2.8	51
34	Regulation of Human Melanocortin 1 Receptor Signaling and Trafficking by Thr-308 and Ser-316 and Its Alteration in Variant Alleles Associated with Red Hair and Skin Cancer. Journal of Biological Chemistry, 2007, 282, 3241-3251.	3.4	50
35	Regulation of mammalian melanogenesis II: the role of metal cations. Biochimica Et Biophysica Acta - General Subjects, 1990, 1035, 276-285.	2.4	49
36	Melanocortin 1 receptor mutations impact differentially on signalling to the cAMP and the ERK mitogenâ€activated protein kinase pathways. FEBS Letters, 2009, 583, 3269-3274.	2.8	47

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37	Improved Tyrosinase Activity Stains in Polyacrylamide Electrophoresis Gels. Pigment Cell & Melanoma Research, 1993, 6, 394-399.	3.6	46
38	Mahogunin Ring Finger-1 (MGRN1) E3 Ubiquitin Ligase Inhibits Signaling from Melanocortin Receptor by Competition with Gİ±s. Journal of Biological Chemistry, 2009, 284, 31714-31725.	3.4	45
39	Dopachrome Tautomerase Is a Zinc-Containing Enzyme. Biochemical and Biophysical Research Communications, 1994, 204, 1243-1250.	2.1	44
40	A threeâ€dimensional model of mammalian tyrosinase active site accounting for loss of function mutations. Pigment Cell & Melanoma Research, 2007, 20, 394-401.	3.6	44
41	Rate Limiting Factors in Melanocortin 1 Receptor Signalling Throughthe cAMP Pathway. Pigment Cell & Melanoma Research, 2003, 16, 540-547.	3.6	43
42	MC1R gene variants and non-melanoma skin cancer: a pooled-analysis from the M-SKIP project. British Journal of Cancer, 2015, 113, 354-363.	6.4	43
43	Conformation-dependent Post-translational Glycosylation of Tyrosinase. Journal of Biological Chemistry, 2003, 278, 15735-15743.	3.4	42
44	Aberrant trafficking of human melanocortin 1 receptor variants associated with red hair and skin cancer: Steadyâ€state retention of mutant forms in the proximal golgi. Journal of Cellular Physiology, 2009, 220, 640-654.	4.1	42
45	Elevated Glucocorticoid Levels Are Responsible for Induction of Tyrosine Hydroxylase mRNA Expression, Phosphorylation, and Enzyme Activity in the Nucleus of the Solitary Tract during Morphine Withdrawal. Endocrinology, 2009, 150, 3118-3127.	2.8	41
46	Î±-MSH and Other Melanogenic Activators Mediate Opposite Effects of Tyrosinase and Dopachrome Tautomerase in B16/F10 Mouse Melanoma Cells. Journal of Investigative Dermatology, 1992, 99, 435-439.	0.7	39
47	Transforming growth factor Î²1 mediates hypopigmentation of B16 mouse melanoma cells by inhibition of melanin formation and melanosome maturation. International Journal of Biochemistry and Cell Biology, 2001, 33, 971-983.	2.8	36
48	Role of G Protein-Coupled Receptor Kinases in the Homologous Desensitization of the Human and Mouse Melanocortin 1 Receptors. Molecular Endocrinology, 2005, 19, 1035-1048.	3.7	36
49	New Insights on the Structure of the Mouse Silver Locus and on the Function of the Silver Protein. Pigment Cell & Melanoma Research, 2000, 13, 118-124.	3.6	35
50	The Pro162 Variant is a Loss-of-Function Mutation of the Human Melanocortin 1 Receptor Gene. Journal of Investigative Dermatology, 2001, 117, 156-158.	0.7	35
51	Molecular Interactions within the Melanogenic Complex: Formation of Heterodimers of Tyrosinase and TRP1 from B16 Mouse Melanoma. Biochemical and Biophysical Research Communications, 1998, 253, 761-767.	2.1	33
52	Neurotoxicity due to o-Quinones: Neuromelanin formation and possible mechanisms for o-Quinone detoxification. Neurotoxicity Research, 1999, 1, 153-169.	2.7	33
53	Regulation of tyrosine hydroxylase levels and activity and Fos expression during opioid withdrawal in the hypothalamic PVN and medulla oblongata catecholaminergic cell groups innervating the PVN. European Journal of Neuroscience, 2003, 17, 103-112.	2.6	33
54	The melanocortin-1 receptor carboxyl terminal pentapeptide is essential for MC1R function and expression on the cell surface. Peptides, 2005, 26, 1848-1857.	2.4	33

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55	Apoptosis and Molecular Pathways in the Seminiferous Epithelium of Aged and Photoinhibited Syrian Hamsters (Mesocricetus auratus). Journal of Andrology, 2006, 28, 123-135.	2.0	32
56	Mechanism of dimerization of the human melanocortin 1 receptor. Biochemical and Biophysical Research Communications, 2008, 368, 211-216.	2.1	32
57	Melatonin Antagonizes alpha-Melanocyte-Stimulating Hormone Enhancement of Melanogenesis in Mouse Melanoma Cells by Blocking the Hormone-Induced Accumulation of the C Locus Tyrosinase. FEBS Journal, 1995, 232, 257-263.	0.2	31
58	Dopachrome tautomerase decreases the binding of indolic melanogenesis intermediates to proteins. BBA - Proteins and Proteomics, 1994, 1204, 53-60.	2.1	30
59	Immunoreactive alpha-Melanotropin as an Autocrine Effector in Human Melanoma Cells. FEBS Journal, 1997, 244, 923-930.	0.2	30
60	cAMP-independent non-pigmentary actions of variant melanocortin 1 receptor: AKT-mediated activation of protective responses to oxidative DNA damage. Oncogene, 2018, 37, 3631-3646.	5.9	29
61	Differential and competitive regulation of human melanocortin 1 receptor signaling by Î²-arrestin isoforms. Journal of Cell Science, 2013, 126, 3724-37.	2.0	26
62	Quantitative determination of tryptophanyl and tyrosyl residues of proteins by second-derivative fluorescence spectroscopy. Analytical Biochemistry, 1982, 125, 277-285.	2.4	24
63	Functional status and relationships of melanocortin 1 receptor signaling to the cAMP and extracellular signal-regulated protein kinases 1 and 2 pathways in human melanoma cells. International Journal of Biochemistry and Cell Biology, 2012, 44, 2244-2252.	2.8	24
64	Effect of detergents and endogenous lipids on the activity and properties of tyrosinase and its related proteins. Biochimica Et Biophysica Acta - General Subjects, 1995, 1243, 421-430.	2.4	23
65	Reductive methylation as a tool for the identification of the amino groups in .alpha.-bungarotoxin interacting with nicotinic acetylcholine receptor. Biochemistry, 1987, 26, 4295-4303.	2.5	22
66	Partial characterization of IR-Î±-MSH peptides found in melanoma tumors. Peptides, 1992, 13, 989-994.	2.4	22
67	Interaction of nicotinic acetylcholine receptor with two monoclonal antibodies recognizing different epitopes. Biochemistry, 1989, 28, 4222-4229.	2.5	17
68	The existence of apotyrosinase in the cytosol of Harding-Passey mouse melanoma melanocytes and characteristics of enzyme reconstitution by Cu(II). Biochimica Et Biophysica Acta - General Subjects, 1987, 923, 413-420.	2.4	16
69	Melanin formation in the inner ear is catalyzed by a new tyrosine hydroxylase kinetically and structurally different from tyrosinase. Biochimica Et Biophysica Acta - General Subjects, 1997, 1336, 59-72.	2.4	16
70	Association of Melanocortin-1 Receptor Variants with Pigmentary Traits in Humans: AÂPooled Analysis from the M-Skip Project. Journal of Investigative Dermatology, 2016, 136, 1914-1917.	0.7	16
71	Functional interplay between secreted ligands and receptors in melanoma. Seminars in Cell and Developmental Biology, 2018, 78, 73-84.	5.0	16
72	MC1R variants in childhood and adolescent melanoma: a retrospective pooled analysis of a multicentre cohort. The Lancet Child and Adolescent Health, 2019, 3, 332-342.	5.6	16

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73	Nâ€glycosylation of the human melanocortin 1 receptor: occupancy of glycosylation sequons and functional role. Pigment Cell and Melanoma Research, 2011, 24, 479-489.	3.3	15
74	Conjugation with Dihydrolipoic Acid Imparts Caffeic Acid Ester Potent Inhibitory Effect on Dopa Oxidase Activity of Human Tyrosinase. International Journal of Molecular Sciences, 2018, 19, 2156.	4.1	15
75	Tyrosinase isoenzymes in mammalian melanocytes. 2. Differential activation by alpha-melanocyte-stimulating hormone. FEBS Journal, 1993, 217, 541-548.	0.2	14
76	Molecular Basis of the extreme dilution mottled Mouse Mutation. Journal of Biological Chemistry, 2005, 280, 4817-4824.	3.4	14
77	Functional Characterization of MC1R-TUBB3 Intergenic Splice Variants of the Human Melanocortin 1 Receptor. PLoS ONE, 2015, 10, e0144757.	2.5	14
78	Melanocyte stimulating hormone activation of tyrosinase in B16 mouse melanoma cells Evidence for a differential induction of two distinct isoenzymes. FEBS Letters, 1992, 304, 114-118.	2.8	12
79	Melanocortin-1 receptor, skin cancer and phenotypic characteristics (M-SKIP) project: study design and methods for pooling results of genetic epidemiological studies. BMC Medical Research Methodology, 2012, 12, 116.	3.1	12
80	Regulation of the Murine Silver Locus Product (gp87) by the Hypopigmenting Cytokines TGF-Î²1 and TNF-Î±. Pigment Cell & Melanoma Research, 2000, 13, 120-126.	3.6	10
81	Proteolysis with trypsin of mammalian tyrosinase isoforms from B16 mouse melanoma. Archives of Biochemistry and Biophysics, 1992, 297, 221-227.	3.0	9
82	Human melanocortin 1 receptor-mediated ubiquitination of nonvisual arrestins. Role of Mahogunin Ring Finger 1 E3 ligase. Biochimica Et Biophysica Acta - Molecular Cell Research, 2018, 1865, 76-94.	4.1	8
83	Conformational studies of soluble and immobilized frog epidermis tyrosinase by fluorescence. Applied Biochemistry and Biotechnology, 1984, 9, 173-185.	2.9	7
84	Regulation of the cytosolic and melanosome-bound tyrosinase activities in harding-passey mouse melanoma. International Journal of Biochemistry & Cell Biology, 1985, 17, 995-1002.	0.5	7
85	(1-Pyrene)sulfonyl azide: A fluorescent probe for measuring the transmembrane topology of acetylcholine receptor subunits. Archives of Biochemistry and Biophysics, 1987, 256, 101-109.	3.0	7
86	Î±-Melanotropin immunoreactivity in human melanoma exudate is related to necrosis. European Journal of Cancer, 1998, 34, 424-426.	2.8	7
87	Melanocortin 1 receptor and skin pathophysiology: beyond colour, much more than meets the eye. Experimental Dermatology, 2014, 23, 387-388.	2.9	7
88	Biochemical characterization of the melanogenic system in the eye of adult rodents. BBA - Proteins and Proteomics, 1995, 1252, 217-224.	2.1	6
89	Comparison of TRPs From Murine and Human Malignant Melanocytes. Pigment Cell & Melanoma Research, 1997, 10, 229-235.	3.6	6
90	MC1R variants and cutaneous melanoma risk according to histological type, body site, and Breslow thickness: a pooled analysis from the M-SKIP project. Melanoma Research, 2020, 30, 500-510.	1.2	6

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91	Functional characterization of a Câ€terminal splice variant of the human melanocortin 1 receptor. Experimental Dermatology, 2020, 29, 610-615.	2.9	6
92	Mahogunin Ring Finger 1 regulates pigmentation by controlling the pH of melanosomes in melanocytes and melanoma cells. Cellular and Molecular Life Sciences, 2022, 79, 1.	5.4	6
93	Selective labeling of ?-bungarotoxin with fluorescein isothiocyanate and its use for the study of toxin-acetylcholine receptor interactions. The Protein Journal, 1990, 9, 683-693.	1.1	5
94	Preparation of Purified Tyrosinase Devoid of Dopachrome Tautomerase From Mammalian Malignant Melanocytes. Pigment Cell & Melanoma Research, 1993, 6, 158-164.	3.6	5
95	A reexamination of the melanin formation assay of tyrosinase and an extension to estimate phaeomelanin formation. Journal of Proteomics, 1989, 19, 327-337.	2.4	4
96	Regulation of ornithine decarboxylase in B16 mouse melanoma cells: synergistic activation of melanogenesis by Î±MSH and ornithine decarboxylase inhibition. Biochimica Et Biophysica Acta - Molecular Cell Research, 2002, 1542, 57-65.	4.1	4
97	SOX9 and the tanning response: something new under the sun. Pigment Cell and Melanoma Research, 2008, 21, 3-4.	3.3	4
98	Molecular cloning and biochemical characterization of the skin tyrosinase from Rana esculenta L.. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2009, 152, 234-242.	1.6	4
99	Identification and functional characterization of natural human melanocortin 1 receptor mutant alleles in Pakistani population. Pigment Cell and Melanoma Research, 2015, 28, 730-735.	3.3	4
100	Incorporation of bovine thyroid peroxidase in liposomes. Chemistry and Physics of Lipids, 1984, 34, 237-244.	3.2	3
101	Tyrosinase Isoenzymes: Two Melanosomal Tyrosinases With Different Kinetic Properties and Susceptibility to Inhibition by Calcium. Pigment Cell & Melanoma Research, 1994, 7, 291-297.	3.6	3
102	The DHICA Oxidase Activity of the Melanosomal Tyrosinases LEMT and HEMT. Pigment Cell & Melanoma Research, 1994, 7, 298-304.	3.6	3
103	Sticky fingers at work: Palmitoylationâ€dependent MC1R activation. Pigment Cell and Melanoma Research, 2018, 31, 238-240.	3.3	3
104	Mahogunin Ring Finger 1 Is Required for Genomic Stability and Modulates the Malignant Phenotype of Melanoma Cells. Cancers, 2020, 12, 2840.	3.7	3
105	MC1R variants in relation to naevi in melanoma cases and controls: a pooled analysis from the Mâ€SKIP project. Journal of the European Academy of Dermatology and Venereology, 2021, 35, e135-e138.	2.4	3
106	Letters to the Editor. Pigment Cell & Melanoma Research, 1991, 4, 255-255.	3.6	1
107	Is Dopachrome Tautomerase Necessary To Get DHICA From Dopachrome?. Pigment Cell & Melanoma Research, 1994, 7, 125-126.	3.6	0