Luigia Santella

List of Publications by Year
in descending order

87 papers	3,371 citations	126907 33 h-index	155660 55 g-index
90 all docs	90 docs citations	90 times ranked	2145 citing authors

#	Article	IF	Citations
1	Generation, Control, and Processing of Cellular Calcium Signals. Critical Reviews in Biochemistry and Molecular Biology, 2001, 36, 107-260.	5.2	459
2	Calcium signaling in the cell nucleus. FASEB Journal, 1997, 11, 1091-1109.	0.5	202
3	The Role of Calcium in the Cell Cycle: Facts and Hypotheses. Biochemical and Biophysical Research Communications, 1998, 244, 317-324.	2.1	166
4	Nicotinic Acid Adenine Dinucleotide Phosphate-induced Ca2+ Release. Journal of Biological Chemistry, 2000, 275, 8301-8306.	3.4	101
5	Calcium and fertilization: the beginning of life. Trends in Biochemical Sciences, 2004, 29, 400-408.	7.5	99
6	Intercellular communication in the early human embryo. Molecular Reproduction and Development, 1991, 29, 22-28.	2.0	97
7	Effects of 1-methyladenine on nuclear Ca2* transients and meiosis resumption in starfish oocytes are mimicked by the nuclear injection of inositol 1,4,5-trisphosphate and cADP-ribose. Cell Calcium, 1997, 22, 11-20.	2.4	91
8	NAADP+initiates the Ca2+response during fertilization of starfish oocytes. FASEB Journal, 2001, 15, 2257-2267.	0.5	87
9	Is the human oocyte plasma membrane polarized?. Human Reproduction, 1992, 7, 999-1003.	0.9	81
10	Alteration of the Cortical Actin Cytoskeleton Deregulates Ca2+ Signaling, Monospermic Fertilization, and Sperm Entry. PLoS ONE, 2008, 3, e3588.	2.5	76
11	Calcium, protease action, and the regulation of the cell cycle. Cell Calcium, 1998, 23, 123-130.	2.4	74
12	Reinitiation of Meiosis in Starfish Oocytes Requires an Increase in Nuclear Ca2+. Biochemical and Biophysical Research Communications, 1994, 203, 674-680.	2.1	66
13	NAADP activates a Ca 2+ current that is dependent on Fâ€actin cytoskeleton. FASEB Journal, 2003, 17, 1-20.	0.5	62
14	Fertilization in echinoderms. Biochemical and Biophysical Research Communications, 2012, 425, 588-594.	2.1	61
15	The cell cycle: a new entry in the field of Ca2+ signaling. Cellular and Molecular Life Sciences, 2005, 62, 2405-2413.	5.4	54
16	Subitaneous and diapause eggs in Mediterranean populations ofPontella mediterranea (Copepoda:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.5	53
17	Cortical Granule Translocation during Maturation of Starfish Oocytes Requires Cytoskeletal Rearrangement Triggered by InsP3-Mediated Ca2+Release. Experimental Cell Research, 1999, 248, 567-574.	2.6	52
18	NAADP triggers the fertilization potential in starfish oocytes. Cell Calcium, 2004, 36, 515-524.	2.4	52

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19	Diapause embryos in the neustonic copepodAnomalocera patersoni. Marine Biology, 1991, 108, 387-394.	1.5	50
20	Activation of oocytes by latrunculin A. FASEB Journal, 2002, 16, 1050-1056.	0.5	48
21	Actin cytoskeleton modulates calcium signaling during maturation of starfish oocytes. Developmental Biology, 2008, 320, 426-435.	2.0	48
22	Calcium and actin in the saga of awakening oocytes. Biochemical and Biophysical Research Communications, 2015, 460, 104-113.	2.1	48
23	Rapid important paper. Neurochemistry International, 1986, 8, 435-442.	3.8	47
24	Modulation of calcium signalling by the actin-binding protein cofilin. Biochemical and Biophysical Research Communications, 2006, 348, 109-114.	2.1	45
25	Tight junctions and cavitation in the human pre-embryo. Molecular Reproduction and Development, 1992, 32, 81-87.	2.0	44
26	The M-phase-promoting Factor Modulates the Sensitivity of the Ca2+ Stores to Inositol 1,4,5-Trisphosphate via the Actin Cytoskeleton. Journal of Biological Chemistry, 2003, 278, 42505-42514.	3.4	44
27	NAADP and InsP3 play distinct roles at fertilization in starfish oocytes. Developmental Biology, 2006, 294, 24-38.	2.0	44
28	Separate Activation of the Cytoplasmic and Nuclear Calcium Pools in Maturing Starfish Oocytes. Biochemical and Biophysical Research Communications, 1998, 252, 1-4.	2.1	43
29	Effects of Ionomycin on Egg Activation and Early Development in Starfish. PLoS ONE, 2012, 7, e39231.	2.5	43
30	Early events of fertilization in sea urchin eggs are sensitive to actin-binding organic molecules. Biochemical and Biophysical Research Communications, 2014, 450, 1166-1174.	2.1	43
31	The Biphasic Increase of PIP2 in the Fertilized Eggs of Starfish: New Roles in Actin Polymerization and Ca2+ Signaling. PLoS ONE, 2010, 5, e14100.	2.5	41
32	Assisted yes, but where do we draw the line?. Reproductive BioMedicine Online, 2015, 31, 476-478.	2.4	40
33	The Cell Nucleus: An Eldorado to Future Calcium Research?. Journal of Membrane Biology, 1996, 153, 83-92.	2.1	37
34	Ca2+ Response to cADPr during Maturation and Fertilization of Starfish Oocytes. Biochemical and Biophysical Research Communications, 2002, 290, 1015-1021.	2.1	37
35	Pharmacological characterization of NAADP-induced Ca2+ signals in starfish oocytes. Biochemical and Biophysical Research Communications, 2006, 348, 329-336.	2.1	31
36	Roles of the actinâ€binding proteins in intracellular Ca²⁺ signalling. Acta Physiologica, 2009, 195, 61-70.	3.8	28

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37	Actin, more than just a housekeeping protein at the scene of fertilization. Science China Life Sciences, 2011, 54, 733-743.	4.9	28
38	Breakdown of Cytoskeletal Proteins during Meiosis of Starfish Oocytes and Proteolysis Induced by Calpain. Experimental Cell Research, 2000, 259, 117-126.	2.6	27
39	The role of the actin cytoskeleton in calcium signaling in starfish oocytes. International Journal of Developmental Biology, 2008, 52, 571-584.	0.6	26
40	Maturation and fertilization of echinoderm eggs: Role of actin cytoskeleton dynamics. Biochemical and Biophysical Research Communications, 2018, 506, 361-371.	2.1	26
41	Cellular and molecular aspects of oocyte maturation and fertilization: a perspective from the actin cytoskeleton. Zoological Letters, 2020, 6, 5.	1.3	26
42	Role of the actin cytoskeleton in store-mediated calcium entry in glioma C6 cells. Biochemical and Biophysical Research Communications, 2002, 296, 484-491.	2.1	25
43	NAADP: A New Second Messenger Comes of Age. Molecular Interventions: Pharmacological Perspectives From Biology, Chemistry and Genomics, 2005, 5, 70-72.	3.4	24
44	New insights into negative effects of lithium on sea urchin Paracentrotus lividus embryos. Scientific Reports, 2016, 6, 32157.	3.3	23
45	Respiratory metabolism during embryonic subitaneous and diapause development in Pontella mediterranea (Crustacea, Copepoda). Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 1996, 166, 157-163.	1.5	22
46	Activated M-phase-promoting factor (MPF) is exported from the nucleus of starfish oocytes to increase the sensitivity of the Ins(1,4,5)P3 receptors. Biochemical Society Transactions, 2003, 31, 79-82.	3.4	22
47	Voltage clamp of the nuclear envelope. Proceedings of the Royal Society B: Biological Sciences, 1994, 255, 119-124.	2.6	20
48	Association of Calmodulin with Nuclear Structures in Starfish Oocytes and Its Role in the Resumption of Meiosis. FEBS Journal, 1997, 246, 602-610.	0.2	20
49	Guanine Nucleotides in the Meiotic Maturation of Starfish Oocytes: Regulation of the Actin Cytoskeleton and of Ca2+ Signaling. PLoS ONE, 2009, 4, e6296.	2.5	20
50	Disassembly of Subplasmalemmal Actin Filaments Induces Cytosolic Ca2+ Increases in Astropecten aranciacus Eggs. Cellular Physiology and Biochemistry, 2018, 48, 2011-2034.	1.6	19
51	Sodium-mediated fast electrical depolarization does not prevent polyspermic fertilization in Paracentrotus lividus eggs. Zygote, 2019, 27, 241-249.	1.1	19
52	Effects of Salinity and pH of Seawater on the Reproduction of the Sea UrchinParacentrotus lividus. Biological Bulletin, 2020, 239, 13-23.	1.8	19
53	Electrical coupling of blastomeres in early embryos of ascidians and sea urchins. Experimental Cell Research, 1982, 140, 457-461.	2.6	18
54	Novel Ca2+ increases in the maturing oocytes of starfish during the germinal vesicle breakdown. Cell Calcium, 2015, 58, 500-510.	2.4	18

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55	Altered actin cytoskeleton in ageing eggs of starfish affects fertilization process. Experimental Cell Research, 2019, 381, 179-190.	2.6	18
56	Ca2+ signalling and membrane current activated by cADPr in starfish oocytes. Pflugers Archiv European Journal of Physiology, 2003, 446, 541-552.	2.8	17
57	Contributions of suboolemmal acidic vesicles and microvilli to the intracellular Ca²⁺ increase in the sea urchin eggs at fertilization. International Journal of Biological Sciences, 2019, 15, 757-775.	6.4	17
58	Antibody against the actin-binding protein depactin attenuates Ca2+ signaling in starfish eggs. Biochemical and Biophysical Research Communications, 2013, 441, 301-307.	2.1	16
59	The actin cytoskeleton in meiotic maturation and fertilization of starfish eggs. Biochemical and Biophysical Research Communications, 2009, 384, 141-143.	2.1	15
60	Studies on the differentiation of egg envelopes. Developmental Biology, 1983, 99, 473-481.	2.0	13
61	Fertilization envelope in diapause eggs ofPontella mediterranea (crustacea, copepoda). Molecular Reproduction and Development, 1992, 33, 463-469.	2.0	13
62	Fertilization of sea urchin eggs in space and subsequent development under normal conditions. Advances in Space Research, 1994, 14, 197-208.	2.6	13
63	Calcium regulation and calcium function in the nucleus of starfish oocytes. Invertebrate Reproduction and Development, 1996, 30, 7-15.	0.8	9
64	De novo assembly of a transcriptome from the eggs and early embryos of Astropecten aranciacus. PLoS ONE, 2017, 12, e0184090.	2.5	9
65	Fertilization in Starfish and Sea Urchin: Roles of Actin. Results and Problems in Cell Differentiation, 2018, 65, 33-47.	0.7	9
66	Mechanisms of Calcium Elevation in the Micromeres of Sea Urchin Embryos. Biology of the Cell, 2004, 96, 153-167.	2.0	8
67	Nicotine Induces Polyspermy in Sea Urchin Eggs through a Non-Cholinergic Pathway Modulating Actin Dynamics. Cells, 2020, 9, 63.	4.1	8
68	Fertilization and development of Arbacia lixula eggs are affected by osmolality conditions. BioSystems, 2021, 206, 104448.	2.0	8
69	The Differentiation of the Vitelline Envelope of Xenopus Oocytes*. (xenopus/oocyte/vitelline) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 189-200.	1.5	7
70	Ca2+ influx-linked protein kinase C activity regulates the Î²-catenin localization, micromere induction signalling and the oralâ€“aboral axis formation in early sea urchin embryos. Zygote, 2015, 23, 426-446.	1.1	7
71	Oxygen supersaturation mitigates the impact of the regime of contaminated sediment reworking on sea urchin fertilization process. Marine Environmental Research, 2020, 158, 104951.	2.5	7
72	Effects of Dithiothreitol on Fertilization and Early Development in Sea Urchin. Cells, 2021, 10, 3573.	4.1	7

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73	Regulation of the Actin Cytoskeleton-Linked Ca2+ Signaling by Intracellular pH in Fertilized Eggs of Sea Urchin. Cells, 2022, 11, 1496.	4.1	6
74	Partially Fertilized Sea Urchin Eggs: An Electrophysiological and Morphological Study.. (Sea urchin) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.5	5
75	Actin Cytoskeleton and Fertilization in Starfish Eggs. , 2014, , 141-155.		5
76	Polyspermy-preventing mechanisms in sea urchin eggs: New developments for an old problem. Biochemical and Biophysical Research Communications, 2019, 520, 695-698.	2.1	4
77	Cold shock induces actin reorganization and polyspermy in sea urchin eggs. The Journal of Experimental Zoology, 1989, 252, 183-189.	1.4	3
78	Calcium and fertilization. New Comprehensive Biochemistry, 2007, , 425-443.	0.1	3
79	Ca2+-dependent phosphatidylserine synthesis in immature and mature starfish oocytes.. Acta Biochimica Polonica, 2003, 50, 377-387.	0.5	2
80	Calcium and fertilization: the beginning of life. Trends in Biochemical Sciences, 2004, 29, 571.	7.5	0
81	INTRODUCTION. Biochemical and Biophysical Research Communications, 2014, 450, 1133-1134.	2.1	0
82	Calcium | Intracellular Calcium Waves. , 2021, , 669-677.		0
83	Editorial: Waves in fertilization, cell division and embryogenesis. BioSystems, 2021, 210, 104560.	2.0	0
84	Calcium and Calcium-Linked Second Messengers are Main Actors in the Maturation and Fertilization of Starfish Oocytes. , 2002, , 381-396.		0
85	Calcium Signaling: Cell Cycle. , 2004, , 246-249.		0
86	Calcium | Calcium Signaling by Cyclic ADP-Ribose and NAADP. , 2013, , 609-614.		0
87	Ligand-Activated Ca2+ Channels in the Nuclear Envelope of Starfish Oocytes. , 1998, , 227-230.		0