

Stefano Iotti

List of Publications by Year in descending order

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73
papers

2,086
citations

236612

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76
all docs

76
docs citations

76
times ranked

2748
citing authors

#	ARTICLE	IF	CITATIONS
1	8-Hydroxyquinoline Derivatives as Fluorescent Sensors for Magnesium in Living Cells. <i>Journal of the American Chemical Society</i> , 2006, 128, 344-350.	6.6	273
2	Deficit of in vivo mitochondrial ATP production in OPA1-related dominant optic atrophy. <i>Annals of Neurology</i> , 2004, 56, 719-723.	2.8	132
3	Defective Brain Energy Metabolism Shown by in vivo ³¹ P MR Spectroscopy in 28 Patients with Mitochondrial Cytopathies. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1993, 13, 469-474.	2.4	105
4	Deficient energy metabolism is associated with low free magnesium in the brains of patients with migraine and cluster headache. <i>Brain Research Bulletin</i> , 2001, 54, 437-441.	1.4	103
5	Clinical and brain bioenergetics improvement with idebenone in a patient with Leber's hereditary optic neuropathy: a clinical and ³¹ P-MRS study. <i>Journal of the Neurological Sciences</i> , 1997, 148, 25-31.	0.3	76
6	Intracellular magnesium detection: imaging a brighter future. <i>Analyst</i> , The, 2010, 135, 1855.	1.7	75
7	Deficit of Brain and Skeletal Muscle Bioenergetics and Low Brain Magnesium in Juvenile Migraine: An in Vivo ³¹ P Magnetic Resonance Spectroscopy Interictal Study. <i>Pediatric Research</i> , 1997, 42, 866-871.	1.1	64
8	Magnesium Is a Key Regulator of the Balance between Osteoclast and Osteoblast Differentiation in the Presence of Vitamin D3. <i>International Journal of Molecular Sciences</i> , 2019, 20, 385.	1.8	63
9	Coumarin derivatives as potential antitumor agents: Growth inhibition, apoptosis induction and multidrug resistance reverting activity. <i>European Journal of Medicinal Chemistry</i> , 2017, 127, 577-585.	2.6	56
10	The COVID-19 pandemic: is there a role for magnesium? Hypotheses and perspectives. <i>Magnesium Research</i> , 2020, 33, 21-27.	0.4	55
11	Improved brain and muscle mitochondrial respiration with CoQ. An <i>in vivo</i> study by ³¹ P-MR spectroscopy in patients with mitochondrial cytopathies. <i>BioFactors</i> , 1999, 9, 253-260.	2.6	46
12	Magnesium homeostasis in colon carcinoma LoVo cells sensitive or resistant to doxorubicin. <i>Scientific Reports</i> , 2015, 5, 16538.	1.6	45
13	Synthesis of a highly Mg ²⁺ -selective fluorescent probe and its application to quantifying and imaging total intracellular magnesium. <i>Nature Protocols</i> , 2017, 12, 461-471.	5.5	43
14	Effects of exercise-induced intracellular acidosis on the phosphocreatine recovery kinetics: a ³¹ P MRS study in three muscle groups in humans. <i>NMR in Biomedicine</i> , 2013, 26, 1403-1411.	1.6	42
15	The relevance of magnesium homeostasis in COVID-19. <i>European Journal of Nutrition</i> , 2022, 61, 625-636.	1.8	42
16	Influence of cytosolic pH on in vivo assessment of human muscle mitochondrial respiration by phosphorus magnetic resonance spectroscopy. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 1997, 5, 165-171.	1.1	40
17	Low Brain Intracellular Free Magnesium in Mitochondrial Cytopathies. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1999, 19, 528-532.	2.4	39
18	Human CNNM2 is not a Mg ²⁺ transporter per se. <i>Pflügers Archiv European Journal of Physiology</i> , 2016, 468, 1223-1240.	1.3	38

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19	Quantitative mathematical expressions for accurate in vivo assessment of cytosolic [ADP] and $\delta^{13}\text{C}$ of ATP hydrolysis in the human brain and skeletal muscle. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2005, 1708, 164-177.	0.5	36
20	Going to the roots of reduced magnesium dietary intake: A tradeoff between climate changes and sources. <i>Heliyon</i> , 2020, 6, e05390.	1.4	34
21	Quantitative Chemical Imaging of the Intracellular Spatial Distribution of Fundamental Elements and Light Metals in Single Cells. <i>Analytical Chemistry</i> , 2014, 86, 5108-5115.	3.2	32
22	Nanoscale quantification of intracellular element concentration by X-ray fluorescence microscopy combined with X-ray phase contrast nanotomography. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	32
23	Oscillations in energy metabolism. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 1353-1361.	0.5	31
24	A Simple Spectrofluorometric Assay to Measure Total Intracellular Magnesium by a Hydroxyquinoline Derivative. <i>Journal of Fluorescence</i> , 2009, 19, 11-19.	1.3	27
25	Chemical Fingerprint of Zn ²⁺ -Hydroxyapatite in the Early Stages of Osteogenic Differentiation. <i>ACS Central Science</i> , 2019, 5, 1449-1460.	5.3	26
26	Chemical and Biochemical Thermodynamics: From ATP Hydrolysis to a General Reassessment. <i>Journal of Physical Chemistry B</i> , 2010, 114, 1985-1993.	1.2	25
27	Diaza-18-crown-6 hydroxyquinoline derivatives as flexible tools for the assessment and imaging of total intracellular magnesium. <i>Chemical Science</i> , 2012, 3, 727-734.	3.7	25
28	A novel fluorescent chemosensor allows the assessment of intracellular total magnesium in small samples. <i>Analyst, The</i> , 2014, 139, 1201-1207.	1.7	24
29	Microwave Assisted Synthesis of a Small Library of Substituted N,N'-Bis((8-hydroxy-7-quinolinyl)methyl)-1,10-diaza-18-crown-6 Ethers. <i>Journal of Organic Chemistry</i> , 2010, 75, 6275-6278.	1.7	23
30	Characterization of the cell growth inhibitory effects of a novel DNA-intercalating bipyridyl-thiourea-Pt(II) complex in cisplatin-sensitive and $\text{cisplatin}^{\text{r}}$ resistant human ovarian cancer cells. <i>Investigational New Drugs</i> , 2011, 29, 73-86.	1.2	23
31	Where is it and how much? Mapping and quantifying elements in single cells. <i>Analyst, The</i> , 2016, 141, 5221-5235.	1.7	23
32	In vivo assessment of Mg ²⁺ in human brain and skeletal muscle by ³¹ P-MRS. <i>Magnesium Research</i> , 2008, 21, 157-62.	0.4	22
33	Overexpression of the mitochondrial Mg channel MRS2 increases total cellular Mg concentration and influences sensitivity to apoptosis. <i>Metallomics</i> , 2018, 10, 917-928.	1.0	21
34	Magnesium Deprivation Potentiates Human Mesenchymal Stem Cell Transcriptional Remodeling. <i>International Journal of Molecular Sciences</i> , 2018, 19, 1410.	1.8	21
35	Intracellular concentration map of magnesium in whole cells by combined use of X-ray fluorescence microscopy and atomic force microscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2011, 66, 834-840.	1.5	20
36	Failure of muscle energy metabolism in a patient with adenylosuccinate lyase deficiency. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 1997, 1360, 271-276.	1.8	18

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37	Increase of free Mg ²⁺ in the skeletal muscle of chronic fatigue syndrome patients. <i>Dynamic Medicine: DM</i> , 2006, 5, 1.	2.7	18
38	Single cell versus large population analysis: cell variability in elemental intracellular concentration and distribution. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 337-348.	1.9	17
39	Effects of supplementation with different Mg salts in cells: is there a clue?. <i>Magnesium Research</i> , 2014, 27, 25-34.	0.4	16
40	The different expression of TRPM7 and MagT1 impacts on the proliferation of colon carcinoma cells sensitive or resistant to doxorubicin. <i>Scientific Reports</i> , 2017, 7, 40538.	1.6	16
41	Analysis of Intracellular Magnesium and Mineral Depositions during Osteogenic Commitment of 3D Cultured Saos2 Cells. <i>International Journal of Molecular Sciences</i> , 2020, 21, 2368.	1.8	16
42	The complex relationship between magnesium and serum parathyroid hormone: a study in patients with chronic intestinal failure. <i>Magnesium Research</i> , 2009, 22, 37-43.	0.4	15
43	Pitfalls and advantages of different strategies for the absolute quantification of ¹ H-MRS. <i>NMR in Biomedicine</i> , 2009, 22, 1003-1013.	1.6	15
44	Survey of MRI Usefulness for the Clinical Assessment of Bone Microstructure. <i>International Journal of Molecular Sciences</i> , 2021, 22, 2509.	1.8	15
45	Aspects of human bioenergetics as studied in vivo by magnetic resonance spectroscopy. <i>Biochimie</i> , 1998, 80, 847-853.	1.3	14
46	Assessment of glutamate and glutamine contribution to in vivo N-acetylaspartate quantification in human brain by ¹ H-magnetic resonance spectroscopy. <i>Magnetic Resonance in Medicine</i> , 2005, 54, 1333-1339.	1.9	14
47	Intracellular magnesium content decreases during mitochondria-mediated apoptosis induced by a new indole-derivative in human colon cancer cells. <i>Magnesium Research</i> , 2012, 25, 104-111.	0.4	14
48	3D Quantitative and Ultrastructural Analysis of Mitochondria in a Model of Doxorubicin Sensitive and Resistant Human Colon Carcinoma Cells. <i>Cancers</i> , 2019, 11, 1254.	1.7	14
49	Complex formation equilibria of phosphocreatine with sodium, potassium and magnesium ions. <i>Polyhedron</i> , 2002, 21, 1481-1484.	1.0	9
50	Interactions of nucleic acids with distamycins. Binding of Dst-3 to d(CGTTAAACG) ₂ and d(CGTACGTACG) ₂ . <i>Nucleic Acids Research</i> , 1991, 19, 1695-1698.	6.5	8
51	In vivo assessment of human skeletal muscle mitochondria respiration in health and disease. <i>Molecular and Cellular Biochemistry</i> , 1997, 174, 11-15.	1.4	8
52	Free Mg ²⁺ concentration in the calf muscle of glycogen phosphorylase and phosphofructokinase deficiency patients assessed in different metabolic conditions by ³¹ P MRS. <i>Dynamic Medicine: DM</i> , 2005, 4, 7.	2.7	8
53	Calcite as a Precursor of Hydroxyapatite in the Early Biomineralization of Differentiating Human Bone-Marrow Mesenchymal Stem Cells. <i>International Journal of Molecular Sciences</i> , 2021, 22, 4939.	1.8	8
54	Expanding the targets of the diaza-18-crown-6 hydroxyquinoline derivatives family to Zn(II) ions for intracellular sensing. <i>Supramolecular Chemistry</i> , 2013, 25, 7-15.	1.5	7

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55	Chemical and biochemical thermodynamics: Is it time for a reunification?. <i>Biophysical Chemistry</i> , 2017, 221, 49-57.	1.5	6
56	Balanced Biochemical Reactions: A New Approach to Unify Chemical and Biochemical Thermodynamics. <i>PLoS ONE</i> , 2012, 7, e29529.	1.1	5
57	Imbalance of Mg Homeostasis as a Potential Biomarker in Colon Cancer. <i>Diagnostics</i> , 2021, 11, 727.	1.3	5
58	Multifaceted activity of polycyclic MDR revertant agents in drug-resistant leukemic cells: Role of the spacer. <i>Bioorganic Chemistry</i> , 2021, 106, 104460.	2.0	5
59	The assessment of intracellular magnesium: different strategies to answer different questions. <i>Magnesium Research</i> , 2020, 33, 1-11.	0.4	5
60	Substituted E-3-(3-indolylmethylene)1,3-dihydroindol-2-ones with antiproliferative activity. Study of the effects on HL-60 leukemia cells. <i>European Journal of Medicinal Chemistry</i> , 2014, 79, 382-390.	2.6	4
61	The role of pH on the thermodynamics and kinetics of muscle biochemistry: An in vivo study by ³¹ P-MRS in patients with myo-phosphorylase deficiency. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2011, 1807, 1244-1249.	0.5	3
62	Intracellular magnesium content changes during mitochondria-mediated apoptosis: in depth study of early events on mitochondrial membrane potential. <i>Journal of Biological Research (Italy)</i> , 2014, 87, .	0.0	3
63	Assessment and Imaging of Intracellular Magnesium in SaOS-2 Osteosarcoma Cells and Its Role in Proliferation. <i>Nutrients</i> , 2021, 13, 1376.	1.7	3
64	Dansyl acetyl trehalose: a novel tool to investigate the cellular fate of trehalose. <i>RSC Advances</i> , 2019, 9, 15350-15356.	1.7	2
65	Fluorescence lifetime imaging of intracellular magnesium content in live cells. <i>Analyst, The</i> , 2019, 144, 1876-1880.	1.7	2
66	Chemical and biochemical thermodynamics reunification (IUPAC Technical Report). <i>Pure and Applied Chemistry</i> , 2021, 93, 243-252.	0.9	2
67	Novel Approach Applied to IVMA to Study the Modulation of the Actomyosin Interaction by MgATP In Fast Skeletal Muscle. <i>Biophysical Journal</i> , 2010, 98, 145a.	0.2	1
68	Actomyosin interaction at low ATP concentrations. <i>European Biophysics Journal</i> , 2017, 46, 195-202.	1.2	1
69	Implementation of an iterative approach to optimize synchrotron X-ray fluorescence quantification of light elements in single cell. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018, 149, 132-142.	1.5	1
70	Magnesium favors the capacity of vitamin D3 to induce the monocyte differentiation of U937 cells. <i>Magnesium Research</i> , 2021, 34, 114-129.	0.4	1
71	Magnesium intracellular content and distribution map in drug-resistant and -sensitive whole cells. <i>Journal of Biological Research (Italy)</i> , 2014, 87, .	0.0	0
72	New perspective in the assessment of total intracellular magnesium. <i>Journal of Biological Research (Italy)</i> , 2014, 87, .	0.0	0

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73	Monitoring magnesium efflux cyclic AMP-induced in HL60 cells by using a new hydroxyquinoline fluorescent chemosensor. Journal of Biological Research (Italy), 2014, 87, .	0.0	0