Amy E Palmer

List of Publications by Year
in descending order

81	15,494	117625 34	69250 77
papers	citations	h-index	g-index

94	94	94	22749
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Stageâ€specific differential expression of zinc transporter SLC30A and SLC39A family proteins during prostate tumorigenesis. Molecular Carcinogenesis, 2022, 61, 454-471.	2.7	3
2	Directed Evolution of a Bright Variant of mCherry: Suppression of Nonradiative Decay by Fluorescence Lifetime Selections. Journal of Physical Chemistry B, 2022, 126, 4659-4668.	2.6	19
3	Tools and techniques for illuminating the cell biology of zinc. Biochimica Et Biophysica Acta - Molecular Cell Research, 2021, 1868, 118865.	4.1	39
4	Zn ²⁺ influx activates ERK and Akt signaling pathways. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	24
5	Characterization of Global Gene Expression, Regulation of Metal Ions, and Infection Outcomes in Immune-Competent 129S6 Mouse Macrophages. Infection and Immunity, 2021, 89, e0027321.	2.2	2
6	Editorial overview: Molecular imaging. Current Opinion in Chemical Biology, 2020, 57, A5-A7.	6.1	1
7	Engineering of a Brighter Variant of the FusionRed Fluorescent Protein Using Lifetime Flow Cytometry and Structure-Guided Mutations. Biochemistry, 2020, 59, 3669-3682.	2.5	15
8	Systematic Comparison of Vesicular Targeting Signals Leads to the Development of Genetically Encoded Vesicular Fluorescent Zn²⁺ and pH Sensors. ACS Sensors, 2020, 5, 3879-3891.	7.8	5
9	A multicolor riboswitch-based platform for imaging of RNA in live mammalian cells. Methods in Enzymology, 2020, 641, 343-372.	1.0	6
10	Illuminating RNA Biology: Tools for Imaging RNA in Live Mammalian Cells. Cell Chemical Biology, 2020, 27, 891-903.	5.2	62
11	Remodeling of Zn2+homeostasis upon differentiation of mammary epithelial cells. Metallomics, 2020, 12, 346-362.	2.4	7
12	Dissociated Hippocampal Neurons Exhibit Distinct Zn²⁺ Dynamics in a Stimulation-Method-Dependent Manner. ACS Chemical Neuroscience, 2020, 11, 508-514.	3.5	19
13	Single cell analysis reveals multiple requirements for zinc in the mammalian cell cycle. ELife, 2020, 9, .	6.0	37
14	Intracellular Zn2+ transients modulate global gene expression in dissociated rat hippocampal neurons. Scientific Reports, 2019, 9, 9411.	3.3	41
15	Intramolecular Fluorescent Protein Association in a Class of Zinc FRET Sensors Leads to Increased Dynamic Range. Journal of Physical Chemistry B, 2019, 123, 3079-3085.	2.6	3
16	Discovery of a ZIP7 inhibitor from a Notch pathway screen. Nature Chemical Biology, 2019, 15, 179-188.	8.0	46
17	A Multicolor Split-Fluorescent Protein Approach to Visualize Listeria Protein Secretion in Infection. Biophysical Journal, 2018, 115, 251-262.	0.5	11
18	Superiority of SpiroZin2 Versus FluoZin-3 for monitoring vesicular Zn2+ allows tracking of lysosomal Zn2+ pools. Scientific Reports, 2018, 8, 15034.	3.3	21

#	Article	IF	Citations
19	A multicolor riboswitch-based platform for imaging of RNA in live mammalian cells. Nature Chemical Biology, 2018, 14, 964-971.	8.0	114
20	Directed evolution of excited state lifetime and brightness in FusionRed using a microfluidic sorter. Integrative Biology (United Kingdom), 2018, 10, 516-526.	1.3	22
21	Zinc transporters belonging to the Cation Diffusion Facilitator (CDF) family have complementary roles in transporting zinc out of the cytosol. PLoS Genetics, 2018, 14, e1007262.	3.5	23
22	Exploring the intersection of cellular zinc and kinase activity with single cell imaging. FASEB Journal, 2018, 32, lb129.	0.5	0
23	Discovery of new roles for zinc in biology from quantitative mapping of zinc in mammalian cells. FASEB Journal, 2018, 32, 477.4.	0.5	0
24	Capzimin is a potent and specific inhibitor of proteasome isopeptidase Rpn11. Nature Chemical Biology, 2017, 13, 486-493.	8.0	117
25	Thiolutin is a zinc chelator that inhibits the Rpn11 and other JAMM metalloproteases. Nature Chemical Biology, 2017, 13, 709-714.	8.0	95
26	Optimized Fluorescence Complementation Platform for Visualizing <i>Salmonella</i> Effector Proteins Reveals Distinctly Different Intracellular Niches in Different Cell Types. ACS Infectious Diseases, 2017, 3, 575-584.	3.8	19
27	Genetically encoded biosensors for visualizing live-cell biochemical activity at super-resolution. Nature Methods, 2017, 14, 427-434.	19.0	138
28	Recent Advances in Development of Genetically Encoded Fluorescent Sensors. Methods in Enzymology, 2017, 589, 1-49.	1.0	79
29	Droplet Microfluidic Flow Cytometer For Sorting On Transient Cellular Responses Of Genetically-Encoded Sensors. Analytical Chemistry, 2017, 89, 711-719.	6.5	41
30	Critical Comparison of FRET-Sensor Functionality in the Cytosol and Endoplasmic Reticulum and Implications for Quantification of Ions. Analytical Chemistry, 2017, 89, 9601-9608.	6.5	26
31	The Growing and Glowing Toolbox of Fluorescent and Photoactive Proteins. Trends in Biochemical Sciences, 2017, 42, 111-129.	7.5	514
32	A Critical and Comparative Review of Fluorescent Tools for Live-Cell Imaging. Annual Review of Physiology, 2017, 79, 93-117.	13.1	336
33	Long-term live-cell imaging reveals new roles forSalmonellaeffector proteins SseG and SteA. Cellular Microbiology, 2017, 19, e12641.	2.1	29
34	Methods to Illuminate the Role of Salmonella Effector Proteins during Infection: A Review. Frontiers in Cellular and Infection Microbiology, 2017, 7, 363.	3.9	7
35	Native and engineered sensors for Ca2+ and Zn2+: lessons from calmodulin and MTF1. Essays in Biochemistry, 2017, 61, 237-243.	4.7	7
36	Techniques for measuring cellular zinc. Archives of Biochemistry and Biophysics, 2016, 611, 20-29.	3.0	33

#	Article	IF	Citations
37	Roger Y. Tsien 1952â€“2016. Nature Chemical Biology, 2016, 12, 887-887.	8.0	1
38	Development of an Optical Zn²⁺ Probe Based on a Single Fluorescent Protein. ACS Chemical Biology, 2016, 11, 2744-2751.	3.4	36
39	Unraveling the mystery of the ring: Tracking heme dynamics in living cells. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7296-7297.	7.1	2
40	Measuring the In SituKdof a Genetically Encoded Ca2+Sensor. Cold Spring Harbor Protocols, 2015, 2015, pdb.prot076554.	0.3	10
41	Verifying the Function and Localization of Genetically Encoded Ca2+Sensors and Converting FRET Ratios to Ca2+Concentrations. Cold Spring Harbor Protocols, 2015, 2015, pdb.prot076547.	0.3	6
42	Properties and Use of Genetically Encoded FRET Sensors for Cytosolic and Organellar Ca²⁺ Measurements. Cold Spring Harbor Protocols, 2015, 2015, pdb.top066043.	0.3	7
43	Zinc differently. Nature Chemistry, 2015, 7, 96-97.	13.6	0
44	High-Speed Multiparameter Photophysical Analyses of Fluorophore Libraries. Analytical Chemistry, 2015, 87, 5026-5030.	6.5	30
45	Microfluidics-based selection of red-fluorescent proteins with decreased rates of photobleaching. Integrative Biology (United Kingdom), 2015, 7, 263-273.	1.3	25
46	Distinct mechanisms regulating mechanical force-induced Ca2+ signals at the plasma membrane and the ER in human MSCs. ELife, 2015, 4, e04876.	6.0	90
47	Ionic osmolytes and intracellular calcium regulate tissue production in chondrocytes cultured in a 3D charged hydrogel. Matrix Biology, 2014, 40, 17-26.	3.6	15
48	Fluorescent Sensors for Measuring Metal Ions in Living Systems. Chemical Reviews, 2014, 114, 4564-4601.	47.7	2,006
49	Advances in fluorescence labeling strategies for dynamic cellular imaging. Nature Chemical Biology, 2014, 10, 512-523.	8.0	412
50	Quantitative Measurement of Ca2+ and Zn2+ in Mammalian Cells Using Genetically Encoded Fluorescent Biosensors. Methods in Molecular Biology, 2014, 1071, 29-47.	0.9	23
51	Microfluidic cell sorter for use in developing red fluorescent proteins with improved photostability. Lab on A Chip, 2013, 13, 2320.	6.0	22
52	Direct Comparison of a Genetically Encoded Sensor and Small Molecule Indicator: Implications for Quantification of Cytosolic Zn²⁺. ACS Chemical Biology, 2013, 8, 2366-2371.	3.4	80
53	Atypical mitochondrial fission upon bacterial infection. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16003-16008.	7.1	118
54	Promotion of vesicular zinc efflux by ZIP13 and its implications for spondylocheiro dysplastic Ehlersâ€“Danlos syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E3530-8.	7.1	98

#	Article	IF	Citations
55	High-Throughput Examination of Fluorescence Resonance Energy Transfer-Detected Metal-Ion Response in Mammalian Cells. Journal of the American Chemical Society, 2012, 134, 2488-2491.	13.7	19
56	Differential Effects of Procaspase-3 Activating Compounds in the Induction of Cancer Cell Death. Molecular Pharmaceutics, 2012, 9, 1425-1434.	4.6	34
57	Microfluidic Flow Cytometer for Quantifying Photobleaching of Fluorescent Proteins in Cells. Analytical Chemistry, 2012, 84, 3929-3937.	6.5	25
58	Visualizing metal ions in cells: An overview of analytical techniques, approaches, and probes. Biochimica Et Biophysica Acta - Molecular Cell Research, 2012, 1823, 1406-1415.	4.1	125
59	New Sensors for Quantitative Measurement of Mitochondrial Zn²⁺. ACS Chemical Biology, 2012, 7, 1636-1640.	3.4	92
60	New Alternately Colored FRET Sensors for Simultaneous Monitoring of Zn2+ in Multiple Cellular Locations. PLoS ONE, 2012, 7, e49371.	2.5	77
61	Analysis of Red-Fluorescent Proteins Provides Insight into Dark-State Conversion and Photodegradation. Biophysical Journal, 2011, 101, 961-969.	0.5	73
62	Design and application of genetically encoded biosensors. Trends in Biotechnology, 2011, 29, 144-152.	9.3	213
63	Measuring steady-state and dynamic endoplasmic reticulum and Golgi Zn ²⁺ with genetically encoded sensors. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 7351-7356.	7.1	271
64	FACSâ€Based Selection of Tandem Tetracysteine Peptides with Improved ReAsH Brightness in Live Cells. ChemBioChem, 2010, 11, 489-493.	2.6	20
65	SNAP-Shots of Hydrogen Peroxide in Cells. Chemistry and Biology, 2010, 17, 318-319.	6.0	2
66	MICU1 encodes a mitochondrial EF hand protein required for Ca2+ uptake. Nature, 2010, 467, 291-296.	27.8	747
67	Imaging type-III secretion reveals dynamics and spatial segregation of Salmonella effectors. Nature Methods, 2010, 7, 325-330.	19.0	144
68	Using a genetically targeted sensor to investigate the role of presenilin-1 in ER Ca2+ levels and dynamics. Molecular BioSystems, 2010, 6, 1640.	2.9	28
69	Genetically Encoded Sensors to Elucidate Spatial Distribution of Cellular Zinc. Journal of Biological Chemistry, 2009, 284, 16289-16297.	3.4	188
70	Expanding the Repertoire of Fluorescent Calcium Sensors. ACS Chemical Biology, 2009, 4, 157-159.	3.4	16
71	Fluorescent biosensors of protein function. Current Opinion in Chemical Biology, 2008, 12, 60-65.	6.1	196
72	Quantification of Real-Time Salmonella Effector Type III Secretion Kinetics Reveals Differential Secretion Rates for SopE2 and SptP. Chemistry and Biology, 2008, 15, 619-628.	6.0	59

#	Article	IF	Citations
73	Single-spike detection in vitro and in vivo with a genetic Ca2+ sensor. Nature Methods, 2008, 5, 797-804.	19.0	180
74	Measuring calcium dynamics in living cells with genetically encodable calcium indicators. Methods, 2008, 46, 152-159.	3.8	113
75	Bl-1 Regulates Endoplasmic Reticulum Ca2+ Homeostasis Downstream of Bcl-2 Family Proteins. Journal of Biological Chemistry, 2008, 283, 11477-11484.	3.4	98
76	Genetically encoded sensors for calcium and zinc. , 2008, , .		0
77	Measuring calcium signaling using genetically targetable fluorescent indicators. Nature Protocols, 2006, 1, 1057-1065.	12.0	426
78	Ca2+ Indicators Based on Computationally Redesigned Calmodulin-Peptide Pairs. Chemistry and Biology, 2006, 13, 521-530.	6.0	455
79	Improved monomeric red, orange and yellow fluorescent proteins derived from Discosoma sp. red fluorescent protein. Nature Biotechnology, 2004, 22, 1567-1572.	17.5	4,135
80	Bcl-2-mediated alterations in endoplasmic reticulum Ca2+ analyzed with an improved genetically encoded fluorescent sensor. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17404-17409.	7.1	571
81	A monomeric red fluorescent protein. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 7877-7882.	7.1	2,238