## Philip J Santangelo

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1125890/publications.pdf

Version: 2024-02-01

64 papers 4,224 citations

126708 33 h-index 62 g-index

70 all docs 70 docs citations

times ranked

70

5373 citing authors

#	Article	IF	CITATIONS
1	Species-dependent in vivo mRNA delivery and cellular responses to nanoparticles. Nature Nanotechnology, 2022, 17, 310-318.	15.6	56
2	In vivo mRNA delivery to virus-specific T cells by light-induced ligand exchange of MHC class I antigen-presenting nanoparticles. Science Advances, 2022, 8, eabm7950.	4.7	22
3	Augmented lipid-nanoparticle-mediated in vivo genome editing in the lungs and spleen by disrupting Cas9 activity in the liver. Nature Biomedical Engineering, 2022, 6, 157-167.	11.6	35
4	Robust, Durable Gene Activation In Vivo via mRNA-Encoded Activators. ACS Nano, 2022, 16, 5660-5671.	7.3	10
5	Nanoparticle single-cell multiomic readouts reveal that cell heterogeneity influences lipid nanoparticle-mediated messenger RNA delivery. Nature Nanotechnology, 2022, 17, 871-879.	15.6	31
6	TRAF6-IRF5 kinetics, TRIF, and biophysical factors drive synergistic innate responses to particle-mediated MPLA-CpG co-presentation. Science Advances, 2021, 7, .	4.7	21
7	Treatment of influenza and SARS-CoV-2 infections via mRNA-encoded Cas13a in rodents. Nature Biotechnology, 2021, 39, 717-726.	9.4	130
8	The NIH Somatic Cell Genome Editing program. Nature, 2021, 592, 195-204.	13.7	84
9	Respiratory syncytial virus M2-1 protein associates non-specifically with viral messenger RNA and with specific cellular messenger RNA transcripts. PLoS Pathogens, 2021, 17, e1009589.	2.1	6
10	Optimization of lipid nanoparticles for the delivery of nebulized therapeutic mRNA to the lungs. Nature Biomedical Engineering, 2021, 5, 1059-1068.	11.6	165
11	Dynamics and origin of rebound viremia in SHIV-infected infant macaques following interruption of long-term ART. JCl Insight, 2021, 6, .	2.3	6
12	Mild Innate Immune Activation Overrides Efficient Nanoparticleâ€Mediated RNA Delivery. Advanced Materials, 2020, 32, e1904905.	11.1	84
13	Polymerase-tagged respiratory syncytial virus reveals a dynamic rearrangement of the ribonucleocapsid complex during infection. PLoS Pathogens, 2020, 16, e1008987.	2.1	16
14	Increased PIP3 activity blocks nanoparticle mRNA delivery. Science Advances, 2020, 6, eaba5672.	4.7	16
15	Evaluation of M2-like macrophage enrichment after diffuse traumatic brain injury through transient interleukin-4 expression from engineered mesenchymal stromal cells. Journal of Neuroinflammation, 2020, 17, 197.	3.1	30
16	Engineering monoclonal antibody-based contraception and multipurpose prevention technologiesâ€. Biology of Reproduction, 2020, 103, 275-285.	1.2	23
17	Aerosol Delivery of Synthetic mRNA to Vaginal Mucosa Leads to Durable Expression of Broadly Neutralizing Antibodies against HIV. Molecular Therapy, 2020, 28, 805-819.	3.7	36
18	Quantification and Localization of Protein–RNA Interactions in Patient-Derived Archival Tumor Tissue. Cancer Research, 2019, 79, 5418-5431.	0.4	3

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19	Visualization of early events in mRNA vaccine delivery in non-human primates via PET–CT and near-infrared imaging. Nature Biomedical Engineering, 2019, 3, 371-380.	11.6	112
20	Proximity Ligation Assays for In Situ Detection of Innate Immune Activation: Focus on InÂVitro-Transcribed mRNA. Molecular Therapy - Nucleic Acids, 2019, 14, 52-66.	2.3	18
21	Exploitation of Synthetic mRNA To Drive Immune Effector Cell Recruitment and Functional Reprogramming In Vivo. Journal of Immunology, 2019, 202, 608-617.	0.4	9
22	The Role of Integrin α4β7 in HIV Pathogenesis and Treatment. Current HIV/AIDS Reports, 2018, 15, 127-135.	1.1	36
23	A Direct Comparison of in Vitro and in Vivo Nucleic Acid Delivery Mediated by Hundreds of Nanoparticles Reveals a Weak Correlation. Nano Letters, 2018, 18, 2148-2157.	4.5	138
24	Early treatment of SIV+ macaques with an $\hat{l}\pm4\hat{l}^2$ 7 mAb alters virus distribution and preserves CD4+ T cells in later stages of infection. Mucosal Immunology, 2018, 11, 932-946.	2.7	43
25	Unifying inÂvitro and inÂvivo IVT mRNA expression discrepancies in skeletal muscle via mechanotransduction. Biomaterials, 2018, 159, 189-203.	5.7	22
26	High-throughput in vivo screen of functional mRNA delivery identifies nanoparticles for endothelial cell gene editing. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9944-E9952.	3.3	196
27	Engineered mRNA-expressed antibodies prevent respiratory syncytial virus infection. Nature Communications, 2018, 9, 3999.	5.8	98
28	Select gp120 V2 domain specific antibodies derived from HIV and SIV infection and vaccination inhibit gp120 binding to $\hat{l}\pm4\hat{l}^27$ . PLoS Pathogens, 2018, 14, e1007278.	2.1	29
29	<i>In Vitro</i> Transcribed mRNA Vaccines with Programmable Stimulation of Innate Immunity. Bioconjugate Chemistry, 2018, 29, 3072-3083.	1.8	21
30	LEM domain–containing protein 3 antagonizes TGFβ–SMAD2/3 signaling in a stiffness-dependent manner in both the nucleus and cytosol. Journal of Biological Chemistry, 2018, 293, 15867-15886.	1.6	20
31	Arginineâ€Rich Peptideâ€Based mRNA Nanocomplexes Efficiently Instigate Cytotoxic T Cell Immunity Dependent on the Amphipathic Organization of the Peptide. Advanced Healthcare Materials, 2017, 6, 1601412.	3.9	121
32	Characterizing exogenous mRNA delivery, trafficking, cytoplasmic release and RNA–protein correlations at the level of single cells. Nucleic Acids Research, 2017, 45, e113-e113.	6.5	52
33	Correlated fluorescence microscopy and cryo-electron tomography of virus-infected or transfected mammalian cells. Nature Protocols, 2017, 12, 150-167.	5.5	109
34	RSV glycoprotein and genomic RNA dynamics reveal filament assembly prior to the plasma membrane. Nature Communications, 2017, 8, 667.	5.8	31
35	A Novel Method to Quantify RNA–Protein Interactions In Situ Using FMTRIP and Proximity Ligation. Methods in Molecular Biology, 2017, 1468, 155-170.	0.4	5
36	DNA uptake, intracellular trafficking and gene transfection after ultrasound exposure. Journal of Controlled Release, 2016, 234, 1-9.	4.8	24

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37	Sustained virologic control in SIV $\langle sup \rangle + \langle sup \rangle$ macaques after antiretroviral and $\hat{l}_{\pm} \langle sub \rangle 4 \langle sub \rangle \hat{l}^{2} \langle sub \rangle 7 \langle sub \rangle$ antibody therapy. Science, 2016, 354, 197-202.	6.0	194
38	Mirror-enhanced super-resolution microscopy. Light: Science and Applications, 2016, 5, e16134-e16134.	7.7	74
39	Imaging viral RNA using multiply labeled tetravalent RNA imaging probes in live cells. Methods, 2016, 98, 91-98.	1.9	10
40	Strategies for modulating innate immune activation and protein production of in vitro transcribed mRNAs. Journal of Materials Chemistry B, 2016, 4, 1619-1632.	2.9	17
41	Computing in mammalian cells with nucleic acid strand exchange. Nature Nanotechnology, 2016, 11, 287-294.	15.6	190
42	Can we observe changes in mRNA "state� Overview of methods to study mRNA interactions with regulatory proteins relevant in cancer related processes. Analyst, The, 2016, 141, 548-562.	1.7	5
43	Post-transcriptional Regulation of Programmed Cell Death 4 (PDCD4) mRNA by the RNA-binding Proteins Human Antigen R (HuR) and T-cell Intracellular Antigen 1 (TIA1). Journal of Biological Chemistry, 2015, 290, 3468-3487.	1.6	40
44	Whole-body immunoPET reveals active SIV dynamics in viremic and antiretroviral therapy–treated macaques. Nature Methods, 2015, 12, 427-432.	9.0	153
45	Native Immunogold Labeling of Cell Surface Proteins and Viral Glycoproteins for Cryo-Electron Microscopy and Cryo-Electron Tomography Applications. Journal of Histochemistry and Cytochemistry, 2015, 63, 780-792.	1.3	30
46	Targeting $\hat{l}\pm4\hat{l}^27$ integrin reduces mucosal transmission of simian immunodeficiency virus and protects gut-associated lymphoid tissue from infection. Nature Medicine, 2014, 20, 1397-1400.	15.2	134
47	Structural Analysis of Respiratory Syncytial Virus Reveals the Position of M2-1 between the Matrix Protein and the Ribonucleoprotein Complex. Journal of Virology, 2014, 88, 7602-7617.	1.5	100
48	Combining Single RNA Sensitive Probes with Subdiffraction-Limited and Live-Cell Imaging Enables the Characterization of Virus Dynamics in Cells. ACS Nano, 2014, 8, 302-315.	7.3	33
49	Quantifying RNA–protein interactions in situ using modified-MTRIPs and proximity ligation. Nucleic Acids Research, 2013, 41, e12-e12.	6.5	44
50	Characterization of mRNA-Cytoskeleton Interactions In Situ Using FMTRIP and Proximity Ligation. PLoS ONE, 2013, 8, e74598.	1.1	13
51	Human Respiratory Syncytial Virus Nucleoprotein and Inclusion Bodies Antagonize the Innate Immune Response Mediated by MDA5 and MAVS. Journal of Virology, 2012, 86, 8245-8258.	1.5	136
52	A Critical Phenylalanine Residue in the Respiratory Syncytial Virus Fusion Protein Cytoplasmic Tail Mediates Assembly of Internal Viral Proteins into Viral Filaments and Particles. MBio, 2012, 3, .	1.8	54
53	Probes for Intracellular RNA Imaging in Live Cells. Methods in Enzymology, 2012, 505, 383-399.	0.4	25
54	Dynamics of Native βâ€actin mRNA Transport in the Cytoplasm. Traffic, 2011, 12, 1000-1011.	1.3	33

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55	Characterizing mRNA Interactions with RNA Granules during Translation Initiation Inhibition. PLoS ONE, 2011, 6, e19727.	1.1	42
56	Molecular beacons and related probes for intracellular RNA imaging. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2010, 2, 11-19.	3.3	37
57	Respiratory Syncytial Virus Induces Host RNA Stress Granules To Facilitate Viral Replication. Journal of Virology, 2010, 84, 12274-12284.	1.5	144
58	Single Molecule Sensitive Multivalent Polyethylene Glycol Probes for RNA Imaging. Bioconjugate Chemistry, 2010, 21, 483-488.	1.8	18
59	Single molecule–sensitive probes for imaging RNA in live cells. Nature Methods, 2009, 6, 347-349.	9.0	129
60	Dynamics of filamentous viral RNPs prior to egress. Nucleic Acids Research, 2007, 35, 3602-3611.	6.5	72
61	Live-Cell Characterization and Analysis of a Clinical Isolate of Bovine Respiratory Syncytial Virus, Using Molecular Beacons. Journal of Virology, 2006, 80, 682-688.	1.5	89
62	Nanostructured Probes for RNA Detection in Living Cells. Annals of Biomedical Engineering, 2006, 34, 39-50.	1.3	127
63	Direct visualization of mRNA colocalization with mitochondria in living cells using molecular beacons. Journal of Biomedical Optics, 2005, 10, 044025.	1.4	40
64	Dual FRET molecular beacons for mRNA detection in living cells. Nucleic Acids Research, 2004, 32, e57-e57.	6.5	339