# Walther Mothes

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4008222/publications.pdf

Version: 2024-02-01

| 88 | 12,210 | 43973 48 | 49773 87 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 104 | 104 | 104 | 12589 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Sec6l-mediated transfer of a membrane protein from the endoplasmic reticulum to the proteasome for destruction. Nature, 1996, 384, 432-438. | 13.7 | 1,054 |
| 2 | Structure and immune recognition of trimeric pre-fusion HIV-1 Env. Nature, 2014, 514, 455-461. | 13.7 | 702 |
| 3 | TRIM5 is an innate immune sensor for the retrovirus capsid lattice. Nature, 2011, 472, 361-365. | 13.7 | 569 |
| 4 | Semen-Derived Amyloid Fibrils Drastically Enhance HIV Infection. Cell, 2007, 131, 1059-1071. | 13.5 | 510 |
| 5 | Video-rate nanoscopy using sCMOS cameraâ€“specific single-molecule localization algorithms. Nature Methods, 2013, 10, 653-658. | 9.0 | 475 |
| 6 | Conformational dynamics of single HIV-1 envelope trimers on the surface of native virions. Science, 2014, 346, 759-763. | 6.0 | 439 |
| 7 | Retroviruses can establish filopodial bridges for efficient cell-to-cell transmission. Nature Cell Biology, 2007, 9, 310-315. | 4.6 | 390 |
| 8 | Actin- and myosin-driven movement of viruses along filopodia precedes their entry into cells. Journal of Cell Biology, 2005, 170, 317-325. | 2.3 | 365 |
| 9 | Visualization of Retroviral Replication in Living Cells Reveals Budding into Multivesicular Bodies. Traffic, 2003, 4, 785-801. | 1.3 | 362 |
| 10 | Crystal structure, conformational fixation and entry-related interactions of mature ligand-free HIV-1 Env. Nature Structural and Molecular Biology, 2015, 22, 522-531. | 3.6 | 333 |
| 11 | Fusion peptide of HIV-1 as a site of vulnerability to neutralizing antibody. Science, 2016, 352, 828-833. | 6.0 | 310 |
| 12 | Signal Sequence Recognition in Posttranslational Protein Transport across the Yeast ER Membrane. Cell, 1998, 94, 795-807. | 13.5 | 307 |
| 13 | Neuronal loss and brain atrophy in mice lacking cathepsins B and L. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 7883-7888. | 3.3 | 303 |
| 14 | Protein Translocation: Tunnel Vision. Cell, 1998, 92, 381-390. | 13.5 | 297 |
| 15 | Virus Cell-to-Cell Transmission. Journal of Virology, 2010, 84, 8360-8368. | 1.5 | 296 |
| 16 | Retroviral Entry Mediated by Receptor Priming and Low pH Triggering of an Envelope Glycoprotein. Cell, 2000, 103, 679-689. | 13.5 | 260 |
| 17 | The Sec61p Complex Mediates the Integration of a Membrane Protein by Allowing Lipid Partitioning of the Transmembrane Domain. Cell, 2000, 102, 233-244. | 13.5 | 244 |
| 18 | Retroviruses Human Immunodeficiency Virus and Murine Leukemia Virus Are Enriched in Phosphoinositides. Journal of Virology, 2008, 82, 11228-11238. | 1.5 | 243 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Human TRIM Gene Expression in Response to Interferons. PLoS ONE, 2009, 4, e4894. | 1.1 | 223 |
| 20 | TRIM E3 Ligases Interfere with Early and Late Stages of the Retroviral Life Cycle. PLoS Pathogens, 2008, 4, e16. | 2.1 | 202 |
| 21 | Cytonemes and tunneling nanotubules in cellâ€“cell communication and viral pathogenesis. Trends in Cell Biology, 2008, 18, 414-420. | 3.6 | 201 |
| 22 | TRIM Protein-Mediated Regulation of Inflammatory and Innate Immune Signaling and Its Association with Antiretroviral Activity. Journal of Virology, 2013, 87, 257-272. | 1.5 | 189 |
| 23 | Molecular Mechanism of Membrane Protein Integration into the Endoplasmic Reticulum. Cell, 1997, 89, 523-533. | 13.5 | 185 |
| 24 | Cell-to-cell transmission of viruses. Current Opinion in Virology, 2013, 3, 44-50. | 2.6 | 185 |
| 25 | A single dose of the SARS-CoV-2 vaccine BNT162b2 elicits Fc-mediated antibody effector functions and TÂcell responses. Cell Host and Microbe, 2021, 29, 1137-1150.e6. | 5.1 | 173 |
| 26 | The Cationic Properties of SEVI Underlie Its Ability To Enhance Human Immunodeficiency Virus Infection. Journal of Virology, 2009, 83, 73-80. | 1.5 | 163 |
| 27 | Associating HIV-1 envelope glycoprotein structures with states on theÂvirus observed by smFRET. Nature, 2019, 568, 415-419. | 13.7 | 156 |
| 28 | Retroviruses use CD169-mediated trans-infection of permissive lymphocytes to establish infection. Science, 2015, 350, 563-567. | 6.0 | 155 |
| 29 | Live imaging of SARS-CoV-2 infection in mice reveals that neutralizing antibodies require Fc function for optimal efficacy. Immunity, 2021, 54, 2143-2158.e15. | 6.6 | 155 |
| 30 | Real-Time Conformational Dynamics of SARS-CoV-2 Spikes on Virus Particles. Cell Host and Microbe, 2020, 28, 880-891.e8. | 5.1 | 153 |
| 31 | Cell-to-Cell Transmission Can Overcome Multiple Donor and Target Cell Barriers Imposed on Cell-Free HIV. PLoS ONE, 2013, 8, e53138. | 1.1 | 140 |
| 32 | Ca2+ and synaptotagmin VIIâ€“dependent delivery of lysosomal membrane to nascent phagosomes. Journal of Cell Biology, 2006, 174, 997-1007. | 2.3 | 137 |
| 33 | Release of gp120 Restraints Leads to an Entry-Competent Intermediate State of the HIV-1 Envelope Glycoproteins. MBio, 2016, 7, . | 1.8 | 131 |
| 34 | HIV-1 Env trimer opens through an asymmetric intermediate in which individual protomers adopt distinct conformations. ELife, 2018, 7, . | 2.8 | 127 |
| 35 | Structural basis and mode of action for two broadly neutralizing antibodies against SARS-CoV-2 emerging variants of concern. Cell Reports, 2022, 38, 110210. | 2.9 | 96 |
| 36 | Imaging individual retroviral fusion events: From hemifusion to pore formation and growth. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 8728-8733. | 3.3 | 94 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | An Asymmetric Opening of HIV-1 Envelope Mediates Antibody-Dependent Cellular Cytotoxicity. Cell Host and Microbe, 2019, 25, 578-587.e5. | 5.1 | 93 |
| 38 | HIV cell-to-cell transmission: effects on pathogenesis and antiretroviral therapy. Trends in Microbiology, 2015, 23, 289-295. | 3.5 | 89 |
| 39 | The Î²20â€“Î²21 of gp120 is a regulatory switch for HIV-1 Env conformational transitions. Nature Communications, 2017, 8, 1049. | 5.8 | 88 |
| 40 | TRIM22 Inhibits HIV-1 Transcription Independently of Its E3 Ubiquitin Ligase Activity, Tat, and NF-ÎºB-Responsive Long Terminal Repeat Elements. Journal of Virology, 2011, 85, 5183-5196. | 1.5 | 87 |
| 41 | Highly Active Antiretroviral Therapies Are Effective against HIV-1 Cell-to-Cell Transmission. PLoS Pathogens, 2014, 10, e1003982. | 2.1 | 86 |
| 42 | Assembly of the Murine Leukemia Virus Is Directed towards Sites of Cellâ€“Cell Contact. PLoS Biology, 2009, 7, e1000163. | 2.6 | 85 |
| 43 | A Fc-enhanced NTD-binding non-neutralizing antibody delays virus spread and synergizes with a nAb to protect mice from lethal SARS-CoV-2 infection. Cell Reports, 2022, 38, 110368. | 2.9 | 82 |
| 44 | Structure and Dynamics of the Native HIV-1 Env Trimer. Journal of Virology, 2015, 89, 5752-5755. | 1.5 | 77 |
| 45 | Signal Sequence Recognition in Cotranslational Translocation by Protein Components of the Endoplasmic Reticulum Membrane. Journal of Cell Biology, 1998, 142, 355-364. | 2.3 | 66 |
| 46 | In vivo imaging of virological synapses. Nature Communications, 2012, 3, 1320. | 5.8 | 64 |
| 47 | HIV-1-Infected CD4+ T Cells Facilitate Latent Infection of Resting CD4+ T Cells through Cell-Cell Contact. Cell Reports, 2018, 24, 2088-2100. | 2.9 | 59 |
| 48 | Subnanometer structures of HIV-1 envelope trimers on aldrithiol-2-inactivated virus particles. Nature Structural and Molecular Biology, 2020, 27, 726-734. | 3.6 | 55 |
| 49 | The Mature Avian Leukosis Virus Subgroup A Envelope Glycoprotein Is Metastable, and Refolding Induced by the Synergistic Effects of Receptor Binding and Low pH Is Coupled to Infection. Journal of Virology, 2004, 78, 1403-1410. | 1.5 | 53 |
| 50 | SARS-CoV-2 Variants Increase Kinetic Stability of Open Spike Conformations as an Evolutionary Strategy. MBio, 2022, 13, e0322721. | 1.8 | 48 |
| 51 | A Conformational Transition Observed in Single HIV-1 Gag Molecules during In Vitro Assembly of Virus-Like Particles. Journal of Virology, 2014, 88, 3577-3585. | 1.5 | 46 |
| 52 | TRIM5 Retroviral Restriction Activity Correlates with the Ability To Induce Innate Immune Signaling. Journal of Virology, 2016, 90, 308-316. | 1.5 | 44 |
| 53 | NF-ÎºB-Chromatin Interactions Drive Diverse Phenotypes by Modulating Transcriptional Noise. Cell Reports, 2018, 22, 585-599. | 2.9 | 43 |
| 54 | Disruption of the HIV-1 Envelope allosteric network blocks CD4-induced rearrangements. Nature Communications, 2020, 11, 520. | 5.8 | 42 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Impact of temperature on the affinity of SARS-CoV-2 Spike glycoprotein for host ACE2. Journal of Biological Chemistry, 2021, 297, 101151. | 1.6 | 42 |
| 56 | Attachment of Cell-Binding Ligands to Arginine-Rich Cell-Penetrating Peptides Enables Cytosolic Translocation of Complexed siRNA. Chemistry and Biology, 2015, 22, 50-62. | 6.2 | 38 |
| 57 | HIV-1 Matrix Dependent Membrane Targeting Is Regulated by Gag mRNA Trafficking. PLoS ONE, 2009, 4, e6551. | 1.1 | 36 |
| 58 | Directional Spread of Surface-Associated Retroviruses Regulated by Differential Virus-Cell Interactions. Journal of Virology, 2010, 84, 3248-3258. | 1.5 | 36 |
| 59 | Antibody-Induced Internalization of HIV-1 Env Proteins Limits Surface Expression of the Closed Conformation of Env. Journal of Virology, 2019, 93, . | 1.5 | 32 |
| 60 | TRIM15 is a focal adhesion protein that regulates focal adhesion disassembly. Journal of Cell Science, 2014, 127, 3928-42. | 1.2 | 31 |
| 61 | Native structure of a retroviral envelope protein and its conformational change upon interaction with the target cell. Journal of Structural Biology, 2017, 197, 172-180. | 1.3 | 29 |
| 62 | Long-Acting BMS-378806 Analogues Stabilize the State-1 Conformation of the Human Immunodeficiency Virus Type 1 Envelope Glycoproteins. Journal of Virology, 2020, 94, . | 1.5 | 27 |
| 63 | Engineered ACE2-Fc counters murine lethal SARS-CoV-2 infection through direct neutralization and Fc-effector activities. Science Advances, 2022, 8, . | 4.7 | 27 |
| 64 | A Protective Role for the Lectin CD169/Siglec-1 against a Pathogenic Murine Retrovirus. Cell Host and Microbe, 2019, 25, 87-100.e10. | 5.1 | 26 |
| 65 | Shedding-Resistant HIV-1 Envelope Glycoproteins Adopt Downstream Conformations That Remain Responsive to Conformation-Preferring Ligands. Journal of Virology, 2020, 94, . | 1.5 | 21 |
| 66 | Viral Determinants of Polarized Assembly for the Murine Leukemia Virus. Journal of Virology, 2011, 85, 7672-7682. | 1.5 | 20 |
| 67 | Viruses exploit the tissue physiology of the host to spread in vivo. Current Opinion in Cell Biology, 2016, 41, 81-90. | 2.6 | 20 |
| 68 | Longitudinal bioluminescent imaging of HIV-1 infection during antiretroviral therapy and treatment interruption in humanized mice. PLoS Pathogens, 2019, 15, e1008161. | 2.1 | 19 |
| 69 | Viral entry: a detour through multivesicular bodies. Nature Cell Biology, 2005, 7, 641-642. | 4.6 | 16 |
| 70 | HIV Entry Revisited. Cell, 2009, 137, 402-404. | 13.5 | 15 |
| 71 | Basic Residues in the Matrix Domain and Multimerization Target Murine Leukemia Virus Gag to the Virological Synapse. Journal of Virology, 2013, 87, 7113-7126. | 1.5 | 15 |
| 72 | Murine Leukemia Virus Gag Localizes to the Uropod of Migrating Primary Lymphocytes. Journal of Virology, 2014, 88, 10541-10555. | 1.5 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Functional Characterization of the Putative Hepatitis B Virus Core Protein Late Domain Using Retrovirus Chimeras. PLoS ONE, 2013, 8, e72845. | 1.1 | 11 |
| 74 | Illuminating the virus life cycle with single-molecule FRET imaging. Advances in Virus Research, 2019, 105, 239-273. | 0.9 | 11 |
| 75 | Surface Transmission or Polarized Egress? Lessons Learned from HTLV Cell-to-Cell Transmission. Viruses, 2010, 2, 601-605. | 1.5 | 10 |
| 76 | In Vivo Imaging-Driven Approaches to Study Virus Dissemination and Pathogenesis. Annual Review of Virology, 2019, 6, 501-524. | 3.0 | 10 |
| 77 | Antigenic analysis of the HIV-1 envelope trimer implies small differences between structural states 1 and 2. Journal of Biological Chemistry, 2022, 298, 101819. | 1.6 | 9 |
| 78 | VE607 stabilizes SARS-CoV-2 Spike in the â€œRBD-upâ€•conformation and inhibits viral entry. IScience, 2022, 25, 104528. | 1.9 | 8 |
| 79 | Murine Leukemia Virus Exploits Innate Sensing by Toll-Like Receptor 7 in B-1 Cells To Establish Infection and Locally Spread in Mice. Journal of Virology, 2019, 93, . | 1.5 | 7 |
| 80 | SV40 Polyomavirus Activates the Ras-MAPK Signaling Pathway for Vacuolization, Cell Death, and Virus Release. Viruses, 2020, 12, 1128. | 1.5 | 7 |
| 81 | In vivo imaging of retrovirus infection reveals a role for Siglec-1/CD169 in multiple routes of transmission. ELife, 2021, 10, . | 2.8 | 7 |
| 82 | Mutation of the Putative Immunosuppressive Domain of the Retroviral Envelope Glycoprotein Compromises Infectivity. Journal of Virology, 2017, 91, . | 1.5 | 6 |
| 83 | Murine Leukemia Virus Spreading in Mice Impaired in the Biogenesis of Secretory Lysosomes and Ca2+-Regulated Exocytosis. PLoS ONE, 2008, 3, e2713. | 1.1 | 6 |
| 84 | The HIV-1 Env Trimer in HD. Structure, 2014, 22, 935-936. | 1.6 | 4 |
| 85 | Cancer Microbiology. Journal of the National Cancer Institute, 2022, 114, 651-663. | 3.0 | 4 |
| 86 | Live Imaging of SARS-CoV-2 Infection in Mice Reveals Neutralizing Antibodies Require Fc Function for Optimal Efficacy. SSRN Electronic Journal, 0, , . | 0.4 | 3 |
| 87 | Cell-to-Cell Transmission of HIV. , 2013, , 167-184. | | 1 |
| 88 | TRIM15 is a focal adhesion protein that regulates focal adhesion disassembly. Development (Cambridge), 2014, 141, e1906-e1906. | 1.2 | 0 |