

# Daniela Nicastro

## List of Publications by Year in descending order

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Version: 2024-02-01

75  
papers

7,451  
citations

76294

40  
h-index

76872

74  
g-index

92  
all docs

92  
docs citations

92  
times ranked

6857  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Electron microscopy for imaging organelles in plants and algae. <i>Plant Physiology</i> , 2022, 188, 713-725.  | 2.3  | 17        |
| 2  | 3D structure and in situ arrangements of CatSper channel in the sperm flagellum. <i>Nature Communications</i> , 2022, 13, .  | 5.8  | 21        |
| 3  | Functional refolding of the penetration protein on a non-enveloped virus. <i>Nature</i> , 2021, 590, 666-670.  | 13.7 | 33        |
| 4  | Structural organization of the intermediate and light chain complex of <i>Chlamydomonas</i> ciliary I1 dynein. <i>FASEB Journal</i> , 2021, 35, e21646.  | 0.2  | 5         |
| 5  | Structural insights into the cause of human <i>RSPH4A</i> primary ciliary dyskinesia. <i>Molecular Biology of the Cell</i> , 2021, 32, 1202-1209.  | 0.9  | 12        |
| 6  | Proteomic analysis of microtubule inner proteins (MIPs) in Rib72 null <i>Tetrahymena</i> cells reveals functional MIPs. <i>Molecular Biology of the Cell</i> , 2021, 32, br8.  | 0.9  | 13        |
| 7  | Structural organization of the C1b projection within the ciliary central apparatus. <i>Journal of Cell Science</i> , 2021, 134, .  | 1.2  | 3         |
| 8  | In situ structure determination at nanometer resolution using TYGRESS. <i>Nature Methods</i> , 2020, 17, 201-208.  | 9.0  | 59        |
| 9  | Complexity and ultrastructure of infectious extracellular vesicles from cells infected by non-enveloped virus. <i>Scientific Reports</i> , 2020, 10, 7939.   | 1.6  | 26        |
| 10 | Absolute proteomic quantification reveals design principles of sperm flagellar chemosensation. <i>EMBO Journal</i> , 2020, 39, e102723.  | 3.5  | 22        |
| 11 | <i>Chlamydomonas</i> PKD2 organizes mastigonemes, hair-like glycoprotein polymers on cilia. <i>Journal of Cell Biology</i> , 2020, 219, .  | 2.3  | 40        |
| 12 | Scaffold subunits support associated subunit assembly in the <i>Chlamydomonas</i> ciliary nexin dynein regulatory complex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 23152-23162.      | 3.3  | 40        |
| 13 | FAP57/WDR65 targets assembly of a subset of inner arm dyneins and connects to regulatory hubs in cilia. <i>Molecular Biology of the Cell</i> , 2019, 30, 2659-2680.  | 0.9  | 32        |
| 14 | Morphological Plasticity in a Sulfur-Oxidizing Marine Bacterium from the SUP05 Clade Enhances Dark Carbon Fixation. <i>MBio</i> , 2019, 10, .  | 1.8  | 24        |
| 15 | PACRG and FAP20 form the inner junction of axonemal doublet microtubules and regulate ciliary motility. <i>Molecular Biology of the Cell</i> , 2019, 30, 1805-1816.  | 0.9  | 43        |
| 16 | Heterotrophic carbon metabolism and energy acquisition in <i>Candidatus</i> <i>Thioglobus singularis</i> strain PS1, a member of the SUP05 clade of marine <i>Gammaproteobacteria</i> . <i>Environmental Microbiology</i> , 2019, 21, 2391-2401. | 1.8  | 30        |
| 17 | Mdm1 maintains endoplasmic reticulum homeostasis by spatially regulating lipid droplet biogenesis. <i>Journal of Cell Biology</i> , 2019, 218, 1319-1334.  | 2.3  | 97        |
| 18 | Structural organization of the C1a-e-c supercomplex within the ciliary central apparatus. <i>Journal of Cell Biology</i> , 2019, 218, 4236-4251.   | 2.3  | 38        |

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|----|--|-----|-----------|
| 19 | Ionotropic Receptors Specify the Morphogenesis of Phasic Sensors Controlling Rapid Thermal Preference in <i>Drosophila</i> . <i>Neuron</i> , 2019, 101, 738-747.e3.  | 3.8 | 90        |
| 20 | Membrane bridging by Munc13-1 is crucial for neurotransmitter release. <i>ELife</i> , 2019, 8, .   | 2.8 | 84        |
| 21 | The IDA3 adapter, required for intraflagellar transport of I1 dynein, is regulated by ciliary length. <i>Molecular Biology of the Cell</i> , 2018, 29, 886-896.  | 0.9 | 37        |
| 22 | The I1 dynein-associated tether and tether head complex is a conserved regulator of ciliary motility. <i>Molecular Biology of the Cell</i> , 2018, 29, 1048-1059.  | 0.9 | 53        |
| 23 | Cellular Uptake of A Taurine-Modified, Ester Bond-Decorated D-Peptide Derivative via Dynamin-Based Endocytosis and Macropinocytosis. <i>Molecular Therapy</i> , 2018, 26, 648-658.                                       | 3.7 | 20        |
| 24 | Ciliary proteins Fap43 and Fap44 interact with each other and are essential for proper cilia and flagella beating. <i>Cellular and Molecular Life Sciences</i> , 2018, 75, 4479-4493.                                    | 2.4 | 46        |
| 25 | Asymmetric distribution and spatial switching of dynein activity generates ciliary motility. <i>Science</i> , 2018, 360, .   | 6.0 | 198       |
| 26 | DRC2/CCDC65 is a central hub for assembly of the nexin dynein regulatory complex and other regulators of ciliary and flagellar motility. <i>Molecular Biology of the Cell</i> , 2018, 29, 137-153.                       | 0.9 | 43        |
| 27 | <i>Tetrahymena</i> RIB72A and RIB72B are microtubule inner proteins in the ciliary doublet microtubules. <i>Molecular Biology of the Cell</i> , 2018, 29, 2566-2577.   | 0.9 | 47        |
| 28 | Three-Dimensional Structure of the Ultraoligotrophic Marine Bacterium <i>Candidatus Pelagibacter ubique</i> . <i>Applied and Environmental Microbiology</i> , 2017, 83, .  | 1.4 | 47        |
| 29 | Centriolar remodeling underlies basal body maturation during ciliogenesis in <i>Caenorhabditis elegans</i> . <i>ELife</i> , 2017, 6, .   | 2.8 | 50        |
| 30 | Enzyme-Instructed Self-Assembly for Spatiotemporal Profiling of the Activities of Alkaline Phosphatases on Live Cells. <i>CheM</i> , 2016, 1, 246-263.   | 5.8 | 143       |
| 31 | The nexin link and tubule glutamylation maintain the alignment of outer doublets in the ciliary axoneme. <i>Cytoskeleton</i> , 2016, 73, 331-340.  | 1.0 | 24        |
| 32 | Membrane Charge Directs the Outcome of F-BAR Domain Lipid Binding and Autoregulation. <i>Cell Reports</i> , 2015, 13, 2597-2609.   | 2.9 | 35        |
| 33 | The CSC proteins FAP61 and FAP251 build the basal substructures of radial spoke 3 in cilia. <i>Molecular Biology of the Cell</i> , 2015, 26, 1463-1475.  | 0.9 | 58        |
| 34 | ATP Consumption of Eukaryotic Flagella Measured at a Single-Cell Level. <i>Biophysical Journal</i> , 2015, 109, 2562-2573.   | 0.2 | 72        |
| 35 | In Situ Localization of N and C Termini of Subunits of the Flagellar Nexin-Dynein Regulatory Complex (N-DRC) Using SNAP Tag and Cryo-electron Tomography. <i>Journal of Biological Chemistry</i> , 2015, 290, 5341-5353. | 1.6 | 51        |
| 36 | FAP206 is a microtubule-docking adapter for ciliary radial spoke 2 and dynein c. <i>Molecular Biology of the Cell</i> , 2015, 26, 696-710.   | 0.9 | 28        |

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|----|--|-----|-----------|
| 37 | DRC3 connects the N-DRC to dynein g to regulate flagellar waveform. <i>Molecular Biology of the Cell</i> , 2015, 26, 2788-2800.  | 0.9 | 48        |
| 38 | Assembly of actin filaments and microtubules in Nwk F-BAR-induced membrane deformations. <i>Communicative and Integrative Biology</i> , 2015, 8, e1000703.                                       | 0.6 | 7         |
| 39 | Analyzing Macromolecular Complexes in Situ Using Cellular Cryo-€Electron Microscopy. <i>FASEB Journal</i> , 2015, 29, 488.3.   | 0.2 | 0         |
| 40 | Structural Correlates of Rotavirus Cell Entry. <i>PLoS Pathogens</i> , 2014, 10, e1004355.   | 2.1 | 55        |
| 41 | Cryo-electron tomography reveals ciliary defects underlying human RSPH1 primary ciliary dyskinesia. <i>Nature Communications</i> , 2014, 5, 5727.  | 5.8 | 135       |
| 42 | Supramolecular Self-Assembly Inside Living Mammalian Cells. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1622, 85-93.  | 0.1 | 0         |
| 43 | Critical roles for multiple formins during cardiac myofibril development and repair. <i>Molecular Biology of the Cell</i> , 2014, 25, 811-827.   | 0.9 | 48        |
| 44 | Insights into the Structure and Function of Ciliary and Flagellar Doublet Microtubules. <i>Journal of Biological Chemistry</i> , 2014, 289, 17427-17444.   | 1.6 | 75        |
| 45 | Structural mechanism of the dynein power stroke. <i>Nature Cell Biology</i> , 2014, 16, 479-485.   | 4.6 | 130       |
| 46 | Membrane deformation and scission by the HSV-1 nuclear egress complex. <i>Nature Communications</i> , 2014, 5, 4131.   | 5.8 | 131       |
| 47 | Robust excitons inhabit soft supramolecular nanotubes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E3367-75.                             | 3.3 | 100       |
| 48 | A high-resolution morphological and ultrastructural map of anterior sensory cilia and glia in <i>Caenorhabditis elegans</i> . <i>ELife</i> , 2014, 3, e01948.                                    | 2.8 | 155       |
| 49 | Conserved structural motifs in the central pair complex of eukaryotic flagella. <i>Cytoskeleton</i> , 2013, 70, 101-120.   | 1.0 | 91        |
| 50 | Probing Nanoscale Self-Assembly of Nonfluorescent Small Molecules inside Live Mammalian Cells. <i>ACS Nano</i> , 2013, 7, 9055-9063.   | 7.3 | 69        |
| 51 | The MIA complex is a conserved and novel dynein regulator essential for normal ciliary motility. <i>Journal of Cell Biology</i> , 2013, 201, 263-278.  | 2.3 | 78        |
| 52 | Formation of membrane ridges and scallops by the F-BAR protein Nervous Wreck. <i>Molecular Biology of the Cell</i> , 2013, 24, 2406-2418.  | 0.9 | 39        |
| 53 | Three-dimensional structure of the radial spokes reveals heterogeneity and interactions with dyneins in <i>Chlamydomonas</i> flagella. <i>Molecular Biology of the Cell</i> , 2012, 23, 111-120. | 0.9 | 85        |
| 54 | One of the Nine Doublet Microtubules of Eukaryotic Flagella Exhibits Unique and Partially Conserved Structures. <i>PLoS ONE</i> , 2012, 7, e46494.   | 1.1 | 48        |

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|----|---|-----|-----------|
| 55 | Cryo-electron tomography reveals doublet-specific structures and unique interactions in the I1 dynein. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E2067-76.              | 3.3 | 84        |
| 56 | The CSC connects three major axonemal complexes involved in dynein regulation. <i>Molecular Biology of the Cell</i> , 2012, 23, 3143-3155.  | 0.9 | 78        |
| 57 | The structural heterogeneity of radial spokes in cilia and flagella is conserved. <i>Cytoskeleton</i> , 2012, 69, 88-100.   | 1.0 | 67        |
| 58 | Sas-4 provides a scaffold for cytoplasmic complexes and tethers them in a centrosome. <i>Nature Communications</i> , 2011, 2, 359.  | 5.8 | 125       |
| 59 | Cilia-Like Beating of Active Microtubule Bundles. <i>Science</i> , 2011, 333, 456-459.  | 6.0 | 240       |
| 60 | The CSC is required for complete radial spoke assembly and wild-type ciliary motility. <i>Molecular Biology of the Cell</i> , 2011, 22, 2520-2531.  | 0.9 | 77        |
| 61 | Cryo-electron tomography reveals conserved features of doublet microtubules in flagella. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, E845-53.                             | 3.3 | 131       |
| 62 | Building Blocks of the Nexin-Dynein Regulatory Complex in <i>Chlamydomonas</i> Flagella. <i>Journal of Biological Chemistry</i> , 2011, 286, 29175-29191.   | 1.6 | 91        |
| 63 | Arrangement of Photosystem II and ATP Synthase in Chloroplast Membranes of Spinach and Pea. <i>Plant Cell</i> , 2010, 22, 1299-1312.  | 3.1 | 237       |
| 64 | Cryo-Electron Microscope Tomography to Study Axonemal Organization. <i>Methods in Cell Biology</i> , 2009, 91, 1-39.  | 0.5 | 46        |
| 65 | The dynein regulatory complex is the nexin link and a major regulatory node in cilia and flagella. <i>Journal of Cell Biology</i> , 2009, 187, 921-933.   | 2.3 | 311       |
| 66 | <i>Drosophila</i> <i>asterless</i> and Vertebrate Cep152 Are Orthologs Essential for Centriole Duplication. <i>Genetics</i> , 2008, 180, 2081-2094.   | 1.2 | 147       |
| 67 | Electron Microscopy of Microtubule-Based Cytoskeletal Machinery. <i>Methods in Cell Biology</i> , 2007, 79, 437-462.  | 0.5 | 8         |
| 68 | Single particle cryo-electron tomography characterization of the structure and structural variability of poliovirus "receptor" membrane complex at 30 Å... resolution. <i>Journal of Structural Biology</i> , 2007, 160, 200-210. | 1.3 | 32        |
| 69 | Cryo-fluorescence microscopy facilitates correlations between light and cryo-electron microscopy and reduces the rate of photobleaching. <i>Journal of Microscopy</i> , 2007, 227, 98-109.  | 0.8 | 203       |
| 70 | The Molecular Architecture of Axonemes Revealed by Cryo-electron Tomography. <i>Science</i> , 2006, 313, 944-948.   | 6.0 | 831       |
| 71 | New views of cells in 3D: an introduction to electron tomography. <i>Trends in Cell Biology</i> , 2005, 15, 43-51.  | 3.6 | 378       |
| 72 | 3D structure of eukaryotic flagella in a quiescent state revealed by cryo-electron tomography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 15889-15894.                   | 3.3 | 156       |

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|----|--|-----|-----------|
| 73 | Identification of macromolecular complexes in cryoelectron tomograms of phantom cells. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14153-14158. | 3.3 | 246       |
| 74 | Macromolecular Architecture in Eukaryotic Cells Visualized by Cryoelectron Tomography. Science, 2002, 298, 1209-1213.  | 6.0 | 782       |
| 75 | Cryo-electron Tomography of Neurospora Mitochondria. Journal of Structural Biology, 2000, 129, 48-56.  | 1.3 | 179       |