# Roman S Polishchuk

List of Publications by Year
in descending order



| 117 | 12,514 | 30070 54 | 25787 108 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 122 | 122 | 122 | 16801 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A Gene Network Regulating Lysosomal Biogenesis and Function. Science, 2009, 325, 473-477. | 12.6 | 1,958 |
| 2 | Transcriptional Activation of Lysosomal Exocytosis Promotes Cellular Clearance. Developmental Cell, 2011, 21, 421-430. | 7.0 | 594 |
| 3 | Connecting copper and cancer: from transition metal signalling to metalloplasia. Nature Reviews Cancer, 2022, 22, 102-113. | 28.4 | 519 |
| 4 | Rapid Cycling of Lipid Raft Markers between the Cell Surface and Golgi Complex. Journal of Cell Biology, 2001, 153, 529-542. | 5.2 | 496 |
| 5 | Maintenance of Golgi structure and function depends on the integrity of ER export. Journal of Cell Biology, 2001, 155, 557-570. | 5.2 | 398 |
| 6 | Glycosphingolipid synthesis requires FAPP2 transfer of glucosylceramide. Nature, 2007, 449, 62-67. | 27.8 | 359 |
| 7 | Golgi Membranes Are Absorbed into and Reemerge from the ER during Mitosis. Cell, 1999, 99, 589-601. | 28.9 | 315 |
| 8 | Correlative Light-Electron Microscopy Reveals the Tubular-Saccular Ultrastructure of Carriers Operating between Golgi Apparatus and Plasma Membrane. Journal of Cell Biology, 2000, 148, 45-58. | 5.2 | 304 |
| 9 | Secretory traffic triggers the formation of tubular continuities across Golgi sub-compartments. Nature Cell Biology, 2004, 6, 1071-1081. | 10.3 | 283 |
| 10 | Transcription factor EB (TFEB) is a new therapeutic target for Pompe disease. EMBO Molecular Medicine, 2013, 5, 691-706. | 6.9 | 273 |
| 11 | A tubular EHD1-containing compartment involved in the recycling of major histocompatibility complex class I molecules to the plasma membrane. EMBO Journal, 2002, 21, 2557-2567. | 7.8 | 265 |
| 12 | Transport through the Golgi Apparatus by Rapid Partitioning within a Two-Phase Membrane System. Cell, 2008, 133, 1055-1067. | 28.9 | 256 |
| 13 | Mitochondria Are Linked to Calcium Stores in Striated Muscle by Developmentally Regulated Tethering Structures. Molecular Biology of the Cell, 2009, 20, 1058-1067. | 2.1 | 240 |
| 14 | Wilson Disease Protein ATP7B Utilizes Lysosomal Exocytosis to Maintain Copper Homeostasis. Developmental Cell, 2014, 29, 686-700. | 7.0 | 203 |
| 15 | Effective delivery of large genes to the retina by dual AAV vectors. EMBO Molecular Medicine, 2014, 6, 194-211. | 6.9 | 202 |
| 16 | Delivery of raft-associated, GPI-anchored proteins to the apical surface of polarized MDCK cells by a transcytotic pathway. Nature Cell Biology, 2004, 6, 297-307. | 10.3 | 192 |
| 17 | Lysosomal fusion and SNARE function are impaired by cholesterol accumulation in lysosomal storage disorders. EMBO Journal, 2010, 29, 3607-3620. | 7.8 | 192 |
| 18 | Small cargo proteins and large aggregates can traverse the Golgi by a common mechanism without leaving the lumen of cisternae. Journal of Cell Biology, 2001, 155, 1225-1238. | 5.2 | 185 |

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|---|---|---|---|
| 19 | Mechanism of Constitutive Export from the Golgi: Bulk Flow via the Formation, Protrusion, and En Bloc Cleavage of large trans-Golgi Network Tubular Domains. Molecular Biology of the Cell, 2003, 14, 4470-4485. | 2.1 | 177 |
| 20 | A traffic-activated Golgi-based signalling circuit coordinates the secretory pathway. Nature Cell Biology, 2008, 10, 912-922. | 10.3 | 175 |
| 21 | FGF signalling regulates bone growth through autophagy. Nature, 2015, 528, 272-275. | 27.8 | 170 |
| 22 | OCRL controls trafficking through early endosomes via PtdIns4,5P<sub>2</sub>-dependent regulation of endosomal actin. EMBO Journal, 2011, 30, 4970-4985. | 7.8 | 158 |
| 23 | Activation of Autophagy, Observed in Liver Tissues From Patients With Wilson Disease and From ATP7B-Deficient Animals, Protects Hepatocytes From Copper-Induced Apoptosis. Gastroenterology, 2019, 156, 1173-1189.e5. | 1.3 | 150 |
| 24 | Gene transfer of master autophagy regulator TFEB results in clearance of toxic protein and correction of hepatic disease in alphaâ€1â€antiâ€trypsin deficiency. EMBO Molecular Medicine, 2013, 5, 397-412. | 6.9 | 134 |
| 25 | The Golgi-associated Protein GRASP65 Regulates Spindle Dynamics and Is Essential for Cell Division. Molecular Biology of the Cell, 2005, 16, 3211-3222. | 2.1 | 126 |
| 26 | Dimeric PKD regulates membrane fission to form transport carriers at the TGN. Journal of Cell Biology, 2007, 179, 1123-1131. | 5.2 | 121 |
| 27 | A role for Arf1 in mitotic Golgi disassembly, chromosome segregation, and cytokinesis. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 13314-13319. | 7.1 | 110 |
| 28 | Intein-mediated protein trans-splicing expands adeno-associated virus transfer capacity in the retina. Science Translational Medicine, 2019, 11, . | 12.4 | 109 |
| 29 | COPI acts in both vesicular and tubular transport. Nature Cell Biology, 2011, 13, 996-1003. | 10.3 | 108 |
| 30 | Actin remodeling by ADF/cofilin is required for cargo sorting at the trans-Golgi network. Journal of Cell Biology, 2009, 187, 1055-1069. | 5.2 | 98 |
| 31 | Golgi in copper homeostasis: a view from the membrane trafficking field. Histochemistry and Cell Biology, 2013, 140, 285-295. | 1.7 | 97 |
| 32 | Polycystin-1 Induces Cell Migration by Regulating Phosphatidylinositol 3-kinase-dependent Cytoskeletal Rearrangements and GSK3Î²-dependent Cellâ€“Cell Mechanical Adhesion. Molecular Biology of the Cell, 2007, 18, 4050-4061. | 2.1 | 96 |
| 33 | Molecular determinants of ERâ€“Golgi contacts identified through a new FRETâ€“FLIM system. Journal of Cell Biology, 2019, 218, 1055-1065. | 5.2 | 94 |
| 34 | Defective Intracellular Trafficking of Uromodulin Mutant Isoforms. Traffic, 2006, 7, 1567-1579. | 2.7 | 93 |
| 35 | Golgi Enzymes Are Enriched in Perforated Zones of Golgi Cisternae but Are Depleted in COPI Vesicles. Molecular Biology of the Cell, 2004, 15, 4710-4724. | 2.1 | 90 |
| 36 | A new class of carriers that transport selective cargo from the trans Golgi network to the cell surface. EMBO Journal, 2012, 31, 3976-3990. | 7.8 | 88 |

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|---|---|---|---|
| 37 | The role of NSP6 in the biogenesis of the SARS-CoV-2 replication organelle. Nature, 2022, 606, 761-768. | 27.8 | 87 |
| 38 | Activation of the transcription factor EB rescues lysosomal abnormalities in cystinotic kidney cells. Kidney International, 2016, 89, 862-873. | 5.2 | 85 |
| 39 | Group IV Phospholipase A2Î± Controls the Formation of Inter-Cisternal Continuities Involved in Intra-Golgi Transport. PLoS Biology, 2009, 7, e1000194. | 5.6 | 81 |
| 40 | A 14-3-3Î³ dimer-based scaffold bridges CtBP1-S/BARS to PI(4)KIIIÎ² to regulate post-Golgi carrier formation. Nature Cell Biology, 2012, 14, 343-354. | 10.3 | 79 |
| 41 | The Role of GRASP55 in Golgi Fragmentation and Entry of Cells into Mitosis. Molecular Biology of the Cell, 2008, 19, 2579-2587. | 2.1 | 78 |
| 42 | The E3-Ubiquitin Ligase TRIM50 Interacts with HDAC6 and p62, and Promotes the Sequestration and Clearance of Ubiquitinated Proteins into the Aggresome. PLoS ONE, 2012, 7, e40440. | 2.5 | 76 |
| 43 | T-Cell Antigen Receptor-Induced Signaling Complexes: Internalization Via a Cholesterol-Dependent Endocytic Pathway. Traffic, 2006, 7, 1143-1162. | 2.7 | 74 |
| 44 | Sphingomyelin organization is required for vesicle biogenesis at the Golgi complex. EMBO Journal, 2012, 31, 4535-4546. | 7.8 | 74 |
| 45 | Defective autophagy in spastizin mutated patients with hereditary spastic paraparesis type 15. Brain, 2013, 136, 3119-3139. | 7.6 | 74 |
| 46 | Transport of soluble proteins through the Golgi occurs by diffusion via continuities across cisternae. ELife, 2014, 3, . | 6.0 | 74 |
| 47 | Faciogenital Dysplasia Protein Fgd1 Regulates Invadopodia Biogenesis and Extracellular Matrix Degradation and Is Up-regulated in Prostate and Breast Cancer. Cancer Research, 2009, 69, 747-752. | 0.9 | 73 |
| 48 | Improved dual AAV vectors with reduced expression of truncated proteins are safe and effective in the retina of a mouse model of Stargardt disease. Human Molecular Genetics, 2015, 24, 6811-6825. | 2.9 | 73 |
| 49 | Metformin restores the mitochondrial network and reverses mitochondrial dysfunction in Down syndrome cells. Human Molecular Genetics, 2017, 26, ddx016. | 2.9 | 70 |
| 50 | NCX3 regulates mitochondrial calcium handling through AKAP121-anchored signaling complex and prevents hypoxia-induced cell death. Journal of Cell Science, 2013, 126, 5566-77. | 2.0 | 64 |
| 51 | The emerging role of lysosomes in copper homeostasis. Metallomics, 2016, 8, 853-862. | 2.4 | 64 |
| 52 | Golgi membrane fission requires the CtBP1-S/BARS-induced activation of lysophosphatidic acid acyltransferase Î´. Nature Communications, 2016, 7, 12148. | 12.8 | 63 |
| 53 | Ultrastructure of Long-Range Transport Carriers Moving from the trans Golgi Network to Peripheral Endosomes. Traffic, 2006, 7, 1092-1103. | 2.7 | 62 |
| 54 | Connexin-Mediated Signaling in Nonsensory Cells Is Crucial for the Development of Sensory Inner Hair Cells in the Mouse Cochlea. Journal of Neuroscience, 2017, 37, 258-268. | 3.6 | 61 |

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| 55 | Visualizing membrane traffic in vivo by combined video fluorescence and 3D electron microscopy. Trends in Cell Biology, 2000, 10, 349-353. | 7.9 | 60 |
| 56 | The Menkes and Wilson disease genes counteract in copper toxicosis in Labrador retrievers: a new canine model for copper-metabolism disorders. DMM Disease Models and Mechanisms, 2016, 9, 25-38. | 2.4 | 60 |
| 57 | Activity and Trafficking of Copper-Transporting ATPases in Tumor Development and Defense against Platinum-Based Drugs. Cells, 2019, 8, 1080. | 4.1 | 58 |
| 58 | Morphogenesis of post-Golgi transport carriers. Histochemistry and Cell Biology, 2008, 129, 153-161. | 1.7 | 57 |
| 59 | Molecular Events Initiating Exit of a Copper-transporting ATPase ATP7B from the Trans-Golgi Network. Journal of Biological Chemistry, 2012, 287, 36041-36050. | 3.4 | 53 |
| 60 | Faciogenital Dysplasia Protein (FGD1) Regulates Export of Cargo Proteins from the Golgi Complex via Cdc42 Activation. Molecular Biology of the Cell, 2009, 20, 2413-2427. | 2.1 | 52 |
| 61 | Uromodulin is expressed in renal primary cilia and UMOD mutations result in decreased ciliary uromodulin expression. Human Molecular Genetics, 2010, 19, 1985-1997. | 2.9 | 52 |
| 62 | Role of NAD+ and ADP-Ribosylation in the Maintenance of the Golgi Structure. Journal of Cell Biology, 1997, 139, 1109-1118. | 5.2 | 50 |
| 63 | A High-Calorie Diet Aggravates Mitochondrial Dysfunction and Triggers Severe Liver Damage in Wilson Disease Rats. Cellular and Molecular Gastroenterology and Hepatology, 2019, 7, 571-596. | 4.5 | 50 |
| 64 | Hypothyroidism induced by loss of the manganese efflux transporter SLC30A10 may be explained by reduced thyroxine production. Journal of Biological Chemistry, 2017, 292, 16605-16615. | 3.4 | 46 |
| 65 | Dâ€Aspartate treatment attenuates myelin damage and stimulates myelin repair. EMBO Molecular Medicine, 2019, 11, . | 6.9 | 44 |
| 66 | Coalescence of Golgi fragments in microtubule-deprived living cells. European Journal of Cell Biology, 1999, 78, 170-185. | 3.6 | 43 |
| 67 | Dicumarol, an inhibitor of ADP-ribosylation of CtBP3/BARS, fragments Golgi non-compact tubular zones and inhibits intra-Golgi transport. European Journal of Cell Biology, 2004, 83, 263-279. | 3.6 | 43 |
| 68 | Correlation of 4Pi and Electron Microscopy to Study Transport Through Single Golgi Stacks in Living Cells with Super Resolution. Traffic, 2009, 10, 379-391. | 2.7 | 43 |
| 69 | Correction of CNS defects in the MPSII mouse model via systemic enzyme replacement therapy. Human Molecular Genetics, 2010, 19, 4871-4885. | 2.9 | 43 |
| 70 | Identification of p38 MAPK and JNK as new targets for correction of Wilson diseaseâ€causing ATP7B mutants. Hepatology, 2016, 63, 1842-1859. | 7.3 | 42 |
| 71 | Localization and age-dependent expression of the inward rectifier K+ channel subunit Kir 5.1 in a mammalian reproductive system. FEBS Letters, 1999, 449, 146-152. | 2.8 | 41 |
| 72 | Intra-Golgi transport: A way to a new paradigm?. Biochimica Et Biophysica Acta - Molecular Cell Research, 2005, 1744, 340-350. | 4.1 | 40 |

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| 73 | Golgi-modifying properties of macfarlandin E and the synthesis and evaluation of its 2,7-dioxabicyclo[3.2.1]octan-3-one core. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6158-6163. | 7.1 | 40 |
| 74 | AAV-mediated transcription factor EB (TFEB) gene delivery ameliorates muscle pathology and function in the murine model of Pompe Disease. Scientific Reports, 2017, 7, 15089. | 3.3 | 40 |
| 75 | A novel murine model for arrhythmogenic cardiomyopathy points to a pathogenic role of Wnt signalling and miRNA dysregulation. Cardiovascular Research, 2019, 115, 739-751. | 3.8 | 40 |
| 76 | Akap1 Deficiency Promotes Mitochondrial Aberrations and Exacerbates Cardiac Injury Following Permanent Coronary Ligation via Enhanced Mitophagy and Apoptosis. PLoS ONE, 2016, 11, e0154076. | 2.5 | 39 |
| 77 | PERK-Mediated Unfolded Protein Response Activation and Oxidative Stress in PARK20 Fibroblasts. Frontiers in Neuroscience, 2019, 13, 673. | 2.8 | 38 |
| 78 | Silver Ions as a Tool for Understanding Different Aspects of Copper Metabolism. Nutrients, 2019, 11, 1364. | 4.1 | 38 |
| 79 | Pharmacological readâ€through of nonsense ARSB mutations as a potential therapeutic approach for mucopolysaccharidosis VI. Journal of Inherited Metabolic Disease, 2013, 36, 363-371. | 3.6 | 36 |
| 80 | Rab6 and myosin II at the cutting edge of membrane fission. Nature Cell Biology, 2010, 12, 635-638. | 10.3 | 35 |
| 81 | Characterization of the most frequent ATP7B mutation causing Wilson disease in hepatocytes from patient induced pluripotent stem cells. Scientific Reports, 2018, 8, 6247. | 3.3 | 35 |
| 82 | Atherosclerosis-prone branch regions in human aorta: microarchitecture and cell composition of intima. Atherosclerosis, 1996, 122, 173-189. | 0.8 | 31 |
| 83 | The cytosolic chaperone Î±-Crystallin B rescues appropriate folding and compartmentalization of misfolded multispan transmembrane proteins. Journal of Cell Science, 2013, 126, 4160-72. | 2.0 | 31 |
| 84 | Myosin7a Deficiency Results in Reduced Retinal Activity Which Is Improved by Gene Therapy. PLoS ONE, 2013, 8, e72027. | 2.5 | 29 |
| 85 | Cytosolic phospholipase A2Îµ drives recycling in the clathrin-independent endocytic route. Journal of Cell Science, 2014, 127, 977-93. | 2.0 | 26 |
| 86 | CREB3L1-mediated functional and structural adaptation of the secretory pathway in hormone-stimulated thyroid cells. Journal of Cell Science, 2017, 130, 4155-4167. | 2.0 | 26 |
| 87 | Synthetic Lethality Screening Identifies FDA-Approved Drugs that Overcome ATP7B-Mediated Tolerance of Tumor Cells to Cisplatin. Cancers, 2020, 12, 608. | 3.7 | 25 |
| 88 | Changes in Muscle Cell Metabolism and Mechanotransduction Are Associated with Myopathic Phenotype in a Mouse Model of Collagen VI Deficiency. PLoS ONE, 2013, 8, e56716. | 2.5 | 23 |
| 89 | Shaping tubular carriers for intracellular membrane transport. FEBS Letters, 2009, 583, 3847-3856. | 2.8 | 22 |
| 90 | Pre-embedding labeling for subcellular detection of molecules with electron microscopy. Tissue and Cell, 2019, 57, 103-110. | 2.2 | 22 |

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| 91 | Visualizing Live Dynamics and Ultrastructure of Intracellular Organelles with Preembedding Correlative Light-Electron Microscopy. Methods in Cell Biology, 2012, 111, 21-35. | 1.1 | 21 |
| 92 | Helical organization of microtubules occurs in a minority of tunneling membrane nanotubes in normal and cancer urothelial cells. Scientific Reports, 2018, 8, 17133. | 3.3 | 21 |
| 93 | A systems biology approach reveals new endoplasmic reticulum-associated targets for the correction of the ATP7B mutant causing Wilson disease. Metallomics, 2016, 8, 920-930. | 2.4 | 19 |
| 94 | Abnormal cell-clearance and accumulation of autophagic vesicles in lymphocytes from patients affected with Ataxia-Teleangiectasia. Clinical Immunology, 2017, 175, 16-25. | 3.2 | 19 |
| 95 | Uroplakin traffic through the Golgi apparatus induces its fragmentation: new insights from novel in vitro models. Scientific Reports, 2017, 7, 12842. | 3.3 | 19 |
| 96 | Mitochondrial Dynamics of Proximal Tubular Epithelial Cells in Nephropathic Cystinosis. International Journal of Molecular Sciences, 2020, 21, 192. | 4.1 | 19 |
| 97 | Correlative Lightâ€“Electron Microscopy as a Tool to Study In Vivo Dynamics and Ultrastructure of Intracellular Structures. Methods in Molecular Biology, 2012, 931, 413-422. | 0.9 | 18 |
| 98 | Golgi-Dependent Copper Homeostasis Sustains Synaptic Development and Mitochondrial Content. Journal of Neuroscience, 2021, 41, 215-233. | 3.6 | 17 |
| 99 | Chapter 5 Combined Video Fluorescence and 3D Electron Microscopy. Methods in Cell Biology, 2008, 88, 83-95. | 1.1 | 16 |
| 100 | From and to the Golgi â€“ defining the Wilson disease protein road map. FEBS Letters, 2019, 593, 2341-2350. | 2.8 | 16 |
| 101 | Correlative Video Light/Electron Microscopy. Current Protocols in Cell Biology, 2001, 11, Unit 4.8. | 2.3 | 13 |
| 102 | Correction of oxidative stress enhances enzyme replacement therapy in Pompe disease. EMBO Molecular Medicine, 2021, 13, e14434. | 6.9 | 13 |
| 103 | Visualizing Intracellular Events In Vivo by Combined Video Fluorescence and 3â€Ð Electron Microscopy. Methods in Enzymology, 2005, 404, 43-57. | 1.0 | 12 |
| 104 | Myopalladin knockout mice develop cardiac dilation and show a maladaptive response to mechanical pressure overload. ELife, 2021, 10, . | 6.0 | 12 |
| 105 | Analysis of Golgi Complex Function Using Correlative Light-Electron Microscopy. Methods in Cell Biology, 2013, 118, 243-258. | 1.1 | 11 |
| 106 | Emerging role of Cdc42-specific guanine nucleotide exchange factors as regulators of membrane trafficking in health and disease. Tissue and Cell, 2017, 49, 157-162. | 2.2 | 11 |
| 107 | ER/Golgi trafficking is facilitated by unbranched actin filaments containing Tpm4.2. Cytoskeleton, 2017, 74, 379-389. | 2.0 | 11 |
| 108 | TFEB Regulates ATP7B Expression to Promote Platinum Chemoresistance in Human Ovarian Cancer Cells. Cells, 2022, 11, 219. | 4.1 | 10 |

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| 109 | Cystinosin-LKG rescues cystine accumulation and decreases apoptosis rate in cystinotic proximal tubular epithelial cells. Pediatric Research, 2017, 81, 113-119. | 2.3 | 9 |
| 110 | Pharmacoproteomics pinpoints HSP70 interaction for correction of the most frequent Wilson disease-causing mutant of ATP7B. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 32453-32463. | 7.1 | 9 |
| 111 | Skin fibroblasts of patients with geleophysic dysplasia due to FBN1 mutations have lysosomal inclusions and losartan improves their microfibril deposition defect. Molecular Genetics & Genomic Medicine, 2019, 7, e844. | 1.2 | 8 |
| 112 | Identification of CDC42 Effectors Operating in FGD1-Dependent Trafficking at the Golgi. Frontiers in Cell and Developmental Biology, 2019, 7, 7. | 3.7 | 8 |
| 113 | Cellular Function of ATP7B (Wilson ATPase). , 2019, , 45-56. | | 2 |
| 114 | Protein transport from the trans-Golgi network to endosomes. , 2008, , 388-401. | | 1 |
| 115 | Down Syndrome Fetal Fibroblasts Display Alterations of Endosomal Trafficking Possibly due to SYNJ1 Overexpression. Frontiers in Genetics, 2022, 13, . | 2.3 | 1 |
| 116 | Toxicological Assessment Via Gene Network Analysis. Methods in Pharmacology and Toxicology, 2015, , 161-180. | 0.2 | 0 |
| 117 | Golgi-to-PM transport. , 2008, , 375-387. | | 0 |