

# Marc Fransen

## List of Publications by Year in descending order

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91  
papers

9,064  
citations

66343

42  
h-index

51608

86  
g-index

93  
all docs

93  
docs citations

93  
times ranked

14022  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Guidelines for the use and interpretation of assays for monitoring autophagy. <i>Autophagy</i> , 2012, 8, 445-544.   | 9.1  | 3,122     |
| 2  | Peroxisomes Are Signaling Platforms for Antiviral Innate Immunity. <i>Cell</i> , 2010, 141, 668-681.   | 28.9 | 717       |
| 3  | Role of peroxisomes in ROS/RNS-metabolism: Implications for human disease. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2012, 1822, 1363-1373.  | 3.8  | 494       |
| 4  | A mouse model for Zellweger syndrome. <i>Nature Genetics</i> , 1997, 17, 49-57.  | 21.4 | 267       |
| 5  | The Peroxisome-Mitochondria Connection: How and Why?. <i>International Journal of Molecular Sciences</i> , 2017, 18, 1126.   | 4.1  | 261       |
| 6  | The Difference in Recognition of Terminal Tripeptides as Peroxisomal Targeting Signal 1 between Yeast and Human Is Due to Different Affinities of Their Receptor Pex5p to the Cognate Signal and to Residues Adjacent to It. <i>Journal of Biological Chemistry</i> , 1998, 273, 33635-33643.  | 3.4  | 192       |
| 7  | Intraperoxisomal redox balance in mammalian cells: oxidative stress and interorganellar cross-talk. <i>Molecular Biology of the Cell</i> , 2011, 22, 1440-1451.  | 2.1  | 175       |
| 8  | Redox interplay between mitochondria and peroxisomes. <i>Frontiers in Cell and Developmental Biology</i> , 2015, 3, 35.  | 3.7  | 174       |
| 9  | Identification and Characterization of the Putative Human Peroxisomal C-terminal Targeting Signal Import Receptor. <i>Journal of Biological Chemistry</i> , 1995, 270, 7731-7736.  | 3.4  | 170       |
| 10 | Peroxisome Dynamics in Cultured Mammalian Cells. <i>Traffic</i> , 2009, 10, 1722-1733.   | 2.7  | 160       |
| 11 | Ubiquitination of Mammalian Pex5p, the Peroxisomal Import Receptor. <i>Journal of Biological Chemistry</i> , 2007, 282, 31267-31272.   | 3.4  | 158       |
| 12 | Peroxisomal metabolism and oxidative stress. <i>Biochimie</i> , 2014, 98, 56-62.   | 2.6  | 147       |
| 13 | Mitochondria are targets for peroxisome-derived oxidative stress in cultured mammalian cells. <i>Free Radical Biology and Medicine</i> , 2013, 65, 882-894.  | 2.9  | 126       |
| 14 | Human Pex19p Binds Peroxisomal Integral Membrane Proteins at Regions Distinct from Their Sorting Sequences. <i>Molecular and Cellular Biology</i> , 2001, 21, 4413-4424.   | 2.3  | 124       |
| 15 | Peroxisomal Hydrogen Peroxide Metabolism and Signaling in Health and Disease. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3673.   | 4.1  | 121       |
| 16 | Import of peroxisomal membrane proteins: The interplay of Pex3p- and Pex19p-mediated interactions. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2006, 1763, 1639-1646.   | 4.1  | 115       |
| 17 | Further Characterization of the Peroxisomal 3-Hydroxyacyl-Coa Dehydrogenases from Rat Liver. Relationship Between the Different Dehydrogenases and Evidence That Fatty Acids and the C27 Bile Acids Di- and Tri-Hydroxycoprostanic Acids are Metabolized by Separate Multifunctional Proteins. <i>FEBS Journal</i> , 1996, 240, 660-666. | 0.2  | 108       |
| 18 | Identification of Ubiquitin-specific Protease 9X (USP9X) as a Deubiquitinase Acting on Ubiquitin-Peroxin 5 (PEX5) Thioester Conjugate. <i>Journal of Biological Chemistry</i> , 2012, 287, 12815-12827.  | 3.4  | 87        |

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|----|--|-----|-----------|
| 19 | Pex11p <sup>2</sup> -mediated growth and division of mammalian peroxisomes follows a maturation pathway. <i>Journal of Cell Science</i> , 2010, 123, 2750-2762.  | 2.0 | 86        |
| 20 | PEX5 Protein Binds Monomeric Catalase Blocking Its Tetramerization and Releases It upon Binding the N-terminal Domain of PEX14. <i>Journal of Biological Chemistry</i> , 2011, 286, 40509-40519.                                 | 3.4 | 81        |
| 21 | Properties of the Ubiquitin-Pex5p Thiol Ester Conjugate. <i>Journal of Biological Chemistry</i> , 2009, 284, 10504-10513.  | 3.4 | 80        |
| 22 | Export-deficient monoubiquitinated PEX5 triggers peroxisome removal in SV40 large T antigen-transformed mouse embryonic fibroblasts. <i>Autophagy</i> , 2015, 11, 1326-1340.   | 9.1 | 79        |
| 23 | The N-terminal Half of the Peroxisomal Cycling Receptor Pex5p is a Natively Unfolded Domain. <i>Journal of Molecular Biology</i> , 2006, 356, 864-875.   | 4.2 | 76        |
| 24 | Aging, Age-Related Diseases and Peroxisomes. <i>Sub-Cellular Biochemistry</i> , 2013, 69, 45-65.   | 2.4 | 71        |
| 25 | Identification of peroxisomal proteins by using M13 phage protein VI phage display: molecular evidence that mammalian peroxisomes contain a 2,4-dienoyl-CoA reductase. <i>Biochemical Journal</i> , 1999, 340, 561-568.          | 3.7 | 68        |
| 26 | <sc>PEX5</sc>, the Shuttling Import Receptor for Peroxisomal Matrix Proteins, Is a Redox-Sensitive Protein. <i>Traffic</i> , 2014, 15, 94-103.   | 2.7 | 67        |
| 27 | Mitochondria in peroxisome-deficient hepatocytes exhibit impaired respiration, depleted DNA, and PGC-1 $\alpha$ independent proliferation. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2015, 1853, 285-298. | 4.1 | 65        |
| 28 | Potential Role for Pex19p in Assembly of PTS-Receptor Docking Complexes. <i>Journal of Biological Chemistry</i> , 2004, 279, 12615-12624.  | 3.4 | 63        |
| 29 | Analysis of Mammalian Peroxin Interactions Using a Non-transcription-based Bacterial Two-hybrid Assay. <i>Molecular and Cellular Proteomics</i> , 2002, 1, 243-252.  | 3.8 | 61        |
| 30 | Peroxisome degradation in mammals: mechanisms of action, recent advances, and perspectives. <i>Frontiers in Physiology</i> , 2013, 4, 145.   | 2.8 | 59        |
| 31 | The peroxisomal import receptor PEX5 functions as a stress sensor, retaining catalase in the cytosol in times of oxidative stress. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2017, 1864, 1833-1843.       | 4.1 | 58        |
| 32 | Analysis of Human Pex19p's Domain Structure by Pentapeptide Scanning Mutagenesis. <i>Journal of Molecular Biology</i> , 2005, 346, 1275-1286.  | 4.2 | 56        |
| 33 | Targeting signals in peroxisomal membrane proteins. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2006, 1763, 1629-1638.  | 4.1 | 53        |
| 34 | The Import Competence of a Peroxisomal Membrane Protein Is Determined by Pex19p before the Docking Step. <i>Journal of Biological Chemistry</i> , 2006, 281, 34492-34502.  | 3.4 | 53        |
| 35 | Antioxidant cytoprotection by peroxisomal peroxiredoxin-5. <i>Free Radical Biology and Medicine</i> , 2015, 84, 215-226.   | 2.9 | 53        |
| 36 | How Peroxisomes Arise. <i>Traffic</i> , 2000, 1, 465-473.  | 2.7 | 51        |

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|----|---|-----|-----------|
| 37 | Redox Signaling from and to Peroxisomes: Progress, Challenges, and Prospects. <i>Antioxidants and Redox Signaling</i> , 2019, 30, 95-112.   | 5.4 | 51        |
| 38 | The N Terminus of the Peroxisomal Cycling Receptor, Pex5p, Is Required for Redirecting the Peroxisome-associated Peroxin Back to the Cytosol. <i>Journal of Biological Chemistry</i> , 2004, 279, 46573-46579.      | 3.4 | 49        |
| 39 | Trypanosoma bruceiglycosomal ABC transporters: identification and membrane targeting. <i>Molecular Membrane Biology</i> , 2006, 23, 157-172.  | 2.0 | 48        |
| 40 | Large-scale purification and further characterization of rat pristanoyl-CoA oxidase. <i>FEBS Journal</i> , 1994, 222, 795-801.  | 0.2 | 46        |
| 41 | Mapping the Cargo Protein Membrane Translocation Step into the PEX5 Cycling Pathway. <i>Journal of Biological Chemistry</i> , 2009, 284, 27243-27251.   | 3.4 | 44        |
| 42 | Pex5p, the Peroxisomal Cycling Receptor, Is a Monomeric Non-globular Protein. <i>Journal of Biological Chemistry</i> , 2005, 280, 24404-24411.  | 3.4 | 43        |
| 43 | Presence of small GTP-binding proteins in the peroxisomal membrane. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1992, 1109, 48-54.  | 2.6 | 40        |
| 44 | Localization of a portion of the liver isoform of fatty-acid-binding protein (L-FABP) to peroxisomes. <i>Biochemical Journal</i> , 2006, 394, 475-484.  | 3.7 | 38        |
| 45 | Functional studies on human Pex7p: subcellular localization and interaction with proteins containing a peroxisome-targeting signal type 2 and other peroxins. <i>Biochemical Journal</i> , 2002, 365, 41-50.        | 3.7 | 36        |
| 46 | Membrane topologies of PEX13 and PEX14 provide new insights on the mechanism of protein import into peroxisomes. <i>FEBS Journal</i> , 2019, 286, 205-222.  | 4.7 | 36        |
| 47 | A PEX7-Centered Perspective on the Peroxisomal Targeting Signal Type 2-Mediated Protein Import Pathway. <i>Molecular and Cellular Biology</i> , 2014, 34, 2917-2928.  | 2.3 | 34        |
| 48 | A cost-effective approach to microporate mammalian cells with the Neon Transfection System. <i>Analytical Biochemistry</i> , 2014, 466, 49-50.  | 2.4 | 34        |
| 49 | Identification of peroxisomal proteins by using M13 phage protein VI phage display: molecular evidence that mammalian peroxisomes contain a 2,4-dienoyl-CoA reductase. <i>Biochemical Journal</i> , 1999, 340, 561. | 3.7 | 32        |
| 50 | Identification of PEX5p-related novel peroxisome-targeting signal 1 (PTS1)-binding proteins in mammals. <i>Biochemical Journal</i> , 2001, 357, 635-646.  | 3.7 | 32        |
| 51 | Functional characterization of two missense mutations in Pex5p C11S and N526K. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2007, 1773, 1141-1148.  | 4.1 | 32        |
| 52 | The peroxisomal protein import machinery displays a preference for monomeric substrates. <i>Open Biology</i> , 2015, 5, 140236.   | 3.6 | 30        |
| 53 | Peroxisomes as Modulators of Cellular Protein Thiol Oxidation: A New Model System. <i>Antioxidants and Redox Signaling</i> , 2019, 30, 22-39.   | 5.4 | 30        |
| 54 | Rat Pristanoyl-CoA Oxidase. cDNA Cloning and Recognition of its C-Terminal (SQL) by the Peroxisomal-Targeting Signal 1 Receptor. <i>FEBS Journal</i> , 1996, 239, 302-309.  | 0.2 | 28        |

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|----|---|-----|-----------|
| 55 | Peroxisome biogenesis in mammalian cells: The impact of genes and environment. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2016, 1863, 1049-1060.  | 4.1 | 28        |
| 56 | Identification of PEX5p-related novel peroxisome-targeting signal 1 (PTS1)-binding proteins in mammals. <i>Biochemical Journal</i> , 2001, 357, 635.  | 3.7 | 27        |
| 57 | Farnesylation of Pex19p is not essential for peroxisome biogenesis in yeast and mammalian cells. <i>Cellular and Molecular Life Sciences</i> , 2006, 63, 1686-1699.   | 5.4 | 27        |
| 58 | Functional peroxisomes are required for $\beta$ -cell integrity in mice. <i>Molecular Metabolism</i> , 2019, 22, 71-83.   | 6.5 | 27        |
| 59 | Peroxisome Dynamics: Molecular Players, Mechanisms, and (Dys)functions. , 2012, 2012, 1-24.   |     | 26        |
| 60 | Mitochondrial fission factor (MFF) is a critical regulator of peroxisome maturation. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2020, 1867, 118709.   | 4.1 | 26        |
| 61 | Comparison of the PTS1- and Rab8b-binding properties of Pex5p and Pex5Rp/TRIP8b. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2008, 1783, 864-873.  | 4.1 | 25        |
| 62 | Deciphering the potential involvement of PXMP2 and PEX11B in hydrogen peroxide permeation across the peroxisomal membrane reveals a role for PEX11B in protein sorting. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2019, 1861, 182991.   | 2.6 | 25        |
| 63 | Identification of a novel PEX14 mutation in Zellweger syndrome. <i>Journal of Medical Genetics</i> , 2008, 45, 376-383.   | 3.2 | 22        |
| 64 | The cytosolic domain of PEX3, a protein involved in the biogenesis of peroxisomes, binds membrane lipids. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2009, 1793, 1669-1675.   | 4.1 | 22        |
| 65 | Differential distribution of peroxisomal proteins points to specific roles of peroxisomes in the murine retina. <i>Molecular and Cellular Biochemistry</i> , 2019, 456, 53-62.  | 3.1 | 20        |
| 66 | The Visualization of Peroxisomal Proteins Containing a C-Terminal Targeting Sequence on Western Blot by Using the Biotinylated PTS1-Receptor. <i>Analytical Biochemistry</i> , 1996, 242, 26-30.  | 2.4 | 19        |
| 67 | Characterisation of human peroxisomal 2,4-dienoyl-CoA reductase1The sequence was deposited in the EMBL database (AJ293009).12During the preparation of this manuscript, the sequence of clone LA61-359F1 was finalised (AL023881 version 24) and an ORF was deduced which was identical to the cloned pDCR cDNA.2. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2001, 1533, 66-72. | 2.4 | 18        |
| 68 | Potential limitations in the use of KillerRed for fluorescence microscopy. <i>Journal of Microscopy</i> , 2012, 245, 229-235.   | 1.8 | 18        |
| 69 | Slc25a17 Gene Trapped Mice: PMP34 Plays a Role in the Peroxisomal Degradation of Phytanic and Pristanic Acid. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 144.  | 3.7 | 17        |
| 70 | Small G proteins in peroxisome biogenesis: the potential involvement of ADP-ribosylation factor 6. <i>BMC Cell Biology</i> , 2009, 10, 58.  | 3.0 | 16        |
| 71 | Quantitative Monitoring of Subcellular Redox Dynamics in Living Mammalian Cells Using RoGFP2-Based Probes. <i>Methods in Molecular Biology</i> , 2017, 1595, 151-164.   | 0.9 | 15        |
| 72 | Peroxisomes in zebrafish: distribution pattern and knockdown studies. <i>Histochemistry and Cell Biology</i> , 2010, 134, 39-51.  | 1.7 | 14        |

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|----|---|------|-----------|
| 73 | Peroxisomes and Cellular Oxidant/Antioxidant Balance: Protein Redox Modifications and Impact on Inter-organelle Communication. <i>Sub-Cellular Biochemistry</i> , 2018, 89, 435-461.                        | 2.4  | 14        |
| 74 | Therapeutic concentrations of calcineurin inhibitors do not deregulate glutathione redox balance in human renal proximal tubule cells. <i>PLoS ONE</i> , 2021, 16, e0250996.                                | 2.5  | 8         |
| 75 | HaloTag as a Tool to Investigate Peroxisome Dynamics in Cultured Mammalian Cells. <i>Methods in Molecular Biology</i> , 2014, 1174, 157-170.  | 0.9  | 8         |
| 76 | Dissecting Peroxisome-Mediated Signaling Pathways: A New and Exciting Research Field. , 2014, , 255-273.  |      | 8         |
| 77 | Peroxisomal Dysfunction and Oxidative Stress in Neurodegenerative Disease: A Bidirectional Crosstalk. <i>Advances in Experimental Medicine and Biology</i> , 2020, 1299, 19-30.                             | 1.6  | 7         |
| 78 | The Peroxisome-Autophagy Redox Connection: A Double-Edged Sword?. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 814047.   | 3.7  | 7         |
| 79 | Peroxisome-Derived Hydrogen Peroxide Modulates the Sulfenylation Profiles of Key Redox Signaling Proteins in Flp-In T-REx 293 Cells. <i>Frontiers in Cell and Developmental Biology</i> , 2022, 10, 888873. | 3.7  | 6         |
| 80 | Metabolism of germinating teliospores of <i>Ustilago nuda</i> . <i>Archives of Microbiology</i> , 1989, 153, 33-37.   | 2.2  | 5         |
| 81 | Cyclophilin D: a therapeutic target to counteract reactive oxygen species-mediated damage in neurodegenerative disease?. <i>Brain</i> , 2012, 135, 3525-3526.   | 7.6  | 5         |
| 82 | The Gene for the Peroxisomal Targeting Signal Import Receptor (PXR1) Is Located on Human Chromosome 12p13, Flanked by TPI1 and D12S1089. <i>Genomics</i> , 1995, 30, 366-368.                               | 2.9  | 4         |
| 83 | Mammalian Peroxisomal Acyl-CoA Oxidases.. <i>Annals of the New York Academy of Sciences</i> , 1996, 804, 676-677.   | 3.8  | 4         |
| 84 | Synchronized, Spontaneous, and Oscillatory Detachment of Eukaryotic Cells: A New Tool for Cell Characterization and Identification. <i>Advanced Science</i> , 2022, 9, .                                    | 11.2 | 4         |
| 85 | Mammalian Peroxisomal Acyl-CoA Oxidases.. <i>Annals of the New York Academy of Sciences</i> , 1996, 804, 678-679.   | 3.8  | 3         |
| 86 | Identification of a novel PEX14 mutation in Zellweger syndrome. <i>BMJ Case Reports</i> , 2009, 2009, bcr0720080503-bcr0720080503.  | 0.5  | 3         |
| 87 | Further Characterization of the Human Peroxisomal C-Terminal Targeting Signal Protein Import Receptor. <i>Annals of the New York Academy of Sciences</i> , 1996, 804, 672-673.                              | 3.8  | 2         |
| 88 | Mammalian Peroxisomal Acyl-CoA Oxidases.. <i>Annals of the New York Academy of Sciences</i> , 1996, 804, 674-675.   | 3.8  | 1         |
| 89 | KillerRed as a Tool to Study the Cellular Responses to Peroxisome-Derived Oxidative Stress. <i>Methods in Molecular Biology</i> , 2017, 1595, 165-179.  | 0.9  | 1         |
| 90 | The Visualization of Peroxisomal Proteins Containing a C-Terminal Targeting Sequence on Western Blot by Using the Biotinylated PTS1-Receptor. <i>Analytical Biochemistry</i> , 1997, 246, 270.              | 2.4  | 0         |

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|----|--|-----|-----------|
| 91 | Class I peroxisomal membrane protein import. Reactome - A Curated Knowledgebase of Biological Pathways, 0, 68, . | 0.0 | 0         |