# Vladimir I Titorenko

List of Publications by Year
in descending order



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|---|---|---|---|
| 105 papers | 8,627 citations | 109321 35 h-index | 45317 90 g-index |
| 106 all docs | 106 docs citations | 106 times ranked | 16894 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222. | 9.1 | 4,701 |
| 2 | The life cycle of the peroxisome. Nature Reviews Molecular Cell Biology, 2001, 2, 357-368. | 37.0 | 173 |
| 3 | Mutants of the Yeast <i>Yarrowia lipolytica</i>Defective in Protein Exit from the Endoplasmic Reticulum Are Also Defective in Peroxisome Biogenesis. Molecular and Cellular Biology, 1998, 18, 2789-2803. | 2.3 | 159 |
| 4 | Guidelines and recommendations on yeast cell death nomenclature. Microbial Cell, 2018, 5, 4-31. | 3.2 | 158 |
| 5 | Peroxisome Metabolism and Cellular Aging. Traffic, 2011, 12, 252-259. | 2.7 | 145 |
| 6 | Fusion of Small Peroxisomal Vesicles in Vitro Reconstructs an Early Step in the in Vivo Multistep Peroxisome Assembly Pathway of Yarrowia lipolytica. Journal of Cell Biology, 2000, 148, 29-44. | 5.2 | 140 |
| 7 | The Hansenula polymorpha PER3 Gene Is Essential for the Import of PTS1 Proteins into the Peroxisomal Matrix. Journal of Biological Chemistry, 1995, 270, 17229-17236. | 3.4 | 125 |
| 8 | Acyl-CoA oxidase is imported as a heteropentameric, cofactor-containing complex into peroxisomes of Yarrowia lipolytica. Journal of Cell Biology, 2002, 156, 481-494. | 5.2 | 124 |
| 9 | A New Definition for the Consensus Sequence of the Peroxisome Targeting Signal Type 2. Journal of Molecular Biology, 2004, 341, 119-134. | 4.2 | 123 |
| 10 | Pex20p of the Yeast Yarrowia lipolytica Is Required for the Oligomerization of Thiolase in the Cytosol and for Its Targeting to the Peroxisome. Journal of Cell Biology, 1998, 142, 403-420. | 5.2 | 122 |
| 11 | Effect of calorie restriction on the metabolic history of chronologically aging yeast. Experimental Gerontology, 2009, 44, 555-571. | 2.8 | 116 |
| 12 | Peroxisomal Membrane Fusion Requires Two Aaa Family Atpases, Pex1p and Pex6p. Journal of Cell Biology, 2000, 150, 881-886. | 5.2 | 104 |
| 13 | The endoplasmic reticulum plays an essential role in peroxisome biogenesis. Trends in Biochemical Sciences, 1998, 23, 231-233. | 7.5 | 100 |
| 14 | Chemical genetic screen identifies lithocholic acid as an anti-aging compound that extends yeast chronological life span in a TOR-independent manner, by modulating housekeeping longevity assurance processes. Aging, 2010, 2, 393-414. | 3.1 | 99 |
| 15 | Peroxisome biogenesis: the peroxisomal endomembrane system and the role of the ER. Journal of Cell Biology, 2006, 174, 11-17. | 5.2 | 85 |
| 16 | Lithocholic bile acid selectively kills neuroblastoma cells, while sparing normal neuronal cells. Oncotarget, 2011, 2, 761-782. | 1.8 | 85 |
| 17 | The peroxisome. Journal of Cell Biology, 2004, 164, 641-645. | 5.2 | 83 |
| 18 | Longevity Extension by Phytochemicals. Molecules, 2015, 20, 6544-6572. | 3.8 | 76 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Bile acids induce apoptosis selectively in androgen-dependent and -independent prostate cancer cells. PeerJ, 2013, 1, e122. | 2.0 | 71 |
| 20 | Quiescence Entry, Maintenance, and Exit in Adult Stem Cells. International Journal of Molecular Sciences, 2019, 20, 2158. | 4.1 | 68 |
| 21 | Caloric Restriction Extends Yeast Chronological Lifespan by Altering a Pattern of Age-Related Changes in Trehalose Concentration. Frontiers in Physiology, 2012, 3, 256. | 2.8 | 67 |
| 22 | Peroxisome division in the yeast Yarrowia lipolytica is regulated by a signal from inside the peroxisome. Journal of Cell Biology, 2003, 162, 1255-1266. | 5.2 | 61 |
| 23 | Purification of Mitochondria from Yeast Cells. Journal of Visualized Experiments, 2009, , . | 0.3 | 61 |
| 24 | A signal from inside the peroxisome initiates its division by promoting the remodeling of the peroxisomal membrane. Journal of Cell Biology, 2007, 177, 289-303. | 5.2 | 60 |
| 25 | A novel function of lipid droplets in regulating longevity. Biochemical Society Transactions, 2009, 37, 1050-1055. | 3.4 | 59 |
| 26 | Macromitophagy is a longevity assurance process that in chronologically aging yeast limited in calorie supply sustains functional mitochondria and maintains cellular lipid homeostasis. Aging, 2013, 5, 234-269. | 3.1 | 57 |
| 27 | Lithocholic acid induces endoplasmic reticulum stress, autophagy and mitochondrial dysfunction in human prostate cancer cells. PeerJ, 2016, 4, e2445. | 2.0 | 52 |
| 28 | Integration of peroxisomes into an endomembrane system that governs cellular aging. Frontiers in Physiology, 2012, 3, 283. | 2.8 | 51 |
| 29 | RNA interference of peroxisome-related genes in<i>C. elegans</i>: a new model for human peroxisomal disorders. Physiological Genomics, 2002, 10, 79-91. | 2.3 | 49 |
| 30 | The Yarrowia lipolytica Gene PAY5 Encodes a Peroxisomal Integral Membrane Protein Homologous to the Mammalian Peroxisome Assembly Factor PAF-1. Journal of Biological Chemistry, 1996, 271, 20300-20306. | 3.4 | 44 |
| 31 | Caloric restriction extends yeast chronological lifespan via a mechanism linking cellular aging to cell cycle regulation, maintenance of a quiescent state, entry into a non-quiescent state and survival in the non-quiescent state. Oncotarget, 2017, 8, 69328-69350. | 1.8 | 43 |
| 32 | Mutants of theYarrowia lipolytica PEX23Gene Encoding an Integral Peroxisomal Membrane Peroxin Mislocalize Matrix Proteins and Accumulate Vesicles Containing Peroxisomal Matrix and Membrane Proteins. Molecular Biology of the Cell, 2000, 11, 141-152. | 2.1 | 42 |
| 33 | Remodeling of lipid bodies by docosahexaenoic acid in activated microglial cells. Journal of Neuroinflammation, 2016, 13, 116. | 7.2 | 42 |
| 34 | Lithocholic acid extends longevity of chronologically aging yeast only if added at certain critical periods of their lifespan. Cell Cycle, 2012, 11, 3443-3462. | 2.6 | 41 |
| 35 | Macromitophagy, neutral lipids synthesis, and peroxisomal fatty acid oxidation protect yeast from â€œliponecrosisâ€, a previously unknown form of programmed cell death. Cell Cycle, 2014, 13, 138-147. | 2.6 | 39 |
| 36 | Communications between Mitochondria, the Nucleus, Vacuoles, Peroxisomes, the Endoplasmic Reticulum, the Plasma Membrane, Lipid Droplets, and the Cytosol during Yeast Chronological Aging. Frontiers in Genetics, 2016, 7, 177. | 2.3 | 38 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Isolation and characterization of peroxisomal protein import (Pimâˆ') mutants ofHansenula polymorpha. Yeast, 1992, 8, 961-972. | 1.7 | 35 |
| 38 | Dynamic ergosterol- and ceramide-rich domains in the peroxisomal membrane serve as an organizing platform for peroxisome fusion. Journal of Cell Biology, 2005, 168, 761-773. | 5.2 | 35 |
| 39 | Mitochondrial membrane lipidome defines yeast longevity. Aging, 2013, 5, 551-574. | 3.1 | 35 |
| 40 | Mutations in the PAY5 Gene of the Yeast Yarrowia lipolytica Cause the Accumulation of Multiple Subpopulations of Peroxisomes. Journal of Biological Chemistry, 1996, 271, 20307-20314. | 3.4 | 34 |
| 41 | Peroxisome Biogenesis in the Yeast Yarrowia lipolytica. Cell Biochemistry and Biophysics, 2000, 32, 21-26. | 1.8 | 34 |
| 42 | A network of interorganellar communications underlies cellular aging. IUBMB Life, 2013, 65, 665-674. | 3.4 | 34 |
| 43 | Quasi-programmed aging of budding yeast: a trade-off between programmed processes of cell proliferation, differentiation, stress response, survival and death defines yeast lifespan. Cell Cycle, 2014, 13, 3336-3349. | 2.6 | 34 |
| 44 | Cell-autonomous mechanisms of chronological aging in the yeast Saccharomyces cerevisiae. Microbial Cell, 2014, 1, 163-178. | 3.2 | 33 |
| 45 | Mechanisms Underlying the Anti-Aging and Anti-Tumor Effects of Lithocholic Bile Acid. International Journal of Molecular Sciences, 2014, 15, 16522-16543. | 4.1 | 32 |
| 46 | Mechanism of liponecrosis, a distinct mode of programmed cell death. Cell Cycle, 2014, 13, 3707-3726. | 2.6 | 31 |
| 47 | Diindolylmethane and its halogenated derivatives induce protective autophagy in human prostate cancer cells via induction of the oncogenic protein AEG-1 and activation of AMP-activated protein kinase (AMPK). Cellular Signalling, 2017, 40, 172-182. | 3.6 | 30 |
| 48 | Lithocholic bile acid accumulated in yeast mitochondria orchestrates a development of an anti-aging cellular pattern by causing age-related changes in cellular proteome. Cell Cycle, 2015, 14, 1643-1656. | 2.6 | 28 |
| 49 | A mitochondrially targeted compound delays aging in yeast through a mechanism linking mitochondrial membrane lipid metabolism to mitochondrial redox biology. Redox Biology, 2014, 2, 305-307. | 9.0 | 27 |
| 50 | Mechanisms by Which Different Functional States of Mitochondria Define Yeast Longevity. International Journal of Molecular Sciences, 2015, 16, 5528-5554. | 4.1 | 27 |
| 51 | Characterization of peroxisome-deficient mutants of Hansenula polymorpha. Current Genetics, 1995, 28, 248-257. | 1.7 | 25 |
| 52 | Chapter 5 Spatiotemporal Dynamics of the ERâ€derived Peroxisomal Endomembrane System. International Review of Cell and Molecular Biology, 2008, 272, 191-244. | 3.2 | 25 |
| 53 | The Intricate Interplay between Mechanisms Underlying Aging and Cancer. , 2015, 6, 56-75. | | 24 |
| 54 | In search of housekeeping pathways that regulate longevity. Cell Cycle, 2011, 10, 3042-3044. | 2.6 | 22 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 55 | Discovery of plant extracts that greatly delay yeast chronological aging and have different effects on longevity-defining cellular processes. Oncotarget, 2016, 7, 16542-16566. | 1.8 | 20 |
| 56 | Very-long-chain fatty acid metabolic capacity of 17-beta-hydroxysteroid dehydrogenase type 12 (HSD17B12) promotes replication of hepatitis C virus and related flaviviruses. Scientific Reports, 2020, 10, 4040. | 3.3 | 20 |
| 57 | Cells with Impaired Mitochondrial H<sub>2</sub>O<sub>2</sub>Sensing Generate Less<sup>â€¢</sup>OH Radicals and Live Longer. Antioxidants and Redox Signaling, 2014, 21, 1490-1503. | 5.4 | 19 |
| 58 | Caloric restriction delays yeast chronological aging by remodeling carbohydrate and lipid metabolism, altering peroxisomal and mitochondrial functionalities, and postponing the onsets of apoptotic and liponecrotic modes of regulated cell death. Oncotarget, 2018, 9, 16163-16184. | 1.8 | 18 |
| 59 | Xenohormetic, hormetic and cytostatic selective forces driving longevity at the ecosystemic level. Aging, 2010, 2, 461-470. | 3.1 | 18 |
| 60 | Some Metabolites Act as Second Messengers in Yeast Chronological Aging. International Journal of Molecular Sciences, 2018, 19, 860. | 4.1 | 17 |
| 61 | Essential Roles of Peroxisomally Produced and Metabolized Biomolecules in Regulating Yeast Longevity. Sub-Cellular Biochemistry, 2013, 69, 153-167. | 2.4 | 17 |
| 62 | A novel approach to the discovery of anti-tumor pharmaceuticals: searching for activators of liponecrosis. Oncotarget, 2016, 7, 5204-5225. | 1.8 | 17 |
| 63 | A novel method for genetic transformation of yeast cells using oligoelectrolyte polymeric nanoscale carriers. BioTechniques, 2013, 54, 35-43. | 1.8 | 15 |
| 64 | Cell-Nonautonomous Mechanisms Underlying Cellular and Organismal Aging. International Review of Cell and Molecular Biology, 2016, 321, 259-297. | 3.2 | 15 |
| 65 | Mitochondria operate as signaling platforms in yeast aging. Aging, 2016, 8, 212-213. | 3.1 | 15 |
| 66 | Specific changes in mitochondrial lipidome alter mitochondrial proteome and increase the geroprotective efficiency of lithocholic acid in chronologically aging yeast. Oncotarget, 2017, 8, 30672-30691. | 1.8 | 15 |
| 67 | Six plant extracts delay yeast chronological aging through different signaling pathways. Oncotarget, 2016, 7, 50845-50863. | 1.8 | 14 |
| 68 | Mechanisms Underlying the Essential Role of Mitochondrial Membrane Lipids in Yeast Chronological Aging. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-15. | 4.0 | 14 |
| 69 | Molecular and Cellular Mechanisms of Aging and Age-related Disorders. International Journal of Molecular Sciences, 2018, 19, 2049. | 4.1 | 14 |
| 70 | Mechanisms that Link Chronological Aging to Cellular Quiescence in Budding Yeast. International Journal of Molecular Sciences, 2020, 21, 4717. | 4.1 | 14 |
| 71 | Lipid metabolism and transport define longevity of the yeast Saccharomyces cerevisiae. Frontiers in Bioscience - Landmark, 2018, 23, 1166-1194. | 3.0 | 13 |
| 72 | Overproduction of translation elongation factor 1-ÃŽÂ± (eEF1A) suppresses the peroxisome biogenesis defect in aHansenula polymorpha pex3mutant via translational read-through. FEMS Yeast Research, 2007, 7, 1114-1125. | 2.3 | 12 |

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|---|---|---|---|
| 73 | Mechanisms through which lithocholic acid delays yeast chronological aging under caloric restriction conditions. Oncotarget, 2018, 9, 34945-34971. | 1.8 | 11 |
| 74 | Peroxisome biogenesis inHansenula polymorpha: different mutations in genes, essential for peroxisome biogenesis, cause different peroxisomal mutant phenotypes. FEMS Microbiology Letters, 1992, 95, 143-148. | 1.8 | 10 |
| 75 | Affinity purification of molecular chaperones of the yeast Hansenula polymorpha using immobilized denatured alcohol oxidase. FEBS Letters, 1993, 321, 32-36. | 2.8 | 10 |
| 76 | Interspecies Chemical Signals Released into the Environment may Create Xenohormetic, Hormetic and Cytostatic Selective Forces that Drive the Ecosystemic Evolution of Longevity Regulation Mechanisms. Dose-Response, 2012, 10, dose-response.1. | 1.6 | 10 |
| 77 | Empirical Validation of a Hypothesis of the Hormetic Selective Forces Driving the Evolution of Longevity Regulation Mechanisms. Frontiers in Genetics, 2016, 7, 216. | 2.3 | 10 |
| 78 | Origin and spatiotemporal dynamics of the peroxisomal endomembrane system. Frontiers in Physiology, 2014, 5, 493. | 2.8 | 9 |
| 79 | Yeast Cells Exposed to Exogenous Palmitoleic Acid Either Adapt to Stress and Survive or Commit to Regulated Liponecrosis and Die. Oxidative Medicine and Cellular Longevity, 2018, 2018, 1-11. | 4.0 | 9 |
| 80 | Empirical verification of evolutionary theories of aging. Aging, 2016, 8, 2568-2589. | 3.1 | 9 |
| 81 | Metabolomic and Lipidomic Analyses of Chronologically Aging Yeast. Methods in Molecular Biology, 2014, 1205, 359-373. | 0.9 | 8 |
| 82 | Inhibition of stress mediated cell death by human lactate dehydrogenase B in yeast. FEMS Yeast Research, 2015, 15, fov032. | 2.3 | 8 |
| 83 | Pairwise combinations of chemical compounds that delay yeast chronological aging through different signaling pathways display synergistic effects on the extent of aging delay. Oncotarget, 2019, 10, 313-338. | 1.8 | 8 |
| 84 | Mechanisms Through Which Some Mitochondria-Generated Metabolites Act as Second Messengers That Are Essential Contributors to the Aging Process in Eukaryotes Across Phyla. Frontiers in Physiology, 2019, 10, 461. | 2.8 | 8 |
| 85 | Yeast chronological aging is linked to cell cycle regulation. Cell Cycle, 2018, 17, 1035-1036. | 2.6 | 6 |
| 86 | Discovery of fifteen new geroprotective plant extracts and identification of cellular processes they affect to prolong the chronological lifespan of budding yeast. Oncotarget, 2020, 11, 2182-2203. | 1.8 | 5 |
| 87 | Caloric restriction creates a metabolic pattern of chronological aging delay that in budding yeast differs from the metabolic design established by two other geroprotectors. Oncotarget, 2021, 12, 608-625. | 1.8 | 3 |
| 88 | Quantitative Analysis of the Cellular Lipidome of <em>Saccharomyces Cerevisiae</em> Using Liquid Chromatography Coupled with Tandem Mass Spectrometry. Journal of Visualized Experiments, 2020, , . | 0.3 | 2 |
| 89 | Mechanisms by which PE21, an extract from the white willow Salix alba, delays chronological aging in budding yeast. Oncotarget, 2019, 10, 5780-5816. | 1.8 | 2 |
| 90 | Caloric restriction causes a distinct reorganization of the lipidome in quiescent and non-quiescent cells of budding yeast. Oncotarget, 2021, 12, 2351-2374. | 1.8 | 2 |

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|---|---|---|---|
| 91 | Aging and Age-related Disorders: From Molecular Mechanisms to Therapies. International Journal of Molecular Sciences, 2019, 20, 3280. | 4.1 | 1 |
| 92 | Quantitative Metabolomics of <em>Saccharomyces Cerevisiae</em> Using Liquid Chromatography Coupled with Tandem Mass Spectrometry. Journal of Visualized Experiments, 2021, , . | 0.3 | 1 |
| 93 | The spatiotemporal dynamics of longevity-defining cellular processes and its modulation by genetic, dietary, and pharmacological anti-aging interventions. Frontiers in Physiology, 2012, 3, 419. | 2.8 | 0 |
| 94 | The spatiotemporal dynamics of a modular metabolic network that regulates longevity in yeast. FASEB Journal, 2009, 23, 855.1. | 0.5 | 0 |
| 95 | A mechanism linking lipid metabolism and longevity. FASEB Journal, 2009, 23, 692.1. | 0.5 | 0 |
| 96 | Novel antiâ€aging small molecules greatly extend yeast life span by specifically targeting a mechanism underlying the essential role of cellular lipid movement and compartmentalized metabolism in regulating longevity. FASEB Journal, 2010, 24, 474.4. | 0.5 | 0 |
| 97 | Using a combination of chemical and systems biological approaches for defining a mechanism by which a novel antiâ€aging compound greatly extends yeast longevity. FASEB Journal, 2010, 24, 907.15. | 0.5 | 0 |
| 98 | By increasing the level of cardiolipin in the inner mitochondrial membrane, a novel antiâ€aging small molecule modulates many longevityâ€•and diseaseâ€related processes in mitochondria. FASEB Journal, 2010, 24, 474.5. | 0.5 | 0 |
| 99 | A novel antiâ€aging drug extends longevity by remodeling neutral lipid metabolism. FASEB Journal, 2011, 25, 933.4. | 0.5 | 0 |
| 100 | A novel approach to highâ€throughput discovery of antiâ€aging drugs identifies lithocholic acid as a longevityâ€extending compound. FASEB Journal, 2011, 25, 962.5. | 0.5 | 0 |
| 101 | Development of a small antiâ€cancer molecule targeting both the intrinsic and extrinsic pathways of apoptosis. FASEB Journal, 2012, 26, 797.1. | 0.5 | 0 |
| 102 | A novel antiâ€aging compound extends longevity by remodeling neutral lipid metabolism. FASEB Journal, 2012, 26, 965.1. | 0.5 | 0 |
| 103 | Lithocholic acid delays yeast aging by altering mitochondrial dynamics. FASEB Journal, 2012, 26, 585.2. | 0.5 | 0 |
| 104 | Using Yeast to Develop Antiâ€Tumor Therapeutic Agents That Cause Liponecrotic Death of Cancer Cells by Remodeling Lipid Metabolism. FASEB Journal, 2015, 29, 885.2. | 0.5 | 0 |
| 105 | A laboratory test of evolutionary aging theories. Aging, 2017, 9, 600-601. | 3.1 | 0 |