Vladimir Jiranek

List of Publications by Year
in descending order

104 papers	3,446 citations	109137 35 h-index	161609 54 g-index
107 all docs	107 docs citations	107 times ranked	2590 citing authors

#	ARTICLE	IF	CITATIONS
1	Microbial modulation of aromatic esters in wine: Current knowledge and future prospects. Food Chemistry, 2010, 121, 1-16.	4.2	398
2	Regulation of hydrogen sulfide liberation in wine-producing Saccharomyces cerevisiae strains by assimilable nitrogen. Applied and Environmental Microbiology, 1995, 61, 461-467.	1.4	171
3	Lactic Acid Bacteria as a Potential Source of Enzymes for Use in Vinification. Applied and Environmental Microbiology, 2004, 70, 5715-5731.	1.4	149
4	A survey of glycosidase activities of commercial wine strains of Oenococcus oeni. International Journal of Food Microbiology, 2005, 105, 233-244.	2.1	106
5	Screening of Lactobacillus spp. and Pediococcus spp. for glycosidase activities that are important in oenology. Journal of Applied Microbiology, 2005, 99, 1061-1069.	1.4	95
6	Oenological traits of Lachancea thermotolerans show signs of domestication and allopatric differentiation. Scientific Reports, 2018, 8, 14812.	1.6	78
7	Genome-wide identification of the Fermentome; genes required for successful and timely completion of wine-like fermentation by Saccharomyces cerevisiae. BMC Genomics, 2014, 15, 552.	1.2	74
8	Biochemical characterisation of the esterase activities of wine lactic acid bacteria. Applied Microbiology and Biotechnology, 2007, 77, 329-337.	1.7	73
9	Implications of new research and technologies for malolactic fermentation in wine. Applied Microbiology and Biotechnology, 2014, 98, 8111-8132.	1.7	72
10	Lactic Acid Bacteria in Wine: Technological Advances and Evaluation of Their Functional Role. Frontiers in Microbiology, 2020, 11, 612118.	1.5	67
11	High power ultrasonics as a novel tool offering new opportunities for managing wine microbiology. Biotechnology Letters, 2007, 30, 1-6.	1.1	66
12	Application of the reuseable, selectable marker to industrial yeast: construction and evaluation of heterothallic wine strains of , possessing minimal foreign DNA sequences. FEMS Yeast Research, 2003, 4, 339-347.	1.1	65
13	Ethanol Production and Maximum Cell Growth Are Highly Correlated with Membrane Lipid Composition during Fermentation as Determined by Lipidomic Analysis of 22 Saccharomyces cerevisiae Strains. Applied and Environmental Microbiology, 2013, 79, 91-104.	1.4	60
14	Improving Oenococcus oeni to overcome challenges of wine malolactic fermentation. Trends in Biotechnology, 2015, 33, 547-553.	4.9	59
15	Measures to improve wine malolactic fermentation. Applied Microbiology and Biotechnology, 2019, 103, 2033-2051.	1.7	59
16	The evolution of Lachancea thermotolerans is driven by geographical determination, anthropisation and flux between different ecosystems. PLoS ONE, 2017, 12, e0184652.	1.1	56
17	Viability of common wine spoilage organisms after exposure to high power ultrasonics. Ultrasonics Sonochemistry, 2012, 19, 415-420.	3.8	53
18	Cloning and Characterization of an Intracellular Esterase from the Wine-Associated Lactic Acid Bacterium<i>Oenococcus oeni</i>. Applied and Environmental Microbiology, 2009, 75, 6729-6735.	1.4	52

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19	Lower-alcohol wines produced by Metschnikowia pulcherrima and Saccharomyces cerevisiae co-fermentations: The effect of sequential inoculation timing. International Journal of Food Microbiology, 2020, 329, 108651.	2.1	52
20	Use of Winemaking Supplements To Modify the Composition and Sensory Properties of Shiraz Wine. Journal of Agricultural and Food Chemistry, 2017, 65, 1353-1364.	2.4	49
21	Chemical and sensory profiling of Shiraz wines co-fermented with commercial non-<i>Saccharomyces</i>inocula. Australian Journal of Grape and Wine Research, 2018, 24, 166-180.	1.0	49
22	Impact of Lachancea thermotolerans on chemical composition and sensory profiles of Merlot wines. Food Chemistry, 2021, 349, 129015.	4.2	47
23	Hydrogen sulfide and its roles in Saccharomyces cerevisiae in a winemaking context. FEMS Yeast Research, 2017, 17, .	1.1	46
24	Wine-related aromas for different seasons and occasions: Hedonic and emotional responses of wine consumers from Australia, UK and USA. Food Quality and Preference, 2019, 71, 250-260.	2.3	46
25	Evaluation of indigenous non-Saccharomyces yeasts isolated from a South Australian vineyard for their potential as wine starter cultures. International Journal of Food Microbiology, 2020, 312, 108373.	2.1	46
26	A survey of lactic acid bacteria for enzymes of interest to oenology. Australian Journal of Grape and Wine Research, 2006, 12, 235-244.	1.0	45
27	Ester synthesis and hydrolysis in an aqueous environment, and strain specific changes during malolactic fermentation in wine with Oenococcus oeni. Food Chemistry, 2013, 141, 1673-1680.	4.2	45
28	Dekkera and Brettanomyces growth and utilisation of hydroxycinnamic acids in synthetic media. Applied Microbiology and Biotechnology, 2008, 78, 997-1006.	1.7	44
29	The microbial challenge of winemaking: yeast-bacteria compatibility. FEMS Yeast Research, 2019, 19, .	1.1	44
30	Survey of enzyme activity responsible for phenolic off-flavour production by Dekkera and Brettanomyces yeast. Applied Microbiology and Biotechnology, 2009, 81, 1117-1127.	1.7	43
31	Determination of sulphite reductase activity and its response to assimilable nitrogen status in a commercial Saccharomyces cerevisiae wine yeast. Journal of Applied Bacteriology, 1996, 81, 329-336.	1.1	41
32	Inhibitory effect of hydroxycinnamic acids on Dekkera spp.. Applied Microbiology and Biotechnology, 2010, 86, 721-729.	1.7	41
33	Yeast viability during fermentation and sur lie ageing of a defined medium and subsequent growth of Oenococcus oeni. Australian Journal of Grape and Wine Research, 2002, 8, 62-69.	1.0	38
34	A Survey of Industrial Strains of<i>Saccharomyces cerevisiae</i>Reveals Numerous Altered Patterns of Maltose and Sucrose Utilisation. Journal of the Institute of Brewing, 2002, 108, 310-321.	0.8	37
35	Use of a wine yeast deletion collection reveals genes that influence fermentation performance under low-nitrogen conditions. FEMS Yeast Research, 2018, 18, .	1.1	37
36	Rapid Method for Proline Determination in Grape Juice and Wine. Journal of Agricultural and Food Chemistry, 2012, 60, 4259-4264.	2.4	36

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37	Dissection of the molecular bases of genotype x environment interactions: a study of phenotypic plasticity of Saccharomyces cerevisiae in grape juices. BMC Genomics, 2018, 19, 772.	1.2	36
38	Validation of the use of multiple internal control genes, and the application of real-time quantitative PCR, to study esterase gene expression in Oenococcus oeni. Applied Microbiology and Biotechnology, 2012, 96, 1039-1047.	1.7	34
39	Differential utilisation of sulfur compounds for H2S liberation by nitrogen-starved wine yeasts. Australian Journal of Grape and Wine Research, 1999, 5, 82-90.	1.0	33
40	Formation of temperature gradients in large- and small-scale red wine fermentations during cap management. Australian Journal of Grape and Wine Research, 2009, 15, 249-255.	1.0	33
41	Characterization of EstCOo8 and EstC34, intracellular esterases, from the wine-associated lactic acid bacteria Oenococcus oeni and Lactobacillus hilgardii. Journal of Applied Microbiology, 2013, 114, 413-422.	1.4	30
42	Application of directed evolution to develop ethanol tolerant Oenococcus oeni for more efficient malolactic fermentation. Applied Microbiology and Biotechnology, 2018, 102, 921-932.	1.7	27
43	Linking gene expression and oenological traits: Comparison between Torulaspora delbrueckii and Saccharomyces cerevisiae strains. International Journal of Food Microbiology, 2019, 294, 42-49.	2.1	27
44	Microvinificationâ€"how small can we go?. Applied Microbiology and Biotechnology, 2011, 89, 1621-1628.	1.7	26
45	Relative Efficacy of High-Pressure Hot Water and High-Power Ultrasonics for Wine Oak Barrel Sanitization. American Journal of Enology and Viticulture, 2011, 62, 519-526.	0.9	26
46	Diffusion-Limited Growth of Microbial Colonies. Scientific Reports, 2018, 8, 5992.	1.6	26
47	PCR-based gene disruption and recombinatory marker excision to produce modified industrial Saccharomyces cerevisiae without added sequences. Journal of Microbiological Methods, 2005, 63, 193-204.	0.7	24
48	Directed evolution of Oenococcus oeni strains for more efficient malolactic fermentation in a multi-stressor wine environment. Food Microbiology, 2018, 73, 150-159.	2.1	23
49	Yeast bioprospecting versus synthetic biologyâ€"which is better for innovative beverage fermentation?. Applied Microbiology and Biotechnology, 2020, 104, 1939-1953.	1.7	23
50	Practical significance of relative assimilable nitrogen requirements of yeast: a preliminary study of fermentation performance and liberation of H₂S. Australian Journal of Grape and Wine Research, 2002, 8, 175-179.	1.0	22
51	Competition between <i>Saccharomyces cerevisiae</i> and <i>Saccharomyces uvarum</i> in Controlled Chardonnay Wine Fermentations. American Journal of Enology and Viticulture, 2020, 71, 198-207.	0.9	21
52	Î²-Glucoside metabolism in Oenococcus oeni: Cloning and characterisation of the phospho-Î²-glucosidase bglD. Food Chemistry, 2011, 125, 476-482.	4.2	19
53	Chemical and Sensory Evaluation of Magnetic Polymers as a Remedial Treatment for Elevated Concentrations of 3-Isobutyl-2-methoxypyrazine in Cabernet Sauvignon Grape Must and Wine. Journal of Agricultural and Food Chemistry, 2018, 66, 7121-7130.	2.4	19
54	Disruption of the cell wall integrity gene ECM33 results in improved fermentation by wine yeast. Metabolic Engineering, 2018, 45, 255-264.	3.6	18

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55	Removal of Volatile Phenols From Wine Using Crosslinked Cyclodextrin Polymers. Molecules, 2020, 25, 910.	1.7	18
56	Identification of genes affecting glucose catabolism in nitrogen-limited fermentation. FEMS Yeast Research, 2005, 5, 791-800.	1.1	17
57	Novel Wine Yeast for Improved Utilisation of Proline during Fermentation. Fermentation, 2018, 4, 10.	1.4	17
58	Expression Patterns of Genes and Enzymes Involved in Sugar Catabolism in Industrial<i>Saccharomyces cerevisiae</i>Strains Displaying Novel Fermentation Characteristics. Journal of the Institute of Brewing, 2002, 108, 322-335.	0.8	16
59	Proline transport and stress tolerance of ammonia-insensitive mutants of the PUT4-encoded proline-specific permease in yeast. Journal of General and Applied Microbiology, 2009, 55, 427-439.	0.4	16
60	Malolactic enzyme from Oenococcus oeni. Bioengineered, 2013, 4, 147-152.	1.4	16
61	Quantifying the dominant growth mechanisms of dimorphic yeast using a lattice-based model. Journal of the Royal Society Interface, 2017, 14, 20170314.	1.5	16
62	Nutrient-limited growth with non-linear cell diffusion as a mechanism for floral pattern formation in yeast biofilms. Journal of Theoretical Biology, 2018, 448, 122-141.	0.8	15
63	Influence of Kazachstania spp. on the chemical and sensory profile of red wines. International Journal of Food Microbiology, 2022, 362, 109496.	2.1	15
64	Evaluation of Red Wine Made on a Small Scale Utilizing Frozen Must. Journal of Agricultural and Food Chemistry, 2007, 55, 7156-7161.	2.4	14
65	A novel methodology independent of fermentation rate for assessment of the fructophilic character of wine yeast strains. Journal of Industrial Microbiology and Biotechnology, 2011, 38, 833-843.	1.4	14
66	Quantifying Two-Dimensional Filamentous and Invasive Growth Spatial Patterns in Yeast Colonies. PLoS Computational Biology, 2015, 11, e1004070.	1.5	14
67	The yeast TUM1 affects production of hydrogen sulfide from cysteine treatment during fermentation. FEMS Yeast Research, 2016, 16, fow100.	1.1	14
68	Response to Sulfur Dioxide Addition by Two Commercial Saccharomyces cerevisiae Strains. Fermentation, 2019, 5, 69.	1.4	14
69	Discovering the indigenous microbial communities associated with the natural fermentation of sap from the cider gum Eucalyptus gunnii. Scientific Reports, 2020, 10, 14716.	1.6	13
70	A thin-film extensional flow model for biofilm expansion by sliding motility. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190175.	1.0	11
71	Filtration, haze and foam characteristics of fermented wort mediated by yeast strain. Journal of Applied Microbiology, 2006, 100, 58-64.	1.4	10
72	Evaluation of the ability of commercial wine yeasts to form biofilms (mats) and adhere to plastic: implications for the microbiota of the winery environment. FEMS Microbiology Ecology, 2018, 94, .	1.3	10

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73	Impact of <i>Lachancea thermotolerans</i> strain and lactic acid concentration on <i>Oenococcus oeni</i> and malolactic fermentation in wine. Oeno One, 2021, 55, 365-380.	0.7	10
74	Optimisation and validation of a high-throughput semi-quantitative solid-phase microextraction method for analysis of fermentation aroma compounds in metabolomic screening studies of wines. Australian Journal of Grape and Wine Research, 2016, 22, 3-10.	1.0	9
75	Low-Input Fermentations of Agave tequilana Leaf Juice Generate High Returns on Ethanol Yields. Bioenergy Research, 2016, 9, 1142-1154.	2.2	9
76	Genome Sequence of Australian Indigenous Wine Yeast Torulaspora delbrueckii COFT1 Using Nanopore Sequencing. Genome Announcements, 2018, 6, .	0.8	9
77	Î²-Glucoside metabolism in Oenococcus oeni: Cloning and characterization of the phospho-Î²-glucosidase CelD. Journal of Molecular Catalysis B: Enzymatic, 2011, 69, 27-34.	1.8	8
78	Development and use of a quantum dot probe to track multiple yeast strains in mixed culture. Scientific Reports, 2015, 4, 6971.	1.6	8
79	Ethanolâ€tolerant lactic acid bacteria strains as a basis for efficient malolactic fermentation in wine: evaluation of experimentally evolved lactic acid bacteria and winery isolates. Australian Journal of Grape and Wine Research, 2019, 25, 404-413.	1.0	8
80	Brief temperature extremes during wine fermentation: effect on yeast viability and fermentation progress. Australian Journal of Grape and Wine Research, 2019, 25, 62-69.	1.0	8
81	Early adaptation strategies of Saccharomyces cerevisiae and Torulaspora delbrueckii to co-inoculation in high sugar grape must-like media. Food Microbiology, 2020, 90, 103463.	2.1	8
82	Sulfate transport mutants affect hydrogen sulfide and sulfite production during alcoholic fermentation. Yeast, 2021, 38, 367-381.	0.8	8
83	Smoke taint compounds in wine: nature, origin, measurement and amelioration of affected wines. Australian Journal of Grape and Wine Research, 2011, 17, S2-S4.	1.0	7
84	The Interaction of Two Saccharomyces cerevisiae Strains Affects Fermentation-Derived Compounds in Wine. Fermentation, 2016, 2, 9.	1.4	7
85	TAMMiCol: Tool for analysis of the morphology of microbial colonies. PLoS Computational Biology, 2018, 14, e1006629.	1.5	7
86	Yeast diversity in the vineyard: how it is defined, measured and influenced by fungicides. Australian Journal of Grape and Wine Research, 2021, 27, 169-193.	1.0	7
87	Isolation and Characterization of High-Ethanol-Tolerance Lactic Acid Bacteria from Australian Wine. Foods, 2022, 11, 1231.	1.9	7
88	Yeast genes involved in regulating cysteine uptake affect production of hydrogen sulfide from cysteine during fermentation. FEMS Yeast Research, 2017, 17, .	1.1	5
89	Exploring the diversity of bacteriophage specific to Oenococcus oeni and Lactobacillus spp and their role in wine production. Applied Microbiology and Biotechnology, 2021, 105, 8575-8592.	1.7	5
90	Impact of Lachancea thermotolerans on Chemical Composition and Sensory Profiles of Viognier Wines. Journal of Fungi (Basel, Switzerland), 2022, 8, 474.	1.5	5

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91	Appropriate vacuolar acidification in Saccharomyces cerevisiae is associated with efficient high sugar fermentation. Food Microbiology, 2018, 70, 262-268.	2.1	4
92	Development and Evaluation of a HS-SPME GC-MS Method for Determining the Retention of Volatile Phenols by Cyclodextrin in Model Wine. Molecules, 2019, 24, 3432.	1.7	4
93	The VvBAP1 gene is identified as a potential inhibitor of cell death in grape berries. Functional Plant Biology, 2019, 46, 428.	1.1	4
94	Capturing yeast associated with grapes and spontaneous fermentations of the Negro SaurÃ-minority variety from an experimental vineyard near LeÃ³n. Scientific Reports, 2021, 11, 3748.	1.6	4
95	QTL mapping: an innovative method for investigating the genetic determinism of yeast-bacteria interactions in wine. Applied Microbiology and Biotechnology, 2021, 105, 5053-5066.	1.7	4
96	The effect of grape juice dilution and complex nutrient addition on oenological fermentation and wine chemical composition. Journal of Food Composition and Analysis, 2022, 105, 104241.	1.9	4
97	Use of fresh versus frozen or blast-frozen grapes for small-scale fermentation. International Journal of Wine Research, 0, , 25.	0.5	3
98	Comparative study on the sensitivity of solid-phase microextraction fibre coatings for the analysis of fermentation bouquet compounds. Australian Journal of Grape and Wine Research, 2014, 20, 378-385.	1.0	3
99	Disruption of ECM33 in diploid wine yeast EC1118: cell morphology and aggregation and their influence on fermentation performance. FEMS Yeast Research, 2021, 21, .	1.1	3
100	â€˜TeeBotâ€™: A High Throughput Robotic Fermentation and Sampling System. Fermentation, 2021, 7, 205.	1.4	3
101	Directed evolution as an approach to increase fructose utilization in synthetic grape juice by wine yeast AWRI 796. FEMS Yeast Research, 2022, 22, .	1.1	3
102	Monitoring Volatile Aroma Compounds during Fermentation in a Chemically Defined Grape Juice Medium Deficient in Leucine. American Journal of Enology and Viticulture, 2016, 67, 350-355.	0.9	2
103	Editorial: yeast ecology and interaction. FEMS Yeast Research, 2019, 19, .	1.1	2
104	Introduction and Acknowledgements. Australian Journal of Grape and Wine Research, 2011, 17, S1-S1.	1.0	0