Kevin J Verstrepen

List of Publications by Year
in descending order

133 papers	12,335 citations	26630 56 h-index	29157 104 g-index
153 all docs	153 docs citations	153 times ranked	11616 citing authors

#	Article	IF	Citations
1	Breeding of New Saccharomyces cerevisiae Hybrids with Reduced Higher Alcohol Production for Light-Aroma-Type-Xiaoqu Baijiu Production. Journal of the American Society of Brewing Chemists, 2023, 81, 233-241.	1.1	6
2	Impact of wood species on microbial community composition, beer chemistry and sensory characteristics during barrelâ€ageing of beer. International Journal of Food Science and Technology, 2022, 57, 1122-1136.	2.7	6
3	Single-Cell RNA Sequencing in Yeast Using the 10Ã— Genomics Chromium Device. Methods in Molecular Biology, 2022, 2477, 3-20.	0.9	2
4	An Integrated Approach Reveals DNA Damage and Proteotoxic Stress as Main Effects of Proton Radiation in S. cerevisiae. International Journal of Molecular Sciences, 2022, 23, 5493.	4.1	2
5	Beer ethanol and iso-Î±-acid level affect microbial community establishment and beer chemistry throughout wood maturation of beer. International Journal of Food Microbiology, 2022, 374, 109724.	4.7	4
6	Synchronized, Spontaneous, and Oscillatory Detachment of Eukaryotic Cells: A New Tool for Cell Characterization and Identification. Advanced Science, 2022, 9, .	11.2	4
7	Genetic admixture increases phenotypic diversity in the nectar yeast Metschnikowia reukaufii. Fungal Ecology, 2021, 49, 101016.	1.6	4
8	Small Differences in SUC Gene Sequences Impact Saccharomyces cerevisiae Invertase Activity and Specificity toward Fructans with Different Chain Lengths. Journal of Agricultural and Food Chemistry, 2021, 69, 1925-1935.	5.2	7
9	Clinical Progress in Proton Radiotherapy: Biological Unknowns. Cancers, 2021, 13, 604.	3.7	17
10	Description of the temporal dynamics in microbial community composition and beer chemistry in sour beer production via barrel ageing of finished beers. International Journal of Food Microbiology, 2021, 339, 109030.	4.7	23
11	Interspecific hybridization as a driver of fungal evolution and adaptation. Nature Reviews Microbiology, 2021, 19, 485-500.	28.6	49
12	The Role of Structural Variation in Adaptation and Evolution of Yeast and Other Fungi. Genes, 2021, 12, 699.	2.4	19
13	The Pupal Parasitoid Trichopria drosophilae Is Attracted to the Same Yeast Volatiles as Its Adult Host. Journal of Chemical Ecology, 2021, 47, 788-798.	1.8	7
14	The Potential of Kluyveromyces marxianus to Produce Low-FODMAP Straight-Dough and Sourdough Bread: a Pilot-Scale Study. Food and Bioprocess Technology, 2021, 14, 1920-1935.	4.7	8
15	Ethanol-Induced Cell Damage Can Result in the Development of Oral Tumors. Cancers, 2021, 13, 3846.	3.7	7
16	Integrated Multi-Omics Analysis of Mechanisms Underlying Yeast Ethanol Tolerance. Journal of Proteome Research, 2021, 20, 3840-3852.	3.7	17
17	Detection of yeast strains by combining surface-imprinted polymers with impedance-based readout. Sensors and Actuators B: Chemical, 2021, 340, 129917.	7.8	13
18	The androgen receptor depends on ligandâ€binding domain dimerization for transcriptional activation. EMBO Reports, 2021, 22, e52764.	4.5	20

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19	Massive QTL analysis identifies pleiotropic genetic determinants for stress resistance, aroma formation, and ethanol, glycerol and isobutanol production in Saccharomyces cerevisiae. Biotechnology for Biofuels, 2021, 14, 211.	6.2	7
20	Volatiles of bacteria associated with parasitoid habitats elicit distinct olfactory responses in an aphid parasitoid and its hyperparasitoid. Functional Ecology, 2020, 34, 507-520.	3.6	24
21	Ethanol exposure increases mutation rate through error-prone polymerases. Nature Communications, 2020, 11, 3664.	12.8	29
22	Gene Loss Predictably Drives Evolutionary Adaptation. Molecular Biology and Evolution, 2020, 37, 2989-3002.	8.9	55
23	Moulded by humans: The domestication of blueâ€veined cheese fungi. Molecular Ecology, 2020, 29, 2517-2520.	3.9	1
24	Variability in yeast invertase activity determines the extent of fructan hydrolysis during wheat dough fermentation and final FODMAP levels in bread. International Journal of Food Microbiology, 2020, 326, 108648.	4.7	25
25	A new protocol for single-cell RNA-seq reveals stochastic gene expression during lag phase in budding yeast. ELife, 2020, 9, .	6.0	43
26	A Handsâ€On Guide to Brewing and Analyzing Beer in the Laboratory. Current Protocols in Microbiology, 2019, 54, e91.	6.5	20
27	Microbial communities of the house fly Musca domestica vary with geographical location and habitat. Microbiome, 2019, 7, 147.	11.1	70
28	Identification of a Wheat Thaumatin-like Protein That InhibitsSaccharomyces cerevisiae. Journal of Agricultural and Food Chemistry, 2019, 67, 10423-10431.	5.2	4
29	On the duration of the microbial lag phase. Current Genetics, 2019, 65, 721-727.	1.7	55
30	Network hubs affect evolvability. PLoS Biology, 2019, 17, e3000111.	5.6	20
31	Associative learning and memory retention of nectar yeast volatiles in a generalist parasitoid. Animal Behaviour, 2019, 153, 137-146.	1.9	18
32	Domestication of Industrial Microbes. Current Biology, 2019, 29, R381-R393.	3.9	113
33	Enrichment of persisters enabled by a ÃŸ-lactam-induced filamentation method reveals their stochastic single-cell awakening. Communications Biology, 2019, 2, 426.	4.4	30
34	Interspecific hybridization facilitates niche adaptation in beer yeast. Nature Ecology and Evolution, 2019, 3, 1562-1575.	7.8	83
35	Development and validation of a glass-silicon microdroplet-based system to measure sulfite concentrations in beverages. Analytical and Bioanalytical Chemistry, 2019, 411, 1127-1134.	3.7	3
36	Reducing phenolic off-flavors through CRISPR-based gene editing of the FDC1 gene in Saccharomyces cerevisiae x Saccharomyces eubayanus hybrid lager beer yeasts. PLoS ONE, 2019, 14, e0209124.	2.5	24

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37	Apibacter muscae sp. nov., a novel bacterial species isolated from house flies. International Journal of Systematic and Evolutionary Microbiology, 2019, 69, 3586-3592.	1.7	7
38	Origins, evolution, domestication and diversity of Saccharomyces beer yeasts. Current Opinion in Biotechnology, 2018, 49, 148-155.	6.6	104
39	Bioflavoring by non-conventional yeasts in sequential beer fermentations. Food Microbiology, 2018, 72, 55-66.	4.2	128
40	Contribution of Eat1 and Other Alcohol Acyltransferases to Ester Production in Saccharomyces cerevisiae. Frontiers in Microbiology, 2018, 9, 3202.	3.5	25
41	Mapping the landscape of tandem repeat variability by targeted long read single molecule sequencing in familial X-linked intellectual disability. BMC Medical Genomics, 2018, 11, 123.	1.5	5
42	Sweet Scents: Nectar Specialist Yeasts Enhance Nectar Attraction of a Generalist Aphid Parasitoid Without Affecting Survival. Frontiers in Plant Science, 2018, 9, 1009.	3.6	52
43	The Crabtree Effect Shapes the Saccharomyces cerevisiae Lag Phase during the Switch between Different Carbon Sources. MBio, 2018, 9, .	4.1	46
44	Kluyveromyces marxianus yeast enables the production of low FODMAP whole wheat breads. Food Microbiology, 2018, 76, 135-145.	4.2	41
45	SCRaMbLEing to understand and exploit structural variation in genomes. Nature Communications, 2018, 9, 1937.	12.8	19
46	Transition between fermentation and respiration determines history-dependent behavior in fluctuating carbon sources. ELife, 2018, 7, .	6.0	44
47	Evolutionary Context Improves Regulatory Network Predictions. Cell Systems, 2017, 4, 478-479.	6.2	0
48	Substrate-Limited Saccharomyces cerevisiae Yeast Strains Allow Control of Fermentation during Bread Making. Journal of Agricultural and Food Chemistry, 2017, 65, 3368-3377.	5.2	11
49	High-throughput system-wide engineering and screening for microbial biotechnology. Current Opinion in Biotechnology, 2017, 46, 120-125.	6.6	45
50	Fermentation assays reveal differences in sugar and (off-) flavor metabolism across differentBrettanomyces bruxellensisstrains. FEMS Yeast Research, 2017, 17, .	2.3	34
51	Characterization and Degradation of Pectic Polysaccharides in Cocoa Pulp. Journal of Agricultural and Food Chemistry, 2017, 65, 9726-9734.	5.2	18
52	Physiology, ecology and industrial applications of aroma formation in yeast. FEMS Microbiology Reviews, 2017, 41, S95-S128.	8.6	246
53	Phenotypic landscape of non-conventional yeast species for different stress tolerance traits desirable in bioethanol fermentation. Biotechnology for Biofuels, 2017, 10, 216.	6.2	76
54	Saccharomyces cerevisiae and Kluyveromyces marxianus Cocultures Allow Reduction of Fermentable Oligo-, Di-, and Monosaccharides and Polyols Levels in Whole Wheat Bread. Journal of Agricultural and Food Chemistry, 2017, 65, 8704-8713.	5.2	62

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55	Bread Dough and Baker's Yeast: An Uplifting Synergy. Comprehensive Reviews in Food Science and Food Safety, 2017, 16, 850-867.	11.7	91
56	Constraints and consequences of the emergence of amino acid repeats in eukaryotic proteins. Nature Structural and Molecular Biology, 2017, 24, 765-777.	8.2	53
57	Nectar bacteria affect life history of a generalist aphid parasitoid by altering nectar chemistry. Functional Ecology, 2017, 31, 2061-2069.	3.6	39
58	Establishing the relative importance of damaged starch and fructan as sources of fermentable sugars in wheat flour and whole meal bread dough fermentations. Food Chemistry, 2017, 218, 89-98.	8.2	51
59	Rapid Screening Method for Phenolic Off-Flavor (POF) Production in Yeast. Journal of the American Society of Brewing Chemists, 2017, 75, 318-323.	1.1	27
60	A Mutant Isoform of ObgE Causes Cell Death by Interfering with Cell Division. Frontiers in Microbiology, 2017, 8, 1193.	3.5	14
61	Variable repeats in the eukaryotic polyubiquitin gene ubi4 modulate proteostasis and stress survival. Nature Communications, 2017, 8, 397.	12.8	22
62	Adaptive tuning of mutation rates allows fast response to lethal stress in Escherichia coli. ELife, 2017, 6, .	6.0	86
63	The impact of yeast fermentation on dough matrix properties. Journal of the Science of Food and Agriculture, 2016, 96, 3741-3748.	3.5	33
64	Species coexistence in simple microbial communities: unravelling the phenotypic landscape of coâ€•occurring <scp>M</scp>etschnikowia species in floral nectar. Environmental Microbiology, 2016, 18, 1850-1862.	3.8	25
65	Noise and Epigenetic Inheritance of Single-Cell Division Times Influence Population Fitness. Current Biology, 2016, 26, 1138-1147.	3.9	80
66	Domestication and Divergence of Saccharomyces cerevisiae Beer Yeasts. Cell, 2016, 166, 1397-1410.e16.	28.9	580
67	Frequency of antibiotic application drives rapid evolutionary adaptation of Escherichia coli persistence. Nature Microbiology, 2016, 1, 16020.	13.3	210
68	Stop that Noise and Turn Up the Antisense Transcription. Cell Reports, 2016, 15, 2575-2576.	6.4	1
69	How do yeast cells become tolerant to high ethanol concentrations?. Current Genetics, 2016, 62, 475-480.	1.7	83
70	Tuning Chocolate Flavor through Development of Thermotolerant Saccharomyces cerevisiae Starter Cultures with Increased Acetate Ester Production. Applied and Environmental Microbiology, 2016, 82, 732-746.	3.1	41
71	Non-Conventional Yeast Strains Increase the Aroma Complexity of Bread. PLoS ONE, 2016, 11, e0165126.	2.5	87
72	Glycerol Production by Fermenting Yeast Cells Is Essential for Optimal Bread Dough Fermentation. PLoS ONE, 2015, 10, e0119364.	2.5	57

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73	Adaptation to High Ethanol Reveals Complex Evolutionary Pathways. PLoS Genetics, 2015, 11, e1005635.	3.5	173
74	How do regulatory networks evolve and expand throughout evolution?. Current Opinion in Biotechnology, 2015, 34, 180-188.	6.6	90
75	Assessing the potential of wild yeasts for bioethanol production. Journal of Industrial Microbiology and Biotechnology, 2015, 42, 39-48.	3.0	57
76	Experimental evolution of the model eukaryote Saccharomyces cerevisiae yields insight into the molecular mechanisms underlying adaptation. Current Opinion in Microbiology, 2015, 28, 1-9.	5.1	35
77	The impact of nectar chemical features on phenotypic variation in two related nectar yeasts. FEMS Microbiology Ecology, 2015, 91, .	2.7	14
78	Breeding Strategy To Generate Robust Yeast Starter Cultures for Cocoa Pulp Fermentations. Applied and Environmental Microbiology, 2015, 81, 6166-6176.	3.1	36
79	Brettanomyces yeasts â€" From spoilage organisms to valuable contributors to industrial fermentations. International Journal of Food Microbiology, 2015, 206, 24-38.	4.7	192
80	Large-scale robot-assisted genome shuffling yields industrial Saccharomyces cerevisiae yeasts with increased ethanol tolerance. Biotechnology for Biofuels, 2015, 8, 32.	6.2	81
81	Dual Effect of Wasp Queen Pheromone in Regulating Insect Sociality. Current Biology, 2015, 25, 1638-1640.	3.9	61
82	Contribution of the tricarboxylic acid (TCA) cycle and the glyoxylate shunt in Saccharomyces cerevisiae to succinic acid production during dough fermentation. International Journal of Food Microbiology, 2015, 204, 24-32.	4.7	39
83	A Large Set of Newly Created Interspecific Saccharomyces Hybrids Increases Aromatic Diversity in Lager Beers. Applied and Environmental Microbiology, 2015, 81, 8202-8214.	3.1	110
84	Metabolite Analysis Allows Insight into the Differences in Functionality of 25 Saccharomyces cerevisiae Strains in Bread Dough Fermentation. Cereal Chemistry, 2015, 92, 588-597.	2.2	12
85	Variable Glutamine-Rich Repeats Modulate Transcription Factor Activity. Molecular Cell, 2015, 59, 615-627.	9.7	103
86	Critical assessment of the formation of hydrogen peroxide in dough by fermenting yeast cells. Food Chemistry, 2015, 168, 183-189.	8.2	6
87	Duplication of a promiscuous transcription factor drives the emergence of a new regulatory network. Nature Communications, 2014, 5, 4868.	12.8	63
88	Different Levels of Catabolite Repression Optimize Growth in Stable and Variable Environments. PLoS Biology, 2014, 12, e1001764.	5.6	185
89	An integrated framework for discovery and genotyping of genomic variants from high-throughput sequencing experiments. Nucleic Acids Research, 2014, 42, e44-e44.	14.5	124
90	Harvesting yeast (Saccharomyces cerevisiae) at different physiological phases significantly affects its functionality in bread dough fermentation. Food Microbiology, 2014, 39, 108-115.	4.2	48

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91	Succinic acid in levels produced by yeast (Saccharomyces cerevisiae) during fermentation strongly impacts wheat bread dough properties. Food Chemistry, 2014, 151, 421-428.	8.2	76
92	Assessing Genetic Diversity among Brettanomyces Yeasts by DNA Fingerprinting and Whole-Genome Sequencing. Applied and Environmental Microbiology, 2014, 80, 4398-4413.	3.1	66
93	Taming Wild Yeast: Potential of Conventional and Nonconventional Yeasts in Industrial Fermentations. Annual Review of Microbiology, 2014, 68, 61-80.	7.3	216
94	The Fungal Aroma Gene ATF1 Promotes Dispersal of Yeast Cells through Insect Vectors. Cell Reports, 2014, 9, 425-432.	6.4	163
95	Improving industrial yeast strains: exploiting natural and artificial diversity. FEMS Microbiology Reviews, 2014, 38, 947-995.	8.6	403
96	Phenotypic evaluation of natural and industrial Saccharomyces yeasts for different traits desirable in industrial bioethanol production. Applied Microbiology and Biotechnology, 2014, 98, 9483-9498.	3.6	59
97	Large-Scale Selection and Breeding To Generate Industrial Yeasts with Superior Aroma Production. Applied and Environmental Microbiology, 2014, 80, 6965-6975.	3.1	115
98	Large-scale analysis of tandem repeat variability in the human genome. Nucleic Acids Research, 2014, 42, 5728-5741.	14.5	66
99	Improved linkage analysis of Quantitative Trait Loci using bulk segregants unveils a novel determinant of high ethanol tolerance in yeast. BMC Genomics, 2014, 15, 207.	2.8	50
100	Subtelomeric Regions Promote Evolutionary Innovation of Gene Families in Yeast. , 2014, , 39-70.		5
101	Dynamics of the Saccharomyces cerevisiae Transcriptome during Bread Dough Fermentation. Applied and Environmental Microbiology, 2013, 79, 7325-7333.	3.1	24
102	Detailed Analysis of the Microbial Population in Malaysian Spontaneous Cocoa Pulp Fermentations Reveals a Core and Variable Microbiota. PLoS ONE, 2013, 8, e81559.	2.5	79
103	Reconstruction of Ancestral Metabolic Enzymes Reveals Molecular Mechanisms Underlying Evolutionary Innovation through Gene Duplication. PLoS Biology, 2012, 10, e1001446.	5.6	170
104	Distal chromatin structure influences local nucleosome positions and gene expression. Nucleic Acids Research, 2012, 40, 3870-3885.	14.5	25
105	Functional divergence of gene duplicates through ectopic recombination. EMBO Reports, 2012, 13, 1145-1151.	4.5	32
106	Beyond Junk-Variable Tandem Repeats as Facilitators of Rapid Evolution of Regulatory and Coding Sequences. Genes, 2012, 3, 461-480.	2.4	105
107	Identification of a complex genetic network underlying <scp>S</scp>accharomyces cerevisiae colony morphology. Molecular Microbiology, 2012, 86, 225-239.	2.5	71
108	Background-dependent effects of polyglutamine variation in the Arabidopsis thaliana gene ELF3. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19363-19367.	7.1	67

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109	Selecting and generating superior yeasts for the brewing industry. Cerevisia, 2012, 37, 63-67.	0.3	13
110	Nucleosome Positioning in Saccharomyces cerevisiae. Microbiology and Molecular Biology Reviews, 2011, 75, 301-320.	6.6	108
111	Divergence in wine characteristics produced by wild and domesticated strains of Saccharomyces cerevisiae. FEMS Yeast Research, 2011, 11, 540-551.	2.3	56
112	A Wide Extent of Inter-Strain Diversity in Virulent and Vaccine Strains of Alphaherpesviruses. PLoS Pathogens, 2011, 7, e1002282.	4.7	134
113	Rapid Expansion and Functional Divergence of Subtelomeric Gene Families in Yeasts. Current Biology, 2010, 20, 895-903.	3.9	323
114	Production and biological function of volatile esters in Saccharomyces cerevisiae. Microbial Biotechnology, 2010, 3, 165-177.	4.2	348
115	Variable Tandem Repeats Accelerate Evolution of Coding and Regulatory Sequences. Annual Review of Genetics, 2010, 44, 445-477.	7.6	530
116	Promoter architecture and the evolvability of gene expression. Journal of Biology, 2009, 8, 95.	2.7	96
117	Unstable Tandem Repeats in Promoters Confer Transcriptional Evolvability. Science, 2009, 324, 1213-1216.	12.6	317
118	Genetic and Epigenetic Mechanisms Underlying Cell-Surface Variability in Protozoa and Fungi. Annual Review of Genetics, 2009, 43, 1-24.	7.6	87
119	FLO1 Is a Variable Green Beard Gene that Drives Biofilm-like Cooperation in Budding Yeast. Cell, 2008, 135, 726-737.	28.9	398
120	Coding Tandem Repeats Generate Diversity in Aspergillus fumigatus Genes. Eukaryotic Cell, 2007, 6, 1380-1391.	3.4	84
121	Isolation and Characterization of Brewer's Yeast Variants with Improved Fermentation Performance under High-Gravity Conditions. Applied and Environmental Microbiology, 2007, 73, 815-824.	3.1	102
122	Sequence-based estimation of minisatellite and microsatellite repeat variability. Genome Research, 2007, 17, 1787-1796.	5.5	180
123	Timescales of Genetic and Epigenetic Inheritance. Cell, 2007, 128, 655-668.	28.9	425
124	Flocculation, adhesion and biofilm formation in yeasts. Molecular Microbiology, 2006, 60, 5-15.	2.5	513
125	The Saccharomyces cerevisiae EHT1 and EEB1 Genes Encode Novel Enzymes with Medium-chain Fatty Acid Ethyl Ester Synthesis and Hydrolysis Capacity. Journal of Biological Chemistry, 2006, 281, 4446-4456.	3.4	244
126	Intragenic tandem repeats generate functional variability. Nature Genetics, 2005, 37, 986-990.	21.4	556

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127	Origins of variation in the fungal cell surface. Nature Reviews Microbiology, 2004, 2, 533-540.	28.6	177
128	Glucose and sucrose: hazardous fast-food for industrial yeast?. Trends in Biotechnology, 2004, 22, 531-537.	9.3	132
129	TheSaccharomyces cerevisiae alcohol acetyl transferase Atf1p is localized in lipid particles. Yeast, 2004, 21, 367-377.	1.7	65
130	Flavor-active esters: Adding fruitiness to beer. Journal of Bioscience and Bioengineering, 2003, 96, 110-118.	2.2	369
131	The alcohol acetyl transferase gene is a target of the cAMP/PKA and FGM nutrient-signalling pathways. FEMS Yeast Research, 2003, 4, 285-296.	2.3	72
132	Expression Levels of the Yeast Alcohol Acetyltransferase Genes ATF1 , Lg-ATF1 , and ATF2 Control the Formation of a Broad Range of Volatile Esters. Applied and Environmental Microbiology, 2003, 69, 5228-5237.	3.1	328
133	Flavor-active esters: adding fruitiness to beer. Journal of Bioscience and Bioengineering, 2003, 96, 110-8.	2.2	67