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C/N ratio and carbon source-dependent lipid production profiling in *Rhodotorula toruloides*

Lopes, Helberth Júnior Santos; Bonturi, Nemailla; Kerkhoven, Eduard Johannes; Miranda, Everson Alves; **Lahtvee, Petri-Jaan**

Applied Microbiology and Biotechnology 2020 / p. 2639 - 2649 <https://doi.org/10.1007/s00253-020-10386-5> [Journal metrics at Scopus](#)

[Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Characterization of potassium, sodium and their interactions effects in yeasts

Illarionov, Aleksandr; Lahtvee, Petri-Jaan; **Kumar, Rahul, 1978-** bioRxiv 2020 / 16 p. : ill <https://doi.org/10.1101/2020.10.22.350355>

A conundrum of r-protein stability : unbalanced stoichiometry of r-proteins during stationary phase in *Escherichia coli*

Reier, Kaspar; **Lahtvee, Petri-Jaan;** Liiv, Aivar; Remme, Jaanus mBio 2022 / art. e01873-22 : ill <https://doi.org/10.1128/mbio.01873-22>

[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The design-build-test-learn cycle for investigating lipid synthesis in oleaginous *Rhodotorula toruloides*

Rekena, Alina; Gavrilovic, Srdjan; Lahtvee, Petri-Jaan The 7th applied synthetic biology in Europe : programme and abstracts

2024 / p. 80 <https://bipeek-resources-onsite-prd.s3.amazonaws.com/54015/ASBE7-Programme-and-Abstract-Book.pdf?v=1730830392>

Detailed analysis of metabolism reveals growth-rate-promoting interactions between *Anaerostipes caccae* and

***Bacteroides* spp**

Kattel, Anna; Morell, Indrek; **Aro, Valter; Lahtvee, Petri-Jaan; Vilu, Raivo;** Jöers, Arvi; Nahku, Ranno Anaerobe 2023 / art. 102680

<https://doi.org/10.1016/j.anaerobe.2022.102680> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Development of a dedicated Golden Gate Assembly Platform (RtGGA) for *Rhodotorula toruloides*

Bonturi, Nemailla; Pinheiro, Marina Julio; Oliveira, Paola Monteiro de; Rusadze, Eka; Eichinger, Tobias; **Liudžiute, Gintare; De**

Biaggi, Giuliano Sabedotti; Brauer, Age; Remm, Mado; Miranda, Everson Alves; Ledesma-Amaro, Rodrigo; **Lahtvee, Petri-Jaan**

Metabolic engineering communications 2022 / art. e00200 <https://doi.org/10.1016/j.mec.2022.e00200> [Journal metrics at Scopus](#) [Article at Scopus](#)

[Journal metrics at WOS](#) [Article at WOS](#)

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Estonian food tech startup Äio secures €6 million to turn wood into oils

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Ethylene glycol metabolism in the oleaginous yeast *Rhodotorula toruloides*

Senatore, Vittorio Giorgio; **Rekena, Alina;** Mapelli, Valeria; **Lahtvee, Petri-Jaan;** Branduardi, Paola Applied Microbiology and

Biotechnology 2025 / art. 114 <https://doi.org/10.1007/s00253-025-13504-3>

Evaluating the impact of toxicities in hemicellulosic hydrolysates during biotechnological valorisation processes

Lipova, Inna; Axelrud Nunes, Andreia; Bonturi, Nemailla; **Lahtvee, Petri-Jaan** Conference materials "Youth and modern problems of

microbiology and virology" : IV young scientists conference, Kyiv, Ukraine, 15-17 November 2022 : Abstracts book 2022 / p. 15

https://imv.org.ua/wp-content/uploads/2022/12/Conference-materials_2022.pdf

Evaluation of enzyme-constrained genome-scale model through metabolic engineering of anaerobic co-production of 2,3-butanediol and glycerol by *Saccharomyces cerevisiae*

Sjöberg, Gustav; **Rekena, Alina;** Fornstad, Matilda; **Lahtvee, Petri-Jaan;** Van Maris, Antonius J. A. Metabolic engineering 2024 / p.

49-59 <https://doi.org/10.1016/j.ymben.2024.01.007> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Exploring the resilience and stability of a defined human gut microbiota consortium : an isothermal microcalorimetric study

Kattel, Anna; Aro, Valter; Lahtvee, Petri-Jaan; Kazantseva, Jekaterina; Jöers, Arvi; Nahku, Ranno; Belouah, Isma MicrobiologyOpen

2024 / art. e1430 <https://doi.org/10.1002/mbo3.1430> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at](#)

[WOS](#)

Fat-making microbes for greener and sustainable industry

Shapava, Volha; **Lahtvee, Petri-Jaan**; Blomqvist, Johanna; Passoth, Volkmar; **Bonturi, Nemailla**; Einarsson, Hjörleifur; Sigurðarson, Jens J.; Skugor, Stanko; Varland, Marit Fast track to vision 2030 2023 / p. 112-115 <https://www.nordforsk.org/2023/fast-track-vision-2030>

Genome-scale metabolic modeling reveals metabolic trade-offs associated with lipid production in *Rhodotorula toruloides*

Rekena, Alina; Pinheiro, Marina J.; **Bonturi, Nemailla**; **Belouah, Isma**; Tammekivi, Eliise; Herodes, Koit; Kerkhoven, Eduard J.; **Lahtvee, Petri-Jaan** PLoS computational biology 2023 / art. e1011009 <https://doi.org/10.1371/journal.pcbi.1011009> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Genome-scale modelling-based discovery of metabolic strategies in oleaginous yeast *Rhodotorula toruloides*

Rekena, Alina; Pinheiro, Marina J.; **Bonturi, Nemailla**; **Belouah, Isma**; Tammekivi, Eliise; Herodes, Koit; Kerkhoven, Eduard J.; **Lahtvee, Petri-Jaan** 8th conference on physiology of yeasts and filamentous fungi (PYFF8) : abstract book 2023 / p. 47-48 https://efbiotechnology.org/images/uploads/PYFF8_Abstract_book.pdf

Idufirmade konkursil osaleja: meie tehnoloogia aitaks vihmametsasid säästa

Pokk, Priit arileht.delfi.ee 2023 [Idufirmade konkursil osaleja: meie tehnoloogia aitaks vihmametsasid säästa](#)

„Järjekord on ukse taga.“ Suurte plaanidega idufirma on juba löönud käed soomlaste Valio ja ameeriklaste Kraft Heinziga

Liiva, Siiri „Järjekord on ukse taga.“ Suurte plaanidega idufirma on juba löönud käed soomlaste Valio ja ameeriklaste Kraft Heinziga 2023

Kaheksa uut tennuriprofessorit

Sell, Raivo; **Pikas, Ergo**; **Hints, Olle**; **Veski, Siim**; **Lahtvee, Petri-Jaan**; **Ottis, Rain**; **Kiviste, Mihkel**; **Ross, Peeter** Mente et Manu 2021 / lk. 48-51 : portr [Mente et Manu 1/2021 https://www.ester.ee/record=b1242496*est](https://www.ester.ee/record=b1242496*est)

Kuus aastat unetuid öid, verd, higi ja pisaraid : TalTechi teadlased on leidnud viisi, kuidas toota saepurust toitu

geenius.ee 2023 [Kuus aastat unetuid öid, verd, higi ja pisaraid : TalTechi teadlased on leidnud viisi, kuidas toota saepurust toitu](#)

Metabolic engineering of *Rhodotorula toruloides* for astaxanthin production using Golden Gate Assembly Platform

Lipova, Inna; Gavrilovic, Srdjan; **Bonturi, Nemailla**; **Lahtvee, Petri-Jaan** Yeast 2023 : ICYGB31 : 31st International Conference on Yeast Genetics and Molecular Biology, Florence, Italy, 20-25 august, 2023 : Book of abstracts 2023 / p. 257 <https://files.spazioweb.it/ed/08/ed0856fe-fa38-4015-93c9-561144f5b608.pdf>

Metabolic regulation of acetyl-CoA and NADPH production pathways in *Rhodotorula Toruloides*

Rekena, Alina; **Gavrilovic, Srdjan**; **Lahtvee, Petri-Jaan** Metabolic Engineering 16 (ME16) : conference proceedings 2025 / art. 706872 <https://aiche.confex.com/aiche/me16/meetingapp.cgi/Paper/706872>

Metabolism control in 3D-printed living materials improves fermentation

Butelmann, Tobias; Priks, Hans; Parent, Zoel; Johnston, Trevor G.; Tamm, Tarmo; Nelson, Alshakim; **Lahtvee, Petri-Jaan**; **Kumar, Rahul, 1978-** ACS Applied Bio Materials 2021 / p. 7195-7203 <https://doi.org/10.1021/acsabm.1c00754> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Multi-omics approach to study the growth efficiency and amino acid metabolism in *Lactococcus lactis* at various specific growth rates

Lahtvee, Petri-Jaan; **Adamberg, Kaarel**; **Arike, Liisa**; **Nahku, Ranno**; **Aller, Kadri**; **Vilu, Raivo** Microbial cell factories 2011 / Article no. 12 <https://microbialcellfactories.biomedcentral.com/articles/10.1186/1475-2859-10-12>

Petre-Jaan Lahtvee: pikem plaan on väärindada CO2 toiduks

Lahtvee, Petri-Jaan Mente et Manu 2023 / lk. 14-19 : fot https://www.ester.ee/record=b1242496*est

Potassium and sodium salt stress characterization in the yeasts *Saccharomyces cerevisiae*, *Kluyveromyces marxianus*, and *Rhodotorula toruloides*

Illarionov, Aleksandr; **Lahtvee, Petri-Jaan**; **Kumar, Rahul, 1978-** Applied and Environmental Microbiology 2021 / art. e03100-20 <https://doi.org/10.1128/AEM.03100-20> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Production and characterization of an exopolysaccharide from an oleaginous yeast

Hamacek, Henrique Sepulveda Del Rio; Tingajeva, Oksana; **Lahtvee, Petri-Jaan**; **Kumar, Rahul, 1978-** Baltic Polymer Symposium 2025 : 23d International Scientific Conference BPS 2025 "Baltic Polymer Symposium 2025" : Book of abstracts 2025 / p. 35 <http://woodval.taltech.ee/wp-content/uploads/2025/07/BPS2025-Book-of-abstracts.pdf>

Protein turnover forms one of the highest maintenance costs in *Lactococcus lactis*

Lahtvee, Petri-Jaan; Seiman, Andrus; **Arike, Liisa**; **Adamberg, Kaarel**; **Vilu, Raivo** Microbiology 2014 / p.1501-1512 : ill <https://doi.org/10.1099/mic.0.078089-0> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Puidust valguni: TalTechi ja Fibenoli koostöös sündis põnev biotehnoloogiline protsess, mille abil saab puidujäätmetest kas või toitu toota!

digi.geenius.ee 2025 <https://digi.geenius.ee/blogi/teadus-ja-tulevik/puidust-valguni-taltech-ja-fibenoli-koostoo-sundis-ponev-biotehnoloogiline-protsess-mille-abil-saab-puidujaatmetest-kasvoi-toitu-toota/>

Pärm ja kohalik saepuru annavad vegantoidule liha meki

Sarv, Mari Öö novaator.err.ee 2023 [Pärm ja kohalik saepuru annavad vegantoidule liha meki](#)

Quantitative omics-level analysis of growth rate dependent energy metabolism in *Lactococcus lactis* = Kvantitatiivsetel oomika-meetoditel põhinev kasvuerikiirusest sõltuv *Lactococcus lactis*'e energiametabolismi analüüs

Lahtvee, Petri-Jaan 2012 https://www.ester.ee/record=b2931362*est

Quantitative systems biology analysis of lipid-producing yeast *Rhodotorula toruloides* cultivation

Rekena, Alina; Pinheiro, Marina Julio; Pals, Kristjan; Belouah, Isma; Bonturi, Nemailla; Gavrilovic, Srdjan; Kerkhoven, Eduard Johannes; Lahtvee, Petri-Jaan FEBS3+ Baltics : Biochemistry at the Fore Line : Abstract Book 2025 / p. 69 [FEBS3+ Abstract Book \(PDF\)](#)

Quasi steady state growth of *Lactococcus lactis* in glucose-limited acceleration stat (A-stat) cultures

Adamberg, Kaarel; Lahtvee, Petri-Jaan; Valgepea, Kaspar; Abner, Kristo; Vilu, Raivo Antonie van Leeuwenhoek 2009 / 3, p. 219-226 <https://pubmed.ncbi.nlm.nih.gov/19184516/>

The role of ATP citrate lyase, phosphoketolase, and malic enzyme in oleaginous *Rhodotorula toruloides*

Rekena, Alina; Pals, Kristjan; Gavrilovic, Srdjan; Lahtvee, Petri-Jaan Applied microbiology and biotechnology 2025 / art. 77 <https://doi.org/10.1007/s00253-025-13454-w>

Saepuruvõie võib jõuda kodukööki

Imeline Teadus 2023 / lk. 20 : fot https://www.ester.ee/record=b2747925*est

Screening and growth characterization of non-conventional yeasts in a hemicellulosic hydrolysate

Monteiro de Oliveira, Paola; Aborneva, Daria; Bonturi, Nemailla; Lahtvee, Petri-Jaan Frontiers in bioengineering and biotechnology 2021 / art. 659472 <https://doi.org/10.3389/fbioe.2021.659472>

Specific growth rate dependent transcriptome profiling of *Escherichia coli* K12 MG1655 in accelerostat cultures

Nahku, Ranno; Valgepea, Kaspar; Lahtvee, Petri-Jaan; Erm, Sten; Abner, Kristo; Adamberg, Kaarel; Vilu, Raivo Journal of biotechnology 2010 / 1, p. 60-65 <https://www.sciencedirect.com/science/article/pii/S0168165609004726>

Steady state growth space study of *Lactococcus lactis* in D-stat cultures

Lahtvee, Petri-Jaan; Valgepea, Kaspar; Nahku, Ranno; Abner, Kristo; Adamberg, Kaarel; Vilu, Raivo Antonie van Leeuwenhoek 2009 / 4, p. 487-496 <https://pubmed.ncbi.nlm.nih.gov/19603284/>

Süvatehnoloogiate alternatiivsed arengutrajektorid ja nende tähendus Eestile : lõpparuanne

Koppel, Kaupo; Kuusik, Alar; Arrak, Kadri; Raik, Jaan; Niidu, Allan; Kõks, Kerttu-Liis; Lahtvee, Petri-Jaan 2023 <https://media.voog.com/0000/0037/5345/files>

Systems biology approach reveals that overflow metabolism of acetate in *Escheria coli* is triggered by carbon catabolite repression of acetyl-CoA synthetase

Valgepea, Kaspar; Adamberg, Kaarel; Nahku, Ranno; Lahtvee, Petri-Jaan; Arike, Liisa; Vilu, Raivo BMC systems biology 2010 / p. 166 <https://pubmed.ncbi.nlm.nih.gov/21122111/>

TalTechi hargettevõtte kaasas miljon eurot

Mente et Manu 2023 / lk. 10 https://www.ester.ee/record=b1242496*est

Tartu ülikooli teadlased said kahe rahvusvahelise tippkeskuse arendamiseks 60 miljonit eurot

delfi.ee 2023 [Tartu ülikooli teadlased said kahe rahvusvahelise tippkeskuse arendamiseks 60 miljonit eurot](#)

Thermodynamics-based model-driven discovery of metabolic strategies in oleaginous yeast *Rhodotorula toruloides*

Rekena, Alina; Smith, Edward N.; Heinemann, Matthias; Lahtvee, Petri-Jaan Metabolic Engineering 15 (ME15) : conference proceedings 2023 / Art. 52 <https://aiche.confex.com/aiche/me15/meetingapp.cgi/Paper/659438>

Toidutehnoloogia iduettevõtte ÄIO kaasab demotehase ehituseks kuus miljonit eurot

Eesti Ekspress 2024 / lk. 28,29

Uuendusliku tehnoloogiaga jätkusuutlikuma toidu-ja kosmeetikatööstuse poole

Aunap, Sigrid Eesti Päevaleht 2023