



Bruker Microbiology & Infection Diagnostics

IR Biotyper[®] Publications

Microorganisms, 27 June 2024

<https://doi.org/10.3390/microorganisms12071312>

Fourier Transform Infrared Spectroscopy Application for *Candida auris* Outbreak Typing in a Referral Intensive Care Unit: Phylogenetic Analysis and Clustering Cut-Off Definition

Curtoni A., Pastrone L., Cordovana M., Bondi A., Piccinini G., Genco M., Bottino P., Polizzi C., Cavallo L., Mandras N., Corcione S., Montrucchio G., Brazzi L. & Costa C.

Methods and Protocols, 11 June 2024

<https://doi.org/10.3390/mps7030048>

A Comprehensive Methodology for Microbial Strain Typing Using Fourier-Transform Infrared Spectroscopy

Muchaamba F. & Stephan R.

Antimicrobial Stewardship & Healthcare Epidemiology, 16 May 2024

<https://doi.org/10.1017/ash.2024.77>

A cluster of *Candida parapsilosis* displaying fluconazole-trailing in a neonatal intensive care unit successfully contained by multiple infection-control interventions

Hiroaki Baba, Hajime Kanamori, Asami Nakayama, Takami Sato, Makoto Katsumi, Takae Chida, Shinobu Ikeda, Rio Seki, Teppei Arai, Katsuhiko Kamei and Koichi Tokuda

Avian Pathology, 11 April 2024

<https://doi.org/10.1080/03079457.2024.2334683>

Interference between *Escherichia coli* genotypes from the *E. coli* peritonitis syndrome given simultaneously to productive SPF White Leghorn hens by intratracheal inoculation

Landman W. J. M., van Eck J. H. H. & Heuvelink A. E.



Journal of Global Antimicrobial Resistance, 27 March 2024

<https://doi.org/10.1016/j.jgar.2024.03.004>

When it rains it pours: an increased prevalence of intestinal carriage of vancomycin-resistant *Enterococcus faecium* related to higher use of oral vancomycin in a tertiary care Hungarian clinical center during the years of the COVID-19 pandemic

Orosz L.

Frontiers in Microbiology, 20 March 2024

<https://doi.org/10.3389/fmicb.2024.1396367>

Corrigendum: Rapid typing of *Klebsiella pneumoniae* and *Pseudomonas aeruginosa* by Fourier-transform Infrared spectroscopy informs infection control in veterinary settings

Zendri F., Schmidt V., Mauder N., Loeffler A., Jepson R. E., Isgren C., Pinchbeck G., Haldenby S. & Timofte D.

Heliyon, 6 March 2024

<https://doi.org/10.1016/j.heliyon.2024.e27402>

Strain typing and antimicrobial susceptibility of *Salmonella enterica* Albany isolates from duck farms in South Korea

Han M., Chae M., Lee S., No K. & Han S.

Microbiology Spectrum, 5 March 2024

<https://doi.org/10.1128/spectrum.04119-23>

Comparative analysis of IR-Biotyper, MLST, cgMLST, and WGS for clustering of vancomycin-resistant *Enterococcus faecium* in a neonatal intensive care unit

Park S., Ryoo N.

European Journal of Clinical Microbiology & Infectious Diseases, 20 February 2024

<https://doi.org/10.1007/s10096-024-04781-3>

Evaluating Fourier-transform infrared spectroscopy with IR Biotyper as a faster and simpler method for investigating the sources of an outbreak of legionellosis

Naoki Nakajima, Michio Jinnai, Shinji Izumiyama & Toshiro Kuroki



European Journal of Clinical Microbiology & Infectious Diseases, 14 February 2024

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Characterization of an outbreak caused by *Elizabethkingia miricola* using Fourier-transform infrared (FTIR) spectroscopy

Rodríguez-Temporal D., García-Cañada J. E., Candela A., Oteo-Iglesias J., Serrano-Lobo J., Pérez-Vázquez M., Rodríguez-Sánchez B., Cercenado E.

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Application of Fourier Transform Infrared Spectroscopy to Discriminate Two Closely Related Bacterial Species: *Bacillus anthracis* and *Bacillus cereus* Sensus Stricto

Manzulli V., Cordovana M., Serrecchia L., Rondinone V., Pace L., Farina D., Cipolletta D., Caruso M., Fraccalvieri R., Difato L. M., Tolve F., Vetrizzo V., Galante D.

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An outbreak with multidrug-resistant *Acinetobacter baumannii* on a burn ICU and its control with multifaceted containment measures

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Validated differentiation of *Listeria monocytogenes* serogroups by FTIR spectroscopy using an Artificial Neural Network based classifier in an accredited official food control laboratory

Oberreuter H., Dyk M., Rau J.



Journal of Clinical Microbiology, 3 October 2023

<https://doi.org/10.1128/jcm.00347-23>

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Uribe G., Salipante S. J., Curtis L., Lieberman J. A., Kurosawa K., Cookson B. T., Hoogestraat D., Stewart M. K., Olmstead T., Bourassa L.

Microbiology Spectrum, 22 September 2023

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Fourier-transform infrared spectroscopy for typing of vancomycin-resistant *Enterococcus faecium*: performance analysis and outbreak investigation

Scheier T. C., Franz J., Boumasmoud M., Andreoni F., Chakrakodi B., Duvnjak B., Egli A., Zingg W., Ramette A., Wolfensberger A., Kouyos R. D., Brugger S. D.

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Rapid Discrimination of *Pseudomonas aeruginosa* ST175 Isolates Involved in a Nosocomial Outbreak Using MALDI-TOF Mass Spectrometry and FTIR Spectroscopy Coupled with Machine Learning

Candela A., Arroyo M.J., Sánchez-Cueto M., Marín M., Cercenado E., Méndez G., Muñoz P., Mancera L., Rodríguez-Temporal D. and Rodríguez-Sánchez B.

Journal of Microbiological Methods, 28 July 2023

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Application of FT-IR Spectroscopy for *Mycobacterium abscessus* complex subspecies differentiation

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Zoonoses and Public Health, 10 May 2023

<https://doi.org/10.1111/zph.13046>

Investigation of a *Staphylococcus aureus* sequence type 72 food poisoning outbreak associated with food-handler contamination in Italy

F. Savini, A. Romano, F. Giacometti, V. Indio, M. Pitti, L. Decastelli, P. L. Devalle, I. Silvia R. Gorrasi, S. Miaglia, A. Serraino

Frontiers in Microbiology, 13 April 2023

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A multi-center validation study on the discrimination of *Legionella pneumophila* sg.1, *Legionella pneumophila* sg. 2-15 and *Legionella* non-pneumophila isolates from water by FT-IR spectroscopy

Tata A., Marzoli F., Cordovana M., Tiengo A., Zacometti C., Massaro A., Barco L., Belluco S., Piro R.

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Son Young Jun, Young Ah Kim, Suk-Jun Lee, Woon-Won Jung, Hyun-Sook Kim, Sung-Soo Kim, Hyunsoo Kim, Dongeun Yong, Kyungwon Lee

Pathogens 2023, 18 March 2023

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Prescription of Rifampicin for *Staphylococcus aureus* Infections Increased the Incidence of *Corynebacterium striatum* with Decreased Susceptibility to Rifampicin in a Hungarian Clinical Center

Orosz L., Lengyel G., Makai K., Burián K.



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Frontiers in Microbiology, 8 December 2022

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In-process real-time probiotic phenotypic strain identity tracking: The use of Fourier transform infrared spectroscopy

Francesca Deidda, Miriam Cordovana, Nicole Bozzi Cionci, Teresa Graziano, Diana Di Gioia and Marco Pane

Journal of Microbiological Methods, 8 November 2022

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Comparison of FT-IR with whole-genome sequencing for identification of maternal-to-neonate transmission of antibiotic-resistant bacteria

Azrad M, Matok LA, Leshem T and Peretz A

Microbiology Spectrum, October 2022

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Investigating the Origin of *Mycobacterium chimaera* Contamination in Heater-Cooler Units: Integrated Analysis with Fourier Transform Infrared Spectroscopy and Whole-Genome Sequencing

F. Bisognin, F. Messina, O. Butera, C. Nisii, A. Mazzarelli, S. Cristino, M. R. Pascale, G. Lombardi, A. Cannas, P. Dal Monte



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Clonal Dissemination of Extended-Spectrum Cephalosporin-Resistant Enterobacterales between Dogs and Humans in Households and Animal Shelters of Romania

Andrea Paula Cozma, Cristina Mihaela Rimbu, Flavia Zendri, Iuliana Elena Maciucă and Dorina Timofte

Frontiers in Cellular and Infection Microbiology, August 2022

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Surveillance diagnostic algorithm using real-time PCR assay and strain typing method development to assist with the control of *C. auris* amid COVID-19 pandemic

Deisy A. Contreras and Margie A. Morgan

Antibiotics, 7 July 2022

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Performance Evaluation of the IR Biotyper® System for Clinical Microbiology: Application for Detection of *Staphylococcus aureus* Sequence Type 8 Strains

Jun Sung Hong, Dokyun Kim and Seok Hoon Jeong



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Fourier transform infrared spectroscopy as a new tool for surveillance in local stewardship antimicrobial program: a retrospective study in a nosocomial *Acinetobacter baumannii* outbreak

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Frontiers in Microbiology, 26 April 2022

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