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Recent Papers

J Wang, M Ranjbaran, A Ault, MS Verma. 2023. A loop-mediated isothermal amplification assay to detect Bacteroidales and assess risk of fecal contamination. *Food Microbiology* 110, 104173.

M Boodaghizaji, S Milind Athalye, S Thakur, E Esmaili, MS Verma, AM Ardekani. 2022. Characterizing viral samples using machine learning for Raman and absorption spectroscopy. *MicrobiologyOpen* 11 (6), e1336.

J Wang, JL Davidson, S Kaur, AA Dextre, M Ranjbaran, MS Kamel, SM Athalye, MS Verma. 2022. Paper-Based Biosensors for the Detection of Nucleic Acids from Pathogens. *Biosensors* 12 (12), 1094.

RE Centeno-Martinez, N Glidden, S Mohan, JL Davidson, E Fernandez-Juricic, JP Boerman, J Schoonmaker, D Pillai, J Koziol, A Ault, MS Verma, TA Johnson. 2022. Identification of bovine respiratory disease through the nasal microbiome. *Animal microbiome* 4 (1), 1-18.

S Nejati, J Wang, S Sedaghat, NK Balog, AM Long, UH Rivera, V Kasi, K Park, JS Johnson, MS Verma, R Rahimi. 2022. Smart capsule for targeted proximal colon microbiome sampling. *Acta Biomaterialia* 154, p 83-96.

M Ranjbaran, MS Verma. 2022. Microfluidics at the interface of bacteria and fresh produce. *Trends in Food Science & Technology* 128, p 102-117.

S Nejati, J Wang, U Heredia-Rivera, S Sedaghat, I Woodhouse, JS Johnson, M Verma, R Rahimi. 2022. Small intestinal sampling capsule for inflammatory bowel disease type detection and management. *Lab on a Chip* 22 (1), 57-70.

A Pascual-Garrigos, MK Maruthamuthu, A Ault, JL Davidson, G Rudakov, D Pillai, J Koziol, JP Schoonmaker, T Johnson, MS Verma. 2021. On-farm colorimetric detection of *Pasteurella multocida*, *Mannheimia haemolytica*, and *Histophilus somni* in

crude bovine nasal samples. *Veterinary research* 52 (1), 1-12 14.

JL Davidson, J Wang, MK Maruthamuthu, A Dextre, A Pascual-Garrigos, S Mohan, SVS Putikam, OI Osman, D McChesney, J Seville, MS Verma. 2021. A paper-based colorimetric molecular test for SARS-CoV-2 in saliva. *Biosensors and Bioelectronics: X* 9, 100076.

S Mohan, A Pascual-Garrigos, H Brouwer, D Pillai, J Koziol, A Ault, J Schoonmaker, T Johnson, MS Verma. 2021. Loop-Mediated Isothermal Amplification for the Detection of *Pasteurella multocida*, *Mannheimia haemolytica*, and *Histophilus somni* in Bovine Nasal Samples. *ACS Agricultural Science & Technology* 1 (2), 100-108.

J Wang, A Dextre, A Pascual-Garrigos, JL Davidson, MK Maruthamuthu, D McChesney, J Seville, MS Verma. 2021. Fabrication of a paper-based colorimetric molecular test for SARS-CoV-2. *MethodsX* 8, 101586.

MK Maruthamuthu, AH Raffiee, DM De Oliveira, AM Ardekani, MS Verma. 2020. Raman spectra-based deep learning: A tool to identify microbial contamination. *MicrobiologyOpen* 9 (11), e1122.

A Yildirim, JC Grant, S Shams Es-haghi, W Lee, MK Maruthamuthu, M Verma, JW Sutherland, M Cakmak. 2020. Roll-to-Roll (R2R) Production of Large-Area High-Performance Piezoelectric Films Based on Vertically Aligned Nanocolumn Forests. *Advanced Materials Technologies* 5 (11), 2000553.

MK Maruthamuthu, SR Rudge, AM Ardekani, MR Ladisch, MS Verma. 2020. Process analytical technologies and data analytics for the manufacture of monoclonal antibodies. *Trends in biotechnology* 38 (10), 1169-1186.

JF Waimin, S Nejati, H Jiang, J Qiu, J Wang, MS Verma, R Rahimi. 2020. Smart capsule for non-invasive sampling and studying of the gastrointestinal microbiome. *RSC advances* 10 (28), 16313-16322.