

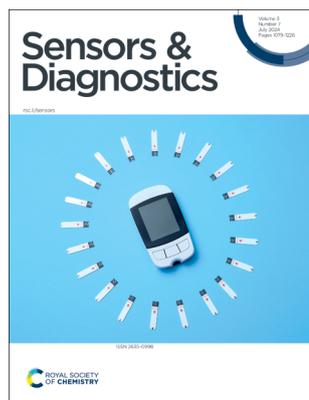
Sensors & Diagnostics

rsc.li/sensors

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 2635-0998 CODEN SDEIAR 3(7) 1079-1226 (2024)



Cover
Image Credit: © Andriy Onufriyenko/Getty Images.

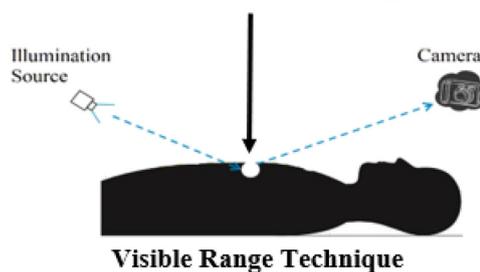
CRITICAL REVIEWS

1085

Contactless vital sign monitoring systems: a comprehensive survey of remote health sensing for heart rate and respiration in internet of things and sleep applications

Muhammad Salman Raheel, Faisal Tubbal, Raad Raad, Philip Ogunbona, James Coyte, Christopher Patterson, Dana Perlman, Saeid Iranmanesh,* Nidhal Odeh and Javad Foroughi*

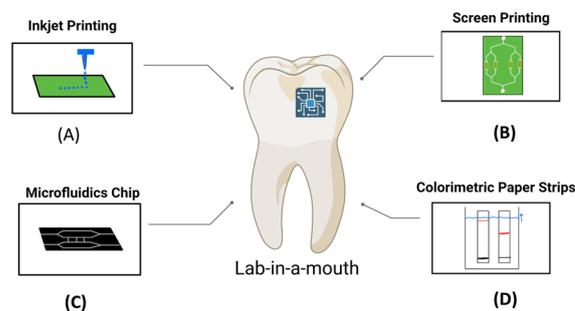
Contactless Vital Sign Monitoring Methods



1119

Point-of-care diagnostic devices for periodontitis – current trends and urgent need

Alexandra Griffith, Charmi Chande, Sahitya Kulkarni, Josuel Morel, Yu-Hsuan Cheng, Emi Shimizu, Carla Cugini, Sagnik Basuray* and Vivek Kumar*



ChemComm

Uncover new possibilities
with outstanding
preliminary research

Original discoveries, fuelling
every step of scientific progress

rsc.li/chemcomm

Fundamental questions
Elemental answers

TUTORIAL REVIEW

1135

The role of optical fiber sensors in the new generation of healthcare devices: a review

Arnaldo Leal-Junior,* Jussara Silva, Leandro Macedo, Arthur Marchesi, Samilly Morau, Janine Valentino, Fabricya Valentim and Magno Costa

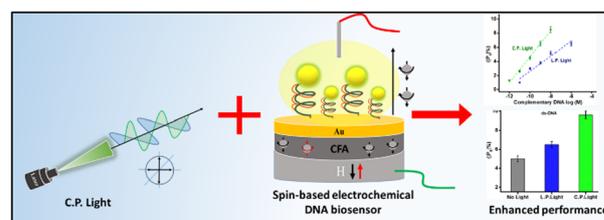


PAPERS

1159

Enhanced spin-polarization and detection limit in a spin-based optoelectrochemical DNA hybridization sensor induced by circularly polarized light

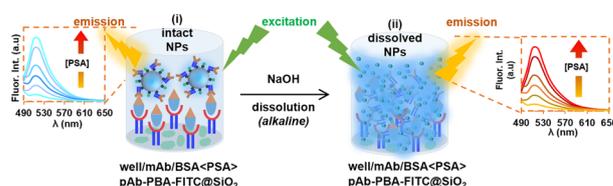
Mayank Tiwari and Debabrata Mishra*



1167

Antibody fluorescein-doped silica nanobioconjugates for the ultrasensitive detection of prostate-specific antigen

Tumelo Msutu, Omotayo Adeniyi and Philani Mashazi*



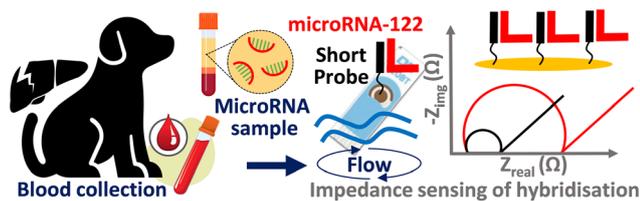
1177

Magneto-plasmonic bionanocomposites for on-site SERS detection of water contaminants

Sofia F. Soares, Nuno M. A. S. Silva, João Brenheiro, Sara Fateixa, Ana L. Daniel-da-Silva and Tito Trindade*



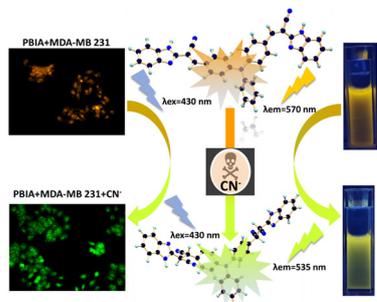
1190



Circulating microRNA detection using electrochemical biosensor for rapid diagnosis of liver disease in dogs

Appan Roychoudhury, Federico Diez, Richard J. Mellanby, James W. Dear and Till T. Bachmann*

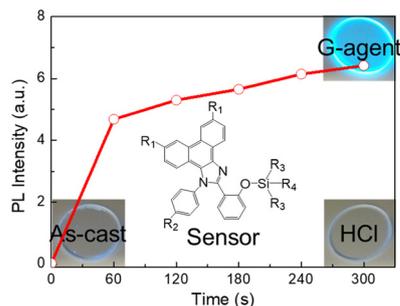
1201



A triphenylamine scaffold for fluorogenic sensing of noxious cyanide *via* the ICT mechanism and its bioimaging application

Amitav Biswas, Rimi Mukherjee, Atanu Maji, Rahul Naskar, Krishnendu Aich, Nabendu Murmu and Tapan K. Mondal*

1212



Effect of structure on excited-state intramolecular proton transfer-based sensors for phosphonofluoridate G-series nerve agent vapour detection

Shengqiang Fan, Paul L. Burn,* Ian R. Gentle and Paul E. Shaw*

