## $(digital\ PCR)\ OR\ (dPCR)$

|   | NCT Number      | Title  | Authors  | Description   | Identifier   | Dates                           |
|---|-----------------|--|--|---|--|---------------------------------|
| 1 | pubmed:36104937 | Associations between early-life and in utero infections and cytomegalovirus-positive acute lymphoblastic leukemia in children              | Rachel E Gallant Katti Arroyo Catherine Metayer Alice Y Kang Adam J de Smith Joseph L Wiemels  | Childhood infections and cytomegalovirus (CMV) are associated with pediatric acute lymphoblastic leukemia (ALL). CMV dysregulates the host immune system and alters the immune response to subsequent antigenic exposures. We suspect that this immune dysregulation contributes to increased numbers of symptomatic infections in childhood allowing for expansion of preleukemic clones. We explored the association between childhood infections, maternal infections during pregnancy, and CMV-positive ALL | pmid:36104937<br>doi:10.1002/ijc.34292                           | Thu, 15 Sep 2022 06:00:00 -0400 |
| 2 | pubmed:36105598 | Nanocellulose Composites as Smart Devices With Chassis, Light-Directed DNA Storage, Engineered Electronic Properties, and Chip Integration | Elena Bencurova Sergey Shityakov Dominik Schaack Martin Kaltdorf Edita Sarukhanyan Alexander Hilgarth Christin Rath Sergio Montenegro Günter Roth Daniel Lopez Thomas Dandekar | The rapid development of green and sustainable materials opens up new possibilities in the field of applied research. Such materials include nanocellulose composites that can integrate many components into composites and provide a good chassis for smart devices. In our study, we evaluate four approaches for turning a nanocellulose composite into an information storage or processing device: 1) nanocellulose can be a suitable carrier material and protect information stored in DNA. 2)          | pmid:36105598<br>pmc:PMC9465592<br>doi:10.3389/fbioe.2022.869111 | Thu, 15 Sep 2022 06:00:00 -0400 |
| 3 | pubmed:36106488 | Controlled Rehydration of Dried Reagents for Robust Multiplex Digital PCR  | Tengbao Xie Yu Luo Ping Wang Lei Wu Xu Cui Bangyong Sun Gang Li  | Digital polymerase chain reaction (dPCR) is emerging as a powerful method for nucleic acid detection due to its unprecedented sensitivity and precision. However, most current dPCR platforms are inherently limited by their low multiplexing ability due to primer-pair cross interactions and spectral overlap of available fluorophores. Here, we present a novel and robust method for multiplexing dPCR that is free from primer dimerization and fluorescence channel number limitation, enabling highly | pmid:36106488<br>doi:10.1021/acs.analchem.2c02920                | Thu, 15 Sep 2022 06:00:00 -0400 |