

lipid nanoparticles

NCT Number		Title	Authors	Description	Identifier	Dates
1	pubmed:36130677	The Race to Develop the Pfizer-BioNTech COVID-19 Vaccine: From the Pharmaceutical Scientists' Perspective: Race to the COVID-19 Vaccine	Lavinia M Lewis Advait V Badkar David Cirelli Rodney Combs Thomas F Lerch	At the outset of the coronavirus disease 2019 (COVID-19) pandemic, it was clear that a vaccine would be crucial for global health efforts. The Pfizer and BioNTech teams came together in a race against the virus, working to design, test, manufacture, and distribute a safe and efficacious vaccine in record time for people around the world. Here, we provide backstory commentary from the pharmaceutical scientist perspective on the challenges and solutions encountered in the development of the...	pmid:36130677 doi:10.1016/j.xphs.2022.09.014	Wed, 21 Sep 2022 06:00:00 -0400
2	pubmed:36133441	Predictive high-throughput screening of PEGylated lipids in oligonucleotide-loaded lipid nanoparticles for neuronal gene silencing	Apoorva Sarode Yuchen Fan Amy E Byrnes Michal Hammel Greg L Hura Yige Fu Ponien Kou Chloe Hu Flora I Hinz Jasmine Roberts Stefan G Koenig Karthik Nagapudi Casper C Hoogenraad Tao Chen Dennis Leung Chun-Wan Yen	Lipid nanoparticles (LNPs) are gaining traction in the field of nucleic acid delivery following the success of two mRNA vaccines against COVID-19. As one of the constituent lipids on LNP surfaces, PEGylated lipids (PEG-lipids) play an important role in defining LNP physicochemical properties and biological interactions. Previous studies indicate that LNP performance is modulated by tuning PEG-lipid parameters including PEG size and architecture, carbon tail type and length, as well as the...	pmid:36133441 pmc:PMC9417559 doi:10.1039/d1na00712b	Thu, 22 Sep 2022 06:00:00 -0400
3	pubmed:36135026	Advances in Nanofabrication Technology for Nutraceuticals: New Insights and Future Trends	Rachitha Puttasiddaiah Rohitha Lakshminarayana Nandini Lalithadripura Somashekar Vijai Kumar Gupta Baskaran Stephen Inbaraj Zeba Usmani Vinay Basavegowda Raghavendra Kandi Sridhar Minaxi Sharma	Bioactive components such as polyphenolics, flavonoids, bioactive peptides, pigments, and essential fatty acids were known to ward off some deadliest diseases. Nutraceuticals are those beneficial compounds that may be food or part of food that has come up with medical or health benefits. Nanoencapsulation and nanofabricated delivery systems are an imminent approach in the field of food sciences. The sustainable fabrication of nutraceuticals and biocompatible active components indisputably...	pmid:36135026 doi:10.3390/bioengineering9090478	Thu, 22 Sep 2022 06:00:00 -0400