Smart Technologies Driven Approaches to Tackle COVID-19 Pandemic

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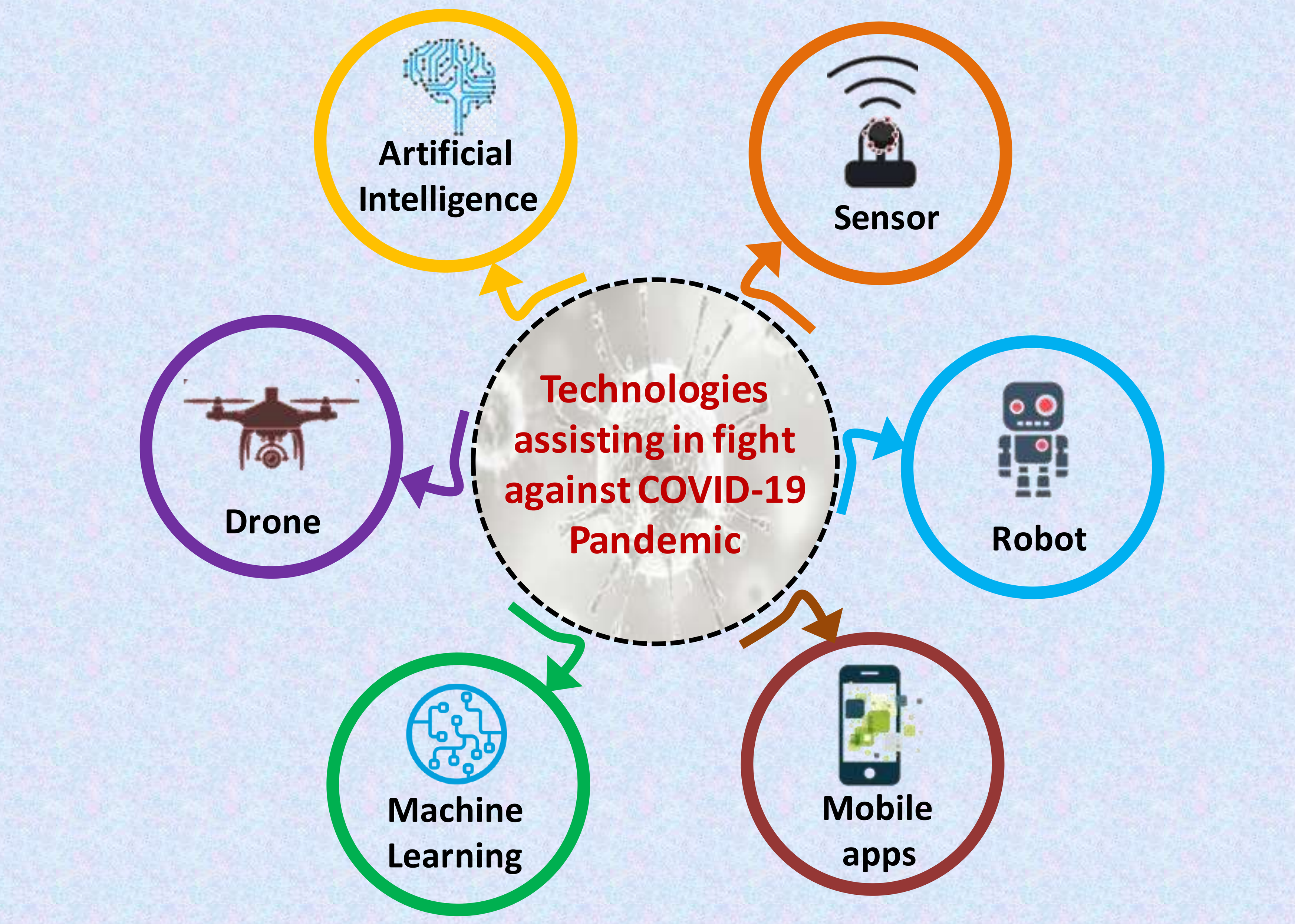
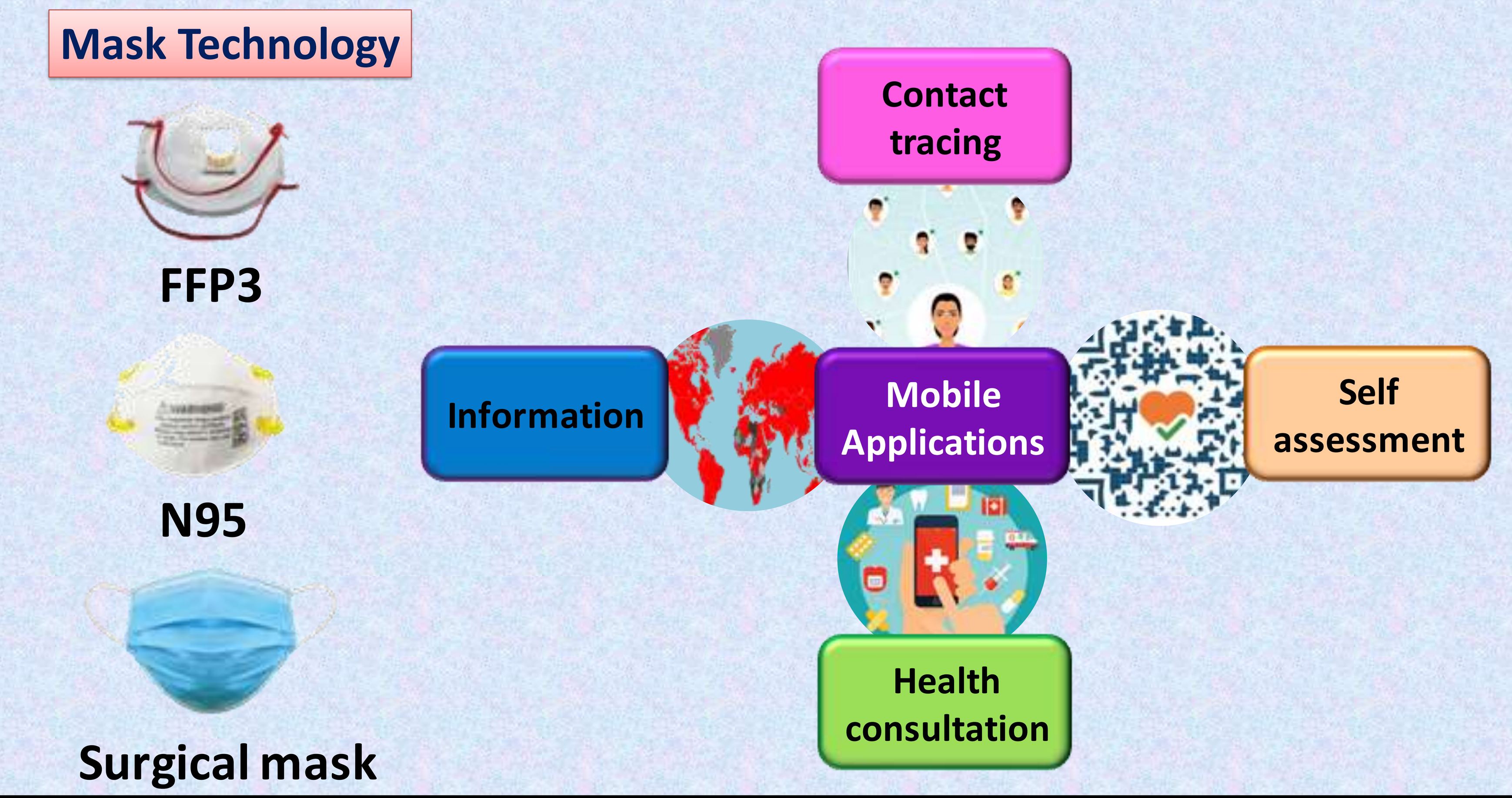
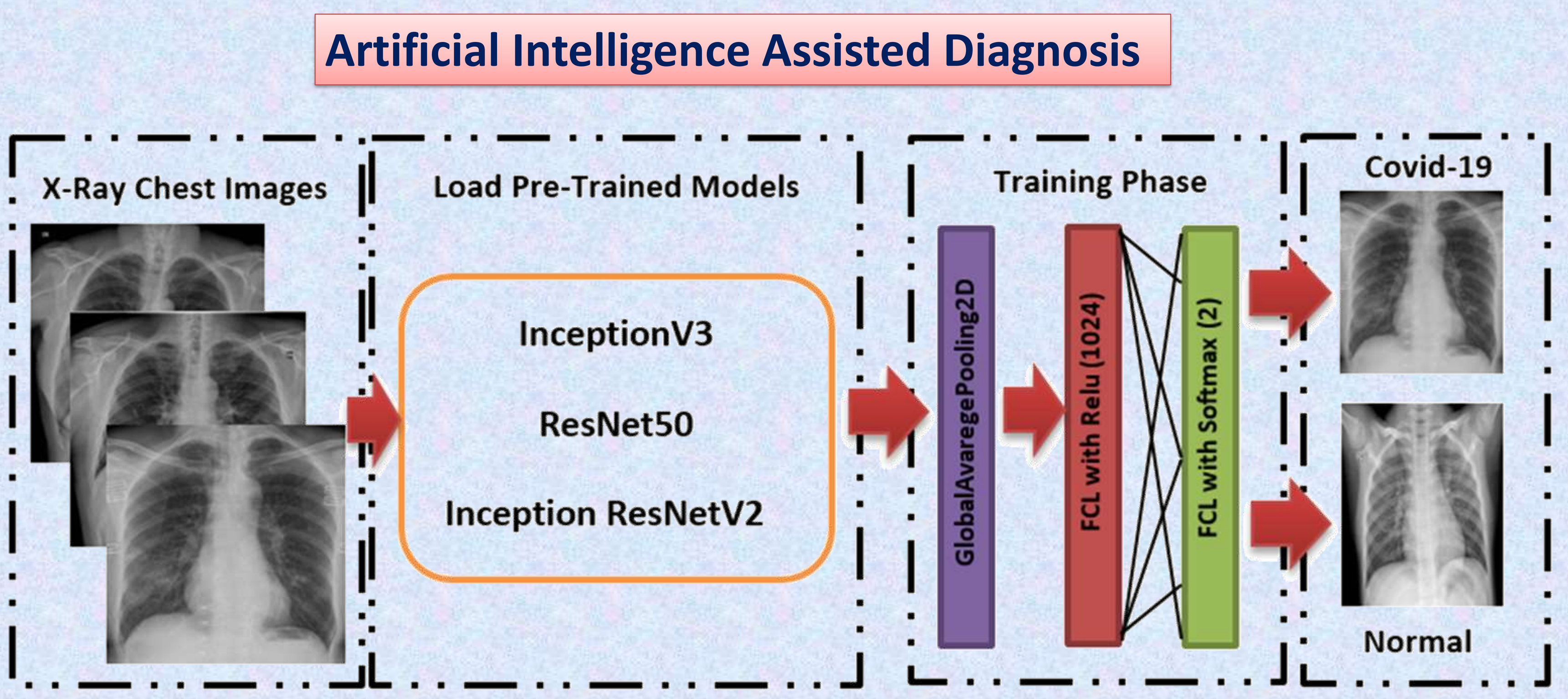
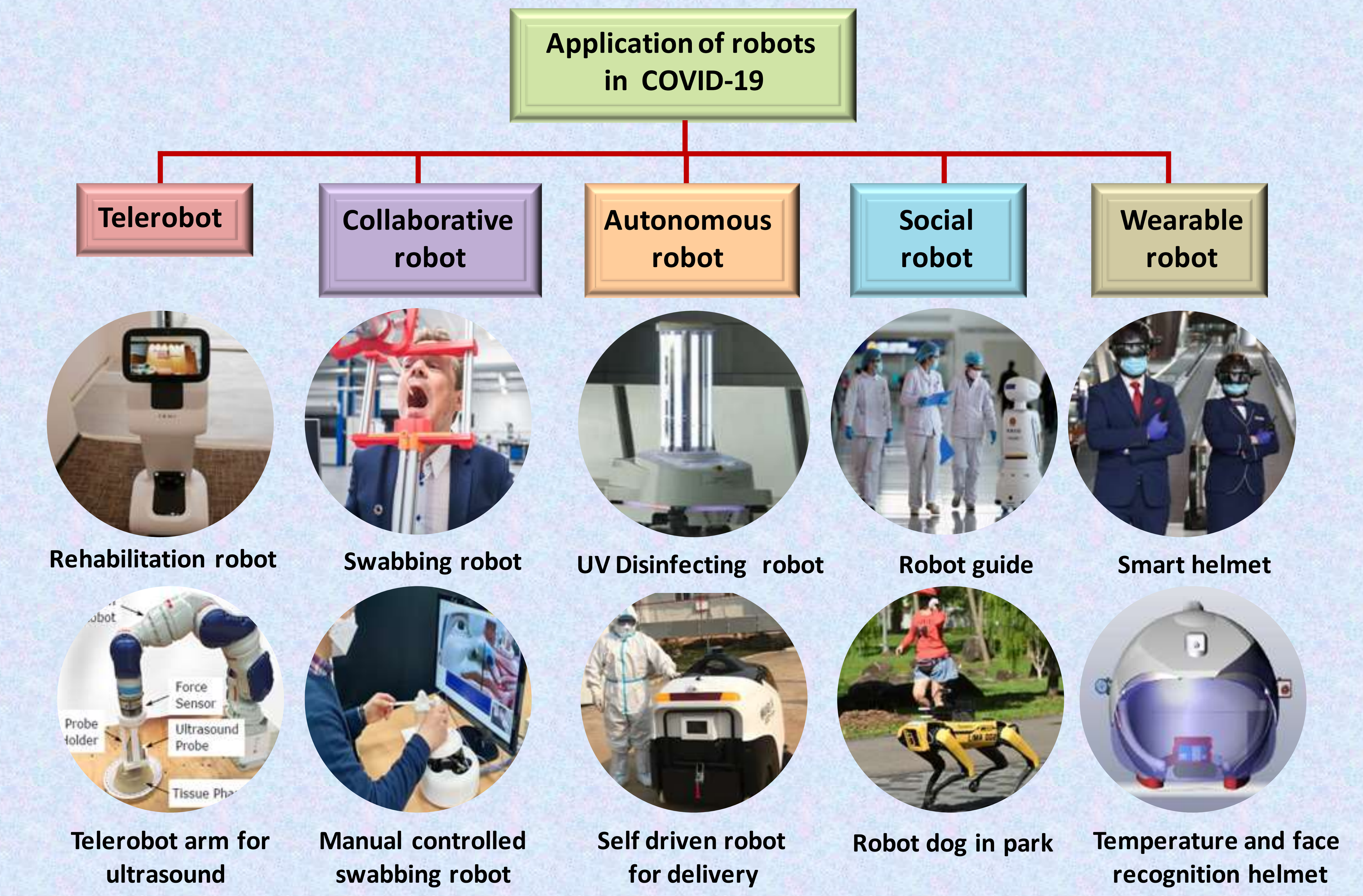
Abstract

The emergence of Severe Acute Respiratory Syndrome Corona Virus 2 (SARS-CoV-2) had led to a global outbreak of corona virus disease 2019 (COVID-19) and raised an international public health issue. To mitigate the infection and bring the sustainability in current pandemic situation, the healthcare system and governments are doing exceptional work. Globally, the implementation of technologies in healthcare systems and diverse government policies has proven to be effective in tackling COVID-19. The rapid technological swift during the pandemic and its role in assisting the fight against corona virus is phenomenal. Various technologies like robotics, drone, artificial intelligence (AI), data communication, mask, and smart sensors, etc. has synergistically helped in mitigating the effect of COVID-19. The poster represents the outlook of these technologies in terms of strategies and framework in which they have been applied for assisting various sectors like the health system, industries, government, and public, etc.

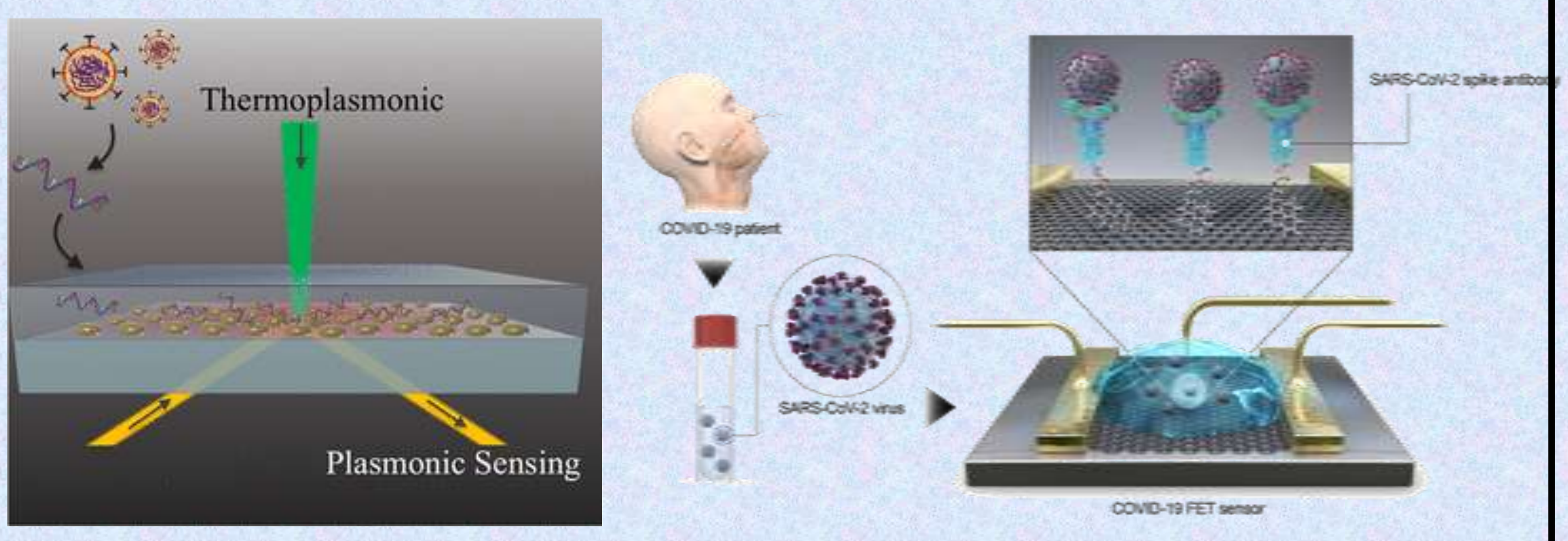








Sensors for Detecting COVID-19



Plasmonics based COVID-19 sensor   COVID-19 FET sensor

Strengths	Weakness	Opportunities
➢Health emergency system is advancing comprehensively. ➢Technology has improved the reach of facilities to masses. ➢Quick and effective cooperation for handling large scale surveillance. ➢Integration of smart technologies with health and information system. ➢Construction of health emergency culture and code of conduct system.	➢The public are flustered and feel bounded with technology. ➢Lack of long term vision and absence of technology continuity plan. ➢Technologies effectiveness in the pandemic is yet to be established. ➢Start up has low financial stability and over dependence on capital sources. ➢Lack of face to face interaction can make things harder to achieve.	➢ New technological exploration. ➢Technological improvement to response in health emergency system. ➢People safety orientated policies. ➢Strengthen public and technology coordination to respond in emergencies. ➢Advance technology for cyber security. ➢Technology assisted International linkages to tackle emergencies.

References

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