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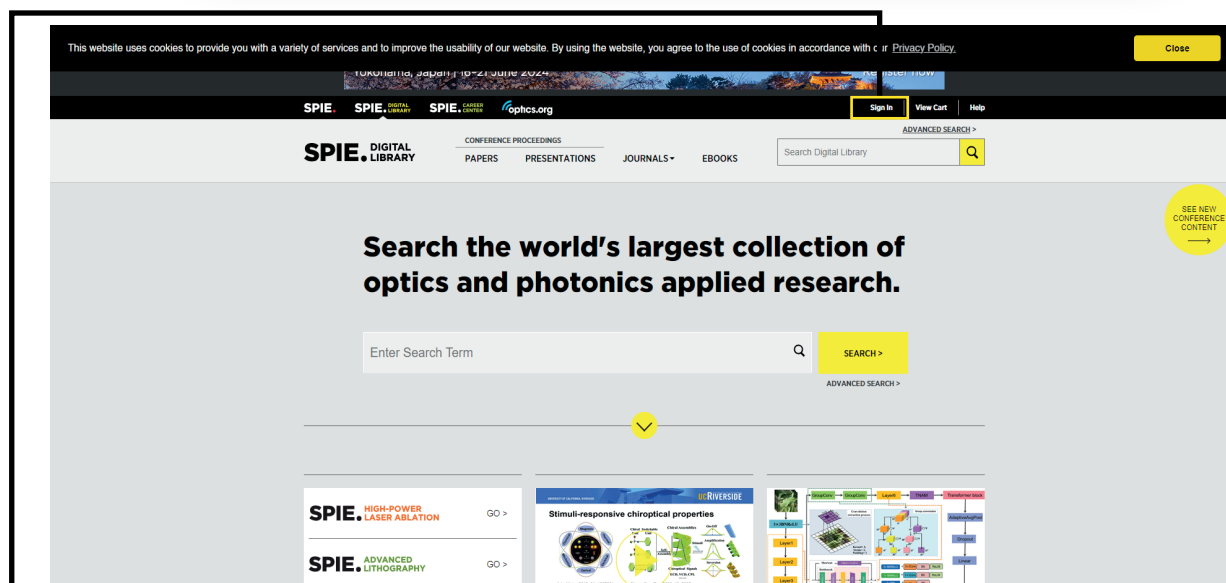
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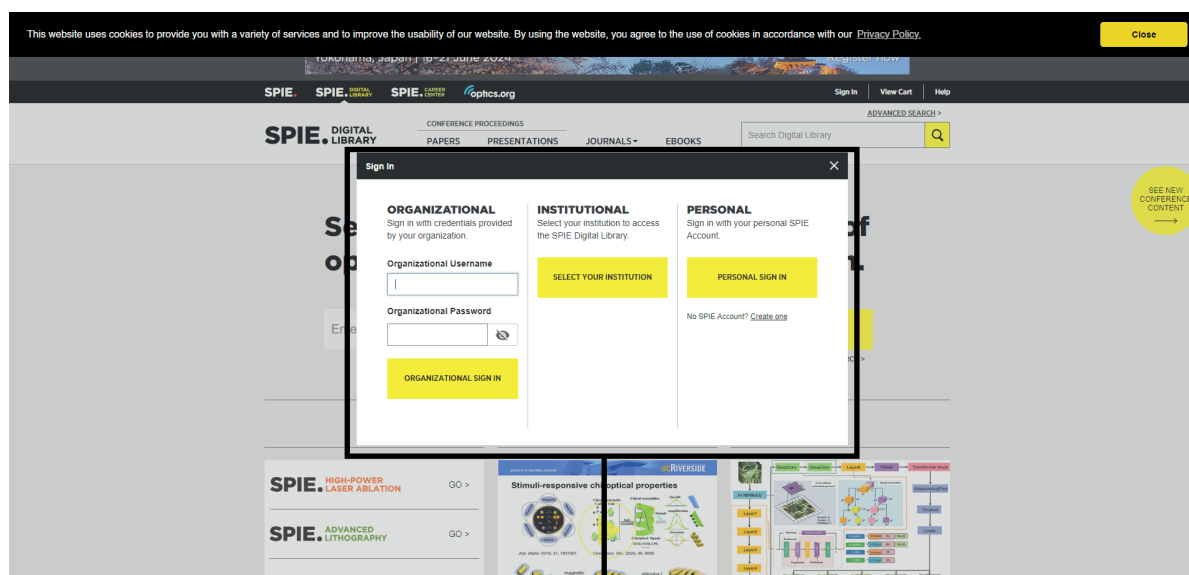


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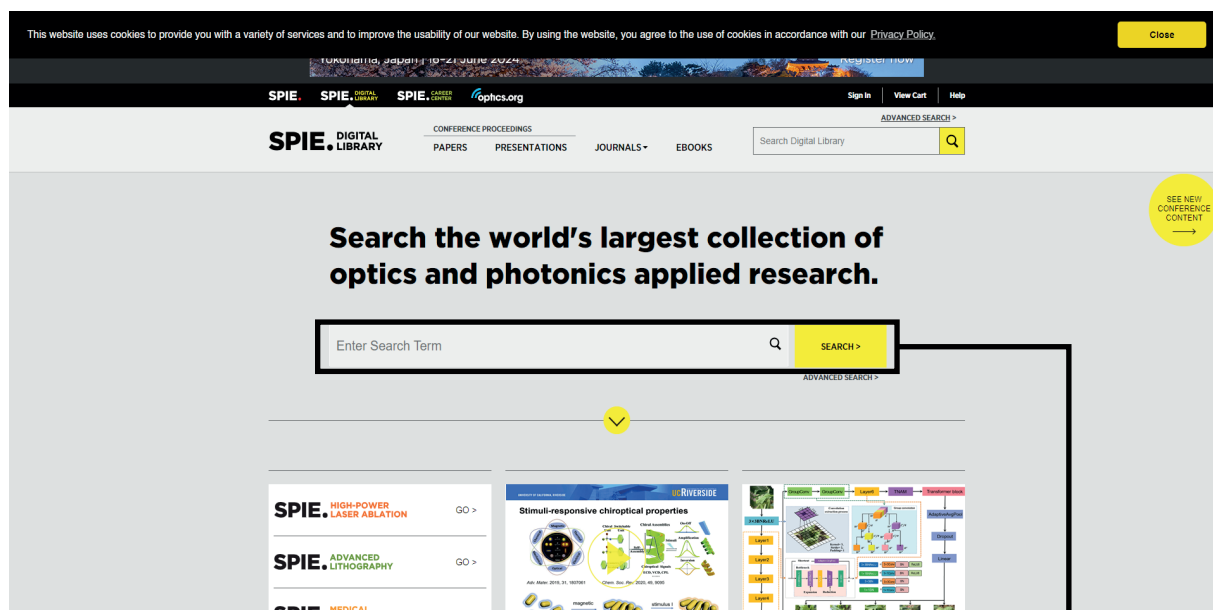


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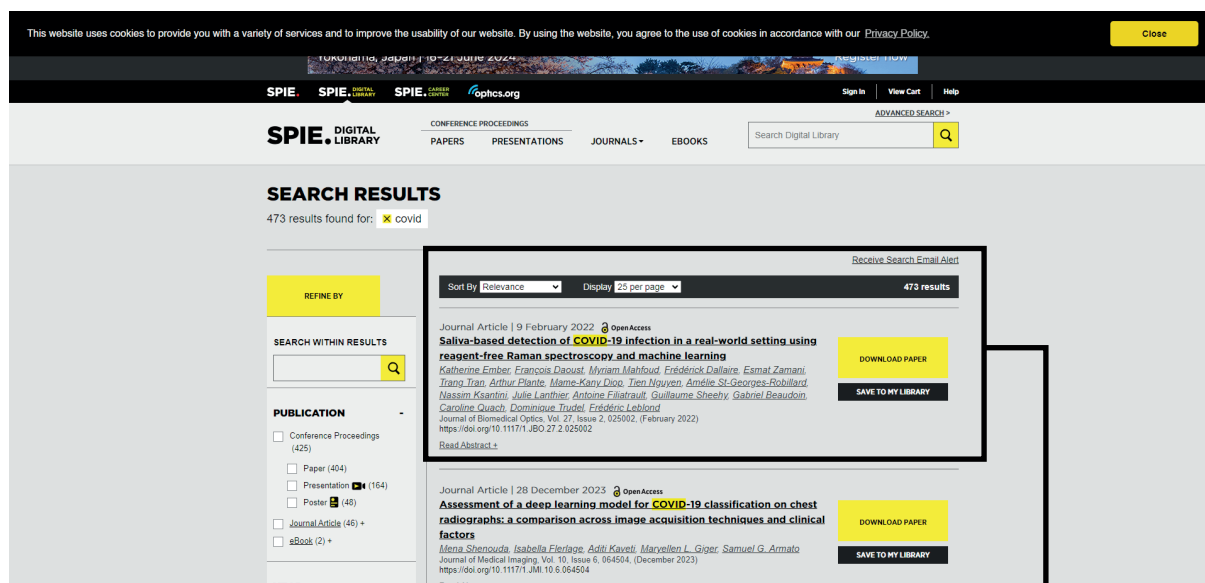
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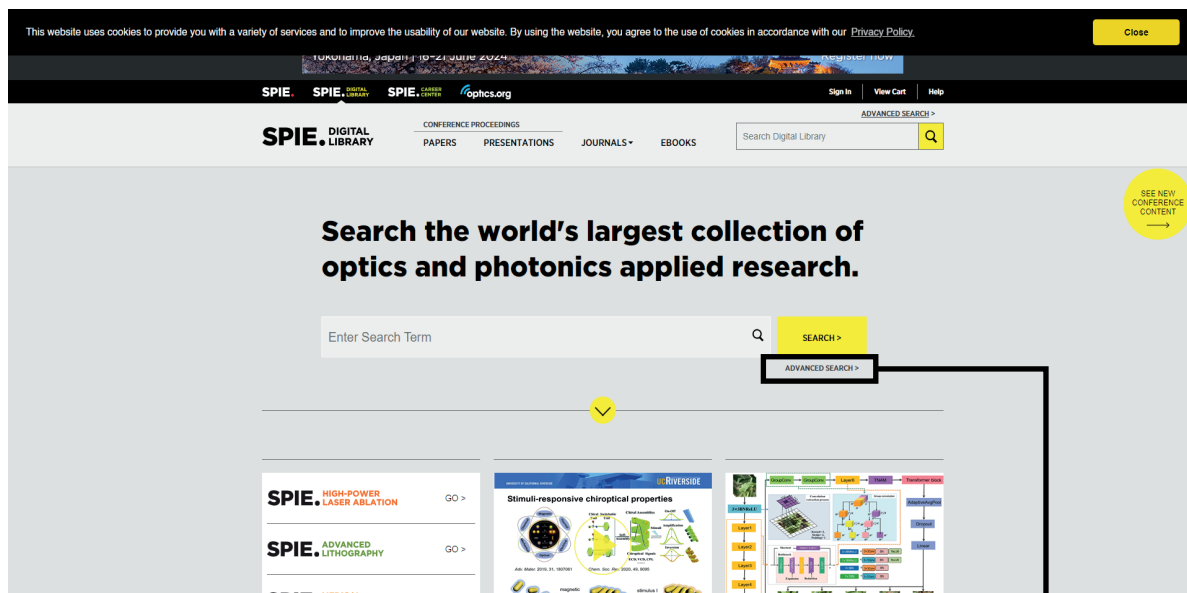


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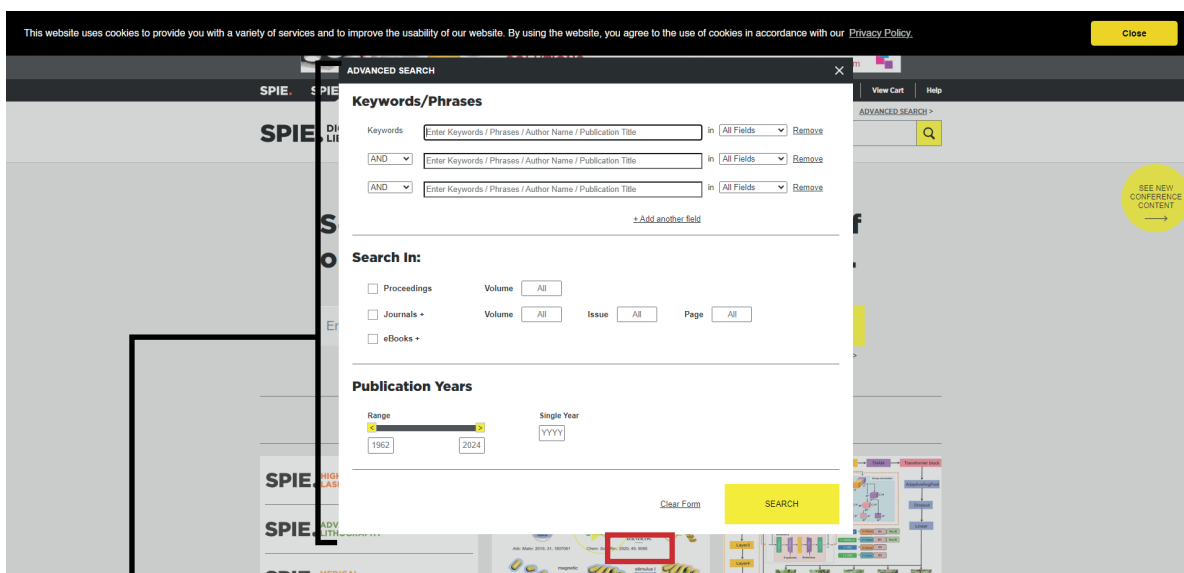
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Significance: The primary method of COVID-19 detection is reverse transcription polymerase chain reaction (RT-PCR) testing. PCR test sensitivity may decrease as more variants of concern arise and reagents may become less specific to the virus.
Aim: We aimed to develop a reagent-free way to detect COVID-19 in a real-world setting with minimal constraints on sample acquisition. The machine learning (ML) models involved could be frequently updated to include spectral information about variants without needing to develop new reagents.

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