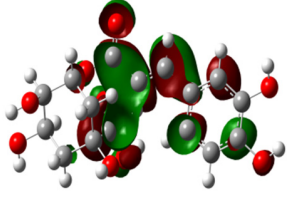
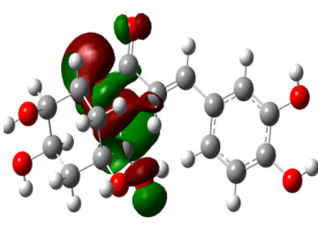
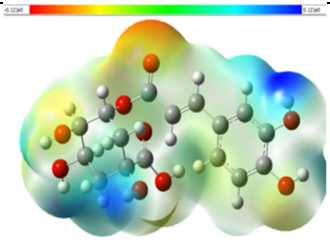
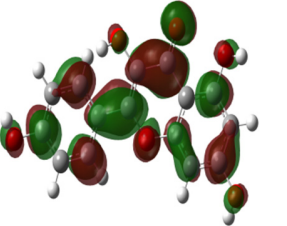
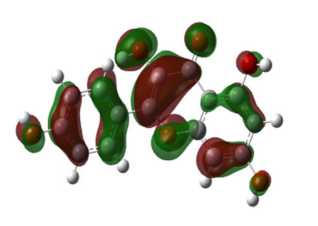
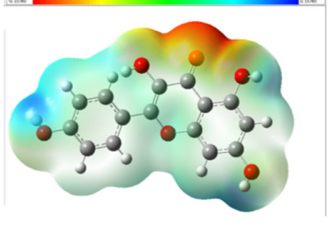
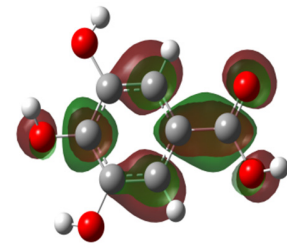
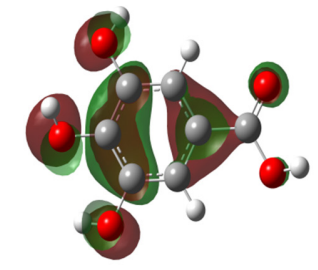
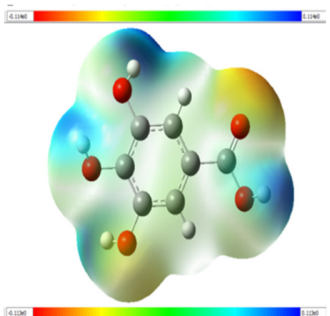
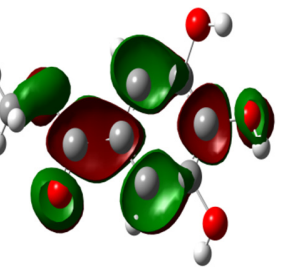
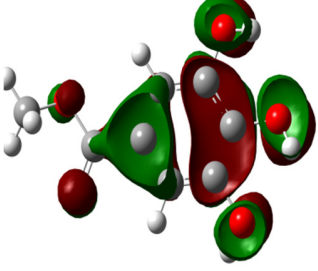
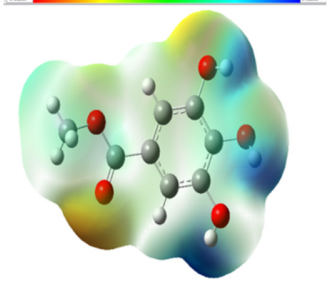
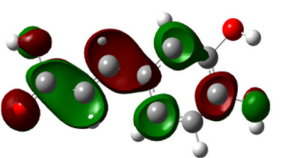
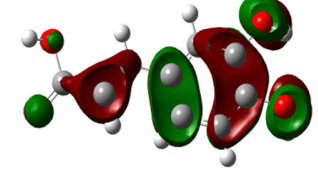
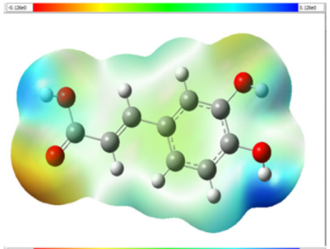
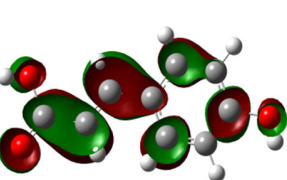
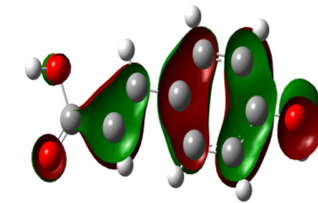
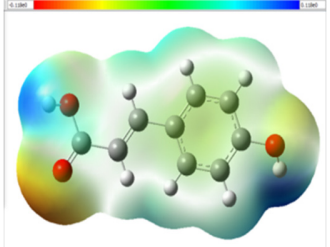


Chlorogenic acid			
Kaempferol			
Gallic acid			
Methyl gallate			
Caffeic acid			
Coumaric acid			

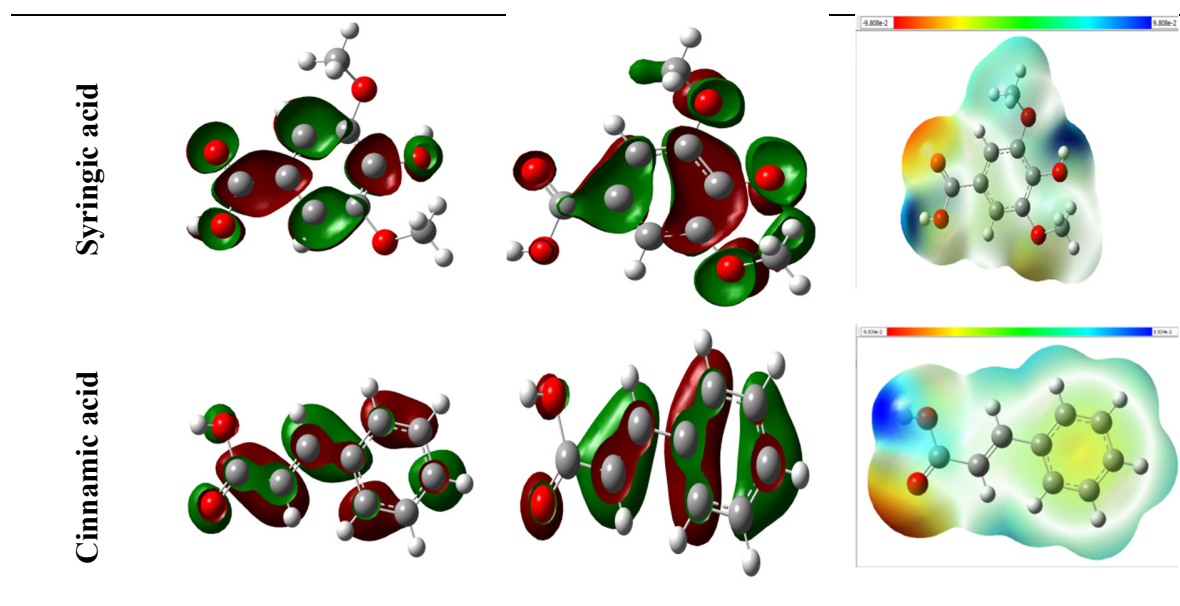
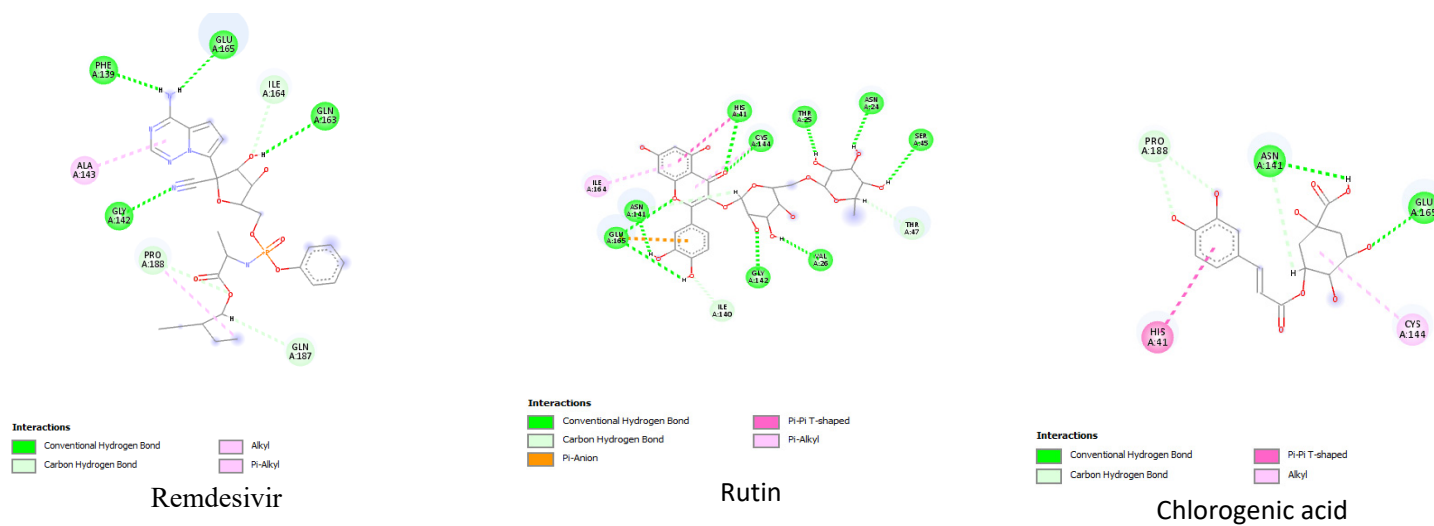
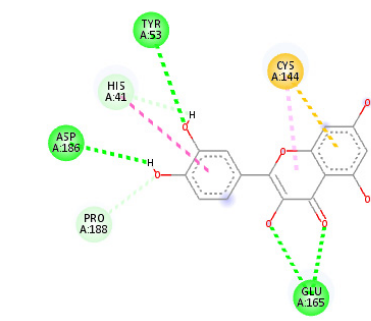


Figure S1. Frontier molecular orbitals (HOMOs, LUMOs) and Molecular electrostatic potential (MEP) surface of all detected phenolic compounds by using DFT/B3LYP/6-311++G(2d,2p) method

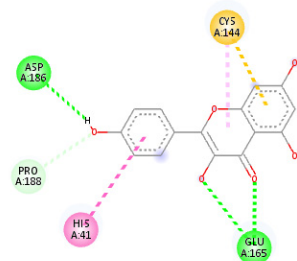




Interactions

- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Pi-Donor Hydrogen Bond
- Pi-Sulfur
- Pi-Pi T-shaped
- Pi-Alkyl

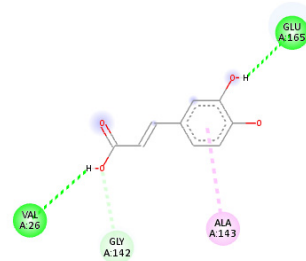
Quercetin



Interactions

- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Pi-Sulfur
- Pi-Pi T-shaped
- Pi-Alkyl

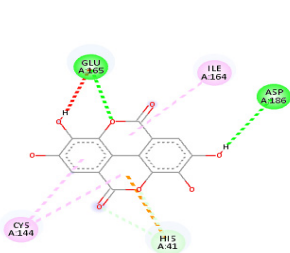
Kaempferol



Interactions

- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Pi-Alkyl

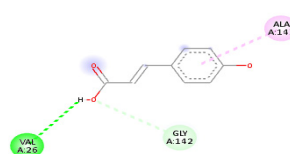
Caffeic acid



Interactions

- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Unfavorable Donor-Donor
- Pi-Cation
- Pi-Alkyl

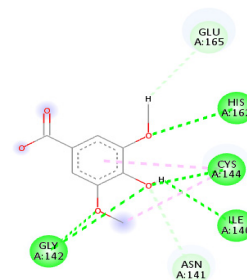
Ellagic acid



Interactions

- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Pi-Alkyl

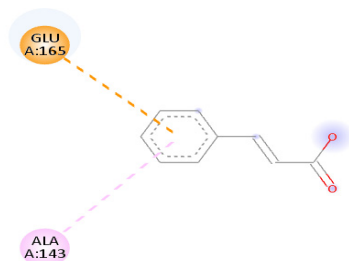
Coumaric acid



Interactions

- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Alkyl
- Pi-Alkyl

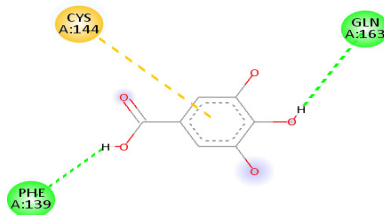
Syringic acid



Interactions

- Pi-Anion
- Pi-Alkyl

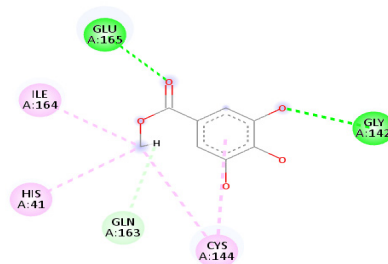
Cinnamic acid



Interactions

- Conventional Hydrogen Bond
- Pi-Sulfur

Gallic acid



Interactions

- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Alkyl
- Pi-Alkyl

Methyl gallate

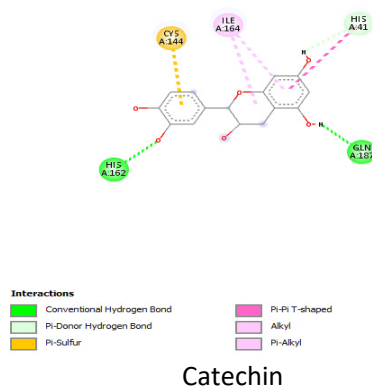
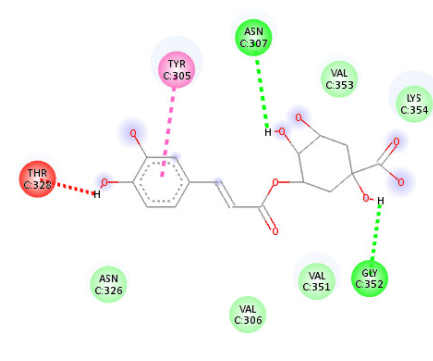
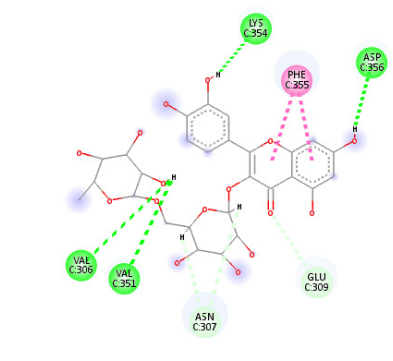
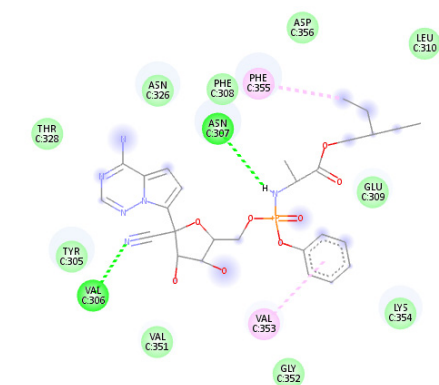
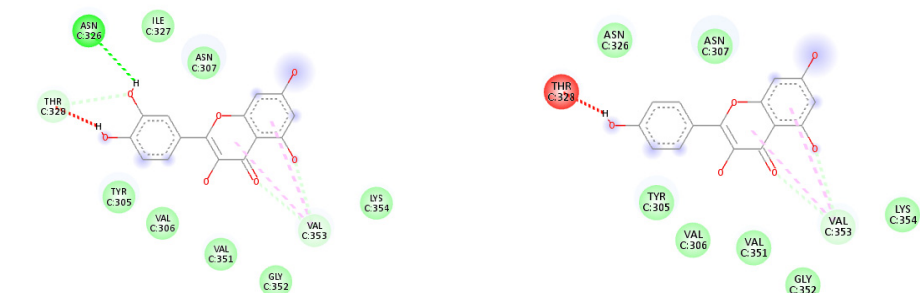


Figure S2. 2D interactions 12 phenolic compounds of GCAE and Remdesivir docked on HCoV-229E M^{pro} (PDB ID: 2ZU2)

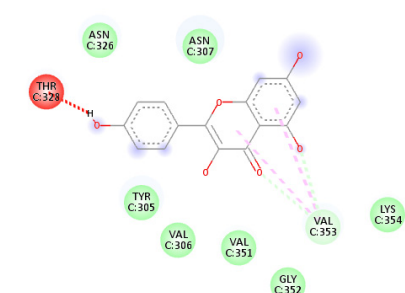




Interactions

- van der Waals
- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Unfavorable Donor-Donor
- Pi-Alkyl

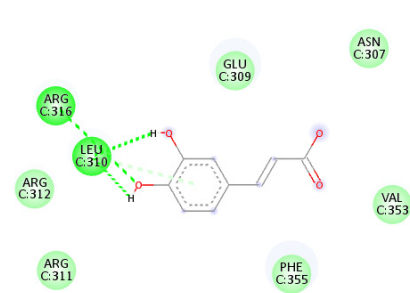
Quercetin



Interactions

- van der Waals
- Carbon Hydrogen Bond
- Unfavorable Donor-Donor
- Pi-Alkyl

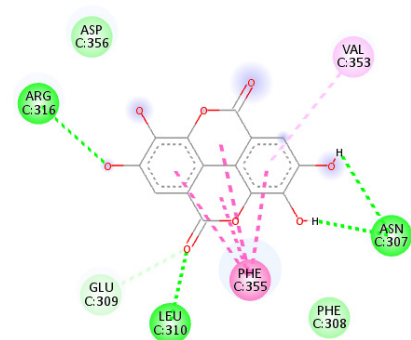
Kaempferol



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Pi-Donor Hydrogen Bond
- Pi-Alkyl

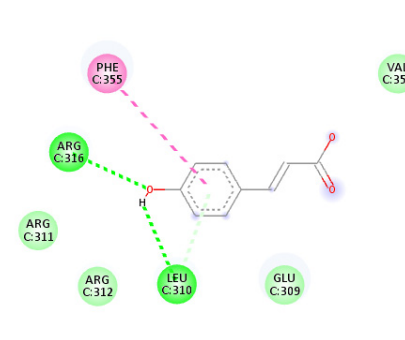
Caffeic acid



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Pi-Pi Stacked
- Pi-Alkyl

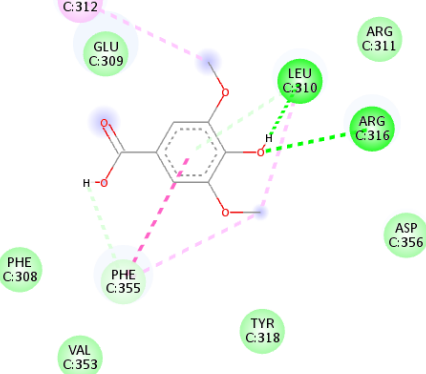
Ellagic acid



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Pi-Donor Hydrogen Bond
- Pi-Pi T-shaped
- Pi-Alkyl

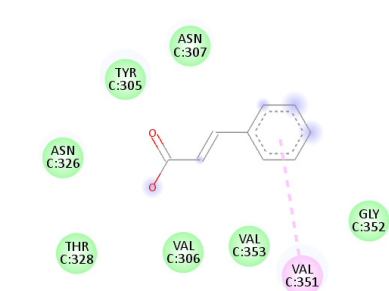
Coumaric acid



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Pi-Donor Hydrogen Bond
- Pi-Pi T-shaped
- Alkyl
- Pi-Alkyl

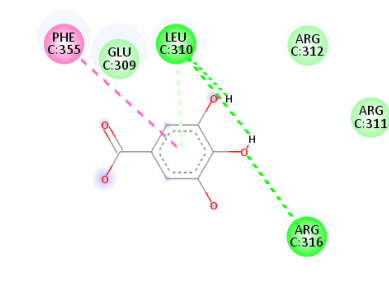
Syringic acid



Interactions

- van der Waals
- Pi-Alkyl

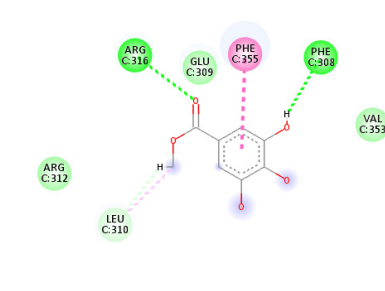
Cinnamic acid



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Pi-Donor Hydrogen Bond
- Pi-Pi T-shaped
- Pi-Alkyl

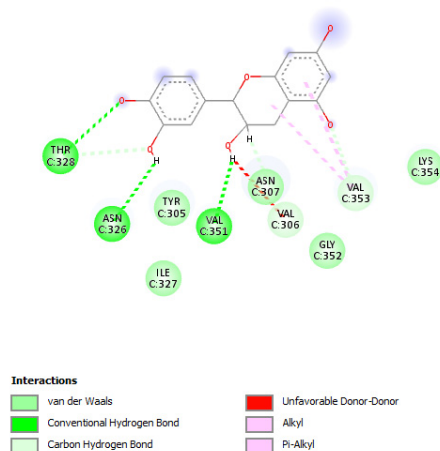
Gallic acid



Interactions

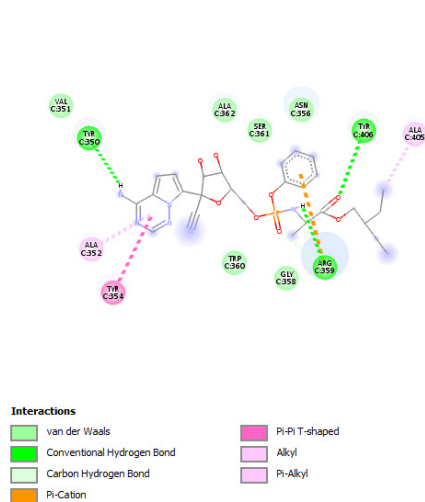
- van der Waals
- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Pi-Pi Stacked
- Alkyl

Methyl gallate

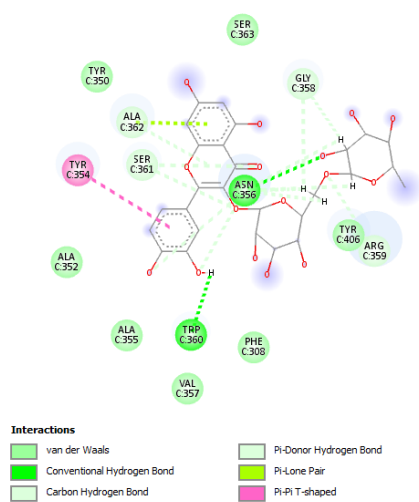


Catechin

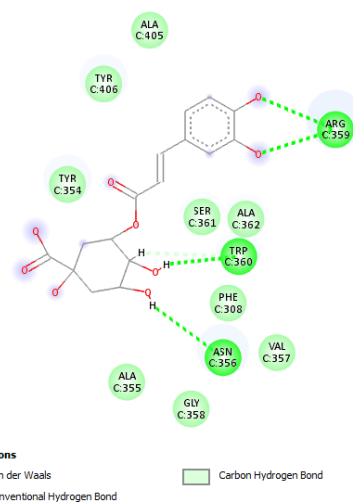
Figure S3. 2D interactions 12 phenolic compounds of GCAE and Remdesivir docked on HCoV-229E RBD Class V (PDB ID: 6U7G)



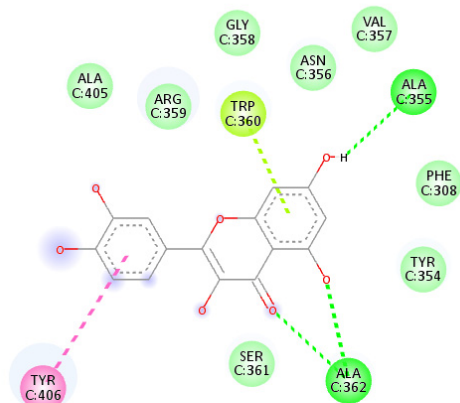
Remdesivir



Rutin



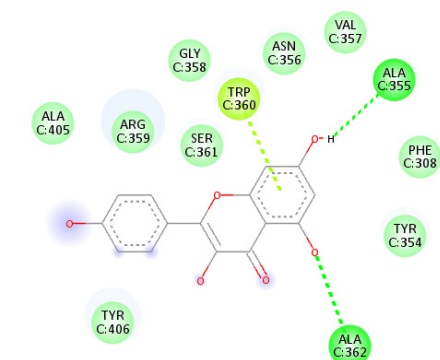
Chlorogenic acid



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Pi-Lone Pair
- Pi-Pi T-shaped

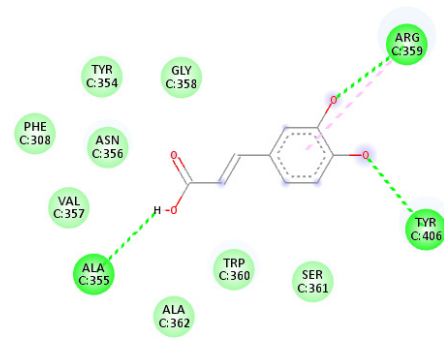
Quercetin



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Pi-Lone Pair

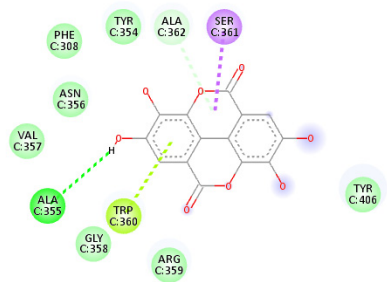
Kaempferol



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Pi-Alkyl

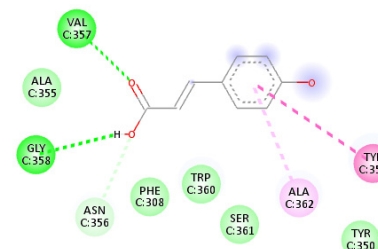
Caffeic acid



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Pi-Donor Hydrogen Bond
- Pi-Sigma
- Pi-Lone Pair
- Pi-Alkyl

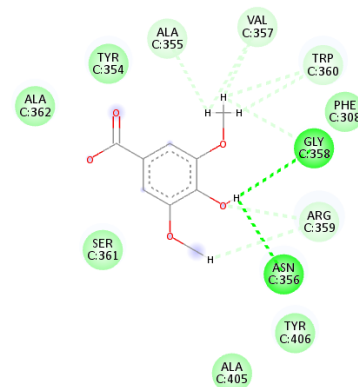
Ellagic acid



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Pi-Pi Stacked
- Pi-Alkyl

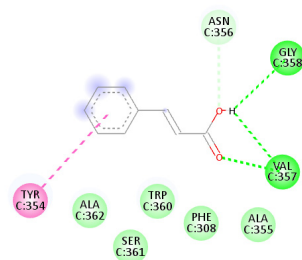
Coumaric acid



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Carbon Hydrogen Bond

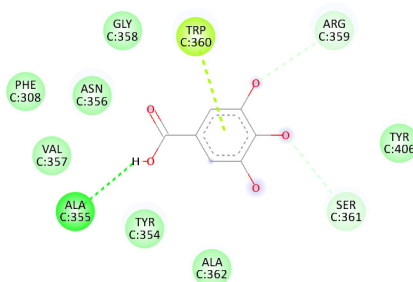
Syringic acid



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Pi-Pi Stacked

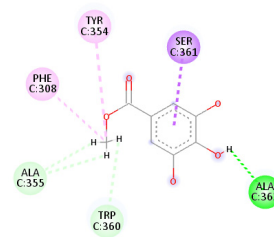
Cinnamic acid



Interactions

- van der Waals
- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Pi-Lone Pair

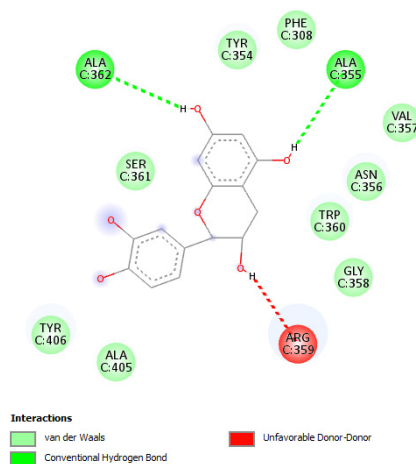
Gallic acid



Interactions

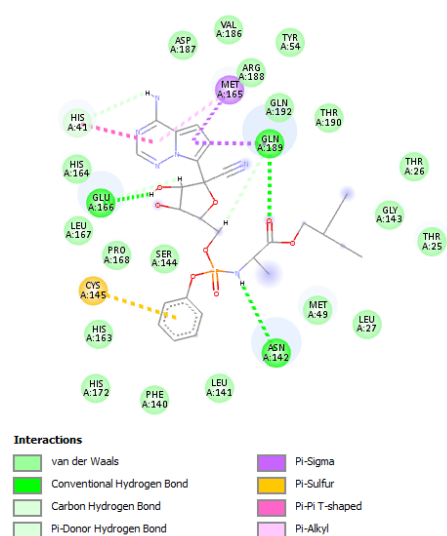
- Conventional Hydrogen Bond
- Carbon Hydrogen Bond
- Pi-Sigma
- Pi-Alkyl

Methyl gallate

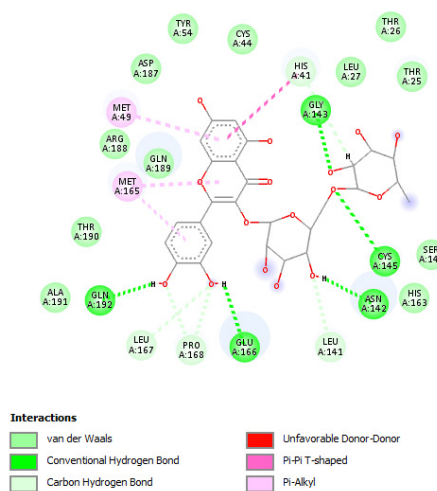


Catechin

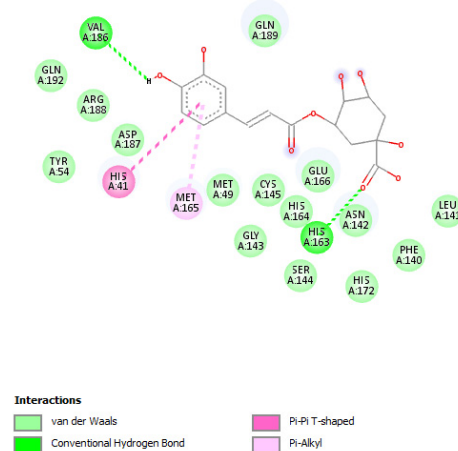
Figure S4. 2D interactions 12 phenolic compounds of GCAE and Remdesivir docked on HCoV-229E spike protein (PDB ID: 7VN9)



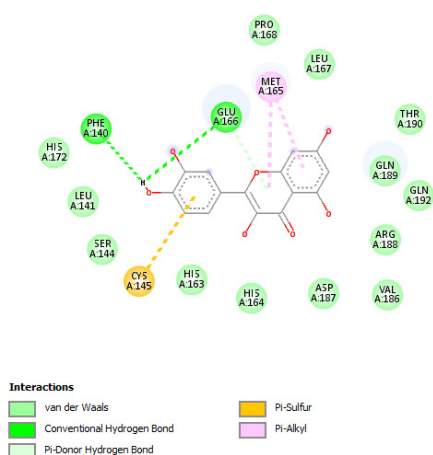
Remdesivir



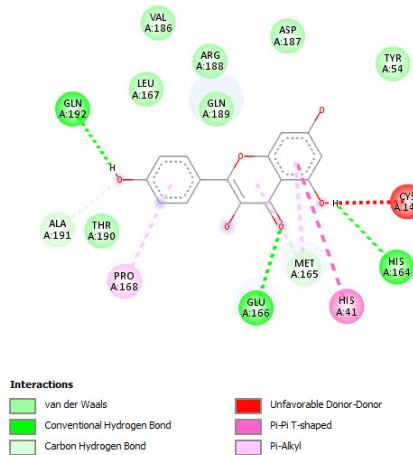
Rutin



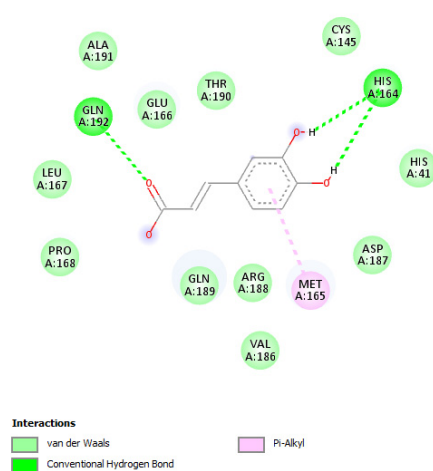
Chlorogenic acid



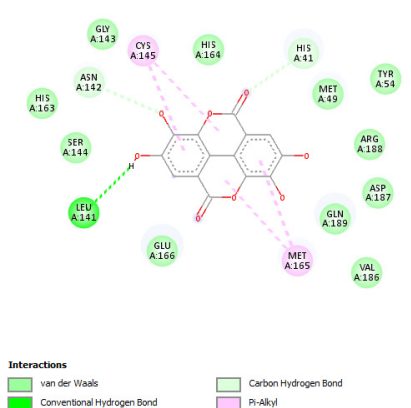
Quercetin



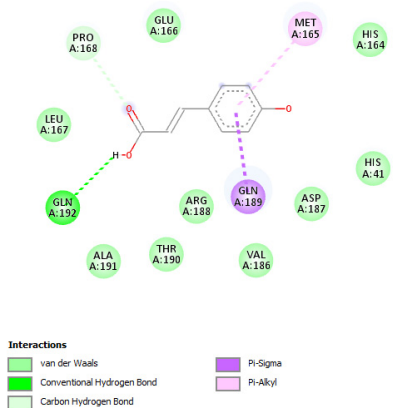
Kaempferol



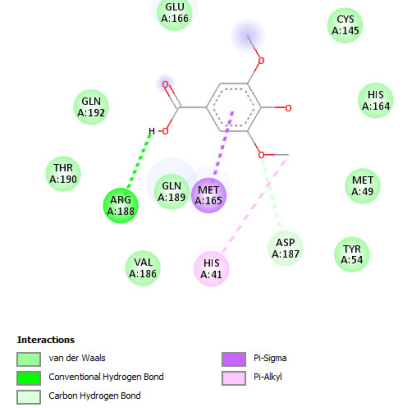
Caffeic acid



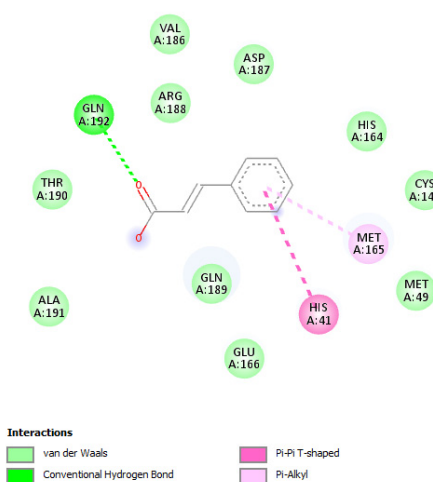
Ellagic acid



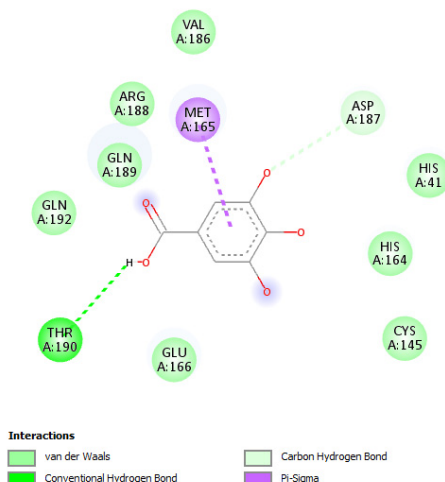
Coumaric acid



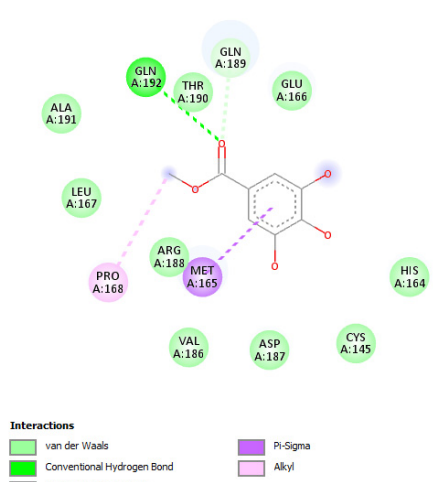
Syringic acid



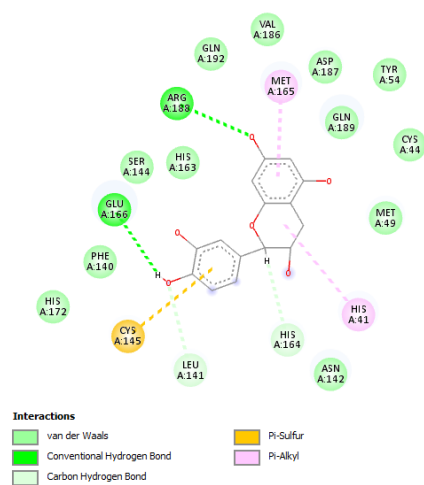
Cinnamic acid



Gallic acid



Methyl gallate



Catechin

Figure S5. 2D interactions 12 phenolic compounds of GCAE and Remdesivir docked on SARS-CoV-2 M^{pro} (PDB ID: 6WTT)