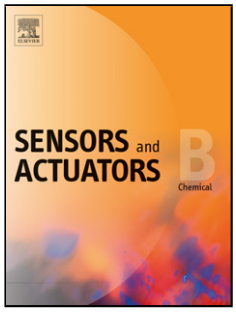

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WHEAT GLUTEN, A BIO-POLYMER TO MONITOR CARBON DIOXIDE IN FOOD PACKAGING: ELECTRIC AND DIELECTRIC CHARACTERIZATION

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Highlights

- Novel study based on wheat gluten development for monitoring carbon dioxide in food packages.
- High coupling potential of wheat gluten with ultra-high frequency radio frequency identification systems.
- Retro-simulation for the determination of dielectric permittivity and loss.
- Linear increase in dielectric permittivity and dielectric loss in controlled carbon dioxide conditions.
- Interaction of carbon dioxide with wheat gluten network.