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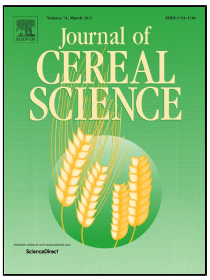

Effects of ozone treatment on the molecular properties of wheat grain proteins

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Highlights

- Prolamins in ozonated wheat grains were analysed.
- Glutenin molecular dimensions and compactness increased after grain ozonation.
- New glutenin intermolecular covalent cross-links are formed after grain ozonation.
- Changes in glutenin secondary structure (β-sheet) are induced after grain ozonation.
- Ozone leads to changes in the rheological properties of the flours and/or doughs.