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座長:毛利聡(土木),金久保利之(建築)
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[1356]EXPLORING THE IMPACT OF GRAPHENE OXIDE ON CEMENT PASTE VIA HYDRATION AND MICROSTRUCTURAL ANALYSES

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Graphene-based materials have enhanced the strength and durability of cement-based materials; however, a comprehensive understanding of the specific influence of graphene remains elusive. This study aims to investigate the impact of Graphene Oxide (GO) on cement paste, focusing on clinker hydration, microstructure, and chemical interactions. The analysis indicates that GO accelerates clinker hydration in cement paste through nucleation and densifies the microstructure by forming covalent bonds between hydration products and GO functional groups, confirmed by zeta potential results.

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