

Apatite mineralization behavior on polyglutamic acid hydrogels in aqueous condition : effects of molecular weight

著者	Miyazaki Toshiki, Mukai Juntarou, Ishida Eiichi, Ohtsuki Chikara
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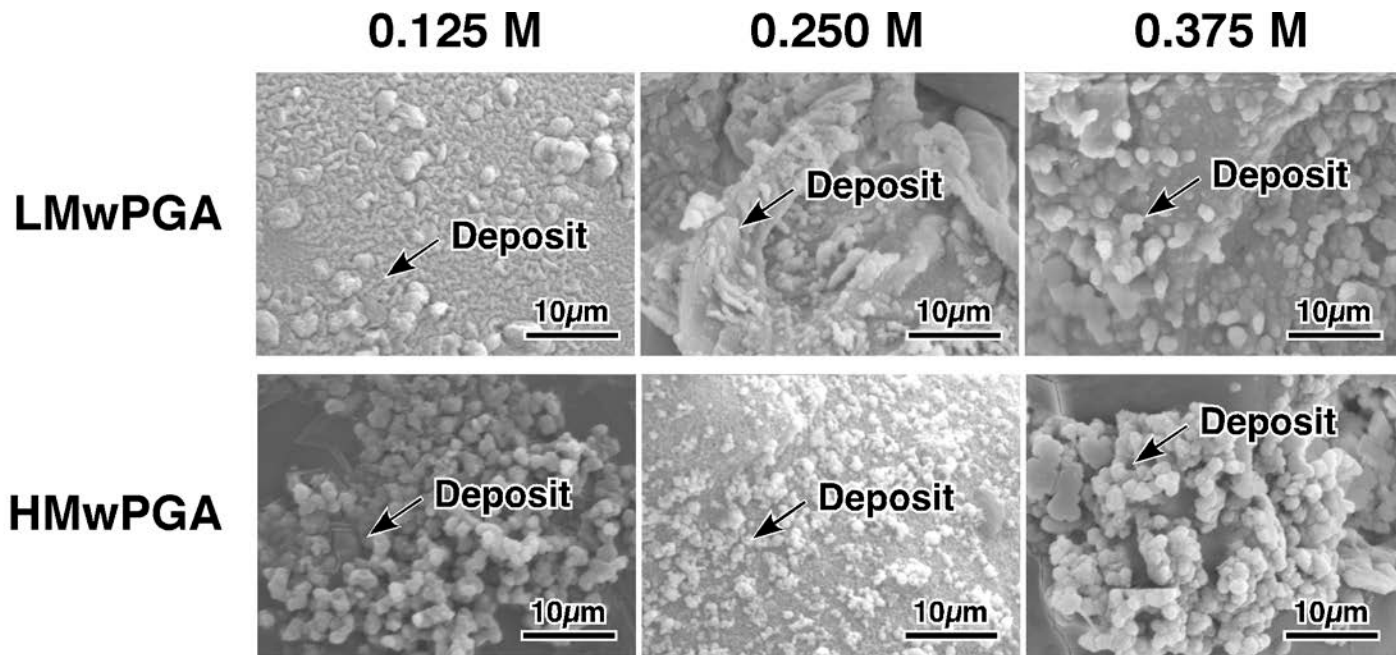


Fig. 1 SEM photographs of the surfaces of the specimens after soaking in SBF for 3 days, as a function of molecular weight of PGA and CaCl₂ concentration of the precursor solution.

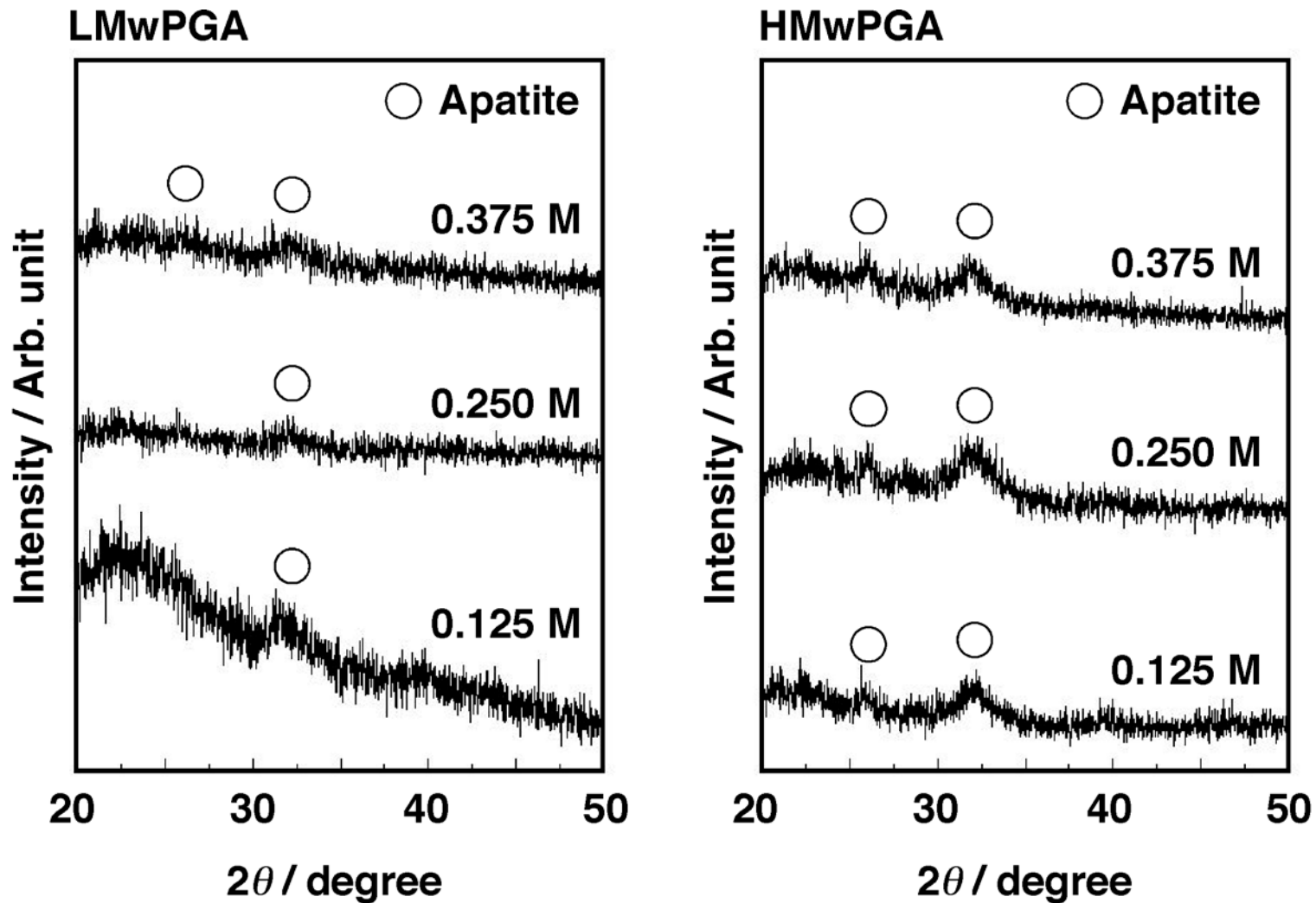


Fig. 2 TF-XRD patterns of the surfaces of the specimens after soaking in SBF for 3 days, as a function of molecular weight of PGA and CaCl₂ concentration of the precursor solution.

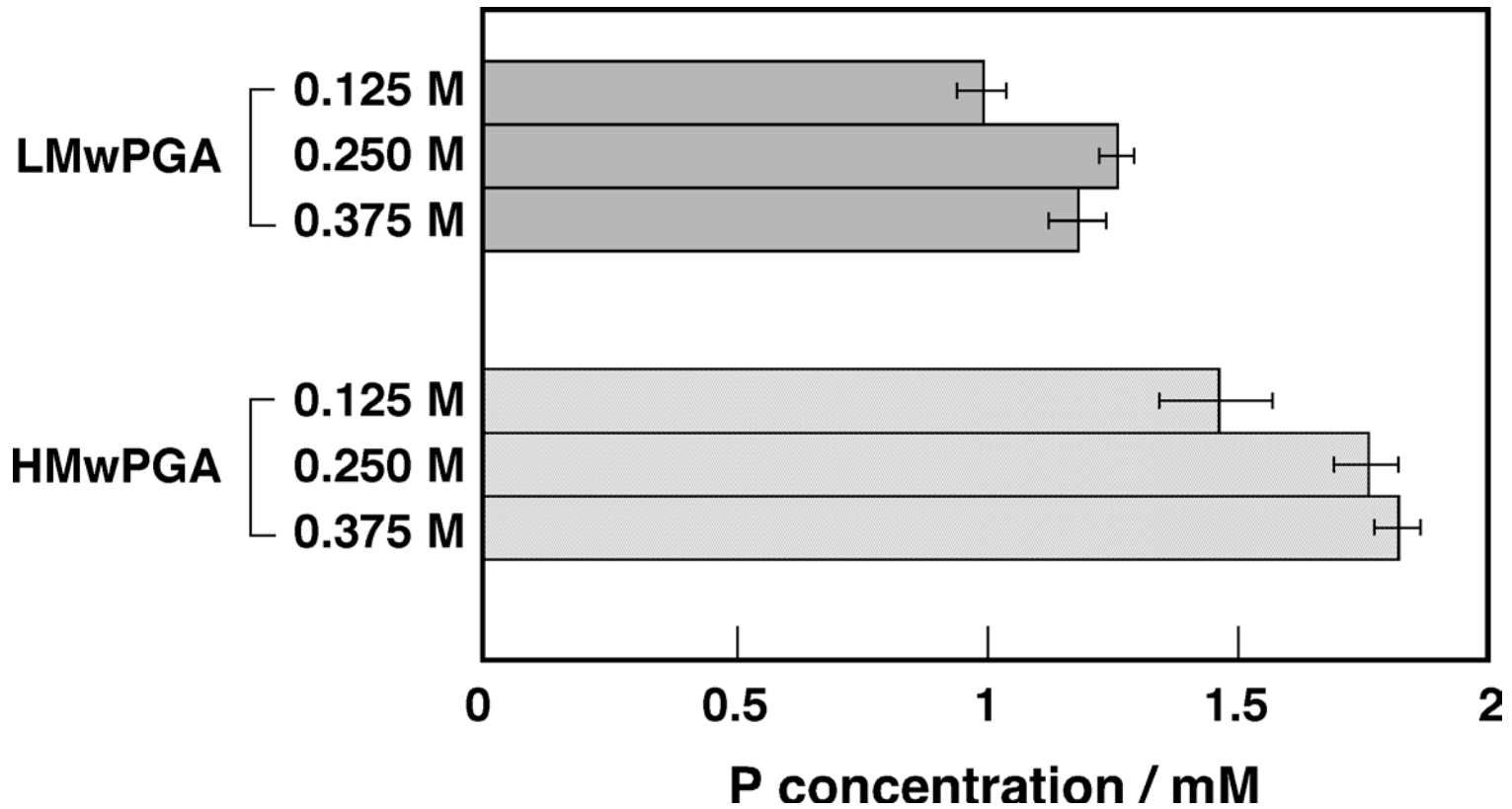


Fig. 3 P concentration of HCl solution which dissolved the precipitates formed on the specimens after immersion in SBF for 3 days (n=3).

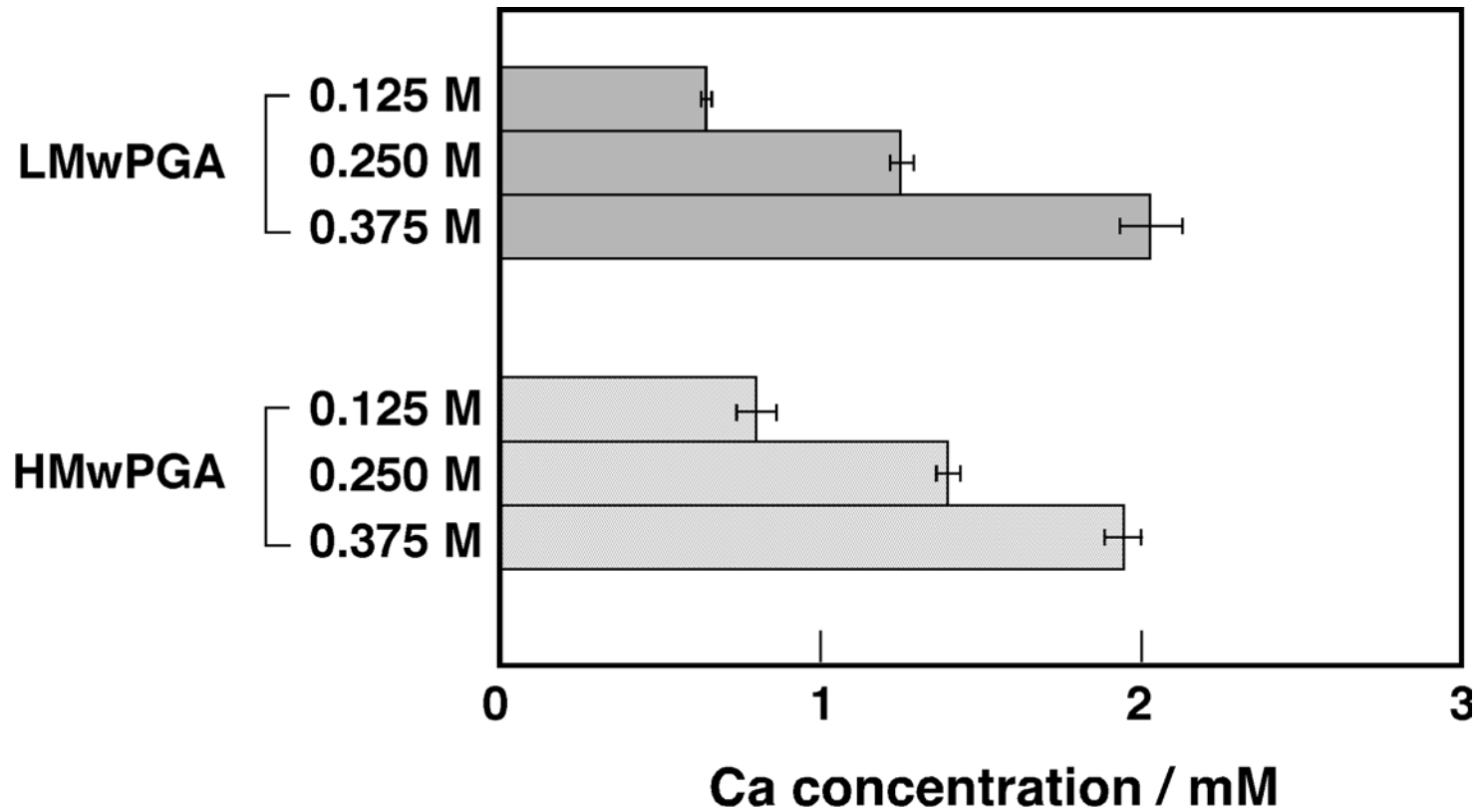


Fig. 4 Ca concentration of Tris-NaCl buffer after soaking of the specimens for 3 days (n=3).

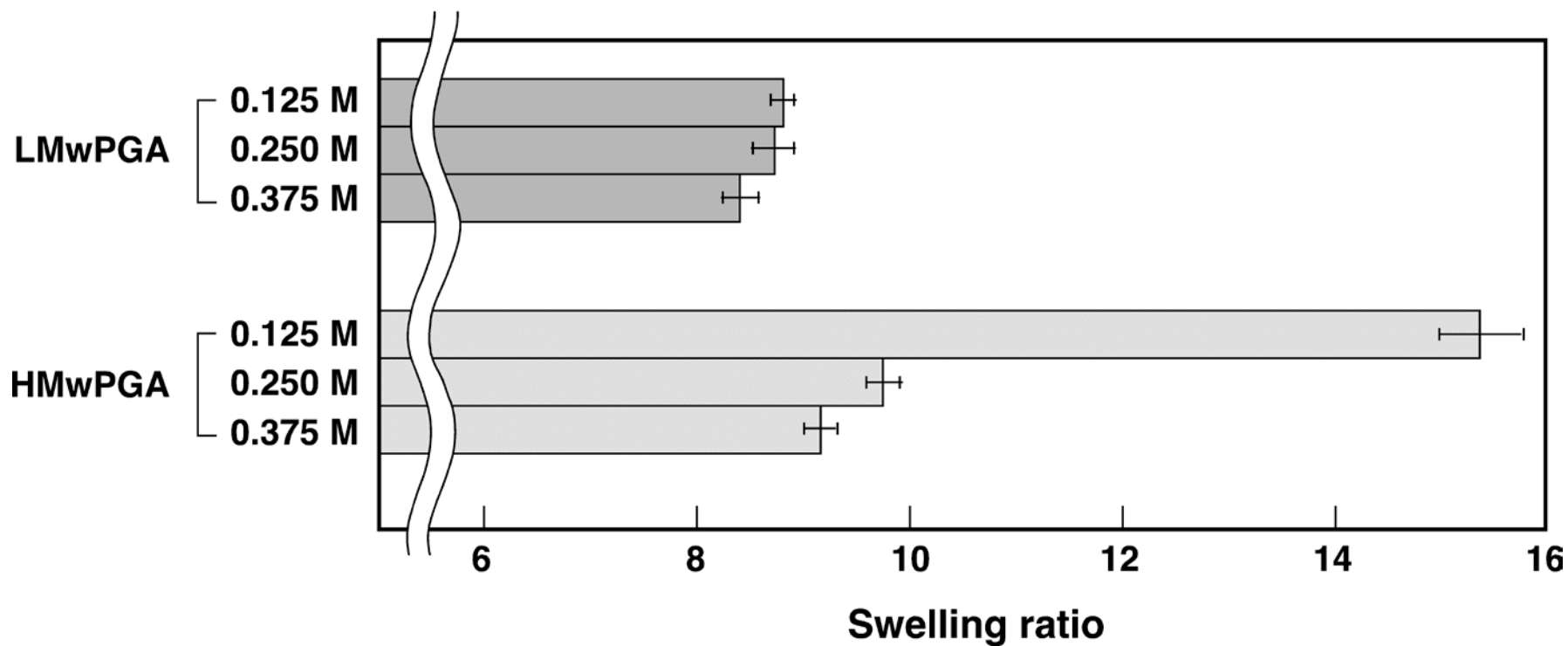


Fig. 5 Swelling ratio of the specimens, as a function of molecular weight and CaCl₂ concentration of the precursor solution (n=3).

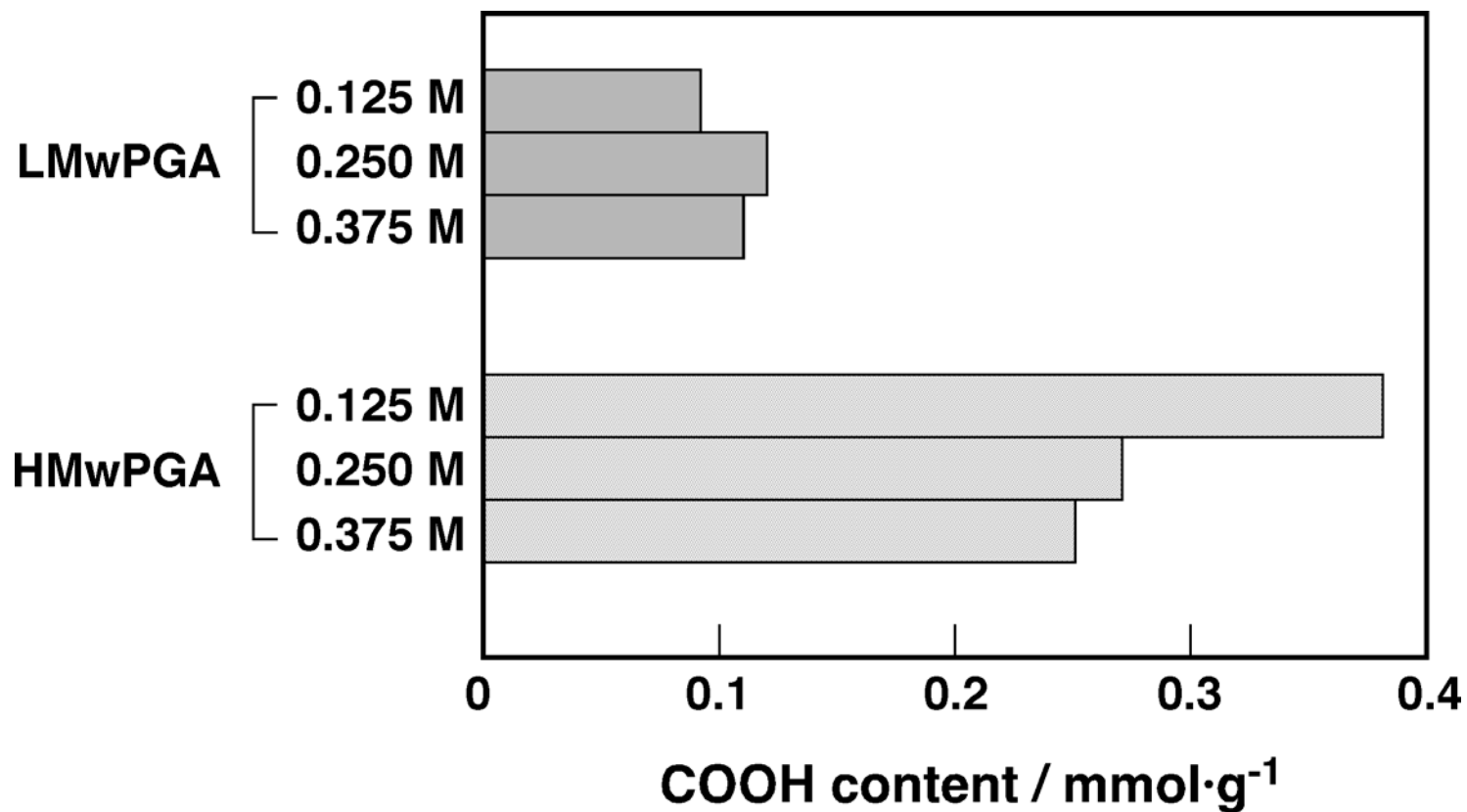


Fig. 6 Amount of carboxyl groups of the specimens, as a function of molecular weight and CaCl₂ concentration of the precursor solution.

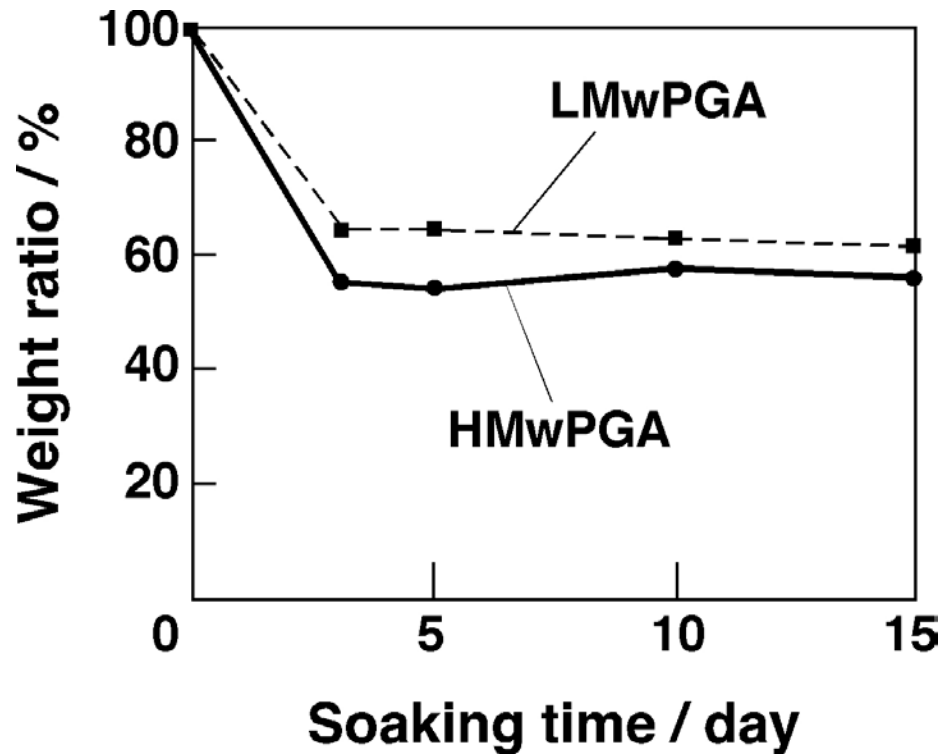


Fig. 7 Changes in weight ratio of the PGA hydrogels with different molecular weight after soaking in Tris-NaCl for various periods (n=3).