Creep Behavior and Delayed Fracture of Tough Polyampholyte Hydrogels

by Tensile Test

Sadia Nazneen Karobi[1,+], Tao Lin Sun[2,3,+], Takayuki Kurokawa[2,3], Feng Luo[2], Tasuku Nakajima[2,3], Takayuki Nonoyama[2,3], Jian Ping Gong[2,3*]

[1]Graduate School of Life Science, Hokkaido University, Sapporo 060-0810, Japan

[2]Faculty of Advanced Life Science, Hokkaido University, Sapporo 060-0810, Japan

[3]Global Station for Soft Matter, Global Institution for Collaborative Research and Education, Hokkaido University, Sapporo, Japan

[*]E-mail: gong@mail.sci.hokudai.ac.jp

+ The two authors are equally contributed.

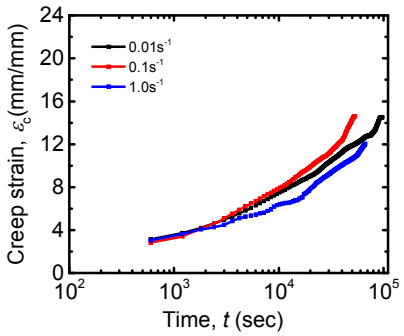

Figure S1 Creep deformation ε_c vs. time t of p-PA gel under a step loading stress σ_0(= 0.1 MPa). Various strain rate (0.01, 0.1 and 1.0 s^{-1}) before reaching σ_0 was performed.

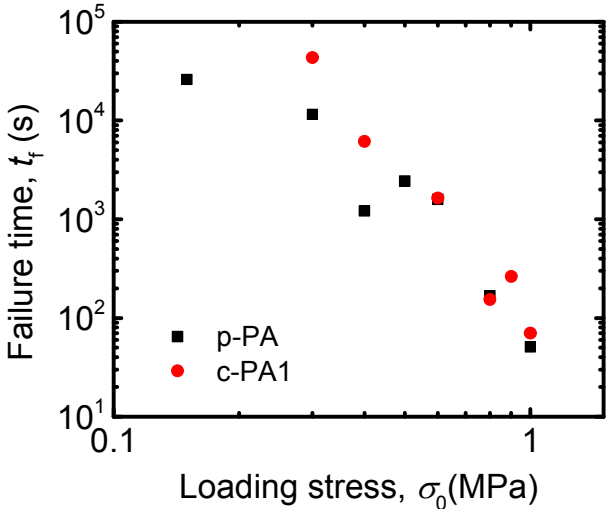

Figure S2 A log-log plot of the failure time and the loading stress for p-PA and c-PA1 gels.