Supporting Information

Unlocking Gel-powers: Exploring Rheological Marvels of Acrylamide/Sodium Alginate Double-Network Hydrogels

*Shi-Chang Wang,1 Shu-Tong Du2, Saud Hashmi3, Shu-Ming Cui1,4, Ling Li1, Stephan Handschuh-Wang2,4, Xuechang Zhou2, Florian J. Stadler1\**

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1 College of Materials Science and Engineering, Shenzhen Key Laboratory of Polymer Science and Technology, Guangdong Research Center for Interfacial Engineering of Functional Materials, Shenzhen University, Shenzhen, 518055, PR China

2 College of Chemistry and Environmental Engineering, Shenzhen University, Shenzhen, P. R. China

3 Department of Polymer & Petrochemical Engineering NED University of Engineering & Technology, Pakistan

4 The International School of Advanced Materials, School of Emergent Soft Matter, South China University of Technology, Guangzhou, 511442, People’s Republic of China

\* fjstadler@szu.edu.cn

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*Figure S1 (a and b) Frequency scan curves for sample S2 (SA=2.667 wt%), (c) relationship between loss coefficient and angular frequency in the frequency scan, (d) modulus of sample S2 versus calcium ion concentration*

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*Figure S2 Elastic Lissajous curves of sample S1 at different calcium ion concentrations with different γ0*

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*Figure S3 Elastic Lissajous curves of sample S2 at different calcium ion concentrations and different γ0*

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*Figure S4 Viscosity Lissajous curves of sample S2 at different calcium ion concentrations with different γ0*



*Figure S5 sample S2: (a and b) Chebyshev coefficient (e3/e1, and v3/v1) versus strain*