

Riku Takahashi

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Tough Hydrogels with Fast, Strong, and Reversible Underwater Adhesion Based on a Multiscale Design. <i>Advanced Materials</i> , 2018, 30, e1801884.	11.1	235
2	Creating Stiff, Tough, and Functional Hydrogel Composites with Low-Melting-Point Alloys. <i>Advanced Materials</i> , 2018, 30, e1706885.	11.1	81
3	Tough Particle-Based Double Network Hydrogels for Functional Solid Surface Coatings. <i>Advanced Materials Interfaces</i> , 2018, 5, 1801018.	1.9	78
4	Hydrogel/Elastomer Laminates Bonded via Fabric Interphases for Stimuli-Responsive Actuators. <i>Matter</i> , 2019, 1, 674-689.	5.0	74
5	Control superstructure of rigid polyelectrolytes in oppositely charged hydrogels via programmed internal stress. <i>Nature Communications</i> , 2014, 5, 4490.	5.8	64
6	Macroscale Double Networks: Design Criteria for Optimizing Strength and Toughness. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35343-35353.	4.0	49
7	Tough and Self-Recoverable Thin Hydrogel Membranes for Biological Applications. <i>Advanced Functional Materials</i> , 2018, 28, 1801489.	7.8	47
8	Polymer Adsorbed Bilayer Membranes Form Self-Healing Hydrogels with Tunable Superstructure. <i>Macromolecules</i> , 2015, 48, 2277-2282.	2.2	34
9	Double network hydrogels based on semi-rigid polyelectrolyte physical networks. <i>Journal of Materials Chemistry B</i> , 2019, 7, 6347-6354.	2.9	34
10	In Situ Observation of Ca ²⁺ Diffusion-Induced Superstructure Formation of a Rigid Polyanion. <i>Macromolecules</i> , 2014, 47, 7208-7214.	2.2	20
11	Coupled instabilities of surface crease and bulk bending during fast free swelling of hydrogels. <i>Soft Matter</i> , 2016, 12, 5081-5088.	1.2	20
12	Anisotropic Double-Network Hydrogels via Controlled Orientation of a Physical Sacrificial Network. <i>ACS Applied Polymer Materials</i> , 2020, 2, 2350-2358.	2.0	19
13	Geometric and Edge Effects on Swelling-Induced Ordered Structure Formation in Polyelectrolyte Hydrogels. <i>Macromolecules</i> , 2013, 46, 9083-9090.	2.2	17
14	Dynamic Creation of 3D Hydrogel Architectures via Selective Swelling Programmed by Interfacial Bonding. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 28267-28277.	4.0	14
15	Sensitive Photodetection with Photomultiplication Effect in an Interfacial Eu ^{2+/3+} Complex on a Mesoporous TiO ₂ Film. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 5706-5713.	4.0	11
16	Improving the strength and toughness of macroscale double networks by exploiting Poisson's ratio mismatch. <i>Scientific Reports</i> , 2021, 11, 13280.	1.6	11
17	Lamellar Bilayer to Fibril Structure Transformation of Tough Photonic Hydrogel under Elongation. <i>Macromolecules</i> , 2020, 53, 4711-4721.	2.2	7
18	Tough, permeable and biocompatible microfluidic devices formed through the buckling delamination of soft hydrogel films. <i>Lab on A Chip</i> , 2021, 21, 1307-1317.	3.1	7

#	ARTICLE	IF	CITATIONS
19	Collective motion of epithelial cells along a wrinkled 3D-buckled hydrogel. RSC Advances, 2022, 12, 20174-20181.	1.7	3
20	Double Network Gels: Tough Particle-Based Double Network Hydrogels for Functional Solid Surface Coatings (Adv. Mater. Interfaces 23/2018). Advanced Materials Interfaces, 2018, 5, 1870118.	1.9	2
21	Hydrogel Membranes: Tough and Self-Recoverable Thin Hydrogel Membranes for Biological Applications (Adv. Funct. Mater. 31/2018). Advanced Functional Materials, 2018, 28, 1870218.	7.8	0