

# Daniel R King

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

37  
papers

1,306  
citations

18  
h-index

36  
g-index

41  
ext. papers

1,594  
ext. citations

10.2  
avg, IF

4.62  
L-index

#	Paper	IF	Citations
37	High strength hydrogels enable dendrite-free Zn metal anodes and high-capacity ZnMnO <sub>2</sub> batteries via a modified mechanical suppression effect. <i>Journal of Materials Chemistry A</i> , <b>2022</b> , 10, 3122-3133	13.3	2
36	Hierarchical toughening: A step toward matching the complexity of biological materials. <i>Chem</i> , <b>2021</b> , 7, 1153-1155	16.2	1
35	Improving the strength and toughness of macroscale double networks by exploiting Poisson's ratio mismatch. <i>Scientific Reports</i> , <b>2021</b> , 11, 13280	4.9	4
34	Adhesive binders for nanosilicon anodes in lithium-ion batteries <b>2021</b> , 279-299		
33	Dynamic bonds enable high toughness and multifunctionality in gelatin/tannic acid-based hydrogels with tunable mechanical properties. <i>Soft Matter</i> , <b>2021</b> , 17, 9399-9409	3.6	4
32	Tiny yet tough: Maximizing the toughness of fiber-reinforced soft composites in the absence of a fiber-fracture mechanism. <i>Matter</i> , <b>2021</b> ,	12.7	2
31	Anisotropic Double-Network Hydrogels via Controlled Orientation of a Physical Sacrificial Network. <i>ACS Applied Polymer Materials</i> , <b>2020</b> , 2, 2350-2358	4.3	11
30	Fiber-Reinforced Viscoelastomers Show Extraordinary Crack Resistance That Exceeds Metals. <i>Advanced Materials</i> , <b>2020</b> , 32, e1907180	24	35
29	Mechanical behavior of unidirectional fiber reinforced soft composites. <i>Extreme Mechanics Letters</i> , <b>2020</b> , 35, 100642	3.9	7
28	Polyzwitterions as a Versatile Building Block of Tough Hydrogels: From Polyelectrolyte Complex Gels to Double-Network Gels. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 50068-50076	9.5	11
27	High-Fidelity Hydrogel Thin Films Processed from Deep Eutectic Solvents. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 43191-43200	9.5	4
26	Modulation and Characterization of the Double Network Hydrogel Surface-Bulk Transition. <i>Macromolecules</i> , <b>2019</b> , 52, 6704-6713	5.5	11
25	Macroscale Double Networks: Design Criteria for Optimizing Strength and Toughness. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 35343-35353	9.5	33
24	Facile synthesis of novel elastomers with tunable dynamics for toughness, self-healing and adhesion. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 17334-17344	13	37
23	Superior fracture resistance of fiber reinforced polyampholyte hydrogels achieved by extraordinarily large energy-dissipative process zones. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 13431-13440	13.4	26
22	Polyelectrolyte complexation via viscoelastic phase separation results in tough and self-recovering porous hydrogels. <i>Journal of Materials Chemistry B</i> , <b>2019</b> , 7, 5296-5305	7.3	17
21	Hydrogel/Elastomer Laminates Bonded via Fabric Interphases for Stimuli-Responsive Actuators. <i>Matter</i> , <b>2019</b> , 1, 674-689	12.7	45

20	Double network hydrogels based on semi-rigid polyelectrolyte physical networks. <i>Journal of Materials Chemistry B</i> , <b>2019</b> , 7, 6347-6354	7.3	18
19	Creating Stiff, Tough, and Functional Hydrogel Composites with Low-Melting-Point Alloys. <i>Advanced Materials</i> , <b>2018</b> , 30, e1706885	24	63
18	Double Network Gels: Tough Particle-Based Double Network Hydrogels for Functional Solid Surface Coatings (Adv. Mater. Interfaces 23/2018). <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1870118	4.6	2
17	Tough Particle-Based Double Network Hydrogels for Functional Solid Surface Coatings. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1801018	4.6	46
16	Tough Hydrogels with Fast, Strong, and Reversible Underwater Adhesion Based on a Multiscale Design. <i>Advanced Materials</i> , <b>2018</b> , 30, e1801884	24	154
15	Energy-Dissipative Matrices Enable Synergistic Toughening in Fiber Reinforced Soft Composites. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1605350	15.6	84
14	Bulk Energy Dissipation Mechanism for the Fracture of Tough and Self-Healing Hydrogels. <i>Macromolecules</i> , <b>2017</b> , 50, 2923-2931	5.5	76
13	High strength reversible adhesive closures. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2017</b> , 55, 1783-1790	2.6	4
12	Strong and Tough Polyion-Complex Hydrogels from Oppositely Charged Polyelectrolytes: A Comparative Study with Polyampholyte Hydrogels. <i>Macromolecules</i> , <b>2016</b> , 49, 2750-2760	5.5	73
11	Coupled instabilities of surface crease and bulk bending during fast free swelling of hydrogels. <i>Soft Matter</i> , <b>2016</b> , 12, 5081-8	3.6	16
10	Extremely tough composites from fabric reinforced polyampholyte hydrogels. <i>Materials Horizons</i> , <b>2015</b> , 2, 584-591	14.4	85
9	Geckos as Springs: Mechanics Explain Across-Species Scaling of Adhesion. <i>PLoS ONE</i> , <b>2015</b> , 10, e0134604	3.7	21
8	Optimizing Adhesive Design by Understanding Compliance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 27771-81	9.5	16
7	Ionic aggregate dissolution and conduction in a plasticized single-ion polymer conductor. <i>Polymer</i> , <b>2015</b> , 59, 133-143	3.9	35
6	Creating gecko-like adhesives for "real world" surfaces. <i>Advanced Materials</i> , <b>2014</b> , 26, 4345-51	24	93
5	Looking beyond fibrillar features to scale gecko-like adhesion. <i>Advanced Materials</i> , <b>2012</b> , 24, 1078-83	24	196
4	Biomimetics: Looking Beyond Fibrillar Features to Scale Gecko-Like Adhesion (Adv. Mater. 8/2012). <i>Advanced Materials</i> , <b>2012</b> , 24, 994-994	24	3
3	Molecular Mobility and Cation Conduction in PolyetherEsterSulfonate Copolymer Ionomers. <i>Macromolecules</i> , <b>2012</b> , 45, 3962-3973	5.5	57

2	Environmental chamber for in situ dynamic control of temperature and relative humidity during x-ray scattering. <i>Review of Scientific Instruments</i> , <b>2012</b> , 83, 025112	1.7	11
1	Macroscale double networks: highly dissipative soft composites. <i>Polymer Journal</i> ,	2.7	0