Arif Md Rashedul Kabir

List of Publications by Year
in descending order

58 papers	1,092 citations	394421 19 h-index	454955 30 g-index
62 all docs	62 docs citations	62 times ranked	598 citing authors

#	Article	IF	Citations
1	DNA-assisted swarm control in a biomolecular motor system. Nature Communications, 2018, 9, 453.	12.8	110
2	Depletion force induced collective motion of microtubules driven by kinesin. Nanoscale, 2015, 7, 18054-18061.	5.6	60
3	Prolongation of the Active Lifetime of a Biomolecular Motor for in Vitro Motility Assay by Using an Inert Atmosphere. Langmuir, 2011, 27, 13659-13668.	3.5	54
4	Artificial Smooth Muscle Model Composed of Hierarchically Ordered Microtubule Asters Mediated by DNA Origami Nanostructures. Nano Letters, 2019, 19, 3933-3938.	9.1	51
5	Sensing surface mechanical deformation using active probes driven by motor proteins. Nature Communications, 2016, 7, 12557.	12.8	46
6	Biomolecular Motor Modulates Mechanical Property of Microtubule. Biomacromolecules, 2014, 15, 1797-1805.	5.4	42
7	Cytoskeletal motor-driven active self-assembly in in vitro systems. Soft Matter, 2016, 12, 988-997.	2.7	42
8	Buckling of Microtubules on a 2D Elastic Medium. Scientific Reports, 2015, 5, 17222.	3.3	40
9	Understanding the emergence of collective motion of microtubules driven by kinesins: role of concentration of microtubules and depletion force. RSC Advances, 2017, 7, 13191-13197.	3.6	37
10	Effect of length and rigidity of microtubules on the size of ring-shaped assemblies obtained through active self-organization. Soft Matter, 2015, 11, 1151-1157.	2.7	31
11	Control of swarming of molecular robots. Scientific Reports, 2018, 8, 11756.	3.3	31
12	Formation of ring-shaped assembly of microtubules with a narrow size distribution at an airâ€“buffer interface. Soft Matter, 2012, 8, 10863.	2.7	30
13	Molecular Encapsulation Inside Microtubules Based on Tauâ€Derived Peptides. Chemistry - A European Journal, 2018, 24, 14958-14967.	3.3	30
14	Molecular swarm robots: recent progress and future challenges. Science and Technology of Advanced Materials, 2020, 21, 323-332.	6.1	30
15	Cooperative cargo transportation by a swarm of molecular machines. Science Robotics, 2022, 7, eabm0677.	17.6	28
16	Growth of ring-shaped microtubule assemblies through stepwise active self-organisation. Soft Matter, 2013, 9, 7061.	2.7	26
17	Active self-organization of microtubules in an inert chamber system. Polymer Journal, 2012, 44, 607-611.	2.7	23
18	High-Resolution Imaging of a Single Gliding Protofilament of Tubulins by HS-AFM. Scientific Reports, 2017, 7, 6166.	3.3	22

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19	Stabilization of microtubules by encapsulation of the GFP using a Tau-derived peptide. Chemical Communications, 2019, 55, 9072-9075.	4.1	22
20	Controlled Clockwiseâ€"Counterclockwise Motion of the Ring-Shaped Microtubules Assembly. Biomacromolecules, 2011, 12, 3394-3399.	5.4	21
21	Enhanced dynamic instability of microtubules in a ROS free inert environment. Biophysical Chemistry, 2016, 211, 1-8.	2.8	21
22	Magnetic Force-Induced Alignment of Microtubules by Encapsulation of CoPt Nanoparticles Using a Tau-Derived Peptide. Nano Letters, 2020, 20, 5251-5258.	9.1	20
23	Fluorescent Tau-derived Peptide for Monitoring Microtubules in Living Cells. ACS Omega, 2019, 4, 11245-11250.	3.5	18
24	Adaptation of Patterns of Motile Filaments under Dynamic Boundary Conditions. ACS Nano, 2019, 13, 12452-12460.	14.6	17
25	Controlling the Bias of Rotational Motion of Ring-Shaped Microtubule Assembly. Biomacromolecules, 2015, 16, 374-378.	5.4	16
26	How to Integrate Biological Motors towards Bioâ€Actuators Fueled by ATP. Macromolecular Bioscience, 2011, 11, 1314-1324.	4.1	15
27	Cyclic Tau-derived peptides for stabilization of microtubules. Polymer Journal, 2020, 52, 1143-1151.	2.7	15
28	Synchronous operation of biomolecular engines. Biophysical Reviews, 2020, 12, 401-409.	3.2	15
29	Formation of ring-shaped microtubule assemblies through active self-organization on dynein. Polymer Journal, 2014, 46, 220-225.	2.7	13
30	Breaking of buckled microtubules is mediated by kinesins. Biochemical and Biophysical Research Communications, 2020, 524, 249-254.	2.1	13
31	Deformation of microtubules regulates translocation dynamics of kinesin. Science Advances, 2021, 7, eabf2211.	10.3	12
32	Role of confinement in the active self-organization of kinesin-driven microtubules. Sensors and Actuators B: Chemical, 2017, 247, 53-60.	7.8	11
33	Construction of artificial cilia from microtubules and kinesins through a well-designed bottom-up approach. Nanoscale, 2018, 10, 6323-6332.	5.6	11
34	Photo-regulated trajectories of gliding microtubules conjugated with DNA. Chemical Communications, 2020, 56, 7953-7956.	4.1	11
35	Drag force on micron-sized objects with different surface morphologies in a flow with a small Reynolds number. Polymer Journal, 2015, 47, 564-570.	2.7	9
36	Study of active self-assembly using biomolecular motors. Polymer Journal, 2018, 50, 1139-1148.	2.7	9

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37	Stabilization of microtubules by cevipabulin. Biochemical and Biophysical Research Communications, 2019, 516, 760-764.	2.1	9
38	Controlling Collective Motion of Kinesin-Driven Microtubules via Patterning of Topographic Landscapes. Nano Letters, 2021, 21, 10478-10485.	9.1	8
39	Liquid Crystalline Colloidal Mixture of Nanosheets and Rods with Dynamically Variable Length. ACS Omega, 2018, 3, 14869-14874.	3.5	7
40	Monopolar flocking of microtubules in collective motion. Biochemical and Biophysical Research Communications, 2021, 563, 73-78.	2.1	7
41	Mechanical oscillation of dynamic microtubule rings. RSC Advances, 2016, 6, 69149-69155.	3.6	6
42	Controlling the kinetics of interaction between microtubules and kinesins over a wide temperature range using the deep-sea osmolyte trimethylamineN-oxide. Chemical Communications, 2020, 56, 1187-1190.	4.1	6
43	Regulation of Biomolecular-Motor-Driven Cargo Transport by Microtubules under Mechanical Stress. ACS Applied Bio Materials, 2020, 3, 1875-1883.	4.6	6
44	Effect of microtubule immobilization by glutaraldehyde on kinesin-driven cargo transport. Polymer Journal, 2020, 52, 655-660.	2.7	6
45	Motility of Microtubules on the Inner Surface of Water-in-Oil Emulsion Droplets. Langmuir, 2017, 33, 12108-12113.	3.5	5
46	Construction and Gilding of Metal-Organic Frameworks and Microtubule Conjugates. ChemistrySelect, 2016, 1, 5358-5362.	1.5	4
47	Complete, rapid and reversible regulation of the motility of a nano-biomolecular machine using an osmolyte trimethylamine-N-oxide. Sensors and Actuators B: Chemical, 2020, 304, 127231.	7.8	4
48	Radial alignment of microtubules through tubulin polymerization in an evaporating droplet. PLoS ONE, 2020, 15, e0231352.	2.5	4
49	Comparison of microtubules stabilized with the anticancer drugs cevipabulin and paclitaxel. Polymer Journal, 2020, 52, 969-976.	2.7	4
50	Buckling of microtubules on elastic media via breakable bonds. Biochemical and Biophysical Research Communications, 2016, 480, 132-138.	2.1	3
51	Mechanical Stimulationâ€Induced Orientation of Gliding Microtubules in Confined Microwells. Advanced Materials Interfaces, 2020, 7, 1902013.	3.7	3
52	Controlling the Length of Microtubules by Manipulating Their Polymerization Condition. ECS Transactions, 2018, 88, 15-21.	0.5	2
53	Controlling the Rigidity of Kinesin-Propelled Microtubules in an <i>In Vitro</i> Gliding Assay Using the Deep-Sea Osmolyte Trimethylamine <i>N</i>-Oxide. ACS Omega, 2022, 7, 3796-3803.	3.5	2
54	A Photoregulated ATP Generation System for In Vitro Motility Assay. Chemistry Letters, 2017, 46, 178-180.	1.3	1

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55	A new approach to explore the mechanoresponsiveness of microtubules and its application in studying dynamic soft interfaces. Polymer Journal, 2021, 53, 299-308.	2.7	1
56	Controlling the length of self-assembled microtubes through mechanical stress-induced scission. Chemical Communications, 2021, 57, 468-471.	4.1	1
57	Intelligence of reconstructed biomolecular motor system. , 2016, , .		0
58	Fluctuation in the Sliding Movement of Kinesin-Driven Microtubules Is Regulated Using the Deep-Sea Osmolyte Trimethylamine <i>N</i>-Oxide. ACS Omega, 0, , .	3.5	0