Carlos Drummond

List of Publications by Year
in descending order

63	2,694	218381 26	174990 52
papers	citations	h-index	g-index

65	65	65	3459
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electroresponsive Weak Polyelectrolyte Brushes. Macromolecules, 2022, 55, 2636-2648.	2.2	3
2	Ions in an AC Electric Field: Strong Long-Range Repulsion between Oppositely Charged Surfaces. Physical Review Letters, 2020, 125, 056001.	2.9	17
3	Weak polyelectrolyte brushes: re-entrant swelling and self-organization. Soft Matter, 2020, 16, 7727-7738.	1.2	2
4	Compliant Surfaces under Shear: Elastohydrodynamic Lift Force. Langmuir, 2019, 35, 15605-15613.	1.6	11
5	Can Polyoxometalates Be Considered as Superchaotropic Ions?. Journal of Physical Chemistry C, 2019, 123, 28744-28752.	1.5	17
6	Interaction between Compliant Surfaces: How Soft Surfaces Can Reduce Friction. Langmuir, 2019, 35, 15723-15728.	1.6	9
7	Protein-surface interactions at the nanoscale: Atomistic simulations with implicit solvent models. Current Opinion in Colloid and Interface Science, 2019, 41, 40-49.	3.4	20
8	Effect of organic and inorganic ions on the lower critical solution transition and aggregation of PNIPAM. Soft Matter, 2018, 14, 7818-7828.	1.2	25
9	Hydroxide Ions Stabilize Open Carbon Nanotubes in Degassed Water. ACS Nano, 2018, 12, 8606-8615.	7.3	7
10	Interaction of organic ions with proteins. Soft Matter, 2017, 13, 1120-1131.	1.2	15
11	Electrowetting of Weak Polyelectrolyte-Coated Surfaces. Langmuir, 2017, 33, 4996-5005.	1.6	10
12	Electro-responsive polyelectrolyte-coated surfaces. Faraday Discussions, 2017, 199, 335-347.	1.6	7
13	Nanotribology and voltage-controlled friction: general discussion. Faraday Discussions, 2017, 199, 349-376.	1.6	0
14	Electroactuators: from understanding to micro-robotics and energy conversion: general discussion. Faraday Discussions, 2017, 199, 525-545.	1.6	2
15	Electrotunable wetting, and micro- and nanofluidics: general discussion. Faraday Discussions, 2017, 199, 195-237.	1.6	2
16	Surfactant-free single-layer graphene in water. Nature Chemistry, 2017, 9, 347-352.	6.6	175
17	Adsorption of Milk Proteins (Î²-Casein and Î²-Lactoglobulin) and BSA onto Hydrophobic Surfaces. Materials, 2017, 10, 893.	1.3	46
18	Raman Signatures of Single Layer Graphene Dispersed in Degassed Water, â€œâ€˜Eau de Grapheneâ€â€™. Journal of Physical Chemistry C, 2016, 120, 28204-28214.	1.5	25

#	Article	IF	Citations
19	â€•Eau de grapheneâ€•from a KC₈ graphite intercalation compound prepared by a simple mixing of graphite and molten potassium. Physica Status Solidi - Rapid Research Letters, 2016, 10, 895-899.	1.2	17
20	Single layer nano graphene platelets derived from graphite nanofibres. Nanoscale, 2016, 8, 8810-8818.	2.8	19
21	Ions at interfaces: the central role of hydration and hydrophobicity. Current Opinion in Colloid and Interface Science, 2016, 23, 19-28.	3.4	78
22	Anions make the difference: insights from the interaction of big cations and anions with poly(N-isopropylacrylamide) chains and microgels. Soft Matter, 2015, 11, 5077-5086.	1.2	26
23	Experimental Study and Modeling of Boundary Lubricant Polyelectrolyte Films. Macromolecules, 2015, 48, 2244-2253.	2.2	15
24	Spatial Heterogeneity of Glassy Polymer Films. Macromolecules, 2015, 48, 2787-2792.	2.2	9
25	On the conformational state of molecules in molecularly thin shearing films. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4973.	3.3	9
26	Spontaneous Structuration of Hydrophobic Polymer Surfaces in Contact with Salt Solutions. , 2015, , 257-272.		1
27	Surface Forces Apparatus in Nanotribology. Nanoscience and Technology, 2015, , 17-34.	1.5	1
28	Nonconventional Methods for Patterning Polymer Surfaces. , 2015, , 1-21.		0
29	Contact Interaction of Double-Chained Surfactant Layers on Silica: Bilayer Rupture and Capillary Bridge Formation. Langmuir, 2013, 29, 14473-14481.	1.6	0
30	Deconstructing Graphite: Graphenide Solutions. Accounts of Chemical Research, 2013, 46, 129-137.	7.6	99
31	Ions-Induced Nanostructuration: Effect of Specific Ionic Adsorption on Hydrophobic Polymer Surfaces. Journal of Physical Chemistry B, 2013, 117, 6814-6822.	1.2	11
32	Boundary Lubricant Polymer Films: Effect of Cross-Linking. Langmuir, 2013, 29, 12936-12949.	1.6	15
33	Electric-Field-Induced Friction Reduction and Control. Physical Review Letters, 2012, 109, 154302.	2.9	60
34	Substrate Remote Control of Polymer Film Surface Mobility. Macromolecules, 2012, 45, 1001-1005.	2.2	34
35	Solutions of fully exfoliated individual graphene flakes in low boiling point solvents. Soft Matter, 2012, 8, 7882.	1.2	46
36	Portrait of carbon nanotube salts as soluble polyelectrolytes. Soft Matter, 2011, 7, 7998.	1.2	38

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37	Graphene solutions. Chemical Communications, 2011, 47, 5470-5472.	2.2	78
38	Waterâ˘Ions Induced Nanostructuration of Hydrophobic Polymer Surfaces. ACS Nano, 2011, 5, 2939-2947.	7.3	41
39	Dendritic Carrier Based on PEG: Design and Degradation of Acidâ€sensitive Dendrimerâ€like Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /	2.0	20
40	Effect of Surfactant Oligomerization Degree on Lubricant Properties of Mixed Surfactant-Diblock Copolymer Films. Tribology Letters, 2010, 39, 31-38.	1.2	8
41	Delamination and Renovation of a Molecular Surfactantâ˘Polymer Boundary Lubricant Film. Langmuir, 2009, 25, 11472-11479.	1.6	2
42	Solutions of Negatively Charged Graphene Sheets and Ribbons. Journal of the American Chemical Society, 2008, 130, 15802-15804.	6.6	444
43	Design of Stimuli-Responsive Surfaces Prepared by Surface Segregation of Polypeptide-b-polystyrene Diblock Copolymers. Macromolecules, 2008, 41, 1053-1056.	2.2	18
44	Reinforcement of a Surfactant Boundary Lubricant Film by a Hydrophilicâ˘Hydrophilic Diblock Copolymer. Langmuir, 2008, 24, 1560-1565.	1.6	15
45	Boundary lubricant films under shear: Effect of roughness and adhesion. Journal of Chemical Physics, 2007, 126, 184906.	1.2	21
46	Triblock Copolymer Lubricant Films under Shear: Effect of Molecular Cross-Linking. Journal of Adhesion, 2007, 83, 431-448.	1.8	6
47	Surfactant Boundary Lubricant Film Modified by an Amphiphilic Diblock Copolymer. Langmuir, 2005, 21, 2779-2788.	1.6	30
48	Behavior of adhesive boundary lubricated surfaces under shear: Effect of grafted diblock copolymers. European Physical Journal E, 2004, 15, 159-165.	0.7	13
49	Fundamental studies of crude oilâ€"surface water interactions and its relationship to reservoir wettability. Journal of Petroleum Science and Engineering, 2004, 45, 61-81.	2.1	147
50	Friction between two weakly adhering boundary lubricated surfaces in water. Physical Review E, 2003, 67, 066110.	0.8	102
51	Shear alignment of confined hydrocarbon liquid films. Physical Review E, 2002, 66, 011705.	0.8	41
52	Behavior of adhesive boundary lubricated surfaces under shear: A new dynamic transition. Europhysics Letters, 2002, 58, 503-509.	0.7	29
53	Surface forces and wettability. Journal of Petroleum Science and Engineering, 2002, 33, 123-133.	2.1	133
54	Dynamic phase transitions in confined lubricant fluids under shear. Physical Review E, 2001, 63, 041506.	0.8	94

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55	Inverted stick-slip friction. Europhysics Letters, 2001, 55, 653-659.	0.7	34
56	Inverted stick-slip friction between two molecularly smooth adhesive surfaces sliding in a solution. Tribology Series, 2001, 39, 875-882.	0.1	0
57	Microtribology and Friction-Induced Material Transfer in WS2 Nanoparticle Additives. Advanced Functional Materials, 2001, 11, 348-354.	7.8	64
58	In situ imaging of shearing contacts in the surface forces apparatus. Wear, 2000, 245, 190-195.	1.5	27
59	Some fundamental differences in the adhesion and friction of rough versus smooth surfaces. Tribology Series, 2000, 38, 3-12.	0.1	22
60	Dynamic Behavior of Confined Branched Hydrocarbon Lubricant Fluids under Shear. Macromolecules, 2000, 33, 4910-4920.	2.2	95
61	Microtribology and Direct Force Measurement of WS2 Nested Fullerene-Like Nanostructures. Advanced Materials, 1999, 11, 934-937.	11.1	83
62	Amontons' law at the molecular level. Tribology Letters, 1998, 4, 95-101.	1.2	153
63	Coupling of Normal and Transverse Motions during Frictional Sliding. Journal of Physical Chemistry B, 1998, 102, 5038-5041.	1.2	91