George W Greene

List of Publications by Year
in descending order

63	2,896	186265	168389
papers	citations	28 h-index	53 g-index

64	64	64	2639
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent advances in the surface forces apparatus (SFA) technique. Reports on Progress in Physics, 2010, 73, 036601.	20.1	459
2	Adsorption, Lubrication, and Wear of Lubricin on Model Surfaces: Polymer Brush-Like Behavior of a Glycoprotein. Biophysical Journal, 2007, 92, 1693-1708.	0.5	273
3	Adaptive mechanically controlled lubrication mechanism found in articular joints. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5255-5259.	7.1	200
4	Synergistic Interactions between Grafted Hyaluronic Acid and Lubricin Provide Enhanced Wear Protection and Lubrication. Biomacromolecules, 2013, 14, 1669-1677.	5.4	133
5	Molecular Aspects of Boundary Lubrication by Human Lubricin:â€‰ Effect of Disulfide Bonds and Enzymatic Digestion. Langmuir, 2008, 24, 1495-1508.	3.5	120
6	Antifouling Strategies for Electrochemical Biosensing: Mechanisms and Performance toward Point of Care Based Diagnostic Applications. ACS Sensors, 2021, 6, 1482-1507.	7.8	113
7	The Electrochemical Surface Forces Apparatus: The Effect of Surface Roughness, Electrostatic Surface Potentials, and Anodic Oxide Growth on Interaction Forces, and Friction between Dissimilar Surfaces in Aqueous Solutions. Langmuir, 2012, 28, 13080-13093.	3.5	108
8	Redox-Active Quasi-Solid-State Electrolytes for Thermal Energy Harvesting. ACS Energy Letters, 2016, 1, 654-658.	17.4	91
9	Lubricin: A versatile, biological anti-adhesive with properties comparable to polyethylene glycol. Biomaterials, 2015, 53, 127-136.	11.4	81
10	Pressure solution â€“ The importance of the electrochemical surface potentials. Geochimica Et Cosmochimica Acta, 2011, 75, 6882-6892.	3.9	75
11	The Boundary Lubrication of Chemically Grafted and Cross-Linked Hyaluronic Acid in Phosphate Buffered Saline and Lipid Solutions Measured by the Surface Forces Apparatus. Langmuir, 2012, 28, 2244-2250.	3.5	75
12	Role of electrochemical reactions in pressure solution. Geochimica Et Cosmochimica Acta, 2009, 73, 2862-2874.	3.9	63
13	Effect of Surface Roughness and Electrostatic Surface Potentials on Forces Between Dissimilar Surfaces in Aqueous Solution. Advanced Materials, 2011, 23, 2294-2299.	21.0	61
14	N-ethyl-N-methylpyrrolidinium bis(fluorosulfonyl)imide-electrospun polyvinylidene fluoride composite electrolytes: characterization and lithium cell studies. Physical Chemistry Chemical Physics, 2017, 19, 2225-2234.	2.8	61
15	Solidâ€State Lithium Conductors for Lithium Metal Batteries Based on Electrospun Nanofiber/Plastic Crystal Composites. ChemSusChem, 2017, 10, 3135-3145.	6.8	58
16	Enhancement of ion dynamics in organic ionic plastic crystal/PVDF composite electrolytes prepared by co-electrospinning. Journal of Materials Chemistry A, 2016, 4, 9873-9880.	10.3	49
17	Organic Ionic Plastic Crystalâ€Based Composite Electrolyte with Surface Enhanced Ion Transport and Its Use in Allâ€Solidâ€State Lithium Batteries. Advanced Materials Technologies, 2017, 2, 1700046.	5.8	49
18	Ternary lithium-salt organic ionic plastic crystal polymer composite electrolytes for high voltage, all-solid-state batteries. Energy Storage Materials, 2018, 15, 407-414.	18.0	45

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19	Changes in pore morphology and fluid transport in compressed articular cartilage and the implications for joint lubrication. Biomaterials, 2008, 29, 4455-4462.	11.4	44
20	Anisotropic dynamic changes in the pore network structure, fluid diffusion and fluid flow in articular cartilage under compression. Biomaterials, 2010, 31, 3117-3128.	11.4	40
21	Structure and Property Changes in Self-Assembled Lubricin Layers Induced by Calcium Ion Interactions. Langmuir, 2017, 33, 2559-2570.	3.5	38
22	Wetting Characteristics of Plasma-Modified Porous Polyethylene. Langmuir, 2003, 19, 5869-5874.	3.5	34
23	Experimental investigation of the dissolution of quartz by a muscovite mica surface: Implications for pressure solution. Journal of Geophysical Research, 2006, 111, .	3.3	33
24	Confined fluids and their role in pressure solution. Chemical Geology, 2006, 230, 220-231.	3.3	33
25	A cartilage-inspired lubrication system. Soft Matter, 2014, 10, 374-382.	2.7	33
26	Interactions between fibroin and sericin proteins from Antheraea pernyi and Bombyx mori silk fibers. Journal of Colloid and Interface Science, 2016, 478, 316-323.	9.4	33
27	Interactions between Lubricin and Hyaluronic Acid Synergistically Enhance Antiadhesive Properties. ACS Applied Materials & Interfaces, 2019, 11, 18090-18102.	8.0	33
28	Lubricin Antiadhesive Coatings Exhibit Sizeâ€Selective Transport Properties that Inhibit Biofouling of Electrode Surfaces with Minimal Loss in Electrochemical Activity. Advanced Materials Interfaces, 2018, 5, 1701296.	3.7	31
29	Protein binding properties of surface-modified porous polyethylene membranes. Biomaterials, 2005, 26, 5972-5982.	11.4	28
30	Mercury Vapor Sorption and Amalgamation with a Thin Gold Film. ACS Applied Materials & Interfaces, 2015, 7, 23172-23181.	8.0	27
31	Force amplification response of actin filaments under confined compression. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 445-449.	7.1	26
32	The influence of interfacial interactions on the conductivity and phase behaviour of organic ionic plastic crystal/polymer nanoparticle composite electrolytes. Journal of Materials Chemistry A, 2020, 8, 5350-5362.	10.3	26
33	Deposition and Wetting Characteristics of Polyelectrolyte Multilayers on Plasma-Modified Porous Polyethylene. Langmuir, 2004, 20, 2739-2745.	3.5	22
34	Lubricin on Platinum Electrodes: A Lowâ€Impedance Proteinâ€Resistant Surface Towards Biomedical Implantation. ChemElectroChem, 2019, 6, 1939-1943.	3.4	22
35	A Simple Electrochemical Swab Assay for the Rapid Quantification of Clonazepam in Unprocessed Saliva Enabled by Lubricin Antifouling Coatings. ChemElectroChem, 2020, 7, 2851-2858.	3.4	22
36	Electrokinetic Properties of Lubricin Antiadhesive Coatings in Microfluidic Systems. Langmuir, 2016, 32, 1899-1908.	3.5	21

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37	Enhanced ionic mobility in Organic Ionic Plastic Crystal â€“ Dendrimer solid electrolytes. Electrochimica Acta, 2015, 175, 214-223.	5.2	20
38	Adhesion and Self-Assembly of Lubricin (PRG4) Brush Layers on Different Substrate Surfaces. Langmuir, 2019, 35, 15834-15848.	3.5	19
39	Adsorption of Amyloidogenic Peptides to Functionalized Surfaces Is Biased by Charge and Hydrophilicity. Langmuir, 2019, 35, 14522-14531.	3.5	19
40	Lubricin (PRG4) reduces fouling susceptibility and improves sensitivity of carbon-based electrodes. Electrochimica Acta, 2020, 333, 135574.	5.2	19
41	Prospects and application of nanobiotechnology in food preservation: molecular perspectives. Critical Reviews in Biotechnology, 2019, 39, 759-778.	9.0	18
42	Anion effects on the properties of OIPC/PVDF composites. Materials Advances, 2021, 2, 1683-1694.	5.4	17
43	Hyaluronic acidâ€“collagen network interactions during the dynamic compression and recovery of cartilage. Soft Matter, 2012, 8, 9906.	2.7	14
44	Adsorption of polyelectrolyte multilayers on plasma-modified porous polyethylene. Applied Surface Science, 2004, 233, 336-342.	6.1	9
45	Self-Assembly of Lubricin (PRG-4) Brushes on Graphene Oxide Affords Stable 2D-Nanosheets in Concentrated Electrolytes and Complex Fluids. ACS Applied Nano Materials, 2020, 3, 11527-11542.	5.0	9
46	Ion Transport in Li-Doped Triethyl(methyl)phosphonium Tetrafluoroborate (Li-[P₁₂₂₂][BF₄]) Impregnated with PVDF Nanoparticles. Journal of Physical Chemistry C, 2022, 126, 3839-3852.	3.1	9
47	Morphological Evolution and Solidâ€“Electrolyte Interphase Formation on LiNi_{0.6}Mn_{0.2}Co_{0.2}O₂ Cathodes Using Highly Concentrated Ionic Liquid Electrolytes. ACS Applied Materials & Interfaces, 2022, 14, 13196-13205.	8.0	9
48	Adsorbtion of polyelectrolyte multilayers on plasma-modified porous polyethylene. Applied Surface Science, 2004, 238, 101-107.	6.1	8
49	Lubricin (PRG4) Antiadhesive Coatings Mitigate Electrochemical Impedance Instabilities in Polypyrrole Bionic Electrodes Exposed to Fouling Fluids. ACS Applied Bio Materials, 2020, 3, 8032-8039.	4.6	8
50	Lubricin as a tool for controlling adhesion in vivo and ex vivo. Biointerphases, 2021, 16, 020802.	1.6	7
51	Phase behavior and electrochemical properties of solid lithium electrolytes based on N-ethyl-N-methylpyrrolidinium bis(fluorosulfonyl)imide and PVdF composites. Solid State Ionics, 2021, 363, 115588.	2.7	7
52	Dynamics of force generation by confined actin filaments. Soft Matter, 2013, 9, 2389.	2.7	6
53	Dip-and-Drag Lateral Force Spectroscopy for Measuring Adhesive Forces between Nanofibers. Langmuir, 2016, 32, 13340-13348.	3.5	5
54	Dataset on the synthesis and physicochemical characterization of blank and curcumin encapsulated sericin nanoparticles obtained from Philosamia ricini silkworm cocoons. Data in Brief, 2019, 26, 104359.	1.0	5

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55	Cellular Interactions with Lubricin and Hyaluronic Acidâ€“Lubricin Composite Coatings on Gold Electrodes in Passive and Electrically Stimulated Environments. ACS Biomaterials Science and Engineering, 2021, 7, 3696-3708.	5.2	5
56	Reply to McCutchen: Clarification of hydrodynamic and boundary lubrication mechanisms in joints. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E462-E462.	7.1	2
57	Use of optical interferometry to measure gold nanoparticle adsorption on silica. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 506, 383-392.	4.7	2
58	Anti-Adhesive Coatings: Lubricin Antiadhesive Coatings Exhibit Size-Selective Transport Properties that Inhibit Biofouling of Electrode Surfaces with Minimal Loss in Electrochemical Activity (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	31.7	2
59	Potential Pulse-Facilitated Active Adsorption of Lubricin Polymer Brushes Can Both Accelerate Self-Assembly and Control Grafting Density. Langmuir, 2021, 37, 11188-11193.	3.5	2
60	Novel Boundary Lubrication Mechanisms from Molecular Pillows of Lubricin Brush-Coated Graphene Oxide Nanosheets. Langmuir, 2022, 38, 5351-5360.	3.5	2
61	Chemical and Thermal Stability of Surfaceâ€Modified Porous Polyethylene Membranes. Journal of Dispersion Science and Technology, 2005, 25, 609-617.	2.4	1
62	Frequency Dependent Silica Dissolution Rate Enhancement under Oscillating Pressure via an Electrochemical Pressure Solution-like, Surface Resonance Mechanism. Journal of the American Chemical Society, 2022, 144, 3875-3891.	13.7	1
63	(Keynote) Solid State Organic Ionic Plastic Crystals and Composite Materials for Energy Storage. ECS Meeting Abstracts, 2018, , .	0.0	0