Feng Zhou

List of Publications by Citations

539 papers	22,968 citations	80 h-index	126 g-index
564 ext. papers	26,923 ext. citations	7.9 avg, IF	7.4 L-index

#	Paper	IF	Citations
539	Bioinspired catecholic chemistry for surface modification. *Chemical Society Reviews*, **2011**, 40, 4244-58	58.5	935
538	Ionic liquid lubricants: designed chemistry for engineering applications. *Chemical Society Reviews*, **2009**, 38, 2590-9	58.5	795
537	Molecularly engineered dual-crosslinked hydrogel with ultrahigh mechanical strength, toughness, and good self-recovery. *Advanced Materials*, **2015**, 27, 2054-9	24	553
536	Stable biomimetic super-hydrophobic engineering materials. *Journal of the American Chemical Society*, **2005**, 127, 15670-1	16.4	447
535	Surface grafted polymer brushes as ideal building blocks for "smart" surfaces. *Physical Chemistry Chemical Physics*, **2006**, 8, 3815-23	3.6	256
534	One-Step Device Fabrication of Phosphorene and Graphene Interdigital Micro-Supercapacitors with High Energy Density. *ACS Nano*, **2017**, 11, 7284-7292	16.7	251
533	Mechanical properties and wear and corrosion resistance of electrodeposited Ni□o/SiC nanocomposite coating. *Applied Surface Science*, **2006**, 252, 3591-3599	6.7	244
532	Bio-inspired reversible underwater adhesive. *Nature Communications*, **2017**, 8, 2218	17.4	243
531	TiO2 Nanotubes with Tunable Morphology, Diameter, and Length: Synthesis and Photo-Electrical/Catalytic Performance. *Chemistry of Materials*, **2009**, 21, 1198-1206	9.6	218
530	Extreme wettability and tunable adhesion: biomimicking beyond nature?. *Soft Matter*, **2012**, 8, 2070-2086	3.6	209
529	Tribological performance of phosphonium based ionic liquids for an aluminum-on-steel system and opinions on lubrication mechanism. *Wear*, **2006**, 261, 1174-1179	3.5	206
528	Graphene-based materials for high-voltage and high-energy asymmetric supercapacitors. *Energy Storage Materials*, **2017**, 6, 70-97	19.4	201
527	Pdop layer exhibiting zwitterionicity: a simple electrochemical interface for governing ion permeability. *Chemical Communications*, **2010**, 46, 5900-2	5.8	201
526	Effect of the functional groups in ionic liquid molecules on the friction and wear behavior of aluminum alloy in lubricated aluminum-on-steel contact. *Tribology International*, **2005**, 38, 725-731	4.9	195
525	Self-healing superamphiphobicity. *Chemical Communications*, **2011**, 47, 2324-6	5.8	192
524	Electrochemically Scalable Production of Fluorine-Modified Graphene for Flexible and High-Energy Ionogel-Based Microsupercapacitors. *Journal of the American Chemical Society*, **2018**, 140, 8198-8205	16.4	188
523	Robust polydopamine nano/microcapsules and their loading and release behavior. *Chemical Communications*, **2009**, 6789-91	5.8	180

522	Alumina nanowire forests via unconventional anodization and super-repellency plus low adhesion to diverse liquids. *Chemical Communications*, **2009**, 1043-5	5.8	180
521	TiO2 nanotubes: Structure optimization for solar cells. *Journal of Materials Chemistry*, **2011**, 21, 9406		170
520	Material-Independent Surface Chemistry beyond Polydopamine Coating. *Accounts of Chemical Research*, **2019**, 52, 704-713	24.3	168
519	A Novel Protocol Toward Perfect Alignment of Anodized TiO2 Nanotubes. *Advanced Materials*, **2009**, 21, 1964-1967	24	167
518	Multicomponent polymer brushes. *Journal of the American Chemical Society*, **2006**, 128, 16253-8	16.4	165
517	Highly selective uptake and release of charged molecules by pH-responsive polydopamine microcapsules. *Macromolecular Bioscience*, **2011**, 11, 1227-34	5.5	163
516	Template-Free and Direct Electrochemical Deposition of Hierarchical Dendritic Gold Microstructures: Growth and Their Multiple Applications. *Journal of Physical Chemistry C*, **2010**, 114, 15617-15624	3.8	157
515	Highly reversible and multi-stage cantilever actuation driven by polyelectrolyte brushes. *Journal of the American Chemical Society*, **2006**, 128, 5326-7	16.4	157
514	Mussel-inspired hydrogels: from design principles to promising applications. *Chemical Society Reviews*, **2020**, 49, 3605-3637	58.5	153
513	Scalable Fabrication of Photochemically Reduced Graphene-Based Monolithic Micro-Supercapacitors with Superior Energy and Power Densities. *ACS Nano*, **2017**, 11, 4283-4291	16.7	152
512	Modification of carbon nanotubes with a nanothin polydopamine layer and polydimethylamino-ethyl methacrylate brushes. *Carbon*, **2010**, 48, 2347-2353	10.4	151
511	Electrochemically mediated atom transfer radical polymerization on nonconducting substrates: controlled brush growth through catalyst diffusion. *Journal of the American Chemical Society*, **2013**, 135, 1708-10	16.4	148
510	Imidazolium ionic liquids as antiwear and antioxidant additive in poly(ethylene glycol) for steel/steel contacts. *ACS Applied Materials & Interfaces*, **2010**, 2, 870-6	9.5	144
509	Molybdenum Phosphide/Carbon Nanotube Hybrids as pH-Universal Electrocatalysts for Hydrogen Evolution Reaction. *Advanced Functional Materials*, **2018**, 28, 1706523	15.6	141
508	Matrix-assisted catalytic printing for the fabrication of multiscale, flexible, foldable, and stretchable metal conductors. *Advanced Materials*, **2013**, 25, 3343-50	24	137
507	Dramatically Tuning Friction Using Responsive Polyelectrolyte Brushes. *Macromolecules*, **2013**, 46, 9368-9379	5.8	131
506	Ultrahigh-voltage integrated micro-supercapacitors with designable shapes and superior flexibility. *Energy and Environmental Science*, **2019**, 12, 1534-1541	35.4	129
505	Brushing up from "anywhere" under sunlight: a universal surface-initiated polymerization from polydopamine-coated surfaces. *Chemical Science*, **2015**, 6, 2068-2073	9.4	129

504	2D Amorphous V2O5/Graphene Heterostructures for High-Safety Aqueous Zn-Ion Batteries with Unprecedented Capacity and Ultrahigh Rate Capability. *Advanced Energy Materials*, **2020**, 10, 2000081	21.8	128
503	Electrochemically induced surface-initiated atom-transfer radical polymerization. *Angewandte Chemie - International Edition*, **2012**, 51, 5092-5	16.4	127
502	Integration of Self-Lubrication and Near-Infrared Photothermogenesis for Excellent Anti-Icing/Deicing Performance. *Advanced Functional Materials*, **2015**, 25, 4237-4245	15.6	121
501	Engineering a Titanium Surface with Controllable Oleophobicity and Switchable Oil Adhesion. *Journal of Physical Chemistry C*, **2010**, 114, 9938-9944	3.8	121
500	Functional Room-temperature Ionic Liquids as Lubricants for an Aluminum-on-Steel System. *Chemistry Letters*, **2004**, 33, 524-525	1.7	121
499	All-solid-state flexible planar lithium ion micro-capacitors. *Energy and Environmental Science*, **2018**, 11, 2001-2009	35.4	121
498	Bisimidazolium ionic liquids as the high-performance antiwear additives in poly(ethylene glycol) for steel-steel contacts. *ACS Applied Materials & Interfaces*, **2009**, 1, 467-71	9.5	120
497	Electrochemical growth of flowerlike gold nanoparticles on polydopamine modified ITO glass for SERS application. *Electrochimica Acta*, **2010**, 55, 2004-2009	6.7	120
496	Adhesive polydopamine coated avermectin microcapsules for prolonging foliar pesticide retention. *ACS Applied Materials & Interfaces*, **2014**, 6, 19552-8	9.5	114
495	Towards a tunable and switchable water adhesion on a TiO(2) nanotube film with patterned wettability. *Chemical Communications*, **2009**, 7018-20	5.8	111
494	Effects of system parameters on making aluminum alloy lotus. *Journal of Colloid and Interface Science*, **2006**, 303, 298-305	9.3	110
493	Electrodeposition and characterization of Ni□Co□carbon nanotubes composite coatings. *Surface and Coatings Technology*, **2006**, 200, 4870-4875	4.4	108
492	Electrodeposited nickel□cobalt composite coating containing nano-sized Si3N4. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2005**, 397, 190-194	5.3	107
491	Graphene-Based Linear Tandem Micro-Supercapacitors with Metal-Free Current Collectors and High-Voltage Output. *Advanced Materials*, **2017**, 29, 1703034	24	106
490	Switching water droplet adhesion using responsive polymer brushes. *Langmuir*, **2010**, 26, 12377-82	4	106
489	Stick and slide□ferrofluidic droplets on superhydrophobic surfaces. *Applied Physics Letters*, **2006**, 89, 081911	3.4	106
488	High output polypropylene nanowire array triboelectric nanogenerator through surface structural control and chemical modification. *Nano Energy*, **2016**, 19, 48-57	17.1	104
487	Leaves based triboelectric nanogenerator (TENG) and TENG tree for wind energy harvesting. *Nano Energy*, **2019**, 55, 260-268	17.1	104

486	Facile preparation of monodisperse, impurity-free, and antioxidation copper nanoparticles on a large scale for application in conductive ink. *ACS Applied Materials & Interfaces*, **2014**, 6, 560-7	9.5	103
485	Polyelectrolyte brush amplified electroactuation of microcantilevers. *Nano Letters*, **2008**, 8, 725-30	11.5	103
484	One-step modification of fabrics with bioinspired polydopamine@octadecylamine nanocapsules for robust and healable self-cleaning performance. *Small*, **2015**, 11, 426-31	11	102
483	Self-powered ammonia nanosensor based on the integration of the gas sensor and triboelectric nanogenerator. *Nano Energy*, **2018**, 49, 31-39	17.1	101
482	Freezing Molecular Orientation under Stretch for High Mechanical Strength but Anisotropic Hydrogels. *Small*, **2016**, 12, 4386-92	11	97
481	Hierarchical architectures of monodisperse porous Cu microspheres: synthesis, growth mechanism, high-efficiency and recyclable catalytic performance. *Journal of Materials Chemistry A*, **2014**, 2, 11966	13	97
480	Tribological properties of novel imidazolium ionic liquids bearing benzotriazole group as the antiwear/anticorrosion additive in poly(ethylene glycol) and polyurea grease for steel/steel contacts. *ACS Applied Materials & Interfaces*, **2011**, 3, 4580-92	9.5	97
479	Spray-coated fluorine-free superhydrophobic coatings with easy repairability and applicability. *ACS Applied Materials & Interfaces*, **2009**, 1, 1656-61	9.5	96
478	Electrostatic Self-Assembly of Au Nanoparticles onto Thermosensitive Magnetic Core-Shell Microgels for Thermally Tunable and Magnetically Recyclable Catalysis. *Small*, **2015**, 11, 2807-16	11	95
477	General Construction of Molybdenum-Based Nanowire Arrays for pH-Universal Hydrogen Evolution Electrocatalysis. *Advanced Functional Materials*, **2018**, 28, 1804600	15.6	95
476	Self-healing surface hydrophobicity by consecutive release of hydrophobic molecules from mesoporous silica. *Langmuir*, **2012**, 28, 5845-9	4	91
475	Ultraviolet Light-Induced Surface-Initiated Atom-Transfer Radical Polymerization.. *ACS Macro Letters*, **2013**, 2, 592-596	6.6	90
474	Enhanced field emission from hydrogenated TiO2 nanotube arrays. *Nanotechnology*, **2012**, 23, 455204	3.4	89
473	Tapping the potential of polymer brushes through synthesis. *Accounts of Chemical Research*, **2015**, 48, 229-37	24.3	87
472	Remote Control over Underwater Dynamic Attachment/Detachment and Locomotion. *Advanced Materials*, **2018**, 30, e1801595	24	87
471	Imidazolium hexafluorophosphate ionic liquids as high temperature lubricants for steel□teel contacts. *Wear*, **2010**, 268, 67-71	3.5	86
470	Three-stage switching of surface wetting using phosphate-bearing polymer brushes. *Chemical Communications*, **2005**, 5999-6001	5.8	86
469	The electrolyte switchable solubility of multi-walled carbon nanotube/ionic liquid (MWCNT/IL) hybrids. *Chemical Communications*, **2006**, 2356-8	5.8	86

468	Significant and stable drag reduction with air rings confined by alternated superhydrophobic and hydrophilic strips. *Science Advances*, **2017**, 3, e1603288	14.3	85
467	Surface-Initiated Ring-Opening Metathesis Polymerization of Pentadecafluorooctyl-5-norbornene-2-carboxylate from Variable Substrates Modified with Sticky Biomimic Initiator. *Macromolecules*, **2010**, 43, 5554-5560	5.5	84
466	Microstructured Arrays of TiO2 Nanotubes for Improved Photo-Electrocatalysis and Mechanical Stability. *Advanced Functional Materials*, **2009**, 19, 1930-1938	15.6	84
465	Ionic liquids from amino acids: fully green fluid lubricants for various surface contacts. *RSC Advances*, **2014**, 4, 19396	3.7	83
464	Superamphiphobic coatings with coralline-like structure enabled by one-step spray of polyurethane/carbon nanotube composites. *Journal of Materials Chemistry*, **2012**, 22, 9624		82
463	Fluoride-assisted galvanic replacement synthesis of Ag and Au dendrites on aluminum foil with enhanced SERS and catalytic activities. *Journal of Materials Chemistry*, **2012**, 22, 18327		82
462	A replication strategy for complex micro/nanostructures with superhydrophobicity and superoleophobicity and high contrast adhesion. *Soft Matter*, **2009**, 5, 3097	3.6	82
461	Probing the responsive behavior of polyelectrolyte brushes using electrochemical impedance spectroscopy. *Analytical Chemistry*, **2007**, 79, 176-82	7.8	82
460	Grafting poly(ionic liquid) brushes for anti-bacterial and anti-biofouling applications. *Journal of Materials Chemistry*, **2012**, 22, 13123		80
459	Scalable fabrication of printed Zn//MnO planar micro-batteries with high volumetric energy density and exceptional safety. *National Science Review*, **2020**, 7, 64-72	10.8	80
458	Biomimicking Topographic Elastomeric Petals (E-Petals) for Omnidirectional Stretchable and Printable Electronics. *Advanced Science*, **2015**, 2, 1400021	13.6	79
457	Synthesis of dicationic symmetrical and asymmetrical ionic liquids and their tribological properties as ultrathin films. *Tribology Letters*, **2007**, 25, 197-205	2.8	79
456	A new protocol toward high output TENG with polyimide as charge storage layer. *Nano Energy*, **2017**, 38, 467-476	17.1	78
455	Electrochemical deposition of Au–Pt alloy particles with cauliflower-like microstructures for electrocatalytic methanol oxidation. *International Journal of Hydrogen Energy*, **2012**, 37, 4088-4097	6.7	78
454	Synthesis and characterization of anatase TiO2 nanotubes and their use in dye-sensitized solar cells. *Materials Chemistry and Physics*, **2009**, 113, 602-606	4.4	78
453	A novel imidazolium salt with antioxidation and anticorrosion dual functionalities as the additive in poly(ethylene glycol) for steel/steel contacts. *Wear*, **2013**, 306, 197-208	3.5	77
452	Polypyrrole nanowire/TiO2 nanotube nanocomposites as photoanodes for photocathodic protection of Ti substrate and 304 stainless steel under visible light. *Corrosion Science*, **2015**, 98, 471-477	6.8	76
451	Benzotriazole as the additive for ionic liquid lubricant: one pathway towards actual application of ionic liquids. *Tribology Letters*, **2006**, 23, 191-196	2.8	76

450	Ionic liquid lubricants: when chemistry meets tribology. *Chemical Society Reviews*, **2020**, 49, 7753-7818	58.5	75
449	Ionic liquid pre-intercalated MXene films for ionogel-based flexible micro-supercapacitors with high volumetric energy density. *Journal of Materials Chemistry A*, **2019**, 7, 9478-9485	13	74
448	Hairy polyelectrolyte brushes-grafted thermosensitive microgels as artificial synovial fluid for simultaneous biomimetic lubrication and arthritis treatment. *ACS Applied Materials & Interfaces* , **2014**, 6, 20452-63	9.5	74
447	Structural hydrogels. *Polymer*, **2016**, 98, 516-535	3.9	73
446	Highly flexible coaxial nanohybrids made from porous TiO2 nanotubes. *ACS Nano*, **2009**, 3, 1249-57	16.7	73
445	High Strength Astringent Hydrogels Using Protein as the Building Block for Physically Cross-linked Multi-Network. *ACS Applied Materials & Interfaces*, **2018**, 10, 7593-7601	9.5	72
444	Alkyl Imidazolium Ionic Liquids as Friction Reduction and Anti-Wear Additive in Polyurea Grease for Steel/Steel Contacts. *Tribology Letters*, **2010**, 40, 215-224	2.8	72
443	Tribological properties of plasma nitrided stainless steel against SAE52100 steel under ionic liquid lubrication condition. *Tribology International*, **2006**, 39, 635-640	4.9	72
442	Interconnected Phosphorus and Nitrogen Codoped Porous Exfoliated Carbon Nanosheets for High-Rate Supercapacitors. *ACS Applied Materials & Interfaces*, **2017**, 9, 17317-17325	9.5	68
441	Grafting polymer brushes on biomimetic structural surfaces for anti-algae fouling and foul release. *ACS Applied Materials & Interfaces*, **2012**, 4, 4557-65	9.5	68
440	Topography printing to locally control wettability. *Journal of the American Chemical Society*, **2006**, 128, 7730-1	16.4	67
439	Articular Cartilage Inspired Bilayer Tough Hydrogel Prepared by Interfacial Modulated Polymerization Showing Excellent Combination of High Load-Bearing and Low Friction Performance. *ACS Macro Letters*, **2016**, 5, 1191-1195	6.6	67
438	Fabrication of Chemically Tethered Binary Polymer-Brush Pattern through Two-Step Surface-Initiated Atomic-Transfer Radical Polymerization. *Macromolecular Rapid Communications*, **2004**, 25, 1979-1983	4.8	66
437	Self-assembled structure in room-temperature ionic liquids. *Chemistry - A European Journal*, **2005**, 11, 3936-40	4.8	66
436	One-Step Scalable Fabrication of Graphene-Integrated Micro-Supercapacitors with Remarkable Flexibility and Exceptional Performance Uniformity. *Advanced Functional Materials*, **2019**, 29, 1902860	15.6	64
435	3D printing of shape changing composites for constructing flexible paper-based photothermal bilayer actuators. *Journal of Materials Chemistry C*, **2018**, 6, 2123-2131	7.1	64
434	Electrochemical characteristics of polyelectrolyte brushes with electroactive counterions. *Langmuir* , **2007**, 23, 10389-94	4	64
433	Stretchable tandem micro-supercapacitors with high voltage output and exceptional mechanical robustness. *Energy Storage Materials*, **2018**, 13, 233-240	19.4	63

432	A novel gel polymer electrolyte based on poly ionic liquid 1-ethyl 3-(2-methacryloyloxy ethyl) imidazolium iodide. *European Polymer Journal*, **2007**, 43, 2699-2707	5.2	63
431	Tribological properties of ultra-thin ionic liquid films on single-crystal silicon wafers with functionalized surfaces. *Tribology International*, **2006**, 39, 879-887	4.9	63
430	Functional ionic gels formed by supramolecular assembly of a novel low molecular weight anticorrosive/antioxidative gelator. *Journal of Materials Chemistry*, **2011**, 21, 13399		62
429	Superhydrophobic zinc oxide surface by differential etching and hydrophobic modification. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2007**, 452-453, 732-736	5.3	62
428	Astringent Mouthfeel as a Consequence of Lubrication Failure. *Angewandte Chemie - International Edition*, **2016**, 55, 5793-7	16.4	62
427	Nanoporous Substrate-Infiltrated Hydrogels: a Bioinspired Regenerable Surface for High Load Bearing and Tunable Friction. *Advanced Functional Materials*, **2015**, 25, 7366-7374	15.6	61
426	Polyelectrolyte Brush Templated Multiple Loading of Pd Nanoparticles onto TiO2 Nanowires via Regenerative Counterion Exchange−Reduction. *Journal of Physical Chemistry C*, **2009**, 113, 7677-7683	3.8	61
425	Enhancing the catalytic activity of flowerike Pt nanocrystals using polydopamine functionalized graphene supports for methanol electrooxidation. *Electrochimica Acta*, **2014**, 142, 18-24	6.7	60
424	Solid-liquid triboelectrification in smart U-tube for multifunctional sensors. *Nano Energy*, **2017**, 40, 95-106	17.1	59
423	Grafting zwitterionic polymer brushes via electrochemical surface-initiated atomic-transfer radical polymerization for anti-fouling applications. *Journal of Materials Chemistry B*, **2014**, 2, 5352-5357	7.3	58
422	Brushing up functional materials. *NPG Asia Materials*, **2019**, 11,	10.3	57
421	Direct ink writing with high-strength and swelling-resistant biocompatible physically crosslinked hydrogels. *Biomaterials Science*, **2019**, 7, 1805-1814	7.4	57
420	Ionic liquid modified multi-walled carbon nanotubes as lubricant additive. *Tribology International*, **2015**, 81, 38-42	4.9	57
419	Core-shell-corona-structured polyelectrolyte brushes-grafting magnetic nanoparticles for water harvesting. *ACS Applied Materials & Interfaces*, **2014**, 6, 11625-32	9.5	56
418	Lubricating a bright future: Lubrication contribution to energy saving and low carbon emission. *Science China Technological Sciences*, **2013**, 56, 2888-2913	3.5	56
417	Superhydrophobic surface from Cu-Zn alloy by one step O2 concentration dependent etching. *Journal of Colloid and Interface Science*, **2008**, 326, 478-82	9.3	56
416	Solvent-free and photocurable polyimide inks for 3D printing. *Journal of Materials Chemistry A*, **2017**, 5, 16307-16314	13	55
415	Paper-based triboelectric nanogenerators and their application in self-powered anticorrosion and antifouling. *Journal of Materials Chemistry A*, **2016**, 4, 18022-18030	13	55

414	Multimaterials 3D Printing for Free Assembly Manufacturing of Magnetic Driving Soft Actuator. *Advanced Materials Interfaces*, **2017**, 4, 1700629	4.6	55
413	Dual-responsive capsules with tunable low critical solution temperatures and their loading and release behavior. *Langmuir*, **2013**, 29, 5631-7	4	55
412	Liquid□solid contact triboelectrification and its use in self-powered nanosensor for detecting organics in water. *Nano Energy*, **2016**, 30, 321-329	17.1	55
411	Interfacial Friction Control. *Advanced Materials Interfaces*, **2015**, 2, 1400392	4.6	54
410	Anticorrosion imidazolium ionic liquids as the additive in poly(ethylene glycol) for steel/Cu-Sn alloy contacts. *Faraday Discussions*, **2012**, 156, 147-57; discussion 197-215	3.6	54
409	A self-assembly approach to chemical micropatterning of poly(dimethylsiloxane). *Angewandte Chemie - International Edition*, **2007**, 46, 6634-7	16.4	54
408	Mechanically induced generation of counterions inside surface-grafted charged macromolecular films: towards enhanced mechanotransduction in artificial systems. *Angewandte Chemie - International Edition*, **2006**, 45, 7440-3	16.4	54
407	Controlled polymer-brush growth from microliter volumes using sacrificial-anode atom-transfer radical polymerization. *Angewandte Chemie - International Edition*, **2013**, 52, 9125-9	16.4	53
406	Synthesis and characterization of anatase TiO2 nanotubes with uniform diameter from titanium powder. *Materials Letters*, **2008**, 62, 1819-1822	3.3	53
405	Thermoreversible gel lubricants through universal supramolecular assembly of a nonionic surfactant in a variety of base lubricating liquids. *ACS Applied Materials & Interfaces*, **2014**, 6, 15783-94	8.5	52
404	Charged polymer brushes-grafted hollow silica nanoparticles as a novel promising material for simultaneous joint lubrication and treatment. *Journal of Physical Chemistry B*, **2014**, 118, 4920-31	3.4	52
403	pH-responsive controlled-release fertilizer with water retention via atom transfer radical polymerization of acrylic acid on mussel-inspired initiator. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 5474-82	5.7	51
402	Tribological evaluation of □,□-diimidazoliumalkylene hexafluorophosphate ionic liquid and benzotriazole as additive. *Tribology International*, **2008**, 41, 797-801	4.9	51
401	Preparation of functional ionic liquids and tribological investigation of their ultra-thin films. *Wear*, **2006**, 260, 1076-1080	3.5	51
400	Mussel-inspired thermosensitive polydopamine-graft-poly(N-isopropylacrylamide) coating for controlled-release fertilizer. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 12232-7	5.7	50
399	Mussel-Inspired Photografting on Colloidal Spheres: A Generalized Self-Template Route to Stimuli-Responsive Hollow Spheres for Controlled Pesticide Release. *Macromolecular Rapid Communications*, **2015**, 36, 1640-5	4.8	50
398	Biomimicking lubrication superior to fish skin using responsive hydrogels. *NPG Asia Materials*, **2014**, 6, e136-e136	10.3	50
397	A novel lubricant additive based on carbon nanotubes for ionic liquids. *Materials Letters*, **2008**, 62, 2967-2969	3.3	50

396	Bioinspired high-power-density strong contractile hydrogel by programmable elastic recoil. *Science Advances*, **2020**, 6,	14.3	50
395	Water-solid triboelectrification with self-repairable surfaces for water-flow energy harvesting. *Nano Energy*, **2019**, 61, 454-461	17.1	49
394	Polydopamine film coated controlled-release multielement compound fertilizer based on mussel-inspired chemistry. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 2919-24	5.7	49
393	Bio-Inspired Design and Fabrication of Micro/Nano-Brush Dual Structural Surfaces for Switchable Oil Adhesion and Antifouling. *Small*, **2017**, 13, 1602020	11	49
392	Continuous Surface Polymerization via Fe(II)-Mediated Redox Reaction for Thick Hydrogel Coatings on Versatile Substrates. *Advanced Materials*, **2018**, 30, e1803371	24	49
391	Dramatically improved friction reduction and wear resistance by in situ formed ionic liquids. *RSC Advances*, **2012**, 2, 6824	3.7	48
390	A versatile macro-initiator with dual functional anchoring groups for surface-initiated atom transfer radical polymerization on various substrates. *Polymer Chemistry*, **2012**, 3, 2129	4.9	48
389	Ionogel-based sodium ion micro-batteries with a 3D Na-ion diffusion mechanism enable ultrahigh rate capability. *Energy and Environmental Science*, **2020**, 13, 821-829	35.4	47
388	All-solid-state high-energy planar hybrid micro-supercapacitors based on 2D VN nanosheets and Co(OH)2 nanoflowers. *Npj 2D Materials and Applications*, **2018**, 2,	8.8	47
387	Adhesion-Regulated Switchable Fluid Slippage on Superhydrophobic Surfaces. *Journal of Physical Chemistry C*, **2014**, 118, 2564-2569	3.8	47
386	One-step reduction and functionalization protocol to synthesize polydopamine wrapping Ag/graphene hybrid for efficient oxidation of hydroquinone to benzoquinone. *Applied Catalysis B: Environmental*, **2014**, 160-161, 400-407	21.8	47
385	Antifouling on Gecko's Feet Inspired Fibrillar Surfaces: Evolving from Land to Marine and from Liquid Repellency to Algae Resistance. *Advanced Materials Interfaces*, **2015**, 2, 1500257	4.6	47
384	Caterpillar-Inspired Design and Fabrication of A Self-Walking Actuator with Anisotropy, Gradient, and Instant Response. *Small*, **2015**, 11, 3494-501	11	46
383	Mechanically Induced Self-Healing Superhydrophobicity. *Journal of Physical Chemistry C*, **2015**, 119, 7109-7114	3.8	46
382	The Weak Interaction of Surfactants with Polymer Brushes and Its Impact on Lubricating Behavior. *Macromolecules*, **2015**, 48, 6186-6196	5.5	46
381	Nanostructured WS2/Ni composite films for improved oxidation, resistance and tribological performance. *Applied Surface Science*, **2014**, 288, 15-25	6.7	46
380	Ultrasound-assisted synthesis of dentritic ZnO nanostructure in ionic liquid. *Materials Letters*, **2007**, 61, 1789-1792	3.3	46
379	Candle soot as a supercapacitor electrode material. *RSC Advances*, **2014**, 4, 2586-2589	3.7	45

378	Fixed-component lanthanide-hybrid-fabricated full-color photoluminescent films as vapoluminescent sensors. *Chemistry - A European Journal*, **2013**, 19, 4556-62	4.8	45
377	Molybdenum-doped and anatase/rutile mixed-phase TiO 2 nanotube photoelectrode for high photoelectrochemical performance. *Journal of Power Sources*, **2015**, 281, 411-416	8.9	44
376	Towards superior lubricity and anticorrosion performances of proton-type ionic liquids additives for water-based lubricating fluids. *Chemical Engineering Journal*, **2020**, 383, 123201	14.7	44
375	Contribution of Charges in Polyvinyl Alcohol Networks to Marine Antifouling. *ACS Applied Materials & Interfaces*, **2017**, 9, 18295-18304	9.5	43
374	Spatial control over brush growth through sunlight-induced atom transfer radical polymerization using dye-sensitized TiO2 as a photocatalyst. *Macromolecular Rapid Communications*, **2014**, 35, 1287-92	4.8	43
373	Self-assembly of catecholic macroinitiator on various substrates and surface-initiated polymerization. *Langmuir*, **2012**, 28, 2574-81	4	43
372	Multi-walled carbon nanotube supported Pd and Pt nanoparticles with high solution affinity for effective electrocatalysis. *Applied Surface Science*, **2010**, 256, 6723-6728	6.7	43
371	Electrochemically Induced Surface-Initiated Atom-Transfer Radical Polymerization. *Angewandte Chemie*, **2012**, 124, 5182-5185	3.6	42
370	Morphology evolution of Ag alloyed WS2 films and the significantly enhanced mechanical and tribological properties. *Surface and Coatings Technology*, **2014**, 238, 197-206	4.4	41
369	Fabrication of Conducting Polymer and Complementary Gold Microstructures Using Polymer Brushes as Templates. *Advanced Functional Materials*, **2003**, 13, 938-942	15.6	41
368	The ecotoxicity and tribological properties of choline amino acid ionic liquid lubricants. *Tribology International*, **2018**, 121, 435-441	4.9	39
367	CdS/CdSe quantum dot co-sensitized graphene nanocomposites via polymer brush templated synthesis for potential photovoltaic applications. *Nanoscale*, **2012**, 4, 2109-16	7.7	39
366	Towards chemically bonded p□ heterojunctions through surface initiated electrodeposition of p-type conducting polymer inside TiO2 nanotubes. *Journal of Materials Chemistry*, **2010**, 20, 6910		39
365	Surface Modification of Diamond-Like Carbon Film with Polymer Brushes Using a Bio-Inspired Catechol Anchor for Excellent Biological Lubrication. *Advanced Materials Interfaces*, **2014**, 1, 1400035	4.6	38
364	Tuning the tribological property with thermal sensitive microgels for aqueous lubrication. *ACS Applied Materials & Interfaces*, **2013**, 5, 10842-52	9.5	38
363	High-Temperature Tribological Properties of 2-Substituted Imidazolium Ionic Liquids for Si3N4-Steel Contacts. *Tribology Letters*, **2008**, 32, 73-79	2.8	38
362	Friction and wear behavior of plasma nitrided 1Cr18Ni9Ti austenitic stainless steel under lubrication condition. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2005**, 402, 135-141	5.3	38
361	3D Printing of Hydrogel Architectures with Complex and Controllable Shape Deformation. *Advanced Materials Technologies*, **2019**, 4, 1800713	6.8	38

360	Novel N , P-containing oil-soluble ionic liquids with excellent tribological and anti-corrosion performance. *Tribology International*, **2019**, 132, 118-129	4.9	38
359	Grafting Robust Thick Zwitterionic Polymer Brushes via Subsurface-Initiated Ring-Opening Metathesis Polymerization for Antimicrobial and Anti-Biofouling. *ACS Applied Materials & Interfaces*, **2019**, 11, 39171-39178	9.5	37
358	Mesoporous polypyrrole-based graphene nanosheets anchoring redox polyoxometalate for all-solid-state micro-supercapacitors with enhanced volumetric capacitance. *Science China Materials* , **2018**, 61, 233-242	7.1	37
357	Synthesis and properties of polymer brushes bearing ionic liquid moieties. *Electrochimica Acta*, **2007**, 53, 487-494	6.7	37
356	Solid–liquid Triboelectrification Control and Antistatic Materials Design Based on Interface Wettability Control. *Advanced Functional Materials*, **2019**, 29, 1903587	15.6	36
355	Accelerating the healing of superhydrophobicity through photothermogenesis. *Journal of Materials Chemistry A*, **2015**, 3, 17074-17079	13	36
354	Candle Soot as Particular Lubricant Additives. *Tribology Letters*, **2014**, 53, 521-531	2.8	36
353	Supramolecular ionogel lubricants with imidazolium-based ionic liquids bearing the urea group as gelator. *Journal of Colloid and Interface Science*, **2017**, 487, 130-140	9.3	36
352	In situ formed ionic liquids in synthetic esters for significantly improved lubrication. *ACS Applied Materials & Interfaces*, **2012**, 4, 6683-9	9.5	36
351	Synthesis and characterization of silver nanoparticle loaded mesoporous TiO2 nanobelts. *Microporous and Mesoporous Materials*, **2008**, 116, 658-664	5.3	36
350	New Self-Healing Triboelectric Nanogenerator Based on Simultaneous Repair Friction Layer and Conductive Layer. *ACS Applied Materials & Interfaces*, **2020**, 12, 30390-30398	9.5	35
349	In situ zwitterionic supramolecular gel lubricants for significantly improved tribological properties. *Tribology International*, **2016**, 95, 55-65	4.9	35
348	Carbon-doped anatase TiO2 nanotube array/glass and its enhanced photocatalytic activity under solar light. *Solid State Sciences*, **2013**, 15, 53-59	3.4	35
347	Tribological properties of chemically bonded polyimide films on silicon with polyglycidyl methacrylate brush as adhesive layer. *Applied Surface Science*, **2006**, 253, 1729-1735	6.7	35
346	Immobilized 1,3-Dialkylimidazolium Salts as New Interface in HPLC Separation. *Chemistry Letters*, **2004**, 33, 496-497	1.7	35
345	Biodegradable betaine-based aprotic task-specific ionic liquids and their application in efficient SO2 absorption. *Green Chemistry*, **2015**, 17, 3798-3805	10	34
344	Selectively splitting a droplet using superhydrophobic stripes on hydrophilic surfaces. *Physical Chemistry Chemical Physics*, **2015**, 17, 13800-3	3.6	34
343	Soft/Hard-Coupled Amphiphilic Polymer Nanospheres for Water Lubrication. *ACS Applied Materials & Interfaces*, **2018**, 10, 9178-9187	9.5	34

342	Lithium-Based Ionic Liquids: In Situ-Formed Lubricant Additive Only by Blending. *Tribology Letters*, **2013**, 49, 127-133	2.8	34
341	Responsive wetting transition on superhydrophobic surfaces with sparsely grafted polymer brushes. *Soft Matter*, **2011**, 7, 515-523	3.6	34
340	3D printing of metal-organic frameworks decorated hierarchical porous ceramics for high-efficiency catalytic degradation. *Chemical Engineering Journal*, **2020**, 397, 125392	14.7	33
339	Bio-Inspired Renewable Surface-Initiated Polymerization from Permanently Embedded Initiators. *Angewandte Chemie - International Edition*, **2016**, 55, 4260-4	16.4	32
338	A general approach for construction of asymmetric modification membranes for gated flow nanochannels. *Journal of Materials Chemistry A*, **2014**, 2, 8804-8814	13	32
337	Polymer brushes for antibiofouling and lubrication. *Biosurface and Biotribology*, **2017**, 3, 97-114	1	32
336	Photo-regulated stick-slip switch of water droplet mobility. *Soft Matter*, **2011**, 7, 3331	3.6	32
335	High Lubricity Meets Load Capacity: Cartilage Mimicking Bilayer Structure by Brushing Up Stiff Hydrogels from Subsurface. *Advanced Functional Materials*, **2020**, 30, 2004062	15.6	32
334	Additively manufacturing high-performance bismaleimide architectures with ultraviolet-assisted direct ink writing. *Materials and Design*, **2019**, 180, 107947	8.1	31
333	How solid-liquid adhesive property regulates liquid slippage on solid surfaces?. *Langmuir*, **2015**, 31, 226-32	4	31
332	Supramolecular Gel Lubricants Based on Amino Acid Derivative Gelators. *Tribology Letters*, **2016**, 61, 1	2.8	31
331	A facile low-cost synthesis of ZnO nanorods via a solid-state reaction at low temperature. *Materials Letters*, **2006**, 60, 3786-3788	3.3	31
330	Fabrication of Positively Patterned Conducting Polymer Microstructures via One-Step Electrodeposition. *Advanced Materials*, **2003**, 15, 1367-1370	24	31
329	Dependence of atomic oxygen resistance and the tribological properties on microstructures of WS2 films. *Applied Surface Science*, **2014**, 298, 36-43	6.7	30
328	Tribological properties of self-assembled monolayers of catecholic imidazolium and the spin-coated films of ionic liquids. *Langmuir*, **2011**, 27, 11324-31	4	30
327	High-density attachment of gold nanoparticles on functionalized multiwalled carbon nanotubes using ion exchange. *Carbon*, **2009**, 47, 1209-1213	10.4	30
326	Low surface energy surfaces from self-assembly of perfluoropolymer with sticky functional groups. *Journal of Colloid and Interface Science*, **2010**, 351, 261-6	9.3	30
325	3D Printing of Dual-Physical Cross-linking Hydrogel with Ultrahigh Strength and Toughness. *Chemistry of Materials*, **2020**, 32, 9983-9995	9.6	30

324	Ion-specific ice propagation behavior on polyelectrolyte brush surfaces. *RSC Advances*, **2017**, 7, 840-844	3.7	29
323	Highly stable and re-dispersible nano Cu hydrosols with sensitively size-dependent catalytic and antibacterial activities. *Nanoscale*, **2015**, 7, 13775-83	7.7	29
322	New Method for the Corrosion Resistance of AZ31 Mg Alloy with a Porous Micro-Arc Oxidation Membrane as an Ionic Corrosion Inhibitor Container. *Langmuir*, **2019**, 35, 1134-1145	4	29
321	Microstructure Evolution and Enhanced Tribological Properties of Cu-Doped WS2 Films. *Tribology Letters*, **2014**, 55, 1-13	2.8	29
320	Multiscale hairy surfaces for nearly perfect marine antibiofouling. *Journal of Materials Chemistry B*, **2013**, 1, 3599-3606	7.3	29
319	Noncovalent microcontact printing for grafting patterned polymer brushes on graphene films. *Langmuir*, **2013**, 29, 1054-60	4	29
318	Robust Photothermal Coating Strategy for Efficient Ice Removal. *ACS Applied Materials & Interfaces*, **2020**, 12, 46981-46990	9.5	29
317	Contribution of Surface Chemistry to the Shear Thickening of Silica Nanoparticle Suspensions. *Langmuir*, **2017**, 33, 1037-1042	4	28
316	Facile preparation of structured zwitterionic polymer substrate via sub-surface initiated atom transfer radical polymerization and its synergistic marine antifouling investigation. *European Polymer Journal*, **2019**, 112, 146-152	5.2	28
315	Enhancing the Performance of Textile Triboelectric Nanogenerators with Oblique Microrod Arrays for Wearable Energy Harvesting. *ACS Applied Materials & Interfaces*, **2019**, 11, 26824-26829	9.5	28
314	Lithium-based ionic liquids functionalized by sym-triazine and cyclotriphosphazene as high temperature lubricants. *Tribology International*, **2014**, 70, 136-141	4.9	28
313	Laxative inspired ionic liquid lubricants with good detergency and no corrosion. *ACS Applied Materials & Interfaces*, **2014**, 6, 3233-41	9.5	28
312	Bioinspired Self-Healing Organic Materials: Chemical Mechanisms and Fabrications. *Journal of Bionic Engineering*, **2015**, 12, 1-16	2.7	28
311	Synergistic effect of hydrophobic film and porous MAO membrane containing alkynol inhibitor for enhanced corrosion resistance of magnesium alloy. *Surface and Coatings Technology*, **2019**, 357, 515-525	4.4	28
310	Investigation of the lubricity and antiwear behavior of guanidinium ionic liquids at high temperature. *Tribology International*, **2017**, 114, 65-76	4.9	27
309	Switching friction with thermal- responsive gels. *Macromolecular Rapid Communications*, **2013**, 34, 1785-90	4.8	27
308	Excellent lubrication performance and superior corrosion resistance of vinyl functionalized ionic liquid lubricants at elevated temperature. *Tribology International*, **2011**, 44, 1111-1117	4.9	27
307	Electrolyte-modulated electrochemistry and electrocatalysis on ferrocene-terminated polyelectrolyte brushes. *Journal of Materials Chemistry*, **2009**, 19, 8129		27

306	Ibuprofen-Based Ionic Liquids as Additives for Enhancing the Lubricity and Antiwear of Water–Ethylene Glycol Liquid. *Tribology Letters*, **2017**, 65, 1	2.8	26
305	Stratified polymer brushes from microcontact printing of polydopamine initiator on polymer brush surfaces. *Macromolecular Rapid Communications*, **2014**, 35, 1046-54	4.8	26
304	Binary oppositely charged polyelectrolyte brushes for highly selective electroless deposition of bimetallic patterns. *Electrochemistry Communications*, **2009**, 11, 492-495	5.1	26
303	PEG-mediated synthesis of ZnO nanostructures at room temperature. *Materials Letters*, **2007**, 61, 2551-2555	3.3	26
302	The synthesis and tribological properties of dicarboxylic acid ionic liquids. *Tribology International*, **2017**, 114, 132-140	4.9	25
301	Gecko-inspired but chemically switched friction and adhesion on nanofibrillar surfaces. *Small*, **2015**, 11, 1131-7	11	25
300	Biobased Green Lubricants: Physicochemical, Tribological and Toxicological Properties of Fatty Acid Ionic Liquids. *Tribology Transactions*, **2018**, 61, 195-206	1.8	25
299	Highlighting the Effect of Interfacial Interaction on Tribological Properties of Supramolecular Gel Lubricants. *Advanced Materials Interfaces*, **2016**, 3, 1500489	4.6	25
298	Parallel array of nanochannels grafted with polymer-brushes-stabilized Au nanoparticles for flow-through catalysis. *Nanoscale*, **2013**, 5, 11894-901	7.7	25
297	N-Substituted carbamate synthesis using urea as carbonyl source over TiO2–Cr2O3/SiO2 catalyst. *Green Chemistry*, **2015**, 17, 3964-3971	10	25
296	In situ AFM investigation of electrochemically induced surface-initiated atom-transfer radical polymerization. *Macromolecular Rapid Communications*, **2013**, 34, 246-50	4.8	25
295	Amination of surfaces via self-assembly of dopamine. *Journal of Colloid and Interface Science*, **2011**, 362, 127-34	9.3	25
294	A novel way to prepare ultra-thin polymer films through surface radical chain-transfer reaction. *Chemical Communications*, **2001**, 2446-7	5.8	25
293	Biofilm material based triboelectric nanogenerator with high output performance in 95% humidity environment. *Nano Energy*, **2020**, 77, 105088	17.1	25
292	3D Printing as Feasible Platform for On-Site Building Oil-Skimmer for Oil Collection from Spills. *Advanced Materials Interfaces*, **2016**, 3, 1600015	4.6	25
291	Oil-soluble ionic liquids as antiwear and extreme pressure additives in poly-α-olefin for steel/steel contacts. *Friction*, **2019**, 7, 18-31	5.6	25
290	New Hydrogen Bonding Enhanced Polyvinyl Alcohol Based Self-Charged Medical Mask with Superior Charge Retention and Moisture Resistance Performances. *Advanced Functional Materials*, **2021**, 31, 2009172	15.6	25
289	Improvement of anti-oxidation capability and tribological property of arc ion plated Ag film by alloying with Cu. *Applied Surface Science*, **2011**, 257, 7643-7648	6.7	24

288	Regulation and influence factors of triboelectricity at the solid-liquid interface. *Nano Energy*, **2020**, 78, 105370	17.1	24
287	Facile fabrication of Cu-based alloy nanoparticles encapsulated within hollow octahedral N-doped porous carbon for selective oxidation of hydrocarbons. *Chemical Science*, **2018**, 9, 8703-8710	9.4	24
286	Direct Ink Writing of High Performance Architectured Polyimides with Low Dimensional Shrinkage. *Advanced Engineering Materials*, **2019**, 21, 1801314	3.5	23
285	Catalytic alcoholysis of urea to diethyl carbonate over calcined Mg2nAl hydrotalcite. *RSC Advances*, **2015**, 5, 19534-19540	3.7	23
284	Mussel-Inspired Two-Dimensional Freestanding Alkyl-Polydopamine Janus Nanosheets. *Angewandte Chemie - International Edition*, **2019**, 58, 12018-12022	16.4	23
283	Intermediate wetting states on nanoporous structures of anodic aluminum oxide surfaces. *Thin Solid Films*, **2014**, 562, 353-360	2.2	23
282	Slip flow of diverse liquids on robust superomniphobic surfaces. *Journal of Colloid and Interface Science*, **2014**, 414, 9-13	9.3	23
281	Preparation and Characterization of New Phosphonyl-Substituted Imidazolium Ionic Liquids. *Helvetica Chimica Acta*, **2004**, 87, 2549-2555	2	23
280	UV-Triggered Surface-Initiated Polymerization from Colorless Green Tea Polyphenol-Coated Surfaces. *Macromolecular Rapid Communications*, **2016**, 37, 1256-61	4.8	23
279	3D Printing of Photocuring Elastomers with Excellent Mechanical Strength and Resilience. *Macromolecular Rapid Communications*, **2019**, 40, e1800873	4.8	23
278	Highly efficient thermogenesis from Fe3O4 nanoparticles for thermoplastic material repair both in air and underwater. *Journal of Materials Chemistry A*, **2017**, 5, 1221-1232	13	22
277	Task-Specific Oil-Miscible Ionic Liquids Lubricate Steel/Light Metal Alloy: A Tribochemistry Study. *Advanced Materials Interfaces*, **2018**, 5, 1800791	4.6	22
276	Controlling liquid movement on a surface with a macro-gradient structure and wetting behavior. *Journal of Materials Chemistry A*, **2014**, 2, 5620	13	22
275	Lithium-based ionic liquids as novel lubricant additives for multiply alkylated cyclopentanes (MACs). *Friction*, **2013**, 1, 222-231	5.6	22
274	Physicochemistry aspects on frictional interfaces. *Friction*, **2017**, 5, 361-382	5.6	22
273	Synergy of lithium salt and non-ionic surfactant for significantly improved tribological properties of water-based fluids. *Tribology International*, **2017**, 113, 58-64	4.9	22
272	Polymer brush stabilized amorphous MnO2 on graphene oxide sheets as novel electrode materials for high performance supercapacitors. *Journal of Materials Chemistry A*, **2013**, 1, 8587	13	22
271	Conductive elastic sponge-based triboelectric nanogenerator (TENG) for effective random mechanical energy harvesting and ammonia sensing. *Nano Energy*, **2021**, 79, 105422	17.1	22

270	Fabrication of 3D Tubular Hydrogel Materials through On-Site Surface Free Radical Polymerization. *Chemistry of Materials*, **2018**, 30, 6756-6768	9.6	22
269	Simultaneous Surface Covalent Bonding and Radical Polymerization for Constructing Robust Soft Actuators with Fast Underwater Response. *Chemistry of Materials*, **2019**, 31, 9504-9512	9.6	21
268	Fabrication of Asymmetric Tubular Hydrogels through Polymerization-Assisted Welding for Thermal Flow Actuated Artificial Muscles. *Chemistry of Materials*, **2019**, 31, 4469-4478	9.6	21
267	Halide-free PN ionic liquids surfactants as additives for enhancing tribological performance of water-based liquid. *Tribology International*, **2018**, 128, 190-196	4.9	21
266	Adaptive control in lubrication, adhesion, and hemostasis by Chitosan-Catechol-pNIPAM. *Biomaterials Science*, **2019**, 7, 3599-3608	7.4	21
265	Grafting polymer brushes on graphene oxide for controlling surface charge states and templated synthesis of metal nanoparticles. *Journal of Applied Polymer Science*, **2013**, 127, 3074-3083	2.9	21
264	The effects of nanoscaled amorphous Si and SiNx protective layers on the atomic oxygen resistant and tribological properties of Ag film. *Applied Surface Science*, **2012**, 258, 5683-5688	6.7	21
263	Electron field emission from the carbon-doped TiO2 nanotube arrays. *Thin Solid Films*, **2011**, 519, 8173-8177	1.7	21
262	Pulsed electrospray for mass spectrometry. *Analytical Chemistry*, **2001**, 73, 4748-53	7.8	21
261	Magnetite-Loaded Thermosensitive Nanogels for Bioinspired Lubrication and Multimodal Friction Control. *ACS Macro Letters*, **2016**, 5, 144-148	6.6	20
260	Preparation of nitrogen-doped anatase TiO2 nanoworm/nanotube hierarchical structures and its photocatalytic effect. *Solid State Sciences*, **2014**, 29, 27-33	3.4	20
259	High-Voltage Potassium Ion Micro-Supercapacitors with Extraordinary Volumetric Energy Density for Wearable Pressure Sensor System. *Advanced Energy Materials*, **2021**, 11, 2003835	21.8	20
258	Significant enhancement of anti-friction capability of cationic surfactant by phosphonate functionality as additive in water. *Tribology International*, **2017**, 112, 86-93	4.9	19
257	Contact printing a biomimetic catecholic monolayer on a variety of surfaces and derivation reaction. *Chemical Communications*, **2012**, 48, 398-400	5.8	19
256	Polymer brushes on structural surfaces: a novel synergistic strategy for perfectly resisting algae settlement. *Biomaterials Science*, **2017**, 5, 2493-2500	7.4	18
255	Effect of hydrophobicity on turbulent boundary layer under water. *Experimental Thermal and Fluid Science*, **2015**, 60, 148-156	3	18
254	Embedded polyzwitterionic brush-modified nanofibrous membrane through subsurface-initiated polymerization for highly efficient and durable oil/water separation. *Journal of Colloid and Interface Science*, **2020**, 575, 388-398	9.3	18
253	Chameleon Luminophore for Erasable Encrypted and Decrypted Devices: From Dual-Channel, Programmable, Smart Sensory Lanthanide Hydrogel to Logic Devices. *ACS Applied Materials & Interfaces*, **2020**, 12, 19955-19964	9.5	18

252	Switching fluid slippage on pH-responsive superhydrophobic surfaces. *Langmuir*, **2014**, 30, 6463-8	4	18
251	In situ preparation of anti-corrosion ionic liquids as the lubricant additives in multiply-alkylated cyclopentanes. *RSC Advances*, **2013**, 3, 21715	3.7	18
250	Pentaerythritol and KI: An Efficient Catalytic System for the Conversion from CO2 and Epoxides to Cyclic Carbonates. *Journal of Chemical Research*, **2013**, 37, 102-104	0.6	18
249	High-density assembly of gold nanoparticles to multiwalled carbon nanotubes using ionic liquid as interlinker. *Materials Letters*, **2009**, 63, 697-699	3.3	18
248	Gecko□ Feet-Inspired Self-Peeling Switchable Dry/Wet Adhesive. *Chemistry of Materials*, **2021**, 33, 2785-2795	9.6	18
247	A high-performance rocking-chair lithium-ion battery-supercapacitor hybrid device boosted by doubly matched capacity and kinetics of the faradaic electrodes. *Energy and Environmental Science*, **2021**, 14, 2269-2277	35.4	18
246	Nanohydrogel Brushes for Switchable Underwater Adhesion. *Journal of Physical Chemistry C*, **2017**, 121, 8452-8463	3.8	17
245	Single crystal TiO2 nanorods: Large-scale synthesis and field emission. *Thin Solid Films*, **2012**, 520, 5036-5041	2.1	17
244	Green Ionic Liquid Lubricants Prepared from Anti-Inflammatory Drug. *Tribology Letters*, **2015**, 60, 1	2.8	17
243	Conferring polytetrafluoroethylene micropowders with hydrophilicity using dopamine chemistry and the application as water-based lubricant additive. *Journal of Applied Polymer Science*, **2011**, 122, 3145-3151	2.8	17
242	Controlled loading of gold nanoparticles on carbon nanotubes by regenerative ion exchange. *Materials Chemistry and Physics*, **2009**, 116, 284-288	4.4	17
241	Surfactant-free and controllable synthesis of hierarchical platinum nanostructures and their comparative studies in electrocatalysis, surface-enhanced Raman scattering and surface wettability. *Electrochimica Acta*, **2010**, 55, 8649-8654	6.7	17
240	Electrochemical impedance spectroscopy of poly (1-ethyl 3-(2-methacryloyloxy ethyl) imidazolium chloride) brushes with locally generated Pd. *Electrochemistry Communications*, **2007**, 9, 1749-1754	5.1	17
239	In situ preparation of multifunctional additives in water. *Tribology International*, **2019**, 130, 317-323	4.9	17
238	Superhydrophobic nickel/carbon core□shell nanocomposites for the hydrogen transfer reactions of nitrobenzene and N-heterocycles. *Green Chemistry*, **2020**, 22, 1996-2010	10	16
237	The effect of wetting property on anti-fouling/foul-release performance under quasi-static/hydrodynamic conditions. *Progress in Organic Coatings*, **2016**, 95, 64-71	4.8	16
236	Photothermally actuated interfacial hydration for fast friction switch on hydrophilic polymer brush modified PDMS sheet incorporated with Fe3O4 nanoparticles. *Chemical Communications*, **2016**, 52, 3681-3	5.8	16
235	Mussel-inspired chemistry for one-step synthesis of N-doped carbon□gold composites with morphology tailoring and their catalytic properties. *RSC Advances*, **2014**, 4, 1853-1856	3.7	16

234	Photoresponsive superhydrophobic coating for regulating boundary slippage. *Soft Matter*, **2014**, 10, 5318-24	3.6	16
233	Fabrication of ZnO submicrorod films with water repellency by surface etching and hydrophobic modification. *Thin Solid Films*, **2011**, 519, 7813-7816	2.2	16
232	Synthesis and field emission of diamond-like carbon nanorods on TiO2/Ti nanotube arrays. *Applied Surface Science*, **2009**, 256, 39-42	6.7	16
231	Anodic aluminum oxide films formed in mixed electrolytes of oxalic and sulfuric acid and their optical constants. *Physica B: Condensed Matter*, **2010**, 405, 456-460	2.8	16
230	Remarkable friction stabilization of AISI 52100 steel by plasma nitriding under lubrication of alkyl naphthalene. *Wear*, **2010**, 268, 917-923	3.5	16
229	A Self-Assembly Approach to Chemical Micropatterning of Poly(dimethylsiloxane). *Angewandte Chemie*, **2007**, 119, 6754-6757	3.6	16
228	An Investigation on the Friction and Wear Properties of Perfluorooctane Sulfonate Ionic Liquids. *Tribology Letters*, **2016**, 63, 1	2.8	16
227	Study on the synthesis and tribological properties of anti-corrosion benzotriazole ionic liquid. *RSC Advances*, **2017**, 7, 11030-11040	3.7	15
226	The Tethered Fibrillar Hydrogels Brushes for Underwater Antifouling. *Advanced Materials Interfaces* , **2017**, 4, 1601039	4.6	15
225	Mussel-Inspired One-Step Fabrication of Ultralow-Friction Coatings on Diverse Biomaterial Surfaces. *Langmuir*, **2019**, 35, 8068-8075	4	15
224	Ionic Liquid Additives for Mixed and Elastohydrodynamic Lubrication. *Tribology Transactions*, **2018**, 61, 816-826	1.8	15
223	Kinetics study of heterogeneous continuous-flow nitration of trifluoromethoxybenzene. *Reaction Chemistry and Engineering*, **2018**, 3, 379-387	4.9	15
222	A nanotubular coating with both high transparency and healable superhydrophobic self-cleaning properties. *RSC Advances*, **2016**, 6, 21362-21366	3.7	15
221	Manipulation of the ultimate pattern of polypyrrole film on self-assembled monolayer patterned substrate by negative or positive electrodeposition. *Surface Science*, **2004**, 561, 1-10	1.8	15
220	Surface functionalization – a new functional dimension added to 3D printing. *Journal of Materials Chemistry C*, **2020**, 8, 12380-12411	7.1	15
219	Fluorinated Candle Soot as the Lubricant Additive of Perfluoropolyether. *Tribology Letters*, **2017**, 65, 1	2.8	14
218	Core-Shell Fiber-Based 2D Woven Triboelectric Nanogenerator for Effective Motion Energy Harvesting. *Nanoscale Research Letters*, **2019**, 14, 311	5	14
217	Enhancement of graft density and chain length of hydrophilic polymer brush for effective marine antifouling. *Journal of Applied Polymer Science*, **2018**, 135, 46232	2.9	14

216	Step-by-step build-up of ordered pn heterojunctions at nanoscale for efficient light harvesting. *RSC Advances*, **2013**, 3, 166-171	3.7	14
215	Polymer brushes assisted loading of high density CdS/CdSe quantum dots onto TiO2 nanotubes and the resulting photoelectric performance. *RSC Advances*, **2012**, 2, 3978	3.7	14
214	The effect of oxalic and sulfuric ions on the photoluminescence of anodic aluminum oxide formed in a mixture of sulfuric and oxalic acid. *Applied Physics A: Materials Science and Processing*, **2009**, 94, 939-942	2.6	14
213	Floating behavior of hydrophobic glass spheres. *Journal of Colloid and Interface Science*, **2009**, 336, 743-9	3.3	14
212	Electrochemical Characterization of the Solution Accessibility of CaTiO3 Microstructures and Improved Biomineralization. *Journal of Physical Chemistry C*, **2008**, 112, 16123-16129	3.8	14
211	Direct visualization of reversible switching of micropatterned polyelectrolyte brushes on gold surfaces using laser scanning confocal microscopy. *Langmuir*, **2008**, 24, 13182-5	4	14
210	Simultaneous superior lubrication and high load bearing by the dynamic weak interaction of a lubricant with mechanically strong bilayer porous hydrogels. *Polymer Chemistry*, **2017**, 8, 7102-7107	4.9	13
209	Low-temperature ammonia annealed TiO2 nanotube arrays: Synergy of morphology improvement and nitrogen doping for enhanced field emission. *Thin Solid Films*, **2014**, 556, 440-446	2.2	13
208	Reversible hydration and dehydration of polyanionic brushes bearing carboxylate, phosphate and sulfonate side groups: a comparative AFM study. *Physical Chemistry Chemical Physics*, **2008**, 10, 7180-5	3.6	13
207	Surface-confined radical chain transfer. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2004**, 244, 87-93	5.1	13
206	Enhancement of the ballistic performance of aramid fabric with polyurethane and shear thickening fluid. *Materials and Design*, **2020**, 196, 109015	8.1	13
205	3D printing of bioinspired topographically oriented surfaces with frictional anisotropy for directional driving. *Tribology International*, **2019**, 132, 99-107	4.9	13
204	Sundew-Inspired Simultaneous Actuation and Adhesion/Friction Control for Reversibly Capturing Objects Underwater. *Advanced Materials Technologies*, **2019**, 4, 1800467	6.8	13
203	Tuning the Hydration and Lubrication of the Embedded Load-Bearing Hydrogel Fibers. *Langmuir*, **2017**, 33, 2069-2075	4	12
202	Astringent Mouthfeel as a Consequence of Lubrication Failure. *Angewandte Chemie*, **2016**, 128, 5887-5891	3.6	12
201	Drawing High-Definition and Reversible Hydrogel Paintings with Grayscale Exposure. *ACS Applied Materials & Interfaces*, **2019**, 11, 42586-42593	9.5	12
200	Mechanically Induced Generation of Counterions Inside Surface-Grafted Charged Macromolecular Films: Towards Enhanced Mechanotransduction in Artificial Systems. *Angewandte Chemie*, **2006**, 118, 7600-7603	3.6	12
199	Preparation of silane-terminated polystyrene and polymethylmethacrylate self-assembled films on silicon wafer. *Journal of Applied Polymer Science*, **2004**, 92, 1695-1701	2.9	12

198	Bioinspired synthetic wet adhesives: from permanent bonding to reversible regulation. *Current Opinion in Colloid and Interface Science*, **2020**, 47, 84-98	7.6	12
197	Effect of Electric Potential and Chain Length on Tribological Performances of Ionic Liquids as Additives for Aqueous Systems and Molecular Dynamics Simulations. *ACS Applied Materials & Interfaces*, **2020**, 12, 39910-39919	9.5	12
196	MOF-aided topotactic transformation into nitrogen-doped porous Mo2C mesocrystals for upgrading the pH-universal hydrogen evolution reaction. *Journal of Materials Chemistry A*, **2020**, 8, 20429-20435	13	12
195	Soft-nanocomposite lubricants of supramolecular gel with carbon nanotubes. *Journal of Materials Chemistry A*, **2019**, 7, 7654-7663	13	11
194	Toward the Efficient Synthesis of Pseudoionone from Citral in a Continuous-Flow Microreactor. *Industrial & Engineering Chemistry Research*, **2018**, 57, 11288-11298	3.9	11
193	Competitive self-assembly driven as a route to control the morphology of poly(tannic acid) assemblies. *Nanoscale*, **2019**, 11, 4751-4758	7.7	11
192	Comparative study of moisture corrosion to WS2 and WS2/Cu multilayer films. *Surface and Coatings Technology*, **2014**, 247, 30-38	4.4	11
191	Electron field emission from the semimetallic TiO2 nanotube arrays. *Vacuum*, **2013**, 96, 18-21	3.7	11
190	Interaction between CO2 and ionic liquids confined in the nanopores of SAPO-11. *RSC Advances*, **2015**, 5, 48908-48915	3.7	11
189	Transferable, transparent and functional polymer@graphene 2D objects. *NPG Asia Materials*, **2014**, 6, e130-e130	10.3	11
188	In situ surface reaction induced adhesion force change for mobility control, droplet sorting and bio-detection. *Soft Matter*, **2012**, 8, 10370	3.6	11
187	Investigation of temperature-dependent field emission from single crystal TiO2 nanorods. *Applied Surface Science*, **2012**, 258, 8279-8282	6.7	11
186	Grafting Binary PEG and Fluoropolymer Brushes from Mix-Biomimic Initiator as Ambiguous Surfaces for Antibiofouling. *Macromolecular Chemistry and Physics*, **2017**, 218, 1700085	2.6	10
185	Bioinspired 3D Printed Locomotion Devices Based on Anisotropic Friction. *Small*, **2019**, 15, e1802931	11	10
184	Amine-Triggered Dopamine Polymerization: From Aqueous Solution to Organic Solvents. *Macromolecular Rapid Communications*, **2018**, 39, e1800160	4.8	10
183	The study of TEMPOs as additives in different lubrication oils for steel/steel contacts. *Tribology International*, **2014**, 73, 83-87	4.9	10
182	Aligned rutile TiO2 nanorods: Facile synthesis and field emission. *Superlattices and Microstructures*, **2013**, 59, 187-195	2.8	10
181	In Situ Analysis for Herbal Pieces of Aconitum Plants by Using Direct Analysis in Real Time Mass Spectrometry. *Chinese Journal of Chemistry*, **2015**, 33, 241-246	4.9	10

180	Performance improvement of P3HT/TiO2 coaxial heterojunction polymer solar cells by introducing a CdS interface modifier. *Journal of Solid State Chemistry*, **2012**, 196, 349-355	3.3	10
179	Superoleophobicity under vacuum. *Applied Physics Letters*, **2011**, 98, 194102	3.4	10
178	Biomimetic Surface with Tunable Frictional Anisotropy Enabled by Photothermogenesis-Induced Supporting Layer Rigidity Variation. *Advanced Materials Interfaces*, **2019**, 6, 1801460	4.6	10
177	Reversible Temperature-Sensitive Liquid–Solid Triboelectrification with Polycaprolactone Material for Wetting Monitoring and Temperature Sensing. *Advanced Functional Materials*, **2021**, 31, 2010220	15.6	10
176	Self-assembly of catecholic ferrocene and electrochemical behavior of its monolayer. *RSC Advances*, **2015**, 5, 60090-60095	3.7	9
175	Goosebumps-Inspired Microgel Patterns with Switchable Adhesion and Friction. *Small*, **2019**, 15, e1902376	13	9
174	First-Principles Delimitation of the Boundary between Intralayer and Interlayer in Two-Dimensional Structures. *Journal of Physical Chemistry C*, **2019**, 123, 26912-26920	3.8	9
173	Ionic liquids as two-dimensional templates for the spontaneous assembly of copper nanoparticles into nanobelts and observation of an intermediate state. *RSC Advances*, **2013**, 3, 341-344	3.7	9
172	High-Performance Lubricant Base Stocks from Biorenewable Gallic Acid: Systematic Study on Their Physicochemical and Tribological Properties. *Industrial & Engineering Chemistry Research*, **2017**, 56, 9513-9523	3.9	9
171	Janus nanoparticle magic: selective asymmetric modification of Au-Ni nanoparticles for its controllable assembly onto attapulgite nanorods. *Chemical Communications*, **2012**, 48, 12112-4	5.8	9
170	Field emission property of carbon-doped TiO2 nanotube arrays with controllable doping content of carbon. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2012**, 30, 041801	1.3	9
169	Preparation and tribological investigation of thin silicone films. *Journal of Materials Research*, **2002**, 17, 2357-2362	2.5	9
168	Robust Hybrid Omniphobic Surface for Stain Resistance. *ACS Applied Materials & Interfaces*, **2021**, 13, 14562-14568	9.5	9
167	Cyclization of Pseudoionone Catalyzed by Sulfuric Acid in a Microreactor. *Chemical Engineering and Technology*, **2016**, 39, 849-856	2	9
166	Mosquito Compound Eyes as Inspiration for Fabrication of Conductive Superhydrophobic Nanocarbon Materials from Waste Wheat Straw. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 3883-3894	8.3	9
165	Self-healing polydimethylsiloxane antifouling coatings based on zwitterionic polyethylenimine-functionalized gallium nanodroplets. *Chemical Engineering Journal*, **2022**, 427, 131019	14.7	9
164	Reversely Orthogonal Actuation of a Janus-Faced Film Based on Asymmetric Polymer Brush Modification. *ACS Applied Materials & Interfaces*, **2019**, 11, 36073-36080	9.5	8
163	Tribological and corrosive properties of ionic liquids containing triazole functional groups. *Industrial Lubrication and Tribology*, **2015**, 67, 210-215	1.3	8

162	Synthesizing Functional Biomacromolecular Wet Adhesives with Typical Gel-Sol Transition and Shear-Thinning Features. *ACS Biomaterials Science and Engineering*, **2019**, 5, 4293-4301	5.5	8
161	Adhesion force spectroscopy of model surfaces with wettability gradient. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2011**, 380, 175-181	5.1	8
160	Synthesis of branched ZnO nanorods on various substrates via a wet-chemistry route. *Particuology*, **2010**, 8, 458-462	2.8	8
159	Layered Hydrogel with Controllable Surface Dissociation for Durable Lubrication. *Chemistry of Materials*, **2020**, 32, 7805-7813	9.6	8
158	Facile Preparation and Tribological Properties of Water-Based Naphthalene Dicarboxylate Ionic Liquid Lubricating Additives. *Tribology Letters*, **2020**, 68, 1	2.8	8
157	Graphene oxide/brush-like polysaccharide copolymer nanohybrids as eco-friendly additives for water-based lubrication. *Tribology International*, **2021**, 157, 106895	4.9	8
156	Tribological performance and lubrication mechanism of new gemini quaternary phosphonium ionic liquid lubricants. *Journal of Molecular Liquids*, **2021**, 322, 114522	6	8
155	Physicochemical and Tribological Performance of Bi-Component Supramolecular Gel Lubricants. *Advanced Materials Interfaces*, **2018**, 6, 1801391	4.6	8
154	On-Site Surface Coordination Complexation via Mechanochemistry for Versatile Metal–Phenolic Networks Films. *Advanced Materials Interfaces*, **2019**, 6, 1801789	4.6	7
153	Correlation between conformation change of polyelectrolyte brushes and lubrication. *Chinese Journal of Polymer Science (English Edition)*, **2015**, 33, 163-172	3.5	7
152	Cartilage Mimics Adaptive Lubrication. *ACS Applied Materials & Interfaces*, **2020**, 12, 51114-51121	9.5	7
151	High compressive strength metallic architectures prepared via polyelectrolyte-brush assisted metal deposition on 3D printed lattices. *Nano Structures Nano Objects*, **2018**, 16, 420-427	5.6	7
150	Fabrication of binary components based on a poly(ionic liquid) through “grafting” and “clicking” and their synergistic antifouling activity. *RSC Advances*, **2015**, 5, 100347-100353	3.7	7
149	Preparation of monodispersed and lipophilic attapulgite and polystyrene nanorods via surface-initiated atom transfer radical polymerization. *Journal of Applied Polymer Science*, **2011**, 122, 2876-2883	2.9	7
148	Fusion and alloying of (bi)metallic nanocrystals onto TiO2 nanowires in the presence of surface grafted polymer brushes. *Physical Chemistry Chemical Physics*, **2010**, 12, 5480-6	3.6	7
147	Concealed Wireless Warning Sensor Based on Triboelectrification and Human-Plant Interactive Induction. *Research*, **2021**, 2021, 9870936	7.8	7
146	Ultrasonic Enhancement of CO2 Desorption from MDEA Solution in Microchannels. *Industrial & Engineering Chemistry Research*, **2019**, 58, 1711-1719	3.9	7
145	The effect of chemical structure on the tribological performance of perfluorosulfonate ILs as lubricants for Ti-6Al-4V tribopairs. *Journal of Molecular Liquids*, **2021**, 321, 114286	6	7

144	Self-Constraint Gel Lubricants with High Phase Transition Temperature. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 15801-15810	8.3	7
143	Complete Prevention of Contact Electrification by Molecular Engineering. *Matter*, **2021**, 4, 290-301	12.7	7
142	Naphthoate based lubricating oil with high oxidation stability and lubricity. *Tribology International*, **2019**, 138, 204-210	4.9	6
141	In Situ Grafting Hydrophilic Polymeric Layer for Stable Drag Reduction. *Langmuir*, **2019**, 35, 7205-7211	4	6
140	In situ covalent bonding in polymerization to construct robust hydrogel lubrication coating on surface of silicone elastomer. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 599, 124753	5.1	6
139	Thermal-assisted gasification injector for analyzing high-salt solution samples: a novel device developed for online coupling of liquid chromatography with direct analysis in real time mass spectrometry. *RSC Advances*, **2016**, 6, 98927-98934	3.7	6
138	Highly durable hydrophobicity in simulated space environment. *RSC Advances*, **2014**, 4, 28780-28785	3.7	6
137	Unconventional assembly of bimetallic Au-Ni janus nanoparticles on chemically modified silica spheres. *Chemistry - A European Journal*, **2014**, 20, 2065-70	4.8	6
136	Protein resistance and pH-responsive controlled release from the modification of single-walled carbon nanotubes with a double polymer layer. *Macromolecular Bioscience*, **2013**, 13, 1259-66	5.5	6
135	Hydrophobization of epoxy nanocomposite surface with 1H,1H,2H,2H-perfluorooctyltrichlorosilane for superhydrophobic properties. *Open Physics*, **2012**, 10,	1.3	6
134	Binary Reactive/Inert Non-Fouling Polymeric Surfaces. *Macromolecular Rapid Communications*, **2008**, 29, 1937-1943	4.8	6
133	Selective Electrodeposition and Etching on Polymer Brush Template Prepared by Patterned Monolayer Surface Initiated Polymerization. *Chemistry Letters*, **2004**, 33, 602-603	1.7	6
132	Transparent Janus Hydrogel Wet Adhesive for Underwater Self-Cleaning. *ACS Applied Materials & Interfaces*, **2021**, 13, 50505-50515	9.5	6
131	Self-polishing emulsion platforms: Eco-friendly surface engineering of coatings toward water borne marine antifouling. *Progress in Organic Coatings*, **2020**, 149, 105945	4.8	6
130	Extremely Tough Hydrogels with Cotton Fibers Reinforced. *Advanced Engineering Materials*, **2020**, 22, 2000508	3.5	6
129	Brush-like organic-inorganic hybrid polysiloxane surface with omniphobicity and extreme durability. *Progress in Organic Coatings*, **2021**, 154, 106171	4.8	6
128	Improving Anti-Icing and De-Icing Performances via Thermal-Regulation with Macroporous Xerogel. *ACS Applied Materials & Interfaces*, **2021**, 13, 37609-37616	9.5	6
127	Growth of TiO2 Nanotube on Titanium Substrate to Enhance its Biotribological Performance and Biocorrosion Resistance. *Journal of Bionic Engineering*, **2019**, 16, 1039-1051	2.7	6

126	Lubricating properties of ester oil prepared from bio-based 2,5-furandicarboxylic acid. *Friction*, **2020**, 8, 360-369	5.6	6
125	Physicochemical and tribological properties of gemini-type halogen-free dicationic ionic liquids. *Friction*, **2021**, 9, 344-355	5.6	6
124	Metal□Organic Framework-Derived CuS Nanocages for Selective CO 2 Electroreduction to Formate. *CCS Chemistry*,199-207	7.2	6
123	Controlling the tribological behavior at the friction interface by regulating the triboelectrification. *Nano Energy*, **2021**, 87, 106183	17.1	6
122	Effects of structure relaxation and surface oxidation on nanoscopic wear behaviors of metallic glass. *Acta Materialia*, **2022**, 232, 117934	8.4	6
121	Superior Lubricity and Antiwear Performances Enabled by Porous Carbon Nanospheres with Different Shell Microstructures. *ACS Sustainable Chemistry and Engineering*, **2019**,	8.3	5
120	Efficient synthesis of diphenyl carbonate from dibutyl carbonate and phenol using square-shaped Zn□Ti□ nanoplates as solid acid catalysts. *RSC Advances*, **2015**, 5, 84621-84626	3.7	5
119	Solvent-driven migration of highly polar monomers into hydrophobic PDMS produces a thick graft layer via subsurface initiated ATRP for efficient antibiofouling. *Chemical Communications*, **2020**, 56, 5030-5033	5.8	5
118	Improving the fretting biocorrosion of Ti6Al4V alloy bone screw by decorating structure optimised TiO2 nanotubes layer. *Journal of Materials Science and Technology*, **2020**, 49, 47-55	9.1	5
117	Facile Preparation of N-Alkyl-2-pyrrolidones in a Continuous-Flow Microreactor. *Organic Process Research and Development*, **2018**, 22, 504-511	3.9	5
116	Rabbit hair regenerative superhydrophobicity. *RSC Advances*, **2014**, 4, 3611-3614	3.7	5
115	Controlled Polymer-Brush Growth from Microliter Volumes using Sacrificial-Anode Atom-Transfer Radical Polymerization. *Angewandte Chemie*, **2013**, 125, 9295-9299	3.6	5
114	Electroless deposition of W-doped Ag films onto p-Si(100) from diluted HF solution. *Transactions of Nonferrous Metals Society of China*, **2009**, 19, 1474-1478	3.3	5
113	The structure optimization design of the organic solar cells using the FDTD method. *Physica B: Condensed Matter*, **2010**, 405, 2061-2064	2.8	5
112	Enhanced lubricity and anti-wear performance of zwitterionic polymer-modified N-enriched porous carbon nanosheets as water-based lubricant additive. *Tribology International*, **2022**, 167, 107421	4.9	5
111	3D Printing of High-Performance Isocyanate Ester Thermosets. *Macromolecular Materials and Engineering*, **2020**, 305, 2000397	3.9	5
110	CO tolerance of Pt/FeO catalyst in both thermal catalytic H oxidation and electrochemical CO oxidation: the effect of Pt deficit electron state. *Physical Chemistry Chemical Physics*, **2016**, 18, 29607-29615	3.6	5
109	Supramolecular PFPE gel lubricant with anti-creep capability under irradiation conditions at high vacuum. *Chemical Engineering Journal*, **2021**, 409, 128120	14.7	5

108	Polymer-based lubricating materials for functional hydration lubrication. *Chemical Engineering Journal*, **2022**, 429, 132324	14.7	5
107	Understanding Adsorption Behaviors of Organic Friction Modifiers on Hydroxylated SiO (001) Surfaces: Effects of Molecular Polarity and Temperature. *Langmuir*, **2020**, 36, 8543-8553	4	4
106	Bio-Inspired Renewable Surface-Initiated Polymerization from Permanently Embedded Initiators. *Angewandte Chemie*, **2016**, 128, 4332-4336	3.6	4
105	Enhanced Photovoltaic properties of P3HT/CrTiO2 bilayer film heterojunction solar cells. *Superlattices and Microstructures*, **2013**, 62, 88-96	2.8	4
104	Ionic Liquids as Lubricants **2012**, 203-233		4
103	Effects of atomic oxygen and ultraviolet in low earth orbit on low surface energy polymer film. *Journal of Applied Polymer Science*, **2011**, 120, 329-334	2.9	4
102	Tribological Behavior of Multiply-Alkylated Cyclopentanes (MACs)-Cu Nanoparticles Composite Thin Film. *Journal of Macromolecular Science - Physics*, **2011**, 50, 1006-1017	1.4	4
101	Chemically attaching polyhydroxyethylmethacrylate brush on substrate surface, derivation, and the role in differential etching. *Journal of Applied Polymer Science*, **2007**, 106, 723-729	2.9	4
100	Modulus adaptive lubricating prototype inspired by instant muscle hardening mechanism of catfish skin.. *Nature Communications*, **2022**, 13, 377	17.4	4
99	A sandcastle worm-inspired strategy to functionalize wet hydrogels. *Nature Communications*, **2021**, 12, 6331	17.4	4
98	Antifouling Surfaces Based on Polymer Brushes **2015**, 55-81		4
97	Significantly Reducing Friction and Wear of Water-Based Fluids with Shear Thinning Bicomponent Supramolecular Hydrogels. *Advanced Materials Interfaces*, **2020**, 7, 2001084	4.6	4
96	Fibers reinforced composite hydrogels with improved lubrication and load-bearing capacity. *Friction*, **2020**, 1	5.6	4
95	Subsurface-initiated atom transfer radical polymerization: effect of graft layer thickness and surface morphology on antibiofouling properties against different foulants. *Journal of Materials Science*, **2020**, 55, 14544-14557	4.3	4
94	Hydrogen bonding induced enhancement for constructing anisotropic sugarcane composite hydrogels. *Journal of Applied Polymer Science*, **2021**, 138, 51374	2.9	4
93	All-Day Anti-Icing/De-Icing Coating by Solar-Thermal and Electric-Thermal Effects. *Advanced Materials Technologies*,2100371	6.8	4
92	Significantly enhancing lubricity and anti-wear performances of glycerol lubricant with urea-functionalized imidazolium-organophosphate ionic liquid as additive. *Tribology International*, **2021**, 153, 106602	4.9	4
91	Molecular dynamics simulations of adsorption behavior of organic friction modifiers on hydrophilic silica surfaces under the effects of surface coverage and contact pressure. *Tribology International*, **2021**, 156, 106826	4.9	4

90	Promoting Lubricity and Antifouling Properties by Supramolecular-Recognition-Based Surface Grafting. *Langmuir*, **2018**, 34, 13116-13122	4	4
89	Material Strategies for Ice Accretion Prevention and Easy Removal **2022**, 4, 246-262		4
88	Facile preparation of antifouling hydrogel architectures for drag reduction and oil/sea water separation. *Materials Today Communications*, **2019**, 21, 100618	2.5	3
87	Polymerization induced phase separation as a generalized methodology for multi-layered hydrogel tubes. *Journal of Materials Chemistry B*, **2019**, 7, 3505-3511	7.3	3
86	Polystyrene Nanospheres Modified with a Hydrophilic Polymer Brush through Subsurface-Initiated Atom Transfer Radical Polymerization as Biolubricating Additive. *Macromolecular Materials and Engineering*, **2020**, 305, 2000135	3.9	3
85	Anisotropic Hydrogels with High Mechanical Strength by Stretching-Induced Oriented Crystallization and Drying. *ACS Applied Polymer Materials*, **2020**, 2, 2142-2150	4.3	3
84	Novel Anticorrosion Property of Organic Coating Based on Liquid Metal. *Advanced Materials Interfaces*, **2019**, 6, 1900942	4.6	3
83	Block copolymer nanolithography to manufacture nanopatterned gold substrate for surface-initiated polymerization. *Journal of Materials Chemistry C*, **2013**, 1, 902-907	7.1	3
82	Synthesis and Lubrication Characteristics of Aryloxycyclophosphazenes Substituted With Imidazolium. *Journal of Tribology*, **2009**, 131,	1.8	3
81	Patterned self-assembled film guided electrodeposition. *Science in China Series B: Chemistry*, **2004**, 47, 120		3
80	MoS Lubricating Film Meets Supramolecular Gel: A Novel Composite Lubricating System for Space Applications. *ACS Applied Materials & Interfaces*, **2021**, 13, 58036-58047	9.5	3
79	Simulation of boundary slip on a liquid-solid surface based on the lattice Boltzmann method. *ScienceAsia*, **2015**, 41, 130	1.4	3
78	PROGRESS ON SURFACE GRAFTED POLYMER BRUSHES FOR BIOMIMETIC LUBRICATION. *Acta Polymerica Sinica*, **2012**, 012, 1102-1107		3
77	Green plant-based triboelectricity system for green energy harvesting and contact warning. *EcoMat* , **2021**, 3, e12145	9.4	3
76	Dynamic oil gels constructed by 1,2-dithiolane-containing telechelic polymers: An efficient and versatile platform for fabricating polymer-inorganic composites toward tribological applications. *Chemical Engineering Journal*, **2021**, 133097	14.7	3
75	Esophagus-Inspired Actuator for Solid Transportation via the Synergy of Lubrication and Contractile Deformation. *Advanced Science*, **2021**, e2102800	13.6	3
74	A simple construction strategy for fabrication of sulfur-doped silicate materials from attapulgite. *New Journal of Chemistry*, **2020**, 44, 401-414	3.6	3
73	Manipulating Electrical Properties of Silica-Based Materials via Atomic Oxygen Irradiation. *ACS Applied Materials & Interfaces*, **2021**, 13, 15344-15352	9.5	3

72	Piezoelectric nanofiber/polymer composite membrane for noise harvesting and active acoustic wave detection. *Nanoscale Advances*, **2019**, 1, 4909-4914	5.1	3
71	Anisotropic Friction: Bioinspired 3D Printed Locomotion Devices Based on Anisotropic Friction (Small 1/2019). *Small*, **2019**, 15, 1970005	11	3
70	Functionalized phosphate ionic liquids as additives in PEG with excellent tribological properties for boundary/mixed/elastohydrodynamic lubrication. *Tribology International*, **2021**, 164, 107242	4.9	3
69	Self-lubricating interpenetrating polymer networks with functionalized nanoparticles enhancement for quasi-static and dynamic antifouling. *Chemical Engineering Journal*, **2022**, 429, 132300	14.7	3
68	An effective strategy for hydrogen supply: catalytic acceptorless dehydrogenation of N-heterocycles. *Catalysis Science and Technology*, **2021**, 11, 3990-4007	5.5	3
67	Bioinspired Polysaccharide-Derived Zwitterionic Brush-like Copolymer as An Injectable Biolubricant for Arthritis Treatment.. *Advanced Healthcare Materials*, **2022**, e2200090	10.1	3
66	Self-Lubricative Organic–Inorganic Hybrid Coating with Anti-Icing and Anti-Waxing Performances by Grafting Liquid-Like Polydimethylsiloxane. *Advanced Materials Interfaces*,2200160	4.6	3
65	Zinc-Ion Batteries: 2D Amorphous V2O5/Graphene Heterostructures for High-Safety Aqueous Zn-Ion Batteries with Unprecedented Capacity and Ultrahigh Rate Capability (Adv. Energy Mater. 22/2020). *Advanced Energy Materials*, **2020**, 10, 2070100	21.8	2
64	Bi-quantum dots co-sensitized TiO2 nanocomposites: Templated synthesis and stabilized by polymer brushes. *Materials Chemistry and Physics*, **2012**, 134, 966-972	4.4	2
63	Fabrication and field emission of carbon nanotubes/TiO2/Ti composite nanostructures. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, 1274-1278	1.3	2
62	Tribological Performance of Ionic Liquids Bearing Hydroxyl Groups as Lubricants in the Aluminum-on-Steel Contacts. *Advanced Materials Research*, **2010**, 146-147, 1147-1153	0.5	2
61	A novel way towards CdS sensitized TiO2 nanoparticles. *Chinese Chemical Letters*, **2010**, 21, 1003-1006	8.1	2
60	Universal Strategy for Growing Tenacious Hydrogel Coating from a Sticky Initiation Layer (SIL).. *Advanced Materials*, **2022**, e2108889	24	2
59	Durable self-polishing antifouling coating based on fluorine-containing pyrrolidone amphiphilic copolymer-functionalized nanosilica. *Progress in Organic Coatings*, **2022**, 165, 106706	4.8	2
58	Super-lubricating hybrid elastomer with rapid photothermal sterilization and strong anti-cell adhesion. *Chemical Engineering Journal*, **2022**, 434, 134763	14.7	2
57	Nitrogen-doped porous carbon nanospheres derived from hyper-crosslinked polystyrene as lubricant additives for friction and wear reduction. *Tribology International*, **2022**, 169, 107458	4.9	2
56	Sub-surface initiated atom transfer radical polymerization for robust embedded polymer brushes. *Scientia Sinica Chimica*, **2018**, 48, 1611-1618	1.6	2
55	Surface engineering and on-site charge neutralization for the regulation of contact electrification. *Nano Energy*, **2022**, 91, 106687	17.1	2

54	Multi-Layer Printable Lithium Ion Micro-Batteries with Remarkable Areal Energy Density and Flexibility for Wearable Smart Electronics. *Small*, **2021**, e2104506	11	2
53	One-step zwitterionization and quaternization of thick PDMAEMA layer grafted through subsurface-initiated ATRP for robust antibiofouling and antibacterial coating on PDMS.. *Journal of Colloid and Interface Science*, **2021**, 610, 234-245	9.3	2
52	The ecotoxicity and tribological properties of choline monocarboxylate ionic liquid lubricants. *Lubrication Science*, **2020**, 32, 1-9	1.3	2
51	The electrostatic self-assembly of microgels on polymer brushes and its effects on interfacial friction. *Journal of Applied Polymer Science*, **2016**, 133,	2.9	2
50	Gelation mechanism and tribological performances of two-component cholesterol-based supramolecular gel lubricant. *Tribology International*, **2021**, 155, 106777	4.9	2
49	Synthesis of charged chitosan nanoparticles as functional biolubricant. *Colloids and Surfaces B: Biointerfaces*, **2021**, 206, 111973	6	2
48	Fluoropolymer grafted Ti3C2Tx MXene as an efficient lubricant additive for fluorine-containing lubricating oil. *Tribology International*, **2022**, 170, 107500	4.9	2
47	Reversing Hydrogel Adhesion Property via Firmly Anchoring Thin Adhesive Coatings. *Advanced Functional Materials*,2111278	15.6	2
46	Growing Hydrogel Organ Mannequins with Interconnected Cavity Structures. *Advanced Functional Materials*, **2022**, 32, 2108845	15.6	2
45	Adhesion: Gecko-Inspired but Chemically Switched Friction and Adhesion on Nanofibrillar Surfaces (Small 9-10/2015). *Small*, **2015**, 11, 1130-1130	11	1
44	Adhesives: Remote Control over Underwater Dynamic Attachment/Detachment and Locomotion (Adv. Mater. 30/2018). *Advanced Materials*, **2018**, 30, 1870222	24	1
43	Mussel-Inspired Two-Dimensional Freestanding Alkyl-Polydopamine Janus Nanosheets. *Angewandte Chemie*, **2019**, 131, 12146-12150	3.6	1
42	Polyelectrolyte brushes as efficient platform for synthesis of Cu and Pt bimetallic nanocrystals onto TiO2 nanowires. *Surface and Interface Analysis*, **2017**, 49, 904-909	1.5	1
41	Tribological behavior of laser textured steel impregnated with supramolecular gel lubricant. *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, **2017**, 231, 1151-1159	1.4	1
40	Friction: Interfacial Friction Control (Adv. Mater. Interfaces 2/2015). *Advanced Materials Interfaces*, **2015**, 2,	4.6	1
39	Antifouling of Micro-/Nanostructural Surfaces **2015**, 83-103		1
38	Metal□Organic Frameworks-Based Fabry□Pérot Cavity Encapsulated TiO2 Nanoparticles for Selective Chemical Sensing. *Advanced Functional Materials*,2109541	15.6	1
37	Exploration on Aqueous Lubrication of Polymeric Microgels between Titanium Alloy Contacts. *ACS Omega*, **2021**, 6, 32178-32185	3.9	1

36	Near-Infrared-Light-Modulated Lubricating Coating Enabled by Photothermal Microgels. *ACS Applied Materials & Interfaces*, **2021**, 13, 49322-49330	9.5	1
35	Natural Product Inspired Environmentally Friendly Strategy Based on Dopamine Chemistry toward Sustainable Marine Antifouling. *ACS Omega*, **2020**, 5, 21524-21530	3.9	1
34	3D-Printed Electromagnetic Actuator for Bionic Swimming Robot. *Journal of Materials Engineering and Performance*, **2021**, 30, 6579-6587	1.6	1
33	Construction of Functional Superhydrophobic Biochars as Hydrogen Transfer Catalysts for Dehydrogenation of N-Heterocycles. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 9062-9077	8.3	1
32	Ester Oils Prepared from Fully Renewable Resources and Their Lubricant Base Oil Properties. *ACS Omega*, **2021**, 6, 16343-16355	3.9	1
31	Bio-inspired smart surface to achieve controllable locomotion through adjustable anisotropic friction. *Friction*,1	5.6	1
30	Instantaneous drag increase on alternate transverse superhydrophobic strips. *Tribology International*, **2021**, 153, 106613	4.9	1
29	Temperature-Responsive Nanofibrous Membranes Fabricated by Subsurface-Initiated Atom Transfer Radical Polymerization for Controllable Oil/Water Separation. *Acta Chimica Sinica*, **2021**, 79, 353	3.3	1
28	Mussel-Inspired Underwater Adhesives-from Adhesion Mechanisms to Engineering Applications: A Critical Review **2021**, 739-759		1
27	Organic-Inorganic Hybrid Polysiloxane Brushes with Improved Lubrication and Load-Bearing Capacity.. *Langmuir*, **2022**,	4	1
26	Molecular Engineering Super-Robust Dry/Wet Adhesive with Strong Interface Bonding and Excellent Mechanical Tolerance.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	1
25	Water-in-Salt Ambipolar Redox Electrolyte Extraordinarily Boosting High Pseudocapacitive Performance of Micro-supercapacitors. *ACS Energy Letters*,1706-1711	20.1	1
24	An overview of functional biolubricants. *Friction*,	5.6	1
23	Continuously growing multi-layered hydrogel structures with seamless interlocked interface. *Matter*, **2022**, 5, 634-653	12.7	0
22	Constructing a biomimetic robust bi-layered hydrophilic lubrication coating on surface of silicone elastomer. *Friction*,1	5.6	0
21	Robust Superlubricity and Moir□Lattice's Size Dependence on Friction between Graphdiyne Layers. *ACS Applied Materials & Interfaces*, **2021**, 13, 40901-40908	9.5	0
20	Imparting Strong Antifouling Properties to the Transparent PVB Coating through the Zwitterionic Compound Condensation. *Coatings*, **2021**, 11, 1164	2.9	0
19	Anomalous boundary behavior of non-Newtonian fluids on amphiphobic surfaces. *Tribology International*, **2022**, 165, 107261	4.9	0

18	Bio-Tribology and Corrosion Behaviors of a Si- and N-Incorporated Diamond-like Carbon Film: A New Class of Protective Film for Ti6Al4V Artificial Implants.. *ACS Biomaterials Science and Engineering*, **2022**, 8, 1166-1180	5.5	0
17	Bioinspired zwitterionic dopamine-functionalized liquid-metal nanodroplets for antifouling application. *Progress in Organic Coatings*, **2022**, 169, 106922	4.8	0
16	Fast analysis of benzodiazepines using argon direct analysis in real time mass spectrometry on-line coupled with a thermal-assisted gasification injector. *Rapid Communications in Mass Spectrometry*, **2017**, 31, 1073-1076	2.2	
15	Preparation of Gradient Polymeric Structures and Their Biological Applications **2018**, 225-249		
14	Goosebumps: Goosebumps-Inspired Microgel Patterns with Switchable Adhesion and Friction (Small 35/2019). *Small*, **2019**, 15, 1970185	11	
13	Electro-Induced Copper-Catalyzed Surface Modification with Monolayer and Polymer Brush **2017**, 123-140		
12	Effect of Boundary Slippage on Foul Release **2015**, 151-175		
11	Influence of deposition temperature and pressure on microstructure and tribological properties of arc ion plated Ag films. *Chinese Journal of Mechanical Engineering (English Edition)*, **2012**, 25, 838-844	2.5	
10	Innenr□ktitelbild: Controlled Polymer-Brush Growth from Microliter Volumes using Sacrificial-Anode Atom-Transfer Radical Polymerization (Angew. Chem. 35/2013). *Angewandte Chemie*, **2013**, 125, 9501-9501	3.6	
9	Nanostructure formation via print diffusion etching through block copolymer templates. *Nanoscale*, **2010**, 2, 587-93	7.7	
8	Copper films deposited by arc ion plating at low temperatures exhibiting excellent antiwear behaviour. *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, **2011**, 225, 1121-1129	1.4	
7	Preparation and mechanism of polystyrene-molybdenum disulfide intercalation materials by a modified two-step route. *Materials Research Innovations*, **2003**, 7, 366-371	1.9	
6	Fretting corrosion of screws contribute to the fixation failure of the femoral neck: a case report. *Biosurface and Biotribology*, **2019**, 5, 118-123	1	
5	Polymer Brushes on Surfaces **2010**, 175-207		
4	Micro-Supercapacitors: High-Voltage Potassium Ion Micro-Supercapacitors with Extraordinary Volumetric Energy Density for Wearable Pressure Sensor System (Adv. Energy Mater. 17/2021). *Advanced Energy Materials*, **2021**, 11, 2170065	21.8	
3	High performance lubricants prepared from Naphthalene-1,4,5,8-Tetracarboxylic acid: Synthesis, physicochemical and Tribological properties. *Journal of Molecular Liquids*, **2021**, 330, 115609	6	
2	Physicochemical and tribological performances of GAILs as lubricants for copper and aluminum friction counterfaces. *Journal of Molecular Liquids*, **2021**, 342, 117371	6	
1	Supramolecular assembly inspired molecular engineering to dynamically tune non-Newtonian fluid:from quasi-static flowability-free to shear thickening. *Journal of Colloid and Interface Science*, **2022**, 607, 1805-1812	9.3	