## Polina Prokopovich

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5124667/publications.pdf

Version: 2024-02-01

60 papers

1,891 citations

218677 26 h-index 265206 42 g-index

63 all docs

63 docs citations

times ranked

63

2848 citing authors

#	Article	IF	CITATIONS
1	The antimicrobial properties of light-activated polymers containing methylene blue and gold nanoparticles. Biomaterials, 2009, 30, 89-93.	11.4	231
2	Silver nanoparticle based antibacterial methacrylate hydrogels potential for bone graft applications. Materials Science and Engineering C, 2015, 50, 332-340.	7.3	97
3	Surface Roughness Mediated Adhesion Forces between Borosilicate Glass and Gram-Positive Bacteria. Langmuir, 2014, 30, 9466-9476.	3.5	91
4	Adhesion models: From single to multiple asperity contacts. Advances in Colloid and Interface Science, 2011, 168, 210-222.	14.7	85
5	Success and failure of colloidal approaches in adhesion of microorganisms to surfaces. Advances in Colloid and Interface Science, 2014, 206, 265-274.	14.7	78
6	Incorporation of methylene blue and nanogold into polyvinyl chloride catheters; a new approach for light-activated disinfection of surfaces. Journal of Materials Chemistry, 2012, 22, 15388.	6.7	62
7	A novel bone cement impregnated with silver–tiopronin nanoparticles: its antimicrobial, cytotoxic, and mechanical properties. International Journal of Nanomedicine, 2013, 8, 2227.	6.7	62
8	Toluidine blue-containing polymers exhibit potent bactericidal activity when irradiated with red laser light. Journal of Materials Chemistry, 2009, 19, 2715.	6.7	59
9	Biogenic synthesis of antimicrobial silver nanoparticles capped with l-cysteine. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 460, 219-224.	4.7	58
10	Characterization of cellulose based sponges for wound dressings. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 480, 336-342.	4.7	58
11	Multiasperity Contact Adhesion Model for Universal Asperity Height and Radius of Curvature Distributions. Langmuir, 2010, 26, 17028-17036.	<b>3.</b> 5	54
12	Comparison of JKR- and DMT-based multi-asperity adhesion model: Theory and experiment. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 383, 95-101.	4.7	53
13	Potent antimicrobial activity of bone cement encapsulating silver nanoparticles capped with oleic acid. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2015, 103, 273-281.	3.4	52
14	Poly-beta-amino-esters nano-vehicles based drug delivery system for cartilage. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 539-548.	3.3	49
15	Nano-carrier based drug delivery systems for sustained antimicrobial agent release from orthopaedic cementous material. Advances in Colloid and Interface Science, 2017, 249, 234-247.	14.7	49
16	Micropatterning with conical features can control bacterial adhesion on silicone. Soft Matter, 2013, 9, 1844-1851.	2.7	47
17	Novel process for coating textile materials with silver to prepare antimicrobial fabrics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 442, 146-151.	4.7	44
18	InÂvitro growth factor-induced bio engineering of mature articular cartilage. Biomaterials, 2013, 34, 1478-1487.	11.4	38

#	Article	IF	CITATIONS
19	Adhesive forces and surface properties of cold gas plasma treated UHMWPE. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 460, 83-89.	4.7	35
20	Interactions between mammalian cells and nano- or micro-sized wear particles: Physico-chemical views against biological approaches. Advances in Colloid and Interface Science, 2014, 213, 36-47.	14.7	34
21	Influence of operating parameters on surface properties of RF glow discharge oxygen plasma treated TiO2/PET film for biomedical application. Materials Science and Engineering C, 2014, 36, 309-319.	<b>7.</b> 3	32
22	Continuous release of gentamicin from gold nanocarriers. RSC Advances, 2014, 4, 51904-51910.	3.6	32
23	Role of poly-beta-amino-esters hydrolysis and electrostatic attraction in gentamicin release from layer-by-layer coatings. Journal of Colloid and Interface Science, 2018, 526, 35-42.	9.4	31
24	Cold atmospheric pressure gas plasma enhances the wear performance of ultra-high molecular weight polyethylene. Acta Biomaterialia, 2012, 8, 1357-1365.	8.3	30
25	An investigation of microbial adhesion to natural and synthetic polysaccharide-based films and its relationship with the surface energy components. Journal of Materials Science: Materials in Medicine, 2009, 20, 195-202.	3.6	29
26	An Injectable Hydrogel as Bone Graft Material with Added Antimicrobial Properties. Tissue Engineering - Part A, 2016, 22, 862-872.	3.1	26
27	Antimicrobial Properties of Light-activated Polyurethane Containing Indocyanine Green. Journal of Biomaterials Applications, 2011, 25, 387-400.	2.4	25
28	Polymer colloids as drug delivery systems for the treatment of arthritis. Advances in Colloid and Interface Science, 2020, 285, 102273.	14.7	24
29	Role of processing parameters on surface and wetting properties controlling the behaviour of layer-by-layer coated nanoparticles. Current Opinion in Colloid and Interface Science, 2018, 36, 130-142.	7.4	23
30	LbL-assembled gentamicin delivery system for PMMA bone cements to prolong antimicrobial activity. PLoS ONE, 2018, 13, e0207753.	2.5	22
31	Prolonged Antimicrobial Activity of PMMA Bone Cement with Embedded Gentamicin-Releasing Silica Nanocarriers. ACS Applied Bio Materials, 2019, 2, 1850-1861.	4.6	18
32	Frictional properties of light-activated antimicrobial polymers in blood vessels. Journal of Materials Science: Materials in Medicine, 2010, 21, 815-821.	3.6	17
33	Prediction of the frictional behavior of mammalian tissues against biomaterials. Acta Biomaterialia, 2010, 6, 4052-4059.	8.3	17
34	The Effect of Anterior-Posterior Shear on the Wear of CHARITÉ Total Disc Replacement. Spine, 2012, 37, E528-E534.	2.0	17
35	Controlling release kinetics of gentamicin from silica nano-carriers. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 541, 212-221.	4.7	17
36	Antimicrobial activity of bone cements embedded with organic nanoparticles. International Journal of Nanomedicine, 2015, 10, 6317.	6.7	16

#	Article	IF	Citations
37	<p>Anti-inflammatory drug-eluting implant model system to prevent wear particle-induced periprosthetic osteolysis</p> . International Journal of Nanomedicine, 2019, Volume 14, 1069-1084.	6.7	14
38	Optimisation and feature selection of poly-beta-amino-ester as a drug delivery system for cartilage. Journal of Materials Chemistry B, 2020, 8, 5096-5108.	5.8	14
39	Obtaining new composite biomaterials by means of mineralization of methacrylate hydrogels using the reaction–diffusion method. Materials Science and Engineering C, 2014, 42, 696-704.	7.3	13
40	Cobalt, titanium and PMMA bone cement debris influence on mouse osteoblast cell elasticity, spring constant and calcium production activity. RSC Advances, 2015, 5, 83885-83898.	3.6	12
41	Long acting anti-infection constructs on titanium. Journal of Controlled Release, 2020, 326, 91-105.	9.9	12
42	PMMA bone cement containing long releasing silica-based chlorhexidine nanocarriers. PLoS ONE, 2021, 16, e0257947.	2.5	11
43	Systematic Review and Meta-Analysis of Tobacco Use as a Risk Factor for Prosthetic Joint Infection After Total Hip Replacement. Arthroplasty Today, 2020, 6, 959-971.	1.6	10
44	Influence of csgD and ompR on Nanomechanics, Adhesion Forces, and Curli Properties of <i>E. coli</i> Langmuir, 2016, 32, 7965-7974.	3.5	9
45	Cobalt and titanium nanoparticles influence on mesenchymal stem cell elasticity and turgidity. Colloids and Surfaces B: Biointerfaces, 2017, 157, 146-156.	5.0	9
46	Cobalt and Titanium nanoparticles influence on human osteoblast mitochondrial activity and biophysical properties of their cytoskeleton. Journal of Colloid and Interface Science, 2018, 531, 410-420.	9.4	9
47	Rheometer enabled study of cartilage frequency-dependent properties. Scientific Reports, 2020, 10, 20696.	3.3	9
48	Multi-asperity elliptical JKR model for adhesion of a surface with non-axially symmetric asperities. Tribology International, 2015, 88, 107-114.	5.9	8
49	Nanomechanical and surface properties of rMSCs post-exposure to CAP treated UHMWPE wear particles. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 723-734.	3.3	8
50	<p>Nanoparticle-based model of anti-inflammatory drug releasing LbL coatings for uncemented prosthesis aseptic loosening prevention</p> . International Journal of Nanomedicine, 2019, Volume 14, 7309-7322.	6.7	8
51	Lethal photosensitisation of bacteria using silica-TBO nanoconjugates. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 510, 293-299.	4.7	7
52	Amplify antimicrobial photo dynamic therapy efficacy with poly-beta-amino esters (PBAEs). Scientific Reports, 2021, 11, 7275.	3.3	6
53	Poly beta amino ester coated emulsions of NSAIDs for cartilage treatment. Journal of Materials Chemistry B, 2021, 9, 5837-5847.	5.8	5
54	Contact interactions of aorta against PVC catheters. Tribology International, 2013, 66, 157-164.	5.9	4

#	Article	IF	CITATIONS
55	Preface. Advances in Colloid and Interface Science, 2017, 249, 1.	14.7	3
56	Adhesion Phenomena in Pharmaceutical Products and Applications of AFM. Reviews of Adhesion and Adhesives, 2014, 2, 226-252.	3.4	2
57	Sunlight induced synthesis of silver nanoparticles on cellulose for the preparation of antimicrobial textiles. Journal of Photochemistry and Photobiology, 2022, 11, 100134.	2.5	2
58	Nano- and Component Level Friction of Rubber Seals in Dispensing Devices. , 2009, , .		1
59	Nanostructured coatings for antimicrobial applications. , 2020, , 115-140.		1
60	A Dimensionless Analysis of the Effect of Material and Surface Properties on Adhesion. Applications to Medical Device Design., 2012,, 59-65.		1