

# Hitesh Handa

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6878627/publications.pdf>

Version: 2024-02-01

91  
papers

3,801  
citations

117571

34  
h-index

143943

57  
g-index

93  
all docs

93  
docs citations

93  
times ranked

3681  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bioinspired ultra-low fouling coatings on medical devices to prevent device-associated infections and thrombosis. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 1015-1024.	5.0	26
2	A review on antibacterial silk fibroin-based biomaterials: current state and prospects. <i>Materials Today Chemistry</i> , 2022, 23, 100673.	1.7	33
3	Potent, Broad-Spectrum Antimicrobial Effects of <i>S</i> -Nitroso- <i>N</i> -acetylpenicillamine-Impregnated Nitric Oxide-Releasing Latex Urinary Catheters. <i>ACS Applied Bio Materials</i> , 2022, 5, 700-710.	2.3	10
4	Improved Polymer Hemocompatibility for Blood-Contacting Applications via <i>S</i> -Nitrosoglutathione Impregnation. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 11116-11123.	4.0	6
5	Nitric Oxide-Releasing Lock Solution for the Prevention of Catheter-Related Infection and Thrombosis. <i>ACS Applied Bio Materials</i> , 2022, 5, 1519-1527.	2.3	11
6	Nitric Oxide-Releasing Gelatin Methacryloyl/Silk Fibroin Interpenetrating Polymer Network Hydrogels for Tissue Engineering Applications. <i>ACS Biomaterials Science and Engineering</i> , 2022, 8, 273-283.	2.6	18
7	Development and <i>In Vitro</i> Whole Blood Hemocompatibility Screening of Endothelium-Mimetic Multifunctional Coatings. <i>ACS Applied Bio Materials</i> , 2022, 5, 2212-2223.	2.3	7
8	Dual Action Nitric Oxide and Fluoride Ion-Releasing Hydrogels for Combating Dental Caries. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 21916-21930.	4.0	14
9	Bio-inspired hemocompatible surface modifications for biomedical applications. <i>Progress in Materials Science</i> , 2022, 130, 100997.	16.0	23
10	Nitric Oxide-Releasing Nanofibrous Scaffolds Based on Silk Fibroin and Zein with Enhanced Biodegradability and Antibacterial Properties. <i>ACS Biomaterials Science and Engineering</i> , 2022, 8, 3066-3077.	2.6	12
11	<i>S</i> -Nitrosoglutathione-Based Nitric Oxide-Releasing Nanofibers Exhibit Dual Antimicrobial and Antithrombotic Activity for Biomedical Applications. <i>Macromolecular Bioscience</i> , 2021, 21, e2000248.	2.1	21
12	Nitric oxide and viral infection: Recent developments in antiviral therapies and platforms. <i>Applied Materials Today</i> , 2021, 22, 100887.	2.3	29
13	Characterization of a nitric oxide (NO) donor molecule and cerium oxide nanoparticle (CNP) interactions and their synergistic antimicrobial potential for biomedical applications. <i>Journal of Colloid and Interface Science</i> , 2021, 586, 163-177.	5.0	33
14	Highly hydrophobic polytetrafluoroethylene particle immobilization via polydopamine anchor layer on nitric oxide releasing polymer for biomedical applications. <i>Journal of Colloid and Interface Science</i> , 2021, 585, 716-728.	5.0	13
15	Tethered Liquid Perfluorocarbon Coating for 72 Hour Heparin-Free Extracorporeal Life Support. <i>ASAIO Journal</i> , 2021, 67, 798-808.	0.9	16
16	Development of Novel Amphotericin B-Immobilized Nitric Oxide-Releasing Platform for the Prevention of Broad-Spectrum Infections and Thrombosis. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 19613-19624.	4.0	17
17	A multifunctional polymeric coating incorporating lawsone with corrosion resistance and antibacterial activity for biomedical Mg alloys. <i>Progress in Organic Coatings</i> , 2021, 153, 106157.	1.9	25
18	Nitric oxide releasing halloysite nanotubes for biomedical applications. <i>Journal of Colloid and Interface Science</i> , 2021, 590, 277-289.	5.0	21

#	ARTICLE	IF	CITATIONS
19	A Synergistic New Approach Toward Enhanced Antibacterial Efficacy via Antimicrobial Peptide Immobilization on a Nitric Oxide-Releasing Surface. ACS Applied Materials & Interfaces, 2021, 13, 43892-43903.	4.0	21
20	Cellulose nanocrystal reinforced silk fibroin coating for enhanced corrosion protection and biocompatibility of Mg-based alloys for orthopedic implant applications. Progress in Organic Coatings, 2021, 161, 106525.	1.9	11
21	Combination strategies for antithrombotic biomaterials: an emerging trend towards hemocompatibility. Biomaterials Science, 2021, 9, 2413-2423.	2.6	32
22	Synergistic Approach to Develop Antibacterial Electrospun Scaffolds Using Honey and <i>S</i> -Nitroso- <i>N</i> -acetyl Penicillamine. ACS Biomaterials Science and Engineering, 2021, 7, 517-526.	2.6	21
23	Covalently Bound <i>S</i> -Nitroso- <i>N</i> -Acetylpenicillamine to Electrospun Polyacrylonitrile Nanofibers for Multifunctional Tissue Engineering Applications. ACS Biomaterials Science and Engineering, 2021, 7, 5279-5287.	2.6	7
24	Reduction in Foreign Body Response and Improved Antimicrobial Efficacy via Silicone-Oil-Infused Nitric-Oxide-Releasing Medical-Grade Cannulas. ACS Applied Materials & Interfaces, 2021, 13, 52425-52434.	4.0	12
25	Surface-Catalyzed Nitric Oxide Release via a Metal Organic Framework Enhances Antibacterial Surface Effects. ACS Applied Materials & Interfaces, 2021, 13, 56931-56943.	4.0	32
26	Heparin-Free Extracorporeal Life Support Using Tethered Liquid Perfluorocarbon: A Feasibility and Efficacy Study. ASAIO Journal, 2020, 66, 809-817.	0.9	23
27	Assessing and improving the biocompatibility of microfluidic artificial lungs. Acta Biomaterialia, 2020, 112, 190-201.	4.1	17
28	Silk Nanoparticles: A Natural Polymeric Platform for Nitric Oxide Delivery in Biomedical Applications. ACS Applied Materials & Interfaces, 2020, 12, 53615-53623.	4.0	26
29	Highly Efficient Antimicrobial Activity of $Cu_xFe_yO_z$ Nanoparticles against Important Human Pathogens. Nanomaterials, 2020, 10, 2294.	1.9	6
30	Toward an artificial endothelium: Development of blood-compatible surfaces for extracorporeal life support. Journal of Trauma and Acute Care Surgery, 2020, 89, S59-S68.	1.1	24
31	Electrospun Bioabsorbable Fibers Containing <i>S</i> -Nitrosoglutathione for Tissue Engineering Applications. ACS Applied Bio Materials, 2020, 3, 7677-7686.	2.3	8
32	Fabrication of Bacteria- and Blood-Repellent Superhydrophobic Polyurethane Sponge Materials. ACS Applied Materials & Interfaces, 2020, 12, 51160-51173.	4.0	46
33	<i>S</i> -Nitroso- <i>N</i> -acetylpenicillamine impregnated endotracheal tubes for prevention of ventilator-associated pneumonia. Biotechnology and Bioengineering, 2020, 117, 2237-2246.	1.7	15
34	$H_{2}S$ -Releasing Composite: a Gasotransmitter Platform for Potential Biomedical Applications. ACS Biomaterials Science and Engineering, 2020, 6, 2062-2071.	2.6	9
35	Nanoparticles Encapsulating Nitrosylated Maytansine To Enhance Radiation Therapy. ACS Nano, 2020, 14, 1468-1481.	7.3	69
36	Multipronged Approach to Combat Catheter-Associated Infections and Thrombosis by Combining Nitric Oxide and a Polyzwitterion: a 7 Day In Vivo Study in a Rabbit Model. ACS Applied Materials & Interfaces, 2020, 12, 9070-9079.	4.0	21

#	ARTICLE	IF	CITATIONS
37	Mimicking the Endothelium: Dual Action Heparinized Nitric Oxide Releasing Surface. ACS Applied Materials & Interfaces, 2020, 12, 20158-20171.	4.0	31
38	Versatile biomimetic medical device surface: hydrophobin coated, nitric oxide-releasing polymer for antimicrobial and hemocompatible applications. Biomaterials Science, 2019, 7, 3438-3449.	2.6	23
39	Antibacterial and Cellular Response Toward a Gasotransmitter-Based Hybrid Wound Dressing. ACS Biomaterials Science and Engineering, 2019, 5, 4002-4012.	2.6	20
40	Multifunctional <i>S</i> -Nitroso- <i>N</i> -acetylpenicillamine-Incorporated Medical-Grade Polymer with Selenium Interface for Biomedical Applications. ACS Applied Materials & Interfaces, 2019, 11, 34652-34662.	4.0	45
41	Catalyzed Nitric Oxide Release via Cu Nanoparticles Leads to an Increase in Antimicrobial Effects and Hemocompatibility for Short-Term Extracorporeal Circulation. ACS Applied Bio Materials, 2019, 2, 2539-2548.	2.3	47
42	Liquid-Infused Nitric-Oxide-Releasing Silicone Foley Urinary Catheters for Prevention of Catheter-Associated Urinary Tract Infections. ACS Biomaterials Science and Engineering, 2019, 5, 2021-2029.	2.6	46
43	Zinc oxide nanoparticles act catalytically and synergistically with nitric oxide donors to enhance antimicrobial efficacy. Journal of Biomedical Materials Research - Part A, 2019, 107, 1425-1433.	2.1	28
44	Antibacterial 3D bone scaffolds for tissue engineering application. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 1068-1078.	1.6	18
45	Active Release of an Antimicrobial and Antiplatelet Agent from a Nonfouling Surface Modification. ACS Applied Materials & Interfaces, 2019, 11, 4523-4530.	4.0	33
46	Nitric oxide-releasing antibacterial albumin plastic for biomedical applications. Journal of Biomedical Materials Research - Part A, 2018, 106, 1535-1542.	2.1	7
47	4D Biofabrication: 3D Cell Patterning Using Shape-Changing Films. Advanced Functional Materials, 2018, 28, 1706248.	7.8	55
48	Nitric oxide releasing vascular catheters for eradicating bacterial infection. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 2849-2857.	1.6	58
49	Biotemplated Synthesis and Characterization of Mesoporous Nitric Oxide-Releasing Diatomaceous Earth Silica Particles. ACS Applied Materials & Interfaces, 2018, 10, 2291-2301.	4.0	32
50	Achieving Long-Term Biocompatible Silicone via Covalently Immobilized <i>S</i> -Nitroso- <i>N</i> -acetylpenicillamine (SNAP) That Exhibits 4 Months of Sustained Nitric Oxide Release. ACS Applied Materials & Interfaces, 2018, 10, 27316-27325.	4.0	57
51	Tunable Nitric Oxide Release from <i>S</i> -Nitroso- <i>N</i> -acetylpenicillamine via Catalytic Copper Nanoparticles for Biomedical Applications. ACS Applied Materials & Interfaces, 2017, 9, 15254-15264.	4.0	110
52	Enhanced antibacterial efficacy of nitric oxide releasing thermoplastic polyurethanes with antifouling hydrophilic topcoats. Biomaterials Science, 2017, 5, 1246-1255.	2.6	62
53	A review of the recent advances in antimicrobial coatings for urinary catheters. Acta Biomaterialia, 2017, 50, 20-40.	4.1	332
54	Covalent Grafting of Antifouling Phosphorylcholine-Based Copolymers with Antimicrobial Nitric Oxide Releasing Polymers to Enhance Infection-Resistant Properties of Medical Device Coatings. Langmuir, 2017, 33, 13105-13113.	1.6	64

#	ARTICLE	IF	CITATIONS
55	Computational imaging analysis of glycated fibrin gels reveals aggregated and anisotropic structures. <i>Journal of Biomedical Materials Research - Part A</i> , 2017, 105, 2191-2198.	2.1	8
56	Liquid-infused nitric oxide-releasing (LINORel) silicone for decreased fouling, thrombosis, and infection of medical devices. <i>Scientific Reports</i> , 2017, 7, 13623.	1.6	93
57	Characterization and <i>in vivo</i> performance of nitric oxide-releasing extracorporeal circuits in a feline model of thrombogenicity. <i>Journal of Biomedical Materials Research - Part A</i> , 2017, 105, 539-546.	2.1	14
58	A multi-defense strategy: Enhancing bactericidal activity of a medical grade polymer with a nitric oxide donor and surface-immobilized quaternary ammonium compound. <i>Acta Biomaterialia</i> , 2017, 58, 421-431.	4.1	78
59	Investigation of Diffusion Characteristics through Microfluidic Channels for Passive Drug Delivery Applications. <i>Journal of Drug Delivery</i> , 2016, 2016, 1-9.	2.5	10
60	Characterization of an S-nitroso-N-acetylpenicillamine-based nitric oxide releasing polymer from a translational perspective. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2016, 65, 769-778.	1.8	53
61	Attenuation of thrombosis and bacterial infection using dual function nitric oxide releasing central venous catheters in a 9 day rabbit model. <i>Acta Biomaterialia</i> , 2016, 44, 304-312.	4.1	59
62	Improved Hemocompatibility of Multilumen Catheters via Nitric Oxide (NO) Release from S-Nitroso-N-acetylpenicillamine (SNAP) Composite Filled Lumen. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 29270-29279.	4.0	45
63	Surface Grafted Antimicrobial Polymer Networks with High Abrasion Resistance. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 1169-1179.	2.6	49
64	Antimicrobial and Physicochemical Characterization of Biodegradable, Nitric Oxide-Releasing Nanocellulose-Chitosan Packaging Membranes. <i>Journal of Agricultural and Food Chemistry</i> , 2016, 64, 5260-5266.	2.4	78
65	Improved hemocompatibility of silicone rubber extracorporeal tubing via solvent swelling-impregnation of S-nitroso-N-acetylpenicillamine (SNAP) and evaluation in rabbit thrombogenicity model. <i>Acta Biomaterialia</i> , 2016, 37, 111-119.	4.1	64
66	The immobilization of a direct thrombin inhibitor to a polyurethane as a nonthrombogenic surface coating for extracorporeal circulation. <i>Journal of Materials Chemistry B</i> , 2016, 4, 2264-2272.	2.9	30
67	Recent Advances in Hemocompatible Polymers for Biomedical Applications. , 2015, , 481-511.		15
68	Reduction in thrombosis and bacterial adhesion with 7 day implantation of S-nitroso-N-acetylpenicillamine (SNAP)-doped Elast-eon E2As catheters in sheep. <i>Journal of Materials Chemistry B</i> , 2015, 3, 1639-1645.	2.9	85
69	Optimized polymeric film-based nitric oxide delivery inhibits bacterial growth in a mouse burn wound model. <i>Acta Biomaterialia</i> , 2014, 10, 4136-4142.	4.1	73
70	A Nitric Oxide-Releasing Heparin Conjugate for Delivery of a Combined Antiplatelet/Anticoagulant Agent. <i>Molecular Pharmaceutics</i> , 2014, 11, 645-650.	2.3	33
71	Hemocompatibility comparison of biomedical grade polymers using rabbit thrombogenicity model for preparing nonthrombogenic nitric oxide releasing surfaces. <i>Journal of Materials Chemistry B</i> , 2014, 2, 1059-1067.	2.9	57
72	Development and hemocompatibility testing of nitric oxide releasing polymers using a rabbit model of thrombogenicity. <i>Journal of Biomaterials Applications</i> , 2014, 29, 479-501.	1.2	33

#	ARTICLE	IF	CITATIONS
73	The effect of a polyurethane coating incorporating both a thrombin inhibitor and nitric oxide on hemocompatibility in extracorporeal circulation. <i>Biomaterials</i> , 2014, 35, 7271-7285.	5.7	75
74	In vitro and in vivo study of sustained nitric oxide release coating using diazeniumdiolate-doped poly(vinyl chloride) matrix with poly(lactide-co-glycolide) additive. <i>Journal of Materials Chemistry B</i> , 2013, 1, 3578.	2.9	58
75	The mediation of platelet quiescence by NO-releasing polymers via cGMP-induced serine 239 phosphorylation of vasodilator-stimulated phosphoprotein. <i>Biomaterials</i> , 2013, 34, 8086-8096.	5.7	19
76	Long-term nitric oxide release and elevated temperature stability with S-nitroso-N-acetylpenicillamine (SNAP)-doped Elast-eon E2As polymer. <i>Biomaterials</i> , 2013, 34, 6957-6966.	5.7	131
77	Thromboresistance Characterization of Extruded Nitric Oxide-Releasing Silicone Catheters. <i>ASAIO Journal</i> , 2012, 58, 238-246.	0.9	21
78	The hemocompatibility of a nitric oxide generating polymer that catalyzes S-nitrosothiol decomposition in an extracorporeal circulation model. <i>Biomaterials</i> , 2011, 32, 5957-5969.	5.7	102
79	The attenuation of platelet and monocyte activation in a rabbit model of extracorporeal circulation by a nitric oxide releasing polymer. <i>Biomaterials</i> , 2010, 31, 2736-2745.	5.7	119
80	Immobilization and Molecular Interactions between Bacteriophage and Lipopolysaccharide Bilayers. <i>Langmuir</i> , 2010, 26, 12095-12103.	1.6	25
81	Cross-Linked Bio-reducible Layer-by-Layer Films for Increased Cell Adhesion and Transgene Expression. <i>Journal of Physical Chemistry B</i> , 2010, 114, 5283-5291.	1.2	39
82	Transfection activity of layer-by-layer plasmid DNA/poly(ethylenimine) films deposited on PLGA microparticles. <i>International Journal of Pharmaceutics</i> , 2009, 365, 44-52.	2.6	29
83	Nanoparticle-mediated combination chemotherapy and photodynamic therapy overcomes tumor drug resistance in vitro. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2009, 71, 214-222.	2.0	118
84	Recognition of <i>Salmonella typhimurium</i> by immobilized phage P22 monolayers. <i>Surface Science</i> , 2008, 602, 1392-1400.	0.8	78
85	Surfactant-Polymer Nanoparticles Enhance the Effectiveness of Anticancer Photodynamic Therapy. <i>Molecular Pharmaceutics</i> , 2008, 5, 795-807.	2.3	96
86	Incorporation of Phospholipids Enhances Cellular Uptake and Retention of Surfactant-Polymer Nanoparticles. <i>Journal of Biomedical Nanotechnology</i> , 2007, 3, 291-296.	0.5	6
87	Surface Morphological Evolution of Ultrathin P4VP Films and Generation of Ordered Patterns on Graphite. <i>Macromolecular Rapid Communications</i> , 2007, 28, 1619-1623.	2.0	6
88	Polymer-surfactant nanoparticles for sustained release of water-soluble drugs. <i>Journal of Pharmaceutical Sciences</i> , 2007, 96, 3379-3389.	1.6	91
89	Disassembly of layer-by-layer films of plasmid DNA and reducible TAT polypeptide. <i>Biomaterials</i> , 2007, 28, 117-124.	5.7	84
90	Phospholipid Nanoparticles: Process Optimization Using Factorial Design and Atomic Force Microscopy. <i>Journal of Biomedical Nanotechnology</i> , 2007, 3, 394-400.	0.5	1

#	ARTICLE	IF	CITATIONS
91	Deposition and Aggregation of Aspirin Molecules on a Phospholipid Bilayer Pattern. Langmuir, 2005, 21, 578-585.	1.6	21