

# Hitesh Handa

## List of Publications by Year in descending order

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91  
papers

3,801  
citations

117571

34  
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143943

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93  
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docs citations

93  
times ranked

3681  
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of the recent advances in antimicrobial coatings for urinary catheters. <i>Acta Biomaterialia</i> , 2017, 50, 20-40.	4.1	332
2	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
3	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
4	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
5	Tunable Nitric Oxide Release from S-Nitroso-N-acetylpenicillamine via Catalytic Copper Nanoparticles for Biomedical Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 15254-15264.	4.0	110
6	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
7	Surfactant Polymer Nanoparticles Enhance the Effectiveness of Anticancer Photodynamic Therapy. <i>Molecular Pharmaceutics</i> , 2008, 5, 795-807.	2.3	96
8	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
9	Polymer-surfactant nanoparticles for sustained release of water-soluble drugs. <i>Journal of Pharmaceutical Sciences</i> , 2007, 96, 3379-3389.	1.6	91
10	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
11	Disassembly of layer-by-layer films of plasmid DNA and reducible TAT polypeptide. <i>Biomaterials</i> , 2007, 28, 117-124.	5.7	84
12	Recognition of <i>Salmonella typhimurium</i> by immobilized phage P22 monolayers. <i>Surface Science</i> , 2008, 602, 1392-1400.	0.8	78
13	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
14	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
15	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
16	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
17	Nanoparticles Encapsulating Nitrosylated Maytansine To Enhance Radiation Therapy. <i>ACS Nano</i> , 2020, 14, 1468-1481.	7.3	69
18	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

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19	Covalent Grafting of Antifouling Phosphorylcholine-Based Copolymers with Antimicrobial Nitric Oxide Releasing Polymers to Enhance Infection-Resistant Properties of Medical Device Coatings. <i>Langmuir</i> , 2017, 33, 13105-13113.	1.6	64
20	Enhanced antibacterial efficacy of nitric oxide releasing thermoplastic polyurethanes with antifouling hydrophilic topcoats. <i>Biomaterials Science</i> , 2017, 5, 1246-1255.	2.6	62
21	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
22	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
23	Nitric oxide releasing vascular catheters for eradicating bacterial infection. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2018, 106, 2849-2857.	1.6	58
24	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
25	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. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 27316-27325.	4.0	57
26	4D Biofabrication: 3D Cell Patterning Using Shape-Changing Films. <i>Advanced Functional Materials</i> , 2018, 28, 1706248.	7.8	55
27	Characterization of an <i>S</i> -nitroso- <i>N</i> -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
28	Surface Grafted Antimicrobial Polymer Networks with High Abrasion Resistance. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 1169-1179.	2.6	49
29	Catalyzed Nitric Oxide Release via Cu Nanoparticles Leads to an Increase in Antimicrobial Effects and Hemocompatibility for Short-Term Extracorporeal Circulation. <i>ACS Applied Bio Materials</i> , 2019, 2, 2539-2548.	2.3	47
30	Liquid-Infused Nitric-Oxide-Releasing Silicone Foley Urinary Catheters for Prevention of Catheter-Associated Urinary Tract Infections. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 2021-2029.	2.6	46
31	Fabrication of Bacteria- and Blood-Repellent Superhydrophobic Polyurethane Sponge Materials. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 51160-51173.	4.0	46
32	Improved Hemocompatibility of Multilumen Catheters via Nitric Oxide (NO) Release from <i>S</i> -Nitroso- <i>N</i> -acetylpenicillamine (SNAP) Composite Filled Lumen. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 29270-29279.	4.0	45
33	Multifunctional <i>S</i> -Nitroso- <i>N</i> -acetylpenicillamine-Incorporated Medical-Grade Polymer with Selenium Interface for Biomedical Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 34652-34662.	4.0	45
34	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
35	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
36	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

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37	Active Release of an Antimicrobial and Antiplatelet Agent from a Nonfouling Surface Modification. ACS Applied Materials & Interfaces, 2019, 11, 4523-4530.	4.0	33
38	Characterization of a nitric oxide (NO) donor molecule and cerium oxide nanoparticle (CNP) interactions and their synergistic antimicrobial potential for biomedical applications. Journal of Colloid and Interface Science, 2021, 586, 163-177.	5.0	33
39	A review on antibacterial silk fibroin-based biomaterials: current state and prospects. Materials Today Chemistry, 2022, 23, 100673.	1.7	33
40	Biotemplated Synthesis and Characterization of Mesoporous Nitric Oxide-Releasing Diatomaceous Earth Silica Particles. ACS Applied Materials & Interfaces, 2018, 10, 2291-2301.	4.0	32
41	Combination strategies for antithrombotic biomaterials: an emerging trend towards hemocompatibility. Biomaterials Science, 2021, 9, 2413-2423.	2.6	32
42	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
43	Mimicking the Endothelium: Dual Action Heparinized Nitric Oxide Releasing Surface. ACS Applied Materials & Interfaces, 2020, 12, 20158-20171.	4.0	31
44	The immobilization of a direct thrombin inhibitor to a polyurethane as a nonthrombogenic surface coating for extracorporeal circulation. Journal of Materials Chemistry B, 2016, 4, 2264-2272.	2.9	30
45	Transfection activity of layer-by-layer plasmid DNA/poly(ethylenimine) films deposited on PLGA microparticles. International Journal of Pharmaceutics, 2009, 365, 44-52.	2.6	29
46	Nitric oxide and viral infection: Recent developments in antiviral therapies and platforms. Applied Materials Today, 2021, 22, 100887.	2.3	29
47	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
48	Silk Nanoparticles: A Natural Polymeric Platform for Nitric Oxide Delivery in Biomedical Applications. ACS Applied Materials & Interfaces, 2020, 12, 53615-53623.	4.0	26
49	Bioinspired ultra-low fouling coatings on medical devices to prevent device-associated infections and thrombosis. Journal of Colloid and Interface Science, 2022, 608, 1015-1024.	5.0	26
50	Immobilization and Molecular Interactions between Bacteriophage and Lipopolysaccharide Bilayers. Langmuir, 2010, 26, 12095-12103.	1.6	25
51	A multifunctional polymeric coating incorporating lawsone with corrosion resistance and antibacterial activity for biomedical Mg alloys. Progress in Organic Coatings, 2021, 153, 106157.	1.9	25
52	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
53	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
54	Heparin-Free Extracorporeal Life Support Using Tethered Liquid Perfluorocarbon: A Feasibility and Efficacy Study. ASAIO Journal, 2020, 66, 809-817.	0.9	23

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55	Bio-inspired hemocompatible surface modifications for biomedical applications. <i>Progress in Materials Science</i> , 2022, 130, 100997.	16.0	23
56	Deposition and Aggregation of Aspirin Molecules on a Phospholipid Bilayer Pattern. <i>Langmuir</i> , 2005, 21, 578-585.	1.6	21
57	Thromboresistance Characterization of Extruded Nitric Oxide-Releasing Silicone Catheters. <i>ASAIO Journal</i> , 2012, 58, 238-246.	0.9	21
58	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. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 9070-9079.	4.0	21
59	S-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
60	Nitric oxide releasing halloysite nanotubes for biomedical applications. <i>Journal of Colloid and Interface Science</i> , 2021, 590, 277-289.	5.0	21
61	A Synergistic New Approach Toward Enhanced Antibacterial Efficacy via Antimicrobial Peptide Immobilization on a Nitric Oxide-Releasing Surface. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 43892-43903.	4.0	21
62	Synergistic Approach to Develop Antibacterial Electrospun Scaffolds Using Honey and S-Nitroso-N-acetyl Penicillamine. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 517-526.	2.6	21
63	Antibacterial and Cellular Response Toward a Gasotransmitter-Based Hybrid Wound Dressing. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 4002-4012.	2.6	20
64	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
65	Antibacterial 3D bone scaffolds for tissue engineering application. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2019, 107, 1068-1078.	1.6	18
66	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
67	Assessing and improving the biocompatibility of microfluidic artificial lungs. <i>Acta Biomaterialia</i> , 2020, 112, 190-201.	4.1	17
68	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
69	Tethered Liquid Perfluorocarbon Coating for 72 Hour Heparin-Free Extracorporeal Life Support. <i>ASAIO Journal</i> , 2021, 67, 798-808.	0.9	16
70	Recent Advances in Hemocompatible Polymers for Biomedical Applications. , 2015, , 481-511.		15
71	S-nitroso-N-acetylpenicillamine impregnated endotracheal tubes for prevention of ventilator-associated pneumonia. <i>Biotechnology and Bioengineering</i> , 2020, 117, 2237-2246.	1.7	15
72	Characterization and in vivo 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

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73	Dual Action Nitric Oxide and Fluoride Ion-Releasing Hydrogels for Combating Dental Caries. ACS Applied Materials & Interfaces, 2022, 14, 21916-21930.	4.0	14
74	Highly hydrophobic polytetrafluoroethylene particle immobilization via polydopamine anchor layer on nitric oxide releasing polymer for biomedical applications. Journal of Colloid and Interface Science, 2021, 585, 716-728.	5.0	13
75	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
76	Nitric Oxide-Releasing Nanofibrous Scaffolds Based on Silk Fibroin and Zein with Enhanced Biodegradability and Antibacterial Properties. ACS Biomaterials Science and Engineering, 2022, 8, 3066-3077.	2.6	12
77	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
78	Nitric Oxide-Releasing Lock Solution for the Prevention of Catheter-Related Infection and Thrombosis. ACS Applied Bio Materials, 2022, 5, 1519-1527.	2.3	11
79	Investigation of Diffusion Characteristics through Microfluidic Channels for Passive Drug Delivery Applications. Journal of Drug Delivery, 2016, 2016, 1-9.	2.5	10
80	Potent, Broad-Spectrum Antimicrobial Effects of S-Nitroso-N-acetylpenicillamine-Impregnated Nitric Oxide-Releasing Latex Urinary Catheters. ACS Applied Bio Materials, 2022, 5, 700-710.	2.3	10
81	H <sub>2</sub> S-Releasing Composite: a Gasotransmitter Platform for Potential Biomedical Applications. ACS Biomaterials Science and Engineering, 2020, 6, 2062-2071.	2.6	9
82	Computational imaging analysis of glycated fibrin gels reveals aggregated and anisotropic structures. Journal of Biomedical Materials Research - Part A, 2017, 105, 2191-2198.	2.1	8
83	Electrospun Bioabsorbable Fibers Containing S-Nitrosoglutathione for Tissue Engineering Applications. ACS Applied Bio Materials, 2020, 3, 7677-7686.	2.3	8
84	Nitric oxide-releasing antibacterial albumin plastic for biomedical applications. Journal of Biomedical Materials Research - Part A, 2018, 106, 1535-1542.	2.1	7
85	Covalently Bound S-Nitroso-N-Acetylpenicillamine to Electrospun Polyacrylonitrile Nanofibers for Multifunctional Tissue Engineering Applications. ACS Biomaterials Science and Engineering, 2021, 7, 5279-5287.	2.6	7
86	Development and In Vitro Whole Blood Hemocompatibility Screening of Endothelium-Mimetic Multifunctional Coatings. ACS Applied Bio Materials, 2022, 5, 2212-2223.	2.3	7
87	Incorporation of Phospholipids Enhances Cellular Uptake and Retention of Surfactant-Polymer Nanoparticles. Journal of Biomedical Nanotechnology, 2007, 3, 291-296.	0.5	6
88	Surface Morphological Evolution of Ultrathin P4VP Films and Generation of Ordered Patterns on Graphite. Macromolecular Rapid Communications, 2007, 28, 1619-1623.	2.0	6
89	Highly Efficient Antimicrobial Activity of CuxFeyOz Nanoparticles against Important Human Pathogens. Nanomaterials, 2020, 10, 2294.	1.9	6
90	Improved Polymer Hemocompatibility for Blood-Contacting Applications via S-Nitrosoglutathione Impregnation. ACS Applied Materials & Interfaces, 2022, 14, 11116-11123.	4.0	6

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91	Phospholipid Nanoparticles: Process Optimization Using Factorial Design and Atomic Force Microscopy. <i>Journal of Biomedical Nanotechnology</i> , 2007, 3, 394-400.	0.5	1