

Lizeng Gao

List of Publications by Year in descending order

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Version: 2024-02-01

92
papers

13,214
citations

76326

40
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42399

92
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93
all docs

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docs citations

93
times ranked

10244
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | A Bioinspired Five-Coordinate Single-Atom Iron Nanozyme for Tumor Catalytic Therapy. <i>Advanced Materials</i> , 2022, 34, e2107088. | 21.0 | 133 |
| 2 | Antibacterial effects of nano-decoction iron polysulfide in epididymitis and the systematic evaluation of its toxicity on the reproductive health of male mice. <i>Ecotoxicology and Environmental Safety</i> , 2022, 231, 113184. | 6.0 | 3 |
| 3 | Reverse intratumor bacteria-induced gemcitabine resistance with carbon nanozymes for enhanced tumor catalytic-chemo therapy. <i>Nano Today</i> , 2022, 43, 101395. | 11.9 | 13 |
| 4 | Metastable Iron Sulfides Gram-Dependently Counteract Resistant <i>Gardnerella Vaginalis</i> for Bacterial Vaginosis Treatment. <i>Advanced Science</i> , 2022, 9, e2104341. | 11.2 | 21 |
| 5 | Ferroptotic stress promotes macrophages against intracellular bacteria. <i>Theranostics</i> , 2022, 12, 2266-2289. | 10.0 | 39 |
| 6 | Ferritin-Nanocaged ATP Traverses the Blood-Testis Barrier and Enhances Sperm Motility in an Asthenozoospermia Model. <i>ACS Nano</i> , 2022, 16, 4175-4185. | 14.6 | 11 |
| 7 | Nanozybiotics: Nanozyme-Based Antibacterials against Bacterial Resistance. <i>Antibiotics</i> , 2022, 11, 390. | 3.7 | 23 |
| 8 | Catalytic antimicrobial therapy using nanozymes. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2022, 14, e1769. | 6.1 | 23 |
| 9 | Metal ions/nucleotide coordinated nanoparticles comprehensively suppress tumor by synergizing ferroptosis with energy metabolism interference. <i>Journal of Nanobiotechnology</i> , 2022, 20, 199. | 9.1 | 26 |
| 10 | Fe ₃ O ₄ Nanozymes Improve Neuroblast Differentiation and Blood-Brain Barrier Integrity of the Hippocampal Dentate Gyrus in D-Galactose-Induced Aged Mice. <i>International Journal of Molecular Sciences</i> , 2022, 23, 6463. | 4.1 | 3 |
| 11 | A Nanozyme-Based Artificial Peroxisome Ameliorates Hyperuricemia and Ischemic Stroke. <i>Advanced Functional Materials</i> , 2021, 31, 2007130. | 14.9 | 116 |
| 12 | Oral Administration of Nanoiron Sulfide Supernatant for the Treatment of Gallbladder Stones with Chronic Cholecystitis. <i>ACS Applied Bio Materials</i> , 2021, 4, 3773-3785. | 4.6 | 10 |
| 13 | Nanozymes go oral: nanocatalytic medicine facilitates dental health. <i>Journal of Materials Chemistry B</i> , 2021, 9, 1491-1502. | 5.8 | 19 |
| 14 | Catalytic defense against fungal pathogens using nanozymes. <i>Nanotechnology Reviews</i> , 2021, 10, 1277-1292. | 5.8 | 4 |
| 15 | The age of bioinspired molybdenum-involved nanozymes: Synthesis, catalytic mechanisms, and biomedical applications. <i>View</i> , 2021, 2, 20200188. | 5.3 | 49 |
| 16 | Fabrication of PAN/FeNPs electrospun nanofibers: Nanozyme and an efficient antimicrobial agent. <i>Materials Today Communications</i> , 2021, 26, 102168. | 1.9 | 5 |
| 17 | High-Performance Self-Cascade Pyrite Nanozymes for Apoptosis-Ferroptosis Synergistic Tumor Therapy. <i>ACS Nano</i> , 2021, 15, 5735-5751. | 14.6 | 266 |
| 18 | Ultrasmall FeS ₂ Nanoparticles-Decorated Carbon Spheres with Laser-Mediated Ferrous Ion Release for Antibacterial Therapy. <i>Small</i> , 2021, 17, e2005473. | 10.0 | 43 |

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|----|---|------|-----------|
| 19 | Nanozyme-based medicine for enzymatic therapy: progress and challenges. <i>Biomedical Materials (Bristol)</i> , 2021, 16, 042002. | 3.3 | 40 |
| 20 | Artesunate-loaded poly (lactic-co-glycolic acid)/polydopamine-manganese oxides nanoparticles as an oxidase mimic for tumor chemo-catalytic therapy. <i>International Journal of Biological Macromolecules</i> , 2021, 181, 72-81. | 7.5 | 11 |
| 21 | Tumor Microenvironment-Modulated Nanozymes for NIR-II-Triggered Hyperthermia-Enhanced Photo-Nanocatalytic Therapy via Disrupting ROS Homeostasis. <i>International Journal of Nanomedicine</i> , 2021, Volume 16, 4559-4577. | 6.7 | 18 |
| 22 | Nanozymes: A clear definition with fuzzy edges. <i>Nano Today</i> , 2021, 40, 101269. | 11.9 | 332 |
| 23 | Dietary Fe ₃ O ₄ Nanozymes Prevent the Injury of Neurons and Bloodâ€‘Brain Barrier Integrity from Cerebral Ischemic Stroke. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 299-310. | 5.2 | 30 |
| 24 | Ferrihydrite nanoparticles as the photosensitizer augment microbial infected wound healing with blue light. <i>Nanoscale</i> , 2021, 13, 19123-19132. | 5.6 | 7 |
| 25 | Unveiling the active sites on ferrihydrite with apparent catalase-like activity for potentiating radiotherapy. <i>Nano Today</i> , 2021, 41, 101317. | 11.9 | 102 |
| 26 | Vitamin B2 functionalized iron oxide nanozymes for mouth ulcer healing. <i>Science China Life Sciences</i> , 2020, 63, 68-79. | 4.9 | 29 |
| 27 | Nano-Sized Iron Sulfide: Structure, Synthesis, Properties, and Biomedical Applications. <i>Frontiers in Chemistry</i> , 2020, 8, 818. | 3.6 | 25 |
| 28 | Nano-decocted ferrous polysulfide coordinates ferroptosis-like death in bacteria for anti-infection therapy. <i>Nano Today</i> , 2020, 35, 100981. | 11.9 | 71 |
| 29 | A metal-free nanozyme-activated prodrug strategy for targeted tumor catalytic therapy. <i>Nano Today</i> , 2020, 35, 100935. | 11.9 | 126 |
| 30 | Mucosal Vaccination for Influenza Protection Enhanced by Catalytic Immuneâ€‘Adjuvant. <i>Advanced Science</i> , 2020, 7, 2000771. | 11.2 | 42 |
| 31 | Photolysis of methicillin-resistant <i>Staphylococcus aureus</i> using Cu-doped carbon spheres. <i>Biomaterials Science</i> , 2020, 8, 6225-6234. | 5.4 | 11 |
| 32 | Local delivery of insulin/IGF-1 for bone regeneration: carriers, strategies, and effects. <i>Nanotheranostics</i> , 2020, 4, 242-255. | 5.2 | 31 |
| 33 | Bimetallic CuCo ₂ S ₄ Nanozymes with Enhanced Peroxidase Activity at Neutral pH for Combating Burn Infections. <i>ChemBioChem</i> , 2020, 21, 2620-2627. | 2.6 | 35 |
| 34 | Cytotoxicity studies of Fe ₃ O ₄ nanoparticles in chicken macrophage cells. <i>Royal Society Open Science</i> , 2020, 7, 191561. | 2.4 | 12 |
| 35 | Chiral Carbon Dots Mimicking Topoisomeraseâ€‘I To Mediate the Topological Rearrangement of Supercoiled DNA Enantioselectively. <i>Angewandte Chemie</i> , 2020, 132, 11180-11185. | 2.0 | 25 |
| 36 | Chiral Carbon Dots Mimicking Topoisomeraseâ€‘I To Mediate the Topological Rearrangement of Supercoiled DNA Enantioselectively. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 11087-11092. | 13.8 | 100 |

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|----|---|------|-----------|
| 37 | Oral biofilm elimination by combining iron-based nanozymes and hydrogen peroxide-producing bacteria. <i>Biomaterials Science</i> , 2020, 8, 2447-2458. | 5.4 | 38 |
| 38 | Self-Assembled Multiple-Enzyme Composites for Enhanced Synergistic Cancer Starvingâ€“Catalytic Therapy. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 20191-20201. | 8.0 | 33 |
| 39 | Nanozymology: An Overview. <i>Nanostructure Science and Technology</i> , 2020, , 3-16. | 0.1 | 11 |
| 40 | Nanozyme-Based Tumor Theranostics. <i>Nanostructure Science and Technology</i> , 2020, , 425-457. | 0.1 | 3 |
| 41 | Nanozymes for Antimicrobes: Precision Biocide. <i>Nanostructure Science and Technology</i> , 2020, , 489-526. | 0.1 | 4 |
| 42 | Kinetics and Mechanisms for Nanozymes. <i>Nanostructure Science and Technology</i> , 2020, , 17-39. | 0.1 | 12 |
| 43 | Iron Oxide Nanozyme: A Multifunctional Enzyme Mimetics for Biomedical Application. <i>Nanostructure Science and Technology</i> , 2020, , 105-140. | 0.1 | 28 |
| 44 | Current developments and trends in nanobiocatalysis. <i>Scientia Sinica Vitae</i> , 2020, 50, 682-697. | 0.3 | 7 |
| 45 | Light-enhanced sponge-like carbon nanozyme used for synergetic antibacterial therapy. <i>Biomaterials Science</i> , 2019, 7, 4131-4141. | 5.4 | 74 |
| 46 | Copper/Carbon Hybrid Nanozyme: Tuning Catalytic Activity by the Copper State for Antibacterial Therapy. <i>Nano Letters</i> , 2019, 19, 7645-7654. | 9.1 | 257 |
| 47 | A Singleâ€“Atom Nanozyme for Wound Disinfection Applications. <i>Angewandte Chemie</i> , 2019, 131, 4965-4970. | 2.0 | 94 |
| 48 | A Singleâ€“Atom Nanozyme for Wound Disinfection Applications. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4911-4916. | 13.8 | 607 |
| 49 | Synthesis of magnetite hybrid nanocomplexes to eliminate bacteria and enhance biofilm disruption. <i>Biomaterials Science</i> , 2019, 7, 2833-2840. | 5.4 | 30 |
| 50 | Catalytic inactivation of influenza virus by iron oxide nanozyme. <i>Theranostics</i> , 2019, 9, 6920-6935. | 10.0 | 90 |
| 51 | Dextran-Coated Iron Oxide Nanoparticles as Biomimetic Catalysts for Localized and pH-Activated Biofilm Disruption. <i>ACS Nano</i> , 2019, 13, 4960-4971. | 14.6 | 243 |
| 52 | Exosome-like Nanozyme Vesicles for H ₂ O ₂ -Responsive Catalytic Photoacoustic Imaging of Xenograft Nasopharyngeal Carcinoma. <i>Nano Letters</i> , 2019, 19, 203-209. | 9.1 | 150 |
| 53 | Fe ₃ O ₄ Nanoparticles Attenuated Salmonella Infection in Chicken Liver Through Reactive Oxygen and Autophagy via PI3K/Akt/mTOR Signaling. <i>Frontiers in Physiology</i> , 2019, 10, 1580. | 2.8 | 20 |
| 54 | Nanozymes: Biomedical Applications of Enzymatic Fe ₃ O ₄ Nanoparticles from In Vitro to In Vivo. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1174, 291-312. | 1.6 | 8 |

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|----|---|------|-----------|
| 55 | Au-PLGA Hybrid Nanoparticles with Catalase-Mimicking and near-Infrared Photothermal Activities for Photoacoustic Imaging-Guided Cancer Therapy. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 1083-1091. | 5.2 | 33 |
| 56 | Tumor Catalytic Photothermal Therapy with Yolk-Shell Gold@Carbon Nanozymes. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 4502-4511. | 8.0 | 130 |
| 57 | In vivo guiding nitrogen-doped carbon nanozyme for tumor catalytic therapy. <i>Nature Communications</i> , 2018, 9, 1440. | 12.8 | 759 |
| 58 | Emerging Biomedical Applications of Enzyme-Like Catalytic Nanomaterials. <i>Trends in Biotechnology</i> , 2018, 36, 15-29. | 9.3 | 154 |
| 59 | Aloe-Emodin/Carbon Nanoparticle Hybrid Gels with Light-Induced and Long-Term Antibacterial Activity. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 4391-4400. | 5.2 | 44 |
| 60 | Iron oxide nanozyme suppresses intracellular <i>Salmonella</i> Enteritidis growth and alleviates infection <i>in vivo</i> . <i>Theranostics</i> , 2018, 8, 6149-6162. | 10.0 | 91 |
| 61 | Converting organosulfur compounds to inorganic polysulfides against resistant bacterial infections. <i>Nature Communications</i> , 2018, 9, 3713. | 12.8 | 141 |
| 62 | Standardized assays for determining the catalytic activity and kinetics of peroxidase-like nanozymes. <i>Nature Protocols</i> , 2018, 13, 1506-1520. | 12.0 | 654 |
| 63 | Mechanistic Insight into the Light-Irradiated Carbon Capsules as an Antibacterial Agent. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 25026-25036. | 8.0 | 51 |
| 64 | Do catalytic nanoparticles offer an improved therapeutic strategy to combat dental biofilms?. <i>Nanomedicine</i> , 2017, 12, 275-279. | 3.3 | 15 |
| 65 | Biomimicry Promotes the Efficiency of a 10-Step Sequential Enzymatic Reaction on Nanoparticles, Converting Glucose to Lactate. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 235-238. | 13.8 | 35 |
| 66 | Biomimicry Promotes the Efficiency of a 10-Step Sequential Enzymatic Reaction on Nanoparticles, Converting Glucose to Lactate. <i>Angewandte Chemie</i> , 2017, 129, 241-244. | 2.0 | 2 |
| 67 | Optimization of Fe ₃ O ₄ nanozyme activity via single amino acid modification mimicking an enzyme active site. <i>Chemical Communications</i> , 2017, 53, 424-427. | 4.1 | 334 |
| 68 | Iron Oxide Nanozyme: A Multifunctional Enzyme Mimetic for Biomedical Applications. <i>Theranostics</i> , 2017, 7, 3207-3227. | 10.0 | 421 |
| 69 | Mn ²⁺ -coordinated PDA@DOX/PLGA nanoparticles as a smart theranostic agent for synergistic chemo-photothermal tumor therapy. <i>International Journal of Nanomedicine</i> , 2017, Volume 12, 3331-3345. | 6.7 | 78 |
| 70 | Nanozymes: an emerging field bridging nanotechnology and biology. <i>Science China Life Sciences</i> , 2016, 59, 400-402. | 4.9 | 214 |
| 71 | -Arginine Modifies the Exopolysaccharide Matrix and Thwarts <i>Streptococcus mutans</i> Outgrowth within Mixed-Species Oral Biofilms. <i>Journal of Bacteriology</i> , 2016, 198, 2651-2661. | 2.2 | 99 |
| 72 | Nanocatalysts promote <i>Streptococcus mutans</i> biofilm matrix degradation and enhance bacterial killing to suppress dental caries <i>in vivo</i> . <i>Biomaterials</i> , 2016, 101, 272-284. | 11.4 | 236 |

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|----|---|------|-----------|
| 73 | Effects of Nanoparticle Size on Multilayer Formation and Kinetics of Tethered Enzymes. <i>Bioconjugate Chemistry</i> , 2015, 26, 1931-1938. | 3.6 | 24 |
| 74 | Ferromagnetic nanoparticles with peroxidase-like activity enhance the cleavage of biological macromolecules for biofilm elimination. <i>Nanoscale</i> , 2014, 6, 2588-2593. | 5.6 | 213 |
| 75 | Human ferritin for tumor detection and therapy. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2013, 5, 287-298. | 6.1 | 66 |
| 76 | Sorting Short Fragments of Single-Stranded DNA with an Evolving Electric Double Layer. <i>Journal of Physical Chemistry B</i> , 2013, 117, 2267-2272. | 2.6 | 7 |
| 77 | Biomimicry Enhances Sequential Reactions of Tethered Glycolytic Enzymes, TPI and GAPDHS. <i>PLoS ONE</i> , 2013, 8, e61434. | 2.5 | 10 |
| 78 | Multistage Magnetic Separation of Microspheres Enabled by Temperature-Responsive Polymers. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 3041-3046. | 8.0 | 8 |
| 79 | Ex Vivo Detection of Iron Oxide Magnetic Nanoparticles in Mice Using Their Intrinsic Peroxidase-Mimicking Activity. <i>Molecular Pharmaceutics</i> , 2012, 9, 1983-1989. | 4.6 | 51 |
| 80 | Enzyme-Controlled Self-Assembly and Transformation of Nanostructures in a Tetramethylbenzidine/Horseradish Peroxidase/H ₂ O ₂ System. <i>ACS Nano</i> , 2011, 5, 6736-6742. | 14.6 | 53 |
| 81 | Separation of single-stranded DNA fragments at a 10-nucleotide resolution by stretching in microfluidic channels. <i>Lab on A Chip</i> , 2011, 11, 4036. | 6.0 | 8 |
| 82 | Mutation Screening Based on the Mechanical Properties of DNA Molecules Tethered to a Solid Surface. <i>Journal of Physical Chemistry B</i> , 2010, 114, 1064-1068. | 2.6 | 13 |
| 83 | Silica coating magnetic nanoparticle-based silver enhancement immunoassay for rapid electrical detection of ricin toxin. <i>Toxicol</i> , 2010, 55, 145-152. | 1.6 | 32 |
| 84 | A novel application of iron oxide nanoparticles for detection of hydrogen peroxide in acid rain. <i>Materials Letters</i> , 2008, 62, 3972-3974. | 2.6 | 36 |
| 85 | Label-Free Colorimetric Detection of Gelatinases on Nanoporous Silicon Photonic Films. <i>Analytical Chemistry</i> , 2008, 80, 1468-1473. | 6.5 | 58 |
| 86 | Magnetite Nanoparticle-Linked Immunosorbent Assay. <i>Journal of Physical Chemistry C</i> , 2008, 112, 17357-17361. | 3.1 | 146 |
| 87 | Separation of long DNA molecules through cleavage of hydrogen bonds under a stretching force. <i>Applied Physics Letters</i> , 2007, 91, . | 3.3 | 17 |
| 88 | Intrinsic peroxidase-like activity of ferromagnetic nanoparticles. <i>Nature Nanotechnology</i> , 2007, 2, 577-583. | 31.5 | 5,080 |
| 89 | Three-Dimensional Functionalized Tetrapod-like ZnO Nanostructures for Plasmid DNA Delivery. <i>Small</i> , 2006, 2, 621-625. | 10.0 | 124 |
| 90 | Carbon Nanotube Delivery of the GFP Gene into Mammalian Cells. <i>ChemBioChem</i> , 2006, 7, 239-242. | 2.6 | 156 |

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|----|--|-----|-----------|
| 91 | Anti-CD146 monoclonal antibody AA98 inhibits angiogenesis via suppression of nuclear factor- κ B activation. <i>Molecular Cancer Therapeutics</i> , 2006, 5, 2872-2878. | 4.1 | 54 |
| 92 | Enzyme-Like Property (Nanozyme) of Iron Oxide Nanoparticles. , 0, , . | | 3 |