

# Akhilesh Rai

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/168562/publications.pdf>

Version: 2024-02-01

28  
papers

5,574  
citations

516215

16  
h-index

552369

26  
g-index

28  
all docs

28  
docs citations

28  
times ranked

6811  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Antimicrobial peptide-based materials: opportunities and challenges. <i>Journal of Materials Chemistry B</i> , 2022, 10, 2384-2429.   | 2.9 | 47        |
| 2  | Antimicrobial Peptide-Tether Dressing Able to Enhance Wound Healing by Tissue Contact. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 24213-24228.   | 4.0 | 12        |
| 3  | Induced pluripotent stem cell-derived vascular networks to screen nano-bio interactions. <i>Nanoscale Horizons</i> , 2021, 6, 245-259.  | 4.1 | 7         |
| 4  | Biomedical applications of the peptide decorated gold nanoparticles. <i>Critical Reviews in Biotechnology</i> , 2021, 41, 186-215.  | 5.1 | 21        |
| 5  | Antimicrobial and pro-angiogenic properties of soluble and nanoparticle-immobilized LL37 peptides. <i>Biomaterials Science</i> , 2021, 9, 8153-8159.  | 2.6 | 16        |
| 6  | A light-triggerable formulation to control the stability of pro-angiogenic transcription factor hypoxia inducible factor-1 $\alpha$ (HIF-1 $\alpha$ ). <i>Nanoscale</i> , 2020, 12, 9935-9942.                        | 2.8 | 7         |
| 7  | Nanoparticle-Based Drug Delivery Systems: Promising Approaches Against Bacterial Infections. , 2019, , 605-633.   |     | 5         |
| 8  | Experimental Validation & Performance Analysis of 100kW Solar Photovoltaic System. , 2018, , .  |     | 0         |
| 9  | Cecropin-Melittin Functionalized Polyurethane Surfaces Prevent <i>Staphylococcus epidermidis</i> Adhesion without Inducing Platelet Adhesion and Activation. <i>Advanced Materials Interfaces</i> , 2018, 5, 1801390. | 1.9 | 14        |
| 10 | Atomistic-Level Investigation of a LL37-Conjugated Gold Nanoparticle By Well-Tempered Metadynamics. <i>Journal of Physical Chemistry B</i> , 2018, 122, 8359-8366.  | 1.2 | 12        |
| 11 | A nanoformulation for the preferential accumulation in adult neurogenic niches. <i>Journal of Controlled Release</i> , 2018, 284, 57-72.  | 4.8 | 30        |
| 12 | MicroRNA-124-loaded nanoparticles increase survival and neuronal differentiation of neural stem cells in vitro but do not contribute to stroke outcome in vivo. <i>PLoS ONE</i> , 2018, 13, e0193609.                 | 1.1 | 31        |
| 13 | Antimicrobial peptide-gold nanoscale therapeutic formulation with high skin regenerative potential. <i>Journal of Controlled Release</i> , 2017, 262, 58-71.  | 4.8 | 48        |
| 14 | Findings on the interaction of the antimicrobial peptide cecropin-melittin with a gold surface from molecular dynamics studies. <i>European Biophysics Journal</i> , 2017, 46, 247-256.                               | 1.2 | 8         |
| 15 | High Antimicrobial Activity and Low Human Cell Cytotoxicity of Core-Shell Magnetic Nanoparticles Functionalized with an Antimicrobial Peptide. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 11366-11378.  | 4.0 | 56        |
| 16 | High-density antimicrobial peptide coating with broad activity and low cytotoxicity against human cells. <i>Acta Biomaterialia</i> , 2016, 33, 64-77.   | 4.1 | 93        |
| 17 | One-step synthesis of high-density peptide-conjugated gold nanoparticles with antimicrobial efficacy in a systemic infection model. <i>Biomaterials</i> , 2016, 85, 99-110.   | 5.7 | 127       |
| 18 | Fabrication, characterisation and performance of hydrophilic and super-hydrophilic silica as cell culture surfaces. <i>Journal of Materials Chemistry</i> , 2012, 22, 12141.  | 6.7 | 9         |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Mussel adhesive protein inspired coatings: a versatile method to fabricate silica films on various surfaces. <i>Journal of Materials Chemistry</i> , 2012, 22, 4790.  | 6.7  | 29        |
| 20 | Entrapment of commercially important invertase in silica particles at physiological pH and the effect of pH and temperature on enzyme activity. <i>Materials Science and Engineering C</i> , 2012, 32, 785-789. | 3.8  | 13        |
| 21 | Antibiotic mediated synthesis of gold nanoparticles with potent antimicrobial activity and their application in antimicrobial coatings. <i>Journal of Materials Chemistry</i> , 2010, 20, 6789.                 | 6.7  | 368       |
| 22 | Facile Fabrication of Uniform Silica Films with Tunable Physical Properties Using Silicatein Protein from Sponges. <i>Langmuir</i> , 2010, 26, 4152-4159.   | 1.6  | 46        |
| 23 | Fabrication of Tuneable Thickness Silica Films on Solid Surfaces Using Amines and Proteins. <i>Silicon</i> , 2009, 1, 91-101.   | 1.8  | 10        |
| 24 | Synthesis of triangular Au core@Ag shell nanoparticles. <i>Materials Research Bulletin</i> , 2007, 42, 1212-1220.   | 2.7  | 71        |
| 25 | Role of Halide Ions and Temperature on the Morphology of Biologically Synthesized Gold Nanotriangles. <i>Langmuir</i> , 2006, 22, 736-741.  | 1.6  | 393       |
| 26 | Controlling the Optical Properties of Lemongrass Extract Synthesized Gold Nanotriangles and Potential Application in Infrared-Absorbing Optical Coatings. <i>Chemistry of Materials</i> , 2005, 17, 566-572.    | 3.2  | 563       |
| 27 | Biological synthesis of triangular gold nanoprisms. <i>Nature Materials</i> , 2004, 3, 482-488.   | 13.3 | 1,409     |
| 28 | Rapid synthesis of Au, Ag, and bimetallic Au core@Ag shell nanoparticles using Neem ( <i>Azadirachta</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5  | 5.0  | 2,129     |