# Daniel J Siegwart

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9011367/publications.pdf

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|---|---|---|---|
| 62 papers | 8,406 citations | 81900 39 h-index | 128289 60 g-index |
| 65 all docs | 65 docs citations | 65 times ranked | 9500 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Lipid nanoparticle chemistry determines how nucleoside base modifications alter mRNA delivery. Journal of Controlled Release, 2022, 341, 206-214. | 9.9 | 27 |
| 2 | InÂvivo CRISPR screening identifies BAZ2 chromatin remodelers as druggable regulators of mammalian liver regeneration. Cell Stem Cell, 2022, 29, 372-385.e8. | 11.1 | 18 |
| 3 | Optimization of phospholipid chemistry for improved lipid nanoparticle (LNP) delivery of messenger RNA (mRNA). Biomaterials Science, 2022, 10, 549-559. | 5.4 | 56 |
| 4 | Disrupting off-target Cas9 activity in the liver. Nature Biomedical Engineering, 2022, 6, 106-107. | 22.5 | 4 |
| 5 | Enhancing CRISPR/Cas gene editing through modulating cellular mechanical properties for cancer therapy. Nature Nanotechnology, 2022, 17, 777-787. | 31.5 | 80 |
| 6 | Next-Generation Diprovocims with Potent Human and Murine TLR1/TLR2 Agonist Activity That Activate the Innate and Adaptive Immune Response. Journal of Medicinal Chemistry, 2022, 65, 9230-9252. | 6.4 | 2 |
| 7 | PEI fluorination reduces toxicity and promotes liver-targeted siRNA delivery. Drug Delivery and Translational Research, 2021, 11, 255-260. | 5.8 | 46 |
| 8 | A Systematic Study of Unsaturation in Lipid Nanoparticles Leads to Improved mRNA Transfection In Vivo. Angewandte Chemie - International Edition, 2021, 60, 5848-5853. | 13.8 | 60 |
| 9 | A Systematic Study of Unsaturation in Lipid Nanoparticles Leads to Improved mRNA Transfection In Vivo. Angewandte Chemie, 2021, 133, 5912-5917. | 2.0 | 11 |
| 10 | Membrane-destabilizing ionizable phospholipids for organ-selective mRNA delivery and CRISPRâ€“Cas gene editing. Nature Materials, 2021, 20, 701-710. | 27.5 | 281 |
| 11 | Allâ€inâ€One Dendrimerâ€Based Lipid Nanoparticles Enable Precise HDRâ€Mediated Gene Editing In Vivo. Advanced Materials, 2021, 33, e2006619. | 21.0 | 52 |
| 12 | TRIM7 inhibits enterovirus replication and promotes emergence of a viral variant with increased pathogenicity. Cell, 2021, 184, 3410-3425.e17. | 28.9 | 35 |
| 13 | Recent advances in the targeted fluorescent probes for the detection of metastatic bone cancer. Science China Chemistry, 2021, 64, 1283-1296. | 8.2 | 7 |
| 14 | On the mechanism of tissue-specific mRNA delivery by selective organ targeting nanoparticles. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 7.1 | 285 |
| 15 | Zwitterionic Phospholipidation of Cationic Polymers Facilitates Systemic mRNA Delivery to Spleen and Lymph Nodes. Journal of the American Chemical Society, 2021, 143, 21321-21330. | 13.7 | 66 |
| 16 | Delivery of Tissue-Targeted Scalpels: Opportunities and Challenges for In Vivo CRISPR/Cas-Based Genome Editing. ACS Nano, 2020, 14, 9243-9262. | 14.6 | 69 |
| 17 | Systemic nanoparticle delivery of CRISPR-Cas9 ribonucleoproteins for effective tissue specific genome editing. Nature Communications, 2020, 11, 3232. | 12.8 | 328 |
| 18 | Theranostic dendrimer-based lipid nanoparticles containing PEGylated BODIPY dyes for tumor imaging and systemic mRNA delivery in vivo. Journal of Controlled Release, 2020, 325, 198-205. | 9.9 | 59 |

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|---|---|---|---|
| 19 | Lipidâ€Modified Aminoglycosides for mRNA Delivery to the Liver. Advanced Healthcare Materials, 2020, 9, e1901487. | 7.6 | 25 |
| 20 | Hydrophobic Domain Structure of Linear-Dendritic Poly(ethylene glycol) Lipids Affects RNA Delivery of Lipid Nanoparticles. Molecular Pharmaceutics, 2020, 17, 1575-1585. | 4.6 | 17 |
| 21 | Selective organ targeting (SORT) nanoparticles for tissue-specific mRNA delivery and CRISPRâ€“Cas gene editing. Nature Nanotechnology, 2020, 15, 313-320. | 31.5 | 932 |
| 22 | Degradable redox-responsive disulfide-based nanogel drug carriers via dithiol oxidation polymerization. Biomaterials Science, 2019, 7, 607-617. | 5.4 | 41 |
| 23 | Strategies, design, and chemistry in siRNA delivery systems. Advanced Drug Delivery Reviews, 2019, 144, 133-147. | 13.7 | 330 |
| 24 | The Polyploid State Plays a Tumor-Suppressive Role in the Liver. Developmental Cell, 2018, 44, 447-459.e5. | 7.0 | 125 |
| 25 | Translational research to enable personalized treatment of cystic fibrosis. Journal of Cystic Fibrosis, 2018, 17, S46-S51. | 0.7 | 18 |
| 26 | Development of Cationic Quaternary Ammonium Sulfonamide Amino Lipids for Nucleic Acid Delivery. ACS Applied Materials & Interfaces, 2018, 10, 2302-2311. | 8.0 | 32 |
| 27 | Knockdown of Anillin Actin Binding Protein Blocks Cytokinesis in Hepatocytes and Reduces Liver Tumor Development in Mice Without Affecting Regeneration. Gastroenterology, 2018, 154, 1421-1434. | 1.3 | 88 |
| 28 | Tumor-Activated Water-Soluble Photosensitizers for Near-Infrared Photodynamic Cancer Therapy. ACS Applied Materials & Interfaces, 2018, 10, 16335-16343. | 8.0 | 85 |
| 29 | Dendrimerâ€Based Lipid Nanoparticles Deliver Therapeutic FAH mRNA to Normalize Liver Function and Extend Survival in a Mouse Model of Hepatorenal Tyrosinemia Type I. Advanced Materials, 2018, 30, e1805308. | 21.0 | 136 |
| 30 | Design of synthetic materials for intracellular delivery of RNAs: From siRNA-mediated gene silencing to CRISPR/Cas gene editing. Nano Research, 2018, 11, 5310-5337. | 10.4 | 31 |
| 31 | Adjuvant effect of the novel TLR1/TLR2 agonist Diprovocim synergizes with antiâ€“PD-L1 to eliminate melanoma in mice. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8698-E8706. | 7.1 | 77 |
| 32 | HDAC inhibitor conjugated polymeric prodrug micelles for doxorubicin delivery. Journal of Materials Chemistry B, 2017, 5, 2106-2114. | 5.8 | 18 |
| 33 | Highâ€Contrast Fluorescence Detection of Metastatic Breast Cancer Including Bone and Liver Micrometastases via Sizeâ€Controlled pHâ€Activatable Waterâ€Soluble Probes. Advanced Materials, 2017, 29, 1700131. | 21.0 | 65 |
| 34 | Aerosol delivery of stabilized polyester-siRNA nanoparticles to silence gene expression in orthotopic lung tumors. Biomaterials, 2017, 118, 84-93. | 11.4 | 60 |
| 35 | Gpr132 sensing of lactate mediates tumorâ€“macrophage interplay to promote breast cancer metastasis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 580-585. | 7.1 | 296 |
| 36 | Nonâ€Viral CRISPR/Cas Gene Editing In Vitro and In Vivo Enabled by Synthetic Nanoparticle Coâ€Delivery of Cas9 mRNA and sgRNA. Angewandte Chemie, 2017, 129, 1079-1083. | 2.0 | 41 |

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| 37 | Nonâ€Viral CRISPR/Cas Gene Editing In Vitro and In Vivo Enabled by Synthetic Nanoparticle Coâ€Delivery of Cas9 mRNA and sgRNA. Angewandte Chemie - International Edition, 2017, 56, 1059-1063. | 13.8 | 411 |
| 38 | Systemic mRNA Delivery to the Lungs by Functional Polyester-based Carriers. Biomacromolecules, 2017, 18, 4307-4315. | 5.4 | 80 |
| 39 | Functional polyesters enable selective siRNA delivery to lung cancer over matched normal cells. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5702-E5710. | 7.1 | 67 |
| 40 | Intercalation-mediated nucleic acid nanoparticles for siRNA delivery. Chemical Communications, 2016, 52, 12155-12158. | 4.1 | 11 |
| 41 | Progress towards the Synthesis of Amino Polyesters via Ring-Opening Polymerization (ROP) of Functional Lactones. Synlett, 2016, 27, 2285-2292. | 1.8 | 10 |
| 42 | Activatable Water-Soluble Probes Enhance Tumor Imaging by Responding to Dysregulated pH and Exhibiting High Tumor-to-Liver Fluorescence Emission Contrast. Bioconjugate Chemistry, 2016, 27, 1737-1744. | 3.6 | 53 |
| 43 | Modular degradable dendrimers enable small RNAs to extend survival in an aggressive liver cancer model. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 520-525. | 7.1 | 125 |
| 44 | Biocompatible organic charge transfer complex nanoparticles based on a semi-crystalline cellulose template. Chemical Communications, 2015, 51, 11868-11871. | 4.1 | 15 |
| 45 | Rapid Synthesis of a Lipocationic Polyester Library via Ring-Opening Polymerization of Functional Valerolactones for Efficacious siRNA Delivery. Journal of the American Chemical Society, 2015, 137, 9206-9209. | 13.7 | 88 |
| 46 | One-pot synthesis of functional poly(amino ester sulfide)s and utility in delivering pDNA and siRNA. Polymer, 2015, 72, 271-280. | 3.8 | 14 |
| 47 | Tumor Imaging Based on Photon Upconversion of Pt(II) Porphyrin Rhodamine Co-modified NIR Excitable Cellulose Enhanced by Aggregation. ACS Biomaterials Science and Engineering, 2015, 1, 1206-1210. | 5.2 | 32 |
| 48 | Precise let-7 expression levels balance organ regeneration against tumor suppression. ELife, 2015, 4, e09431. | 6.0 | 53 |
| 49 | Lipopeptide nanoparticles for potent and selective siRNA delivery in rodents and nonhuman primates. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3955-3960. | 7.1 | 366 |
| 50 | Scalable synthesis and derivation of functional polyesters bearing ene and epoxide side chains. Polymer Chemistry, 2014, 5, 1362-1371. | 3.9 | 29 |
| 51 | Automated ARGET ATRP Accelerates Catalyst Optimization for the Synthesis of Thiol-Functionalized Polymers. Macromolecules, 2012, 45, 1254-1261. | 4.8 | 42 |
| 52 | ATRP in the design of functional materials for biomedical applications. Progress in Polymer Science, 2012, 37, 18-37. | 24.7 | 506 |
| 53 | Combinatorial synthesis of chemically diverse core-shell nanoparticles for intracellular delivery. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12996-13001. | 7.1 | 178 |
| 54 | Regulating Foreign-Body Responses: Development of Cationic Polymer Coatings to Regulate Foreign-Body Responses (Adv. Mater. 24/2011). Advanced Materials, 2011, 23, H129-H129. | 21.0 | 0 |

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|---|---|---|---|
| 55 | Cellular Uptake of Functional Nanogels Prepared by Inverse Miniemulsion ATRP with Encapsulated Proteins, Carbohydrates, and Gold Nanoparticles. Biomacromolecules, 2009, 10, 2300-2309. | 5.4 | 92 |
| 56 | Biotinâ€; Pyreneâ€; and GRGDSâ€Functionalized Polymers and Nanogels via ATRP and End Group Modification. Macromolecular Chemistry and Physics, 2008, 209, 2179-2193. | 2.2 | 60 |
| 57 | Synthesis, characterization, and in vitro cell culture viability of degradable poly(Nâ€isopropylacrylamideâ€coâ€5,6â€benzoâ€2â€methyleneâ€1,3â€dioxepane)â€based polymers and crosslinked gels. Journal of Biomedical Materials Research - Part A, 2008, 87A, 345-358. | 4.8 | 62 |
| 58 | The development of microgels/nanogels for drug delivery applications. Progress in Polymer Science, 2008, 33, 448-477. | 24.7 | 1,419 |
| 59 | Synthesis and Biodegradation of Nanogels as Delivery Carriers for Carbohydrate Drugs. Biomacromolecules, 2007, 8, 3326-3331. | 5.4 | 156 |
| 60 | Biodegradable Nanogels Prepared by Atom Transfer Radical Polymerization as Potential Drug Delivery Carriers:Â Synthesis, Biodegradation, in Vitro Release, and Bioconjugation. Journal of the American Chemical Society, 2007, 129, 5939-5945. | 13.7 | 449 |
| 61 | Synthesis and Characterization of Styrene/Butyl Acrylate Linear and Star Block Copolymers via Atom Transfer Radical Polymerization. Macromolecular Chemistry and Physics, 2006, 207, 801-811. | 2.2 | 33 |
| 62 | Polystyrene with Designed Molecular Weight Distribution by Atom Transfer Radical Coupling. Macromolecules, 2004, 37, 3120-3127. | 4.8 | 152 |