

Anton Simeonov

List of Publications by Year in descending order

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Version: 2024-02-01

58
papers

4,347
citations

186265

28
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155660

55
g-index

68
all docs

68
docs citations

68
times ranked

7720
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Quantitative high-throughput screening: A titration-based approach that efficiently identifies biological activities in large chemical libraries. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11473-11478. | 7.1 | 733 |
| 2 | Identification of small-molecule inhibitors of Zika virus infection and induced neural cell death via a drug repurposing screen. Nature Medicine, 2016, 22, 1101-1107. | 30.7 | 581 |
| 3 | High-throughput combinatorial screening identifies drugs that cooperate with ibrutinib to kill activated B-cell-like diffuse large B-cell lymphoma cells. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2349-2354. | 7.1 | 355 |
| 4 | Modelling the Tox21 10 ⁴ chemical profiles for in vivo toxicity prediction and mechanism characterization. Nature Communications, 2016, 7, 10425. | 12.8 | 202 |
| 5 | Complementarity Between a Docking and a High-Throughput Screen in Discovering New Cruzain Inhibitors. Journal of Medicinal Chemistry, 2010, 53, 4891-4905. | 6.4 | 199 |
| 6 | Selective and Cell-Active Inhibitors of the USP1/ UAF1 Deubiquitinase Complex Reverse Cisplatin Resistance in Non-small Cell Lung Cancer Cells. Chemistry and Biology, 2011, 18, 1390-1400. | 6.0 | 183 |
| 7 | Emetine inhibits Zika and Ebola virus infections through two molecular mechanisms: inhibiting viral replication and decreasing viral entry. Cell Discovery, 2018, 4, 31. | 6.7 | 128 |
| 8 | A Robotic Platform for Quantitative High-Throughput Screening. Assay and Drug Development Technologies, 2008, 6, 637-657. | 1.2 | 126 |
| 9 | Genomic and protein expression analysis reveals flap endonuclease 1 (FEN1) as a key biomarker in breast and ovarian cancer. Molecular Oncology, 2014, 8, 1326-1338. | 4.6 | 109 |
| 10 | Discovery and Optimization of Potent, Cell-Active Pyrazole-Based Inhibitors of Lactate Dehydrogenase (LDH). Journal of Medicinal Chemistry, 2017, 60, 9184-9204. | 6.4 | 98 |
| 11 | AlphaScreen-Based Assays: Ultra-High-Throughput Screening for Small-Molecule Inhibitors of Challenging Enzymes and Protein-Protein Interactions. Methods in Molecular Biology, 2016, 1439, 77-98. | 0.9 | 96 |
| 12 | Structural Basis for KDM5A Histone Lysine Demethylase Inhibition by Diverse Compounds. Cell Chemical Biology, 2016, 23, 769-781. | 5.2 | 80 |
| 13 | Synergistic and Antagonistic Drug Combinations against SARS-CoV-2. Molecular Therapy, 2021, 29, 873-885. | 8.2 | 78 |
| 14 | First Selective 12-LOX Inhibitor, ML355, Impairs Thrombus Formation and Vessel Occlusion In Vivo With Minimal Effects on Hemostasis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 1828-1839. | 2.4 | 76 |
| 15 | Recent developments in the use of differential scanning fluorometry in protein and small molecule discovery and characterization. Expert Opinion on Drug Discovery, 2013, 8, 1071-1082. | 5.0 | 75 |
| 16 | The SARS-CoV-2 Cytopathic Effect Is Blocked by Lysosome Alkalinizing Small Molecules. ACS Infectious Diseases, 2021, 7, 1389-1408. | 3.8 | 74 |
| 17 | A versatile polypharmacology platform promotes cytoprotection and viability of human pluripotent and differentiated cells. Nature Methods, 2021, 18, 528-541. | 19.0 | 72 |
| 18 | KDM4/JMJD2 Histone Demethylase Inhibitors Block Prostate Tumor Growth by Suppressing the Expression of AR and BMYB-Regulated Genes. Chemistry and Biology, 2015, 22, 1185-1196. | 6.0 | 66 |

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|----|---|------|-----------|
| 19 | Discovery of Orally Bioavailable, Quinoline-Based Aldehyde Dehydrogenase 1A1 (ALDH1A1) Inhibitors with Potent Cellular Activity. <i>Journal of Medicinal Chemistry</i> , 2018, 61, 4883-4903. | 6.4 | 61 |
| 20 | Assessing inhibitors of mutant isocitrate dehydrogenase using a suite of pre-clinical discovery assays. <i>Scientific Reports</i> , 2017, 7, 12758. | 3.3 | 59 |
| 21 | Design, Synthesis, and Biological Evaluation of Quinazolin-4-one-Based Hydroxamic Acids as Dual PI3K/HDAC Inhibitors. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 4256-4292. | 6.4 | 59 |
| 22 | Discovery of NCT-501, a Potent and Selective Theophylline-Based Inhibitor of Aldehyde Dehydrogenase 1A1 (ALDH1A1). <i>Journal of Medicinal Chemistry</i> , 2015, 58, 5967-5978. | 6.4 | 52 |
| 23 | Novel Consensus Architecture To Improve Performance of Large-Scale Multitask Deep Learning QSAR Models. <i>Journal of Chemical Information and Modeling</i> , 2019, 59, 4613-4624. | 5.4 | 47 |
| 24 | Discovery of TMPRSS2 Inhibitors from Virtual Screening as a Potential Treatment of COVID-19. <i>ACS Pharmacology and Translational Science</i> , 2021, 4, 1124-1135. | 4.9 | 40 |
| 25 | Biochemical and Cellular Characterization and Inhibitor Discovery of <i>Pseudomonas aeruginosa</i> 15-Lipoxygenase. <i>Biochemistry</i> , 2016, 55, 3329-3340. | 2.5 | 39 |
| 26 | <i>Assay Guidance Manual</i> : Quantitative Biology and Pharmacology in Preclinical Drug Discovery. <i>Clinical and Translational Science</i> , 2018, 11, 461-470. | 3.1 | 38 |
| 27 | Large-Scale Modeling of Multispecies Acute Toxicity End Points Using Consensus of Multitask Deep Learning Methods. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 653-663. | 5.4 | 35 |
| 28 | Robotic high-throughput biomanufacturing and functional differentiation of human pluripotent stem cells. <i>Stem Cell Reports</i> , 2021, 16, 3076-3092. | 4.8 | 34 |
| 29 | Canvass: A Crowd-Sourced, Natural-Product Screening Library for Exploring Biological Space. <i>ACS Central Science</i> , 2018, 4, 1727-1741. | 11.3 | 32 |
| 30 | Pyrazole-Based Lactate Dehydrogenase Inhibitors with Optimized Cell Activity and Pharmacokinetic Properties. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 10984-11011. | 6.4 | 30 |
| 31 | Critical Assessment of Artificial Intelligence Methods for Prediction of hERG Channel Inhibition in the "Big Data" Era. <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 6007-6019. | 5.4 | 29 |
| 32 | Synthesis and SAR studies of 5-(pyridin-4-yl)-1,3,4-thiadiazol-2-amine derivatives as potent inhibitors of Bloom helicase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013, 23, 5660-5666. | 2.2 | 28 |
| 33 | Structure-Based Engineering of Irreversible Inhibitors against Histone Lysine Demethylase KDM5A. <i>Journal of Medicinal Chemistry</i> , 2018, 61, 10588-10601. | 6.4 | 28 |
| 34 | Identification of ML251, a Potent Inhibitor of <i>T. brucei</i> and <i>T. cruzi</i> Phosphofructokinase. <i>ACS Medicinal Chemistry Letters</i> , 2014, 5, 12-17. | 2.8 | 27 |
| 35 | Mining of high throughput screening database reveals AP-1 and autophagy pathways as potential targets for COVID-19 therapeutics. <i>Scientific Reports</i> , 2021, 11, 6725. | 3.3 | 25 |
| 36 | A Universal and High-Throughput Proteomics Sample Preparation Platform. <i>Analytical Chemistry</i> , 2021, 93, 8423-8431. | 6.5 | 24 |

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|----|---|------|-----------|
| 37 | Discovery and optimization of piperazine-1-thiourea-based human phosphoglycerate dehydrogenase inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2018, 26, 1727-1739. | 3.0 | 23 |
| 38 | Connecting Neuronal Cell Protective Pathways and Drug Combinations in a Huntington's Disease Model through the Application of Quantitative Systems Pharmacology. <i>Scientific Reports</i> , 2017, 7, 17803. | 3.3 | 22 |
| 39 | Concise Review: Modeling Central Nervous System Diseases Using Induced Pluripotent Stem Cells. <i>Stem Cells Translational Medicine</i> , 2014, 3, 1418-1428. | 3.3 | 21 |
| 40 | SCAM Detective: Accurate Predictor of Small, Colloidally Aggregating Molecules. <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 4056-4063. | 5.4 | 21 |
| 41 | A potent and selective inhibitor targeting human and murine 12/15-LOX. <i>Bioorganic and Medicinal Chemistry</i> , 2016, 24, 1183-1190. | 3.0 | 15 |
| 42 | Application of niclosamide and analogs as small molecule inhibitors of Zika virus and SARS-CoV-2 infection. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2021, 40, 127906. | 2.2 | 15 |
| 43 | Kinetic and structural investigations of novel inhibitors of human epithelial 15-lipoxygenase-2. <i>Bioorganic and Medicinal Chemistry</i> , 2021, 46, 116349. | 3.0 | 15 |
| 44 | Structure-activity relationship studies and biological characterization of human NAD ⁺ -dependent 15-hydroxyprostaglandin dehydrogenase inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 630-635. | 2.2 | 13 |
| 45 | The Toxmatrix: Chemo-Genomic Profiling Identifies Interactions That Reveal Mechanisms of Toxicity. <i>Chemical Research in Toxicology</i> , 2018, 31, 127-136. | 3.3 | 12 |
| 46 | Discovery and Optimization of 2-H ¹ -Pyridin-2-one Inhibitors of Mutant Isocitrate Dehydrogenase 1 for the Treatment of Cancer. <i>Journal of Medicinal Chemistry</i> , 2021, 64, 4913-4946. | 6.4 | 12 |
| 47 | FEN1 Blockade for Platinum Chemo-Sensitization and Synthetic Lethality in Epithelial Ovarian Cancers. <i>Cancers</i> , 2021, 13, 1866. | 3.7 | 12 |
| 48 | Mapping biologically active chemical space to accelerate drug discovery. <i>Nature Reviews Drug Discovery</i> , 2019, 18, 83-84. | 46.4 | 11 |
| 49 | Identification of environmental chemicals that activate p53 signaling after in vitro metabolic activation. <i>Archives of Toxicology</i> , 2022, 96, 1975-1987. | 4.2 | 10 |
| 50 | Insights into the Action of Inhibitor Enantiomers against Histone Lysine Demethylase 5A. <i>Journal of Medicinal Chemistry</i> , 2018, 61, 3193-3208. | 6.4 | 9 |
| 51 | Modulation of Triple Artemisinin-Based Combination Therapy Pharmacodynamics by <i>Plasmodium falciparum</i> Genotype. <i>ACS Pharmacology and Translational Science</i> , 2020, 3, 1144-1157. | 4.9 | 8 |
| 52 | An Integrated Systems Biology Approach Identifies the Proteasome as A Critical Host Machinery for ZIKV and DENV Replication. <i>Genomics, Proteomics and Bioinformatics</i> , 2021, 19, 108-122. | 6.9 | 7 |
| 53 | A systems approach to enable effective team science from the internal research program of the National Center for Advancing Translational Sciences. <i>Journal of Clinical and Translational Science</i> , 2021, 5, e163. | 0.6 | 6 |
| 54 | Hybrid <i>In Silico</i> Approach Reveals Novel Inhibitors of Multiple SARS-CoV-2 Variants. <i>ACS Pharmacology and Translational Science</i> , 2021, 4, 1675-1688. | 4.9 | 6 |

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|----|---|-----|-----------|
| 55 | Discovery and Optimization of Pyrrolopyrimidine Derivatives as Selective Disruptors of the Perinucleolar Compartment, a Marker of Tumor Progression toward Metastasis. <i>Journal of Medicinal Chemistry</i> , 2022, 65, 8303-8331. | 6.4 | 4 |
| 56 | Inside Cover: A Highly Potent and Selective Caspase-1 Inhibitor that Utilizes a Key 3-Cyanopropanoic Acid Moiety (ChemMedChem 5/2010). <i>ChemMedChem</i> , 2010, 5, 634-634. | 3.2 | 0 |
| 57 | Chemically Defined Neural Conversion of Human Pluripotent Stem Cells. <i>Methods in Molecular Biology</i> , 2019, 1919, 59-72. | 0.9 | 0 |
| 58 | Identification of hit compounds with anti-schistosomal activity on in vitro generated juvenile worms in cell-free medium. <i>PLoS Neglected Tropical Diseases</i> , 2021, 15, e0009432. | 3.0 | 0 |