

# Visvaldas Kairys

## List of Publications by Year in descending order

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Version: 2024-02-01

58  
papers

2,135  
citations

377584

21  
h-index

263392

45  
g-index

60  
all docs

60  
docs citations

60  
times ranked

3104  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Polyester Dendrimers Based on Bis-MPA for Doxorubicin Delivery. <i>Biomacromolecules</i> , 2022, 23, 20-33.   | 2.6 | 5         |
| 2  | Beta and Gamma Amino Acid-Substituted Benzenesulfonamides as Inhibitors of Human Carbonic Anhydrases. <i>Pharmaceuticals</i> , 2022, 15, 477.   | 1.7 | 5         |
| 3  | Enhanced nucleosome assembly at CpG sites containing an extended 5-methylcytosine analogue. <i>Nucleic Acids Research</i> , 2022, 50, 6549-6561.  | 6.5 | 5         |
| 4  | Structure and mechanism of secondary sulfonamide binding to carbonic anhydrases. <i>European Biophysics Journal</i> , 2021, 50, 993-1011.   | 1.2 | 5         |
| 5  | Biphenyl substituted lysine derivatives as recognition elements for the matrix metalloproteinases MMP-2 and MMP-9. <i>Bioorganic Chemistry</i> , 2021, 115, 105155.   | 2.0 | 7         |
| 6  | Template-based modeling of diverse protein interactions in CAPRI rounds 38-45. <i>Proteins: Structure, Function and Bioinformatics</i> , 2020, 88, 939-947.   | 1.5 | 3         |
| 7  | Isoform-Selective Enzyme Inhibitors by Exploring Pocket Size According to the Lock-and-Key Principle. <i>Biophysical Journal</i> , 2020, 119, 1513-1524.  | 0.2 | 6         |
| 8  | The hydrolysis of indoxyl acetate: A versatile reaction to assay carbonic anhydrase activity by high-throughput screening. <i>Enzyme and Microbial Technology</i> , 2020, 139, 109584.                                    | 1.6 | 3         |
| 9  | Recent Developments in Medicinal Chemistry of Allosteric Activators of Human Glucokinase for Type 2 Diabetes Mellitus Therapeutics. <i>Current Pharmaceutical Design</i> , 2020, 26, 2510-2552.                           | 0.9 | 19        |
| 10 | Mycobacterium tuberculosis $\hat{I}^2$ -Carbonic Anhydrases: Novel Targets for Developing Antituberculosis Drugs. <i>International Journal of Molecular Sciences</i> , 2019, 20, 5153.                                    | 1.8 | 28        |
| 11 | Engineered Carbonic Anhydrase VI-Mimic Enzyme Switched the Structure and Affinities of Inhibitors. <i>Scientific Reports</i> , 2019, 9, 12710.  | 1.6 | 5         |
| 12 | In Silico Modeling of Inhibitor Binding to Carbonic Anhydrases. , 2019, , 215-232.  |     | 0         |
| 13 | Binding affinity in drug design: experimental and computational techniques. <i>Expert Opinion on Drug Discovery</i> , 2019, 14, 755-768.  | 2.5 | 75        |
| 14 | Benzimidazole design, synthesis, and docking to build selective carbonic anhydrase VA inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2018, 26, 675-687.  | 1.4 | 11        |
| 15 | Molecular basis for potentiation of Cx36 gap junction channel conductance by <i>n</i> -alcohols and general anesthetics. <i>Bioscience Reports</i> , 2018, 38, .  | 1.1 | 6         |
| 16 | Genome scale metabolic models as tools for drug design and personalized medicine. <i>PLoS ONE</i> , 2018, 13, e0190636.   | 1.1 | 35        |
| 17 | Acetylcholine molecular arrays enable quantum information processing. <i>Chemical Physics Letters</i> , 2017, 684, 39-43.   | 1.2 | 0         |
| 18 | Fluorinated benzenesulfonamide anticancer inhibitors of carbonic anhydrase IX exhibit lower toxic effects on zebrafish embryonic development than ethoxzolamide. <i>Drug and Chemical Toxicology</i> , 2017, 40, 309-319. | 1.2 | 13        |

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|----|--|-----|-----------|
| 19 | Predicting Isoform-specific Binding Selectivities of Benzenesulfonamides Using QSAR and 3D-QSAR. <i>Current Computer-Aided Drug Design</i> , 2017, 13, 75-83.  | 0.8 | 2         |
| 20 | Spintronic characteristics of self-assembled neurotransmitter acetylcholine molecular complexes enable quantum information processing in neural networks and brain. <i>Chemical Physics Letters</i> , 2016, 660, 189-198.                  | 1.2 | 2         |
| 21 | <i>COD::CIF::Parser</i>: an error-correcting CIF parser for the Perl language. <i>Journal of Applied Crystallography</i> , 2016, 49, 292-301.  | 1.9 | 139       |
| 22 | Synthesis and antiproliferative activity of Î±-branched Î±,Î²-unsaturated ketones in human hematological and solid cancer cell lines. <i>European Journal of Medicinal Chemistry</i> , 2015, 98, 30-48.                                    | 2.6 | 6         |
| 23 | CLEA-Based Immobilization of Methylotropic Yeast Alcohol Oxidase: Influence on Storage Stability and Reaction Efficiency. <i>Organic Process Research and Development</i> , 2015, 19, 2025-2033.   | 1.3 | 7         |
| 24 | Comparison of performance of docking, LIE, metadynamics and QSAR in predicting binding affinity of benzenesulfonamides. <i>Current Computer-Aided Drug Design</i> , 2015, 11, 237-244.   | 0.8 | 2         |
| 25 | Saccharin Sulfonamides as Inhibitors of Carbonic Anhydrases I, II, VII, XII, and XIII. <i>BioMed Research International</i> , 2014, 2014, 1-9.   | 0.9 | 9         |
| 26 | Monoclonal antibodies raised against 167â€“180 aa sequence of human carbonic anhydrase XII inhibit its enzymatic activity. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2014, 29, 804-810.                                | 2.5 | 15        |
| 27 | Conformational Analysis of Processivity Clamps in Solution Demonstrates that Tertiary Structure Does Not Correlate with Protein Dynamics. <i>Structure</i> , 2014, 22, 572-581.  | 1.6 | 30        |
| 28 | Discovery and Characterization of Novel Selective Inhibitors of Carbonic Anhydrase IX. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 9435-9446.  | 2.9 | 72        |
| 29 | Intrinsic Thermodynamics and Structure Correlation of Benzenesulfonamides with a Pyrimidine Moiety Binding to Carbonic Anhydrases I, II, VII, XII, and XIII. <i>PLoS ONE</i> , 2014, 9, e114106.   | 1.1 | 19        |
| 30 | Structural and functional analysis of rare missense mutations in human chorionic gonadotrophin Î²-subunit. <i>Molecular Human Reproduction</i> , 2012, 18, 379-390.  | 1.3 | 21        |
| 31 | Insight into the role of N,N-dimethylaminoethyl methacrylate (DMAEMA) conjugation onto poly(ethylenimine): cell viability and gene transfection studies. <i>Journal of Materials Science: Materials in Medicine</i> , 2012, 23, 2967-2980. | 1.7 | 21        |
| 32 | Interaction of antimicrobial peptides, BP100 and pepR, with model membrane systems as explored by brownian dynamics simulations on a coarse-grained model. <i>Biopolymers</i> , 2012, 98, 294-312.   | 1.2 | 7         |
| 33 | Enantioseparation and chiral recognition mechanism of new chiral derivatives of xanthenes on macrocyclic antibiotic stationary phases. <i>Journal of Chromatography A</i> , 2012, 1241, 60-68.   | 1.8 | 48        |
| 34 | Design of [(2-pyrimidinylthio)acetyl]benzenesulfonamides as inhibitors of human carbonic anhydrases. <i>European Journal of Medicinal Chemistry</i> , 2012, 51, 259-270.   | 2.6 | 33        |
| 35 | Evaluating the Substrate-Envelope Hypothesis: Structural Analysis of Novel HIV-1 Protease Inhibitors Designed To Be Robust against Drug Resistance. <i>Journal of Virology</i> , 2010, 84, 5368-5378.                                      | 1.5 | 104       |
| 36 | Study on the cyclization of 6-arylethynylpyrimidine-5-carbaldehydes with tert-butylamine: microwave versus thermal preparation of pyrido[4,3-d]pyrimidines. <i>Tetrahedron</i> , 2009, 65, 5752-5759.                                      | 1.0 | 17        |

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|----|--|-----|-----------|
| 37 | Quantitative Structure–Activity Relationship Models with Receptor–Dependent Descriptors for Predicting Peroxisome Proliferator–Activated Receptor Activities of Thiazolidinedione and Oxazolidinedione Derivatives. <i>Chemical Biology and Drug Design</i> , 2009, 73, 428-441. | 1.5 | 4         |
| 38 | Toward the Design of Mutation–Resistant Enzyme Inhibitors: Further Evaluation of the Substrate Envelope Hypothesis. <i>Chemical Biology and Drug Design</i> , 2009, 74, 234-245.   | 1.5 | 20        |
| 39 | HIV-1 Protease Inhibitors from Inverse Design in the Substrate Envelope Exhibit Subnanomolar Binding to Drug-Resistant Variants. <i>Journal of the American Chemical Society</i> , 2008, 130, 6099-6113.   | 6.6 | 105       |
| 40 | SitCon: Binding site residue conservation visualization and protein sequence-to-function tool. <i>International Journal of Quantum Chemistry</i> , 2007, 107, 2100-2110.   | 1.0 | 0         |
| 41 | Evaluation of the substrate envelope hypothesis for inhibitors of HIV-1 protease. <i>Proteins: Structure, Function and Bioinformatics</i> , 2007, 68, 561-567.   | 1.5 | 48        |
| 42 | Design of Mutation-resistant HIV Protease Inhibitors with the Substrate Envelope Hypothesis. <i>Chemical Biology and Drug Design</i> , 2007, 69, 298-313.  | 1.5 | 51        |
| 43 | Screening Drug-Like Compounds by Docking to Homology Models: A Systematic Study. <i>Journal of Chemical Information and Modeling</i> , 2006, 46, 365-379.  | 2.5 | 82        |
| 44 | Using Protein Homology Models for Structure-Based Studies: Approaches to Model Refinement. <i>Scientific World Journal</i> , The, 2006, 6, 1542-1554.  | 0.8 | 15        |
| 45 | Structural model for an AxxxG-mediated dimer of surfactant-associated protein C. <i>FEBS Journal</i> , 2004, 271, 2086-2092.   | 0.2 | 28        |
| 46 | Comparing Ligand Interactions with Multiple Receptors via Serial Docking. <i>Journal of Chemical Information and Computer Sciences</i> , 2004, 44, 1961-1970.  | 2.8 | 29        |
| 47 | Solution Structure and Functional Ligand Screening of HI0719, a Highly Conserved Protein from Bacteria to Humans in the YjgF/YER057c/UK114 Family. <i>Biochemistry</i> , 2003, 42, 80-89.  | 1.2 | 58        |
| 48 | Enhanced docking with the mining minima optimizer: Acceleration and side-chain flexibility. <i>Journal of Computational Chemistry</i> , 2002, 23, 1656-1670.   | 1.5 | 51        |
| 49 | The Effective Fragment Potential Method: A QM-Based MM Approach to Modeling Environmental Effects in Chemistry. <i>Journal of Physical Chemistry A</i> , 2001, 105, 293-307.   | 1.1 | 570       |
| 50 | Accurate Intraprotein Electrostatics Derived from First Principles: An Effective Fragment Potential Method Study of the Proton Affinities of Lysine 55 and Tyrosine 20 in Turkey Ovomuroid Third Domain. <i>Journal of Physical Chemistry A</i> , 2001, 105, 3829-3837.          | 1.1 | 45        |
| 51 | QM/MM Boundaries Across Covalent Bonds: A Frozen Localized Molecular Orbital-Based Approach for the Effective Fragment Potential Method. <i>Journal of Physical Chemistry A</i> , 2000, 104, 6656-6665.  | 1.1 | 136       |
| 52 | Evaluation of the charge penetration energy between non-orthogonal molecular orbitals using the Spherical Gaussian Overlap approximation. <i>Chemical Physics Letters</i> , 1999, 315, 140-144.  | 1.2 | 61        |
| 53 | Computation of adsorbate vibrational frequencies: methyl, methylidyne and methoxy adsorbed on the Al(111) surface. <i>Computational and Theoretical Chemistry</i> , 1999, 464, 153-162.  | 1.5 | 6         |
| 54 | A quantum chemical cluster study of hydrated halide adsorption on the cathodic Al(111) surface. <i>Surface Science</i> , 1999, 440, 169-186.   | 0.8 | 9         |

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|----|---|-----|-----------|
| 55 | Electric field effects on the geometry and vibrations of charged molecules: the hydroxide ion case. <i>Chemical Physics Letters</i> , 1998, 288, 423-428.   | 1.2 | 4         |
| 56 | Geometry Optimization of Charged Molecules in an External Electric Field Applied to F- $\hat{A}$ -H <sub>2</sub> O and I- $\hat{A}$ -H <sub>2</sub> O. <i>Journal of Physical Chemistry A</i> , 1998, 102, 1365-1370. | 1.1 | 7         |
| 57 | A theoretical investigation of adsorbate-induced surface relaxation effects using cluster models: Al on Si(111). <i>Surface Science</i> , 1997, 380, 283-292.   | 0.8 | 9         |
| 58 | The mechanism of electroreduction of silver cyanide complexes in aqueous electrolytes. II. Interpretation of SERS data. <i>Electrochimica Acta</i> , 1997, 42, 1345-1350.   | 2.6 | 12        |