

# Ronald L Koder

## List of Publications by Year in descending order

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60  
papers

1,595  
citations

430754

18  
h-index

302012

39  
g-index

68  
all docs

68  
docs citations

68  
times ranked

1813  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermalization of Fluorescent Protein Exciton-Polaritons at Room Temperature. <i>Advanced Materials</i> , 2022, 34, e2109107.	11.1	7
2	Oxidation-reduction and photophysical properties of isomeric forms of Safranin. <i>PLoS ONE</i> , 2022, 17, e0265105.	1.1	0
3	Dynamics in natural and designed elastins and their relation to elastic fiber structure and recoil. <i>Biophysical Journal</i> , 2021, 120, 4623-4634.	0.2	4
4	Non-Covalent Coatings on Carbon Nanotubes Mediate Photosensitizer Interactions. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 51343-51350.	4.0	0
5	Dynamics in Natural and Designed Elastins and their Relation to Elastic Fiber Structure and Recoil. <i>Biophysical Journal</i> , 2020, 118, 536a-537a.	0.2	1
6	Designing heterotropically activated allosteric conformational switches using supercharging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 5291-5297.	3.3	10
7	A General Method to Design Allosteric Conformational Switches. <i>Biophysical Journal</i> , 2019, 116, 164a.	0.2	0
8	Engendering Catalytic Activity by Increasing Dynamics in a Designed Enzyme. <i>Biophysical Journal</i> , 2019, 116, 68a.	0.2	0
9	Order, Disorder, and Temperature-Driven Compaction in a Designed Elastin Protein. <i>Journal of Physical Chemistry B</i> , 2018, 122, 2725-2736.	1.2	15
10	Probing Charge Transport through Peptide Bonds. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 763-767.	2.1	38
11	Engendering Methane Monooxygenase and Hydrogen Peroxide Oxidase Activity into a Designed Dimetal Protein by Increasing Protein Dynamics. <i>Biophysical Journal</i> , 2018, 114, 411a.	0.2	0
12	Designed Enzymes: Creating a more Efficient Nitric Oxide Dioxygenase. <i>Biophysical Journal</i> , 2018, 114, 35a.	0.2	0
13	NMR Studies of Secondary Structure and Compaction of Minielastin. <i>Biophysical Journal</i> , 2018, 114, 365a.	0.2	0
14	Supercharging as a General Strategy for Making Proteins into Conformational Switches and their Use in Biosensing. <i>Biophysical Journal</i> , 2018, 114, 588a.	0.2	0
15	Mechanism-Informed Refinement Reveals Altered Substrate-Binding Mode for Catalytically Competent Nitroreductase. <i>Structure</i> , 2017, 25, 978-987.e4.	1.6	18
16	Designed Enzymes and the Driving Forces Behind Interdomain Electron Transfer. <i>Biophysical Journal</i> , 2017, 112, 66a.	0.2	0
17	Optimizing Protein Dynamics in Metalloenzyme Design. <i>Biophysical Journal</i> , 2017, 112, 193a.	0.2	0
18	Design of Supercharged Proteins to Impart Allosteric Behavior and their Use in Biosensing. <i>Biophysical Journal</i> , 2017, 112, 510a.	0.2	0

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19	The design features cells use to build their transmembrane proton gradient. <i>Physical Biology</i> , 2017, 14, 013001.	0.8	4
20	Handheld highly selective plasmonic chem/biosensor using engineered binding proteins for extreme conformational changes. , 2017, , .		0
21	Handheld chem/biosensor using extreme conformational changes in designed binding proteins to enhance surface plasmon resonance (SPR). <i>Proceedings of SPIE</i> , 2016, , .	0.8	2
22	Fast, cheap and out of control " Insights into thermodynamic and informatic constraints on natural protein sequences from de novo protein design. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2016, 1857, 485-492.	0.5	10
23	Photosynthesis in a Single Protein. <i>Biophysical Journal</i> , 2015, 108, 605a.	0.2	0
24	Enhanced Transverse Photo-Induced Voltage by Slow Light. , 2015, , .		0
25	Rational design of a zinc phthalocyanine binding protein. <i>Journal of Structural Biology</i> , 2014, 185, 178-185.	1.3	15
26	An extended scope synthesis of an artificial safranin cofactor. <i>Tetrahedron Letters</i> , 2014, 55, 2487-2491.	0.7	5
27	Observation of persistent $\alpha$ -helical content and discrete types of backbone disorder during a molten globule to ordered peptide transition via deep-UV resonance Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2013, 44, 957-962.	1.2	8
28	Rational Design of a Zinc Phthalocyanine Binding Protein. <i>Biophysical Journal</i> , 2013, 104, 685a.	0.2	0
29	A three-dimensional printed cell for rapid, low-volume spectroelectrochemistry. <i>Analytical Biochemistry</i> , 2013, 439, 1-3.	1.1	17
30	An Artificial Safranin Enzyme which Activates Chemotherapeutic Prodrugs. <i>Biophysical Journal</i> , 2013, 104, 205a.	0.2	1
31	Hemoprotein Design using Minimal Sequence Information. <i>Biophysical Journal</i> , 2013, 104, 661a.	0.2	1
32	Dynamic Factors Affecting Gaseous Ligand Binding in an Artificial Oxygen Transport Protein. <i>Biochemistry</i> , 2013, 52, 447-455.	1.2	14
33	Persistent $\alpha$ -Helical Content and Local Helical Structural Fluctuations from a Molten Globule to Ordered Peptide Transition. <i>Biophysical Journal</i> , 2012, 102, 444a.	0.2	0
34	Fundamental Limits on Wavelength, Efficiency and Yield of the Charge Separation Triad. <i>PLoS ONE</i> , 2012, 7, e36065.	1.1	3
35	Manipulating reduction potentials in an artificial safranin cofactor. <i>Tetrahedron Letters</i> , 2012, 53, 1201-1203.	0.7	9
36	Computational Design of Thermostabilizing $\alpha$ -Amino Acid Substitutions. <i>Journal of the American Chemical Society</i> , 2011, 133, 18750-18759.	6.6	38

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37	Manipulating Cofactor Binding Thermodynamics in an Artificial Oxygen Transport Protein. <i>Biochemistry</i> , 2011, 50, 10254-10261.	1.2	21
38	<sup>15</sup> N Solid-State NMR as a Probe of Flavin H-Bonding. <i>Journal of Physical Chemistry B</i> , 2011, 115, 7788-7798.	1.2	20
39	Design principles for chlorophyll binding sites in helical proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , 2011, 79, 463-476.	1.5	20
40	Designing artificial enzymes by intuition and computation. <i>Nature Chemistry</i> , 2010, 2, 15-24.	6.6	232
41	<i>De Novo</i> Self-Assembling Collagen Heterotrimers Using Explicit Positive and Negative Design. <i>Biochemistry</i> , 2010, 49, 2307-2316.	1.2	34
42	Geometric constraints for porphyrin binding in helical protein binding sites. <i>Proteins: Structure, Function and Bioinformatics</i> , 2009, 74, 400-416.	1.5	25
43	Design and engineering of an O <sub>2</sub> transport protein. <i>Nature</i> , 2009, 458, 305-309.	13.7	228
44	Reversible proton coupled electron transfer in a peptide-incorporated naphthoquinoneamino acid. <i>Chemical Communications</i> , 2009, , 168-170.	2.2	18
45	Hydrogen bond-free flavin redox properties: managing flavins in extreme aprotic solvents. <i>Organic and Biomolecular Chemistry</i> , 2008, 6, 2204.	1.5	12
46	Controlling complexity and water penetration in functional <i>de novo</i> protein design. <i>Biochemical Society Transactions</i> , 2008, 36, 1106-1111.	1.6	18
47	A flavin analogue with improved solubility in organic solvents. <i>Tetrahedron Letters</i> , 2007, 48, 5517-5520.	0.7	12
48	Nativelike Structure in Designed Four $\alpha$ -Helix Bundles Driven by Buried Polar Interactions. <i>Journal of the American Chemical Society</i> , 2006, 128, 14450-14451.	6.6	43
49	<sup>15</sup> N Solid-State NMR Provides a Sensitive Probe of Oxidized Flavin Reactive Sites. <i>Journal of the American Chemical Society</i> , 2006, 128, 15200-15208.	6.6	15
50	Intelligent design: the <i>de novo</i> engineering of proteins with specified functions. <i>Dalton Transactions</i> , 2006, , 3045.	1.6	65
51	The HP-1 maquette: From an apoprotein structure to a structured hemoprotein designed to promote redox-coupled proton exchange. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 5536-5541.	3.3	70
52	Hydrophilic to amphiphilic design in redox protein maquettes. <i>Current Opinion in Chemical Biology</i> , 2003, 7, 741-748.	2.8	48
53	Structures of Nitroreductase in Three States. <i>Journal of Biological Chemistry</i> , 2002, 277, 11513-11520.	1.6	130
54	Flavin Thermodynamics Explain the Oxygen Insensitivity of Enteric Nitroreductases. <i>Biochemistry</i> , 2002, 41, 14197-14205.	1.2	78

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55	Two-electron reduction of quinones by <i>Enterobacter cloacae</i> NAD(P)H:nitroreductase: quantitative structure-activity relationships. <i>Archives of Biochemistry and Biophysics</i> , 2002, 403, 249-258.	1.4	32
56	Quantitative Structure-Activity Relationships in Two-Electron Reduction of Nitroaromatic Compounds by <i>Enterobacter cloacae</i> NAD(P)H:Nitroreductase. <i>Archives of Biochemistry and Biophysics</i> , 2001, 385, 170-178.	1.4	56
57	Retro-Nitroreductase, a Putative Evolutionary Precursor to <i>Enterobacter cloacae</i> Strain 96-3 Nitroreductase. <i>Antioxidants and Redox Signaling</i> , 2001, 3, 747-755.	2.5	4
58	Mutational and spectroscopic studies of the significance of the active site glutamine to metal ion specificity in superoxide dismutase. <i>Journal of Inorganic Biochemistry</i> , 2000, 80, 247-256.	1.5	60
59	Steady-state kinetic mechanism, stereospecificity, substrate and inhibitor specificity of <i>Enterobacter cloacae</i> nitroreductase. <i>BBA - Proteins and Proteomics</i> , 1998, 1387, 395-405.	2.1	116
60	Overexpression, Isotopic Labeling, and Spectral Characterization of <i>Enterobacter cloacae</i> Nitroreductase. <i>Protein Expression and Purification</i> , 1998, 13, 53-60.	0.6	18