

Robert Root-Bernstein

List of Publications by Year in descending order

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Version: 2024-02-01

87
papers

1,728
citations

279798

23
h-index

330143

37
g-index

98
all docs

98
docs citations

98
times ranked

1288
citing authors

#	ARTICLE	IF	CITATIONS
1	Polymathy Among Nobel Laureates As a Creative Strategy” The Qualitative and Phenomenological Evidence. <i>Creativity Research Journal</i> , 2023, 35, 116-142.	2.6	3
2	Adrenergic agonists and antagonists enhance opioid receptor activity. , 2022, , 79-89.		1
3	Biased, Bitopic, Opioid”Adrenergic Tethered Compounds May Improve Specificity, Lower Dosage and Enhance Agonist or Antagonist Function with Reduced Risk of Tolerance and Addiction. <i>Pharmaceuticals</i> , 2022, 15, 214.	3.8	8
4	Innate Receptor Activation Patterns Involving TLR and NLR Synergisms in COVID-19, ALI/ARDS and Sepsis Cytokine Storms: A Review and Model Making Novel Predictions and Therapeutic Suggestions. <i>International Journal of Molecular Sciences</i> , 2021, 22, 2108.	4.1	70
5	Pneumococcal and Influenza Vaccination Rates and Pneumococcal Invasive Disease Rates Set Geographical and Ethnic Population Susceptibility to Serious COVID-19 Cases and Deaths. <i>Vaccines</i> , 2021, 9, 474.	4.4	14
6	Relationships Between Talent, Training, Polymathy, and Creativity. , 2021, , 357-370.		0
7	COVID”19 coagulopathies: Human blood proteins mimic SARS”CoV”2 virus, vaccine proteins and bacterial co”infections inducing autoimmunity. <i>BioEssays</i> , 2021, 43, e2100158.	2.5	17
8	Co-Evolution of Opioid and Adrenergic Ligands and Receptors: Shared, Complementary Modules Explain Evolution of Functional Interactions and Suggest Novel Engineering Possibilities. <i>Life</i> , 2021, 11, 1217.	2.4	4
9	Possible Cross-Reactivity between SARS-CoV-2 Proteins, CRM197 and Proteins in Pneumococcal Vaccines May Protect Against Symptomatic SARS-CoV-2 Disease and Death. <i>Vaccines</i> , 2020, 8, 559.	4.4	26
10	Age and Location in Severity of COVID”19 Pathology: Do Lactoferrin and Pneumococcal Vaccination Explain Low Infant Mortality and Regional Differences?. <i>BioEssays</i> , 2020, 42, 2000076.	2.5	32
11	Glutathione and Glutathione-Like Sequences of Opioid and Aminergic Receptors Bind Ascorbic Acid, Adrenergic and Opioid Drugs Mediating Antioxidant Function: Relevance for Anesthesia and Abuse. <i>International Journal of Molecular Sciences</i> , 2020, 21, 6230.	4.1	8
12	Synergistic Activation of Toll-Like and NOD Receptors by Complementary Antigens as Facilitators of Autoimmune Disease: Review, Model and Novel Predictions. <i>International Journal of Molecular Sciences</i> , 2020, 21, 4645.	4.1	16
13	A Statistical Study of Intra-Domain and Trans-Domain Polymathy among Nobel Laureates. <i>Creativity Research Journal</i> , 2020, 32, 93-112.	2.6	8
14	Leonardo STEAM Initiative on Education. <i>Leonardo</i> , 2020, 53, 331-331.	0.3	0
15	Polymathy. , 2020, , 375-381.		3
16	Mutual Enhancement of Opioid and Adrenergic Receptors by Combinations of Opioids and Adrenergic Ligands Is Reflected in Molecular Complementarity of Ligands: Drug Development Possibilities. <i>International Journal of Molecular Sciences</i> , 2019, 20, 4137.	4.1	9
17	Correlation between tools for thinking; arts, crafts, and design avocations; and scientific achievement among STEMM professionals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 1910-1917.	7.1	22
18	A Review of ACD-STEMM Integration, Part 2: Controlled Studies of Transdisciplinary Tools-for-Thinking Bridges for Arts-Science Pedagogy. <i>Leonardo</i> , 2019, 52, 494-495.	0.3	3

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19	A Review of ACD-STEMM Integration, Part 3: Controlled Studies of Additional Transdisciplinary Bridges for Arts-Science Pedagogy and General Conclusions. Leonardo, 2019, 52, 496-497.	0.3	2
20	The Ribosome as a Missing Link in Prebiotic Evolution III: Over-Representation of tRNA- and rRNA-Like Sequences and Plieofunctionality of Ribosome-Related Molecules Argues for the Evolution of Primitive Genomes from Ribosomal RNA Modules. International Journal of Molecular Sciences, 2019, 20, 140.	4.1	21
21	A Review of ACD-STEMM Integration: Part 1: A Taxonomy of Integrated Bridges. Leonardo, 2019, 52, 492-493.	0.3	4
22	Differences in Male and Female Arts and Crafts Avocations in the Early Training and Patenting Activity Of Stemm Professionals. Technology and Innovation, 2019, 20, 197-219.	0.2	5
23	Predicting Protein Glycation Rate and State: The Need for Models to Incorporate Additional Features. FASEB Journal, 2019, 33, .	0.5	0
24	Adrenergic Agonists Bind to Adrenergic-Receptor-Like Regions of the Mu Opioid Receptor, Enhancing Morphine and Methionine-Enkephalin Binding: A New Approach to "Biased Opioids". International Journal of Molecular Sciences, 2018, 19, 272.	4.1	15
25	tRNA structure and evolution and standardization to the three nucleotide genetic code. Transcription, 2017, 8, 205-219.	3.1	32
26	Human Immunodeficiency Virus Proteins Mimic Human T Cell Receptors Inducing Cross-Reactive Antibodies. International Journal of Molecular Sciences, 2017, 18, 2091.	4.1	17
27	Rapid Non-Enzymatic Glycation of the Insulin Receptor under Hyperglycemic Conditions Inhibits Insulin Binding In Vitro: Implications for Insulin Resistance. International Journal of Molecular Sciences, 2017, 18, 2602.	4.1	8
28	Autoimmunity and the microbiome: T cell receptor mimicry of "self" and microbial antigens mediates self tolerance in holobionts. BioEssays, 2016, 38, 1068-1083.	2.5	19
29	From Compositional Chemical Ecologies to Self-replicating Ribosomes and on to Functional Trait Ecological Networks. , 2016, , 327-343.		1
30	tRNA evolution from the proto-tRNA minihelix world. Transcription, 2016, 7, 153-163.	3.1	33
31	The ribosome as a missing link in prebiotic evolution II: Ribosomes encode ribosomal proteins that bind to common regions of their own mRNAs and rRNAs. Journal of Theoretical Biology, 2016, 397, 115-127.	1.7	42
32	Enzymatic recycling of ascorbic acid from dehydroascorbic acid by glutathione-like peptides in the extracellular loops of aminergic G protein coupled receptors. Journal of Molecular Recognition, 2016, 29, 296-302.	2.1	11
33	Arts and crafts as adjuncts to STEM education to foster creativity in gifted and talented students. Asia Pacific Education Review, 2015, 16, 203-212.	2.5	60
34	The ribosome as a missing link in the evolution of life. Journal of Theoretical Biology, 2015, 367, 130-158.	1.7	100
35	Molecular complementarity between simple, universal molecules and ions limited phenotype space in the precursors of cells. Biology Direct, 2015, 10, 28.	4.6	18
36	Towards an integration of mathematical models, theories and observations concerning autoimmune diseases. Journal of Theoretical Biology, 2015, 375, 1-3.	1.7	7

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37	Unresolved issues in theories of autoimmune disease using myocarditis as a framework. <i>Journal of Theoretical Biology</i> , 2015, 375, 101-123.	1.7	60
38	Tartaric Acid Enhances Adrenergic Receptor Activity: Test of a General Theory of Extracellular Aminergic GPCR Enhancer Discovery. <i>Current Drug Discovery Technologies</i> , 2015, 11, 293-307.	1.2	4
39	How to Make a Non-Antigenic Protein (Auto) Antigenic: Molecular Complementarity Alters Antigen Processing and Activates Adaptive-Innate Immunity Synergy. <i>Anti-Cancer Agents in Medicinal Chemistry</i> , 2015, 15, 1242-1259.	1.7	13
40	Estradiol Binds to Insulin and Insulin Receptor Decreasing Insulin Binding in vitro. <i>Frontiers in Endocrinology</i> , 2014, 5, 118.	3.5	28
41	Rethinking Molecular Mimicry in Rheumatic Heart Disease and Autoimmune Myocarditis: Laminin, Collagen IV, CAR, and B1AR as Initial Targets of Disease. <i>Frontiers in Pediatrics</i> , 2014, 2, 85.	1.9	33
42	A Common Molecular Motif Characterizes Extracellular Allosteric Enhancers of GPCR Aminergic Receptors and Suggests Enhancer Mechanism of Action. <i>Current Medicinal Chemistry</i> , 2014, 21, 3673-3686.	2.4	11
43	Tools for thinking applied to nature: an inclusive pedagogical framework for environmental education. <i>Oryx</i> , 2014, 48, 584-592.	1.0	9
44	Complexities in the Relationship Between Infection and Autoimmunity. <i>Current Allergy and Asthma Reports</i> , 2014, 14, 407.	5.3	80
45	Arts and Crafts. <i>Economic Development Quarterly</i> , 2013, 27, 221-229.	0.9	32
46	A Modular Hierarchy-Based Theory of the Chemical Origins of Life Based on Molecular Complementarity. <i>Accounts of Chemical Research</i> , 2012, 45, 2169-2177.	15.6	31
47	Defining Life: Products or Processes?. <i>Journal of Biomolecular Structure and Dynamics</i> , 2012, 29, 631-632.	3.5	1
48	T Cell Receptor Variable Regions in Diabetes Bind to Each Other, to Insulin, Glucagon or Insulin Receptor, and to Their Antibodies. <i>The Open Autoimmunity Journal</i> , 2012, 4, 10-22.	0.4	8
49	Ronald Ross: Renaissance Man. <i>Leonardo</i> , 2010, 43, 165-166.	0.3	2
50	Experimental Test of L- and D-Amino Acid Binding to L- and D-Codons Suggests that Homochirality and Codon Directionality Emerged with the Genetic Code. <i>Symmetry</i> , 2010, 2, 1180-1200.	2.2	8
51	Receptor-Mediated Enhancement of Beta Adrenergic Drug Activity by Ascorbate In Vitro and In Vivo. <i>PLoS ONE</i> , 2010, 5, e15130.	2.5	25
52	Howard Florey: Photographer, Cinematographer and Sunday Painter. <i>Leonardo</i> , 2009, 42, 265-265.	0.3	0
53	Teaching, Not Testing, for Scientific Vision. <i>Science</i> , 2009, 326, 365-366.	12.6	1
54	The Eukaryotic Cell Originated in the Integration and Redistribution of Hyperstructures from Communities of Prokaryotic Cells Based on Molecular Complementarity. <i>International Journal of Molecular Sciences</i> , 2009, 10, 2611-2632.	4.1	11

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55	A measles-derived peptide treats and vaccinates against adjuvant arthritis. <i>Autoimmunity Reviews</i> , 2009, 8, 405-409.	5.8	0
56	Autoreactive Tâ€cell receptor (V<i>Î²</i>/D/J<i>Î²</i>) sequences in diabetes are homologous to insulin, glucagon, the insulin receptor, and the glucagon receptor. <i>Journal of Molecular Recognition</i> , 2009, 22, 177-187.	2.1	13
57	Glucose binds to the insulin receptor affecting the mutual affinity of insulin and its receptor. <i>Cellular and Molecular Life Sciences</i> , 2009, 66, 2721-2732.	5.4	18
58	Antigenic complementarity between coxsackie virus and streptococcus in the induction of rheumatic heart disease and autoimmune myocarditis. <i>Autoimmunity</i> , 2009, 42, 1-16.	2.6	41
59	Robert R. Wilson: Shaping Matter. <i>Leonardo</i> , 2009, 42, 163-164.	0.3	0
60	A tethered ascorbate-norepinephrine compound, 4-UT, displays long-acting adrenergic activity on rabbit aortic smooth muscle. <i>Drug Development Research</i> , 2008, 69, 242-250.	2.9	8
61	Arts Foster Scientific Success: Avocations of Nobel, National Academy, Royal Society, and Sigma Xi Members. <i>Journal of Psychology of Science and Technology</i> , 2008, 1, 51-63.	0.6	103
62	Small Molecule Complementarity As A Source of Novel Pharmaceutical Agents and Combination Therapies. <i>Current Pharmaceutical Design</i> , 2008, 14, 55-62.	1.9	13
63	Positive Vaccination Markers. <i>Hum Vaccin</i> , 2007, 3, 104-105.	2.4	1
64	Certain of Heisenberg's Arts. <i>Leonardo</i> , 2007, 40, 483-483.	0.3	3
65	Dorothy Crowfoot Hodgkin: Structure as Art. <i>Leonardo</i> , 2007, 40, 259-261.	0.3	1
66	Niko Tinbergen's Visual Arts. <i>Leonardo</i> , 2007, 40, 67-69.	0.3	3
67	An Insulin-Like Modular Basis for the Evolution of Glucose Transporters (GLUT) with Implications for Diabetes. <i>Evolutionary Bioinformatics</i> , 2007, 3, 117693430700300.	1.2	5
68	Simultaneous origin of homochirality, the genetic code and its directionality. <i>BioEssays</i> , 2007, 29, 689-698.	2.5	38
69	Antigenic complementarity in the induction of autoimmunity: A general theory and review. <i>Autoimmunity Reviews</i> , 2007, 6, 272-277.	5.8	38
70	Question 7: The First Units of Life Were Not Simple Cells. <i>Origins of Life and Evolution of Biospheres</i> , 2007, 37, 429-432.	1.9	20
71	An insulin-like modular basis for the evolution of glucose transporters (GLUT) with implications for diabetes. <i>Evolutionary Bioinformatics</i> , 2007, 3, 317-31.	1.2	5
72	Imaginary Worldplay in Childhood and Maturity and Its Impact on Adult Creativity. <i>Creativity Research Journal</i> , 2006, 18, 405-425.	2.6	55

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73	A measles-derived peptide treats and vaccinates against adjuvant arthritis. <i>Autoimmunity Reviews</i> , 2006, , .	5.8	0
74	Compositional complementarity and prebiotic ecology in the origin of life. <i>BioEssays</i> , 2006, 28, 399-412.	2.5	93
75	Antigenic Complementarity in the Origins of Autoimmunity: A General Theory Illustrated With a Case Study of Idiopathic Thrombocytopenia Purpura. <i>Clinical and Developmental Immunology</i> , 2006, 13, 49-65.	3.3	21
76	Peptide vaccines against arthritis. <i>Future Rheumatology</i> , 2006, 1, 339-344.	0.2	4
77	Science Museums and the Arts of Imaginative Thinking. <i>Journal of Museum Education</i> , 2005, 30, 3-8.	0.6	0
78	Roger Sperry: Ambicerebral Man. <i>Leonardo</i> , 2005, 38, 224-225.	0.3	2
79	Antigenic complementarity between HIV and other AIDS-associated infections results in idiotype?antiidiotype antibody complexes that cross react with lymphocyte proteins. <i>Vaccine</i> , 2005, 23, 2160-2163.	3.8	15
80	Antigenic Complementarity Resulting in Idiotype?Antiidiotype Immune Complexes: Possible Contributor to AIDS Pathogenesis and Autoimmunity. <i>Autoimmunity</i> , 2004, 37, 203-210.	2.6	16
81	Martha Graham, Dance, and the Polymathic Imagination: A Case for Multiple Intelligences or Universal Thinking Tools?. <i>Journal of Dance Education</i> , 2003, 3, 16-27.	0.2	17
82	Are Diabetic Neuropathy, Retinopathy and Nephropathy Caused by Hyperglycemic Exclusion of Dehydroascorbate Uptake by Glucose Transporters?. <i>Journal of Theoretical Biology</i> , 2002, 216, 345-359.	1.7	34
83	Molecular Complementarity III. Peptide Complementarity as a Basis for Peptide Receptor Evolution: A Bioinformatic Case Study of Insulin, Glucagon and Gastrin. <i>Journal of Theoretical Biology</i> , 2002, 218, 71-84.	1.7	25
84	Fostering venture research: A case study of the discovery that ascorbate enhances adrenergic drug activity. <i>Drug Development Research</i> , 2002, 57, 58-74.	2.9	17
85	Mental Tools for Thinking About DNA Technologies in New Ways. <i>Archives of Pathology and Laboratory Medicine</i> , 2002, 126, 263-265.	2.5	0
86	CAUSE AND PREVENTION OF POSTINFECTIOUS AND POSTVACCINAL NEUROPATHIES IN LIGHT OF A NEW THEORY OF AUTOIMMUNITY. <i>Lancet, The</i> , 1986, 328, 251-252.	13.7	37
87	Artistic Scientists and Scientific Artists: The Link Between Polymathy and Creativity.. , 0, , 127-151.		64