

Richard O Prum

List of Publications by Year in descending order

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Version: 2024-02-01

130
papers

24,713
citations

34493

54
h-index

18944

123
g-index

138
all docs

138
docs citations

138
times ranked

45551
citing authors

#	ARTICLE	IF	CITATIONS
1	Hummingbird plumage color diversity exceeds the known gamut of all other birds. <i>Communications Biology</i> , 2022, 5, .	2.0	4
2	Higher-Order Musical Temporal Structure in Bird Song. <i>Frontiers in Psychology</i> , 2021, 12, 629456.	1.1	1
3	Recent divergence and lack of shared phylogeographic history characterize the diversification of neotropical savanna birds. <i>Journal of Biogeography</i> , 2021, 48, 1124-1137.	1.4	13
4	Constraint and Function in the Predefinitive Plumages of Manakins (Aves: Pipridae). <i>Integrative and Comparative Biology</i> , 2021, 61, 1363-1377.	0.9	4
5	Evolution of single gyroid photonic crystals in bird feathers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	26
6	Genomic phylogeography of the White-crowned Manakin <i>Pseudopipra pipra</i> (Aves: Pipridae) illuminates a continental-scale radiation out of the Andes. <i>Molecular Phylogenetics and Evolution</i> , 2021, 164, 107205.	1.2	12
7	Structural color from solid-state polymerization-induced phase separation. <i>Soft Matter</i> , 2021, 17, 5772-5779.	1.2	12
8	Expanding the eggshell colour gamut: uroerythrin and bilirubin from tinamou (Tinamidae) eggshells. <i>Scientific Reports</i> , 2020, 10, 11264.	1.6	9
9	Convergent evolution of super black plumage near bright color in 15 bird families. <i>Journal of Experimental Biology</i> , 2019, 222, .	0.8	19
10	Structurally assisted super black in colourful peacock spiders. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2019, 286, 20190589.	1.2	30
11	Female resistance to sexual coercion can evolve to preserve the indirect benefits of mate choice. <i>Journal of Evolutionary Biology</i> , 2019, 32, 545-558.	0.8	9
12	Pervasive Correlated Evolution in Gene Expression Shapes Cell and Tissue Type Transcriptomes. <i>Genome Biology and Evolution</i> , 2018, 10, 538-552.	1.1	70
13	Complex coevolution of wing, tail, and vocal sounds of courting male bee hummingbirds. <i>Evolution; International Journal of Organic Evolution</i> , 2018, 72, 630-646.	1.1	35
14	Structural absorption by barbule microstructures of super black bird of paradise feathers. <i>Nature Communications</i> , 2018, 9, 1.	5.8	12,629
15	Evidence of phenotypic plasticity of penis morphology and delayed reproductive maturation in response to male competition in waterfowl. <i>Auk</i> , 2017, 134, 882-893.	0.7	13
16	The biology of color. <i>Science</i> , 2017, 357, .	6.0	509
17	<i>Smithornis</i> broadbills produce loud wing song by aeroelastic flutter of medial primary wing feathers. <i>Journal of Experimental Biology</i> , 2016, 219, 1069-1075.	0.8	15
18	A comprehensive phylogeny of birds (Aves) using targeted next-generation DNA sequencing. <i>Nature</i> , 2016, 534, S7-S8.	13.7	872

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19	Mimicry Cycles, Traps, and Chains: The Coevolution of Toucan and Kiskadee Mimicry. <i>American Naturalist</i> , 2016, 187, 753-764.	1.0	8
20	Domain morphology, boundaries, and topological defects in biophotonic gyroid nanostructures of butterfly wing scales. <i>Science Advances</i> , 2016, 2, e1600149.	4.7	29
21	Theory of the development of curved barbs and their effects on feather morphology. <i>Journal of Morphology</i> , 2016, 277, 995-1013.	0.6	10
22	Fruit advertisement strategies in two Neotropical plant-seed disperser markets. <i>Evolutionary Ecology</i> , 2015, 29, 489-509.	0.5	19
23	Barb geometry of asymmetrical feathers reveals a transitional morphology in the evolution of avian flight. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2015, 282, 20142864.	1.2	69
24	Mechanisms and Evidence of Genital Coevolution: The Roles of Natural Selection, Mate Choice, and Sexual Conflict. <i>Cold Spring Harbor Perspectives in Biology</i> , 2015, 7, a017749.	2.3	90
25	Diversity, physiology, and evolution of avian plumage carotenoids and the role of carotenoid-protein interactions in plumage color appearance. <i>Archives of Biochemistry and Biophysics</i> , 2015, 572, 201-212.	1.4	46
26	Nuclear β -catenin localization supports homology of feathers, avian scutate scales, and alligator scales in early development. <i>Evolution & Development</i> , 2015, 17, 185-194.	1.1	31
27	Structural Diversity of Arthropod Biophotonic Nanostructures Spans Amphiphilic Phase-Space. <i>Nano Letters</i> , 2015, 15, 3735-3742.	4.5	80
28	Aeroelastic flutter of feathers, flight, and the evolution of nonvocal communication in birds. <i>Journal of Experimental Biology</i> , 2015, 218, 3520-7.	0.8	25
29	A comprehensive phylogeny of birds (Aves) using targeted next-generation DNA sequencing. <i>Nature</i> , 2015, 526, 569-573.	13.7	1,341
30	The Role of Sexual Autonomy in Evolution by Mate Choice. <i>History, Philosophy and Theory of the Life Sciences</i> , 2015, , 237-262.	0.4	21
31	Interspecific social dominance mimicry in birds. <i>Zoological Journal of the Linnean Society</i> , 2014, 172, 910-941.	1.0	54
32	Theoretical morphology and development of flight feather vane asymmetry with experimental tests in parrots. <i>Journal of Experimental Zoology Part B: Molecular and Developmental Evolution</i> , 2014, 322, 240-255.	0.6	14
33	A comprehensive multilocus phylogeny of the Neotropical cotingas (Cotingidae, Aves) with a comparative evolutionary analysis of breeding system and plumage dimorphism and a revised phylogenetic classification. <i>Molecular Phylogenetics and Evolution</i> , 2014, 81, 120-136.	1.2	35
34	Mechanism of carotenoid coloration in the brightly colored plumages of broadbills (Eurylaimidae). <i>Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology</i> , 2014, 184, 651-672.	0.7	9
35	Carotenoids from the crimson and maroon plumages of Old World orioles (Oriolidae). <i>Archives of Biochemistry and Biophysics</i> , 2013, 539, 126-132.	1.4	18
36	Coevolutionary aesthetics in human and biotic artworlds. <i>Biology and Philosophy</i> , 2013, 28, 811-832.	0.7	30

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37	Structural resonance and mode of flutter of hummingbird tail feathers. <i>Journal of Experimental Biology</i> , 2013, 216, 3404-13.	0.8	18
38	Vibrational and electronic spectroscopy of the retro-carotenoid rhodoxanthin in avian plumage, solid-state films, and solution. <i>Archives of Biochemistry and Biophysics</i> , 2013, 539, 142-155.	1.4	27
39	Nuclear magnetic resonance analysis of carotenoids from the burgundy plumage of the Pompadour Cotinga (<i>Xipholena punicea</i>). <i>Archives of Biochemistry and Biophysics</i> , 2013, 539, 133-141.	1.4	15
40	Fourier Blues: Structural Coloration of Biological Tissues. <i>Applied and Numerical Harmonic Analysis</i> , 2013, , 401-421.	0.1	9
41	How colorful are fruits? Limited color diversity in fleshy fruits on local and global scales. <i>New Phytologist</i> , 2013, 198, 617-629.	3.5	57
42	Exceptional three-dimensional preservation and coloration of an originally iridescent fossil feather from the Middle Eocene Messel Oil Shale. <i>Palaontologische Zeitschrift</i> , 2013, 87, 493-503.	0.8	20
43	Color Production by Isotropic Nanostructures with Short-range Order in Bird Feather Barbs. , 2013, , .		0
44	Visualization of color as birds see it. , 2013, , .		0
45	Hummingbird feather sounds are produced by aeroelastic flutter, not vortex-induced vibration. <i>Journal of Experimental Biology</i> , 2013, 216, 3395-403.	0.8	20
46	Structure and optical function of amorphous photonic nanostructures from avian feather barbs: a comparative small angle X-ray scattering (SAXS) analysis of 230 bird species. <i>Journal of the Royal Society Interface</i> , 2012, 9, 2563-2580.	1.5	127
47	3D imaging spectroscopy for measuring hyperspectral patterns on solid objects. <i>ACM Transactions on Graphics</i> , 2012, 31, 1-11.	4.9	70
48	Molecular diversity, metabolic transformation, and evolution of carotenoid feather pigments in cotingas (Aves: Cotingidae). <i>Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology</i> , 2012, 182, 1095-1116.	0.7	44
49	The Hairyâ€“Downy Game: A model of interspecific social dominance mimicry. <i>Journal of Theoretical Biology</i> , 2012, 313, 42-60.	0.8	27
50	The limits of sexual conflict in the narrow sense: new insights from waterfowl biology. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2012, 367, 2324-2338.	1.8	60
51	Variation in carotenoidâ€“protein interaction in bird feathers produces novel plumage coloration. <i>Journal of the Royal Society Interface</i> , 2012, 9, 3338-3350.	1.5	51
52	Aesthetic evolution by mate choice: Darwin's<i>really</i>dangerous idea. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2012, 367, 2253-2265.	1.8	128
53	Aeroelastic Flutter Produces Hummingbird Feather Songs. <i>Science</i> , 2011, 333, 1430-1433.	6.0	63
54	How colorful are birds? Evolution of the avian plumage color gamut. <i>Behavioral Ecology</i> , 2011, 22, 1042-1052.	1.0	195

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55	Short-range order and near-field effects on optical scattering and structural coloration. <i>Optics Express</i> , 2011, 19, 8208.	1.7	65
56	Colour-producing β -keratin nanofibres in blue penguin (<i>Eudyptula minor</i>) feathers. <i>Biology Letters</i> , 2011, 7, 543-546.	1.0	48
57	Biomimetic Isotropic Nanostructures for Structural Coloration. <i>Advanced Materials</i> , 2010, 22, 2939-2944.	11.1	345
58	How Noniridescent Colors Are Generated by Quasi-ordered Structures of Bird Feathers. <i>Advanced Materials</i> , 2010, 22, 2871-2880.	11.1	228
59	Structural Color: How Noniridescent Colors Are Generated by Quasi-ordered Structures of Bird Feathers (<i>Adv. Mater.</i> 26-27/2010). <i>Advanced Materials</i> , 2010, 22, n/a-n/a.	11.1	3
60	THE LANDE-KIRKPATRICK MECHANISM IS THE NULL MODEL OF EVOLUTION BY INTERSEXUAL SELECTION: IMPLICATIONS FOR MEANING, HONESTY, AND DESIGN IN INTERSEXUAL SIGNALS. <i>Evolution; International Journal of Organic Evolution</i> , 2010, 64, 3085-3100.	1.1	178
61	The evolution of black plumage from blue in Australian fairywrens (<i>Maluridae</i>): genetic and structural evidence. <i>Journal of Avian Biology</i> , 2010, 41, 505-514.	0.6	18
62	Moulting tail feathers in a juvenile oviraptorosaur. <i>Nature</i> , 2010, 468, E1-E1.	13.7	16
63	Contribution of double scattering to structural coloration in quasiordered nanostructures of bird feathers. <i>Physical Review E</i> , 2010, 81, 051923.	0.8	23
64	Structure, function, and self-assembly of single network gyroid (4×32) photonic crystals in butterfly wing scales. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 11676-11681.	3.3	428
65	Explosive eversion and functional morphology of the duck penis supports sexual conflict in waterfowl genitalia. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2010, 277, 1309-1314.	1.2	102
66	Double scattering of light from Biophotonic Nanostructures with short-range order. <i>Optics Express</i> , 2010, 18, 11942.	1.7	39
67	Novel methoxy-carotenoids from the burgundy-colored plumage of the Pompadour Cotinga <i>Xipholena punicea</i> . <i>Archives of Biochemistry and Biophysics</i> , 2010, 504, 142-153.	1.4	26
68	Plumage Color Patterns of an Extinct Dinosaur. <i>Science</i> , 2010, 327, 1369-1372.	6.0	224
69	Structural coloration in a fossil feather. <i>Biology Letters</i> , 2010, 6, 128-131.	1.0	100
70	Double Scattering of Light from Biophotonic Nanostructures with Short-Range Order. , 2010, , .		0
71	Electron tomography, three-dimensional Fourier analysis and colour prediction of a three-dimensional amorphous biophotonic nanostructure. <i>Journal of the Royal Society Interface</i> , 2009, 6, S213-20.	1.5	46
72	Development of colour-producing β -keratin nanostructures in avian feather barbs. <i>Journal of the Royal Society Interface</i> , 2009, 6, S253-65.	1.5	103

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73	Self-assembly of amorphous biophotonic nanostructures by phase separation. <i>Soft Matter</i> , 2009, 5, 1792.	1.2	222
74	Independent evolutionary reductions of the phallus in basal birds. <i>Journal of Avian Biology</i> , 2008, 39, 487-492.	0.6	32
75	Manakin display and visiting behaviour: a comparative test of sensory drive. <i>Animal Behaviour</i> , 2008, 75, 783-790.	0.8	26
76	The colour of fossil feathers. <i>Biology Letters</i> , 2008, 4, 522-525.	1.0	167
77	Evolution of Avian Plumage Color in a Tetrahedral Color Space: A Phylogenetic Analysis of New World Buntings. <i>American Naturalist</i> , 2008, 171, 755-776.	1.0	371
78	Who's Your Daddy?. <i>Science</i> , 2008, 322, 1799-1800.	6.0	14
79	Study of Angle Dependent Reflection From a 3D Quasi-Ordered Photonic Crystal. , 2008, , .		0
80	Coevolution of Male and Female Genital Morphology in Waterfowl. <i>PLoS ONE</i> , 2007, 2, e418.	1.1	166
81	A molecular phylogeny of the cotingas (Aves: Cotingidae). <i>Molecular Phylogenetics and Evolution</i> , 2007, 42, 25-37.	1.2	28
82	Genetic evidence supports song learning in the three-wattled bellbird <i>Procnias tricarunculata</i> (Cotingidae). <i>Molecular Ecology</i> , 2007, 16, 3689-3702.	2.0	77
83	Anatomically diverse butterfly scales all produce structural colours by coherent scattering. <i>Journal of Experimental Biology</i> , 2006, 209, 748-765.	0.8	192
84	Phylogeny and Evolutionary History of Old World Suboscine Birds (Aves: Eurylaimides). <i>American Museum Novitates</i> , 2006, 3544, 1.	0.2	48
85	Higher-level phylogeny and morphological evolution of tyrant flycatchers, cotingas, manakins, and their allies (Aves: Tyrannida). <i>Molecular Phylogenetics and Evolution</i> , 2006, 40, 471-483.	1.2	69
86	Anatomy, Physics, and Evolution of Structural Colors. , 2006, , 295-353.		82
87	Evolution of the morphological innovations of feathers. <i>Journal of Experimental Zoology Part B: Molecular and Developmental Evolution</i> , 2005, 304B, 570-579.	0.6	74
88	Molecular evidence for an activator-inhibitor mechanism in development of embryonic feather branching. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 11734-11739.	3.3	144
89	Courting Bird Sings with Stridulating Wing Feathers. <i>Science</i> , 2005, 309, 736-736.	6.0	59
90	Blue integumentary structural colours in dragonflies (Odonata) are not produced by incoherent Tyndall scattering. <i>Journal of Experimental Biology</i> , 2004, 207, 3999-4009.	0.8	97

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91	Structural colouration of mammalian skin: convergent evolution of coherently scattering dermal collagen arrays. <i>Journal of Experimental Biology</i> , 2004, 207, 2157-2172.	0.8	181
92	A hierarchical model of plumage: Morphology, development, and evolution. <i>The Journal of Experimental Zoology</i> , 2003, 298B, 73-90.	1.4	60
93	Which Came First, the Feather or the Bird?. <i>Scientific American</i> , 2003, 288, 84-93.	1.0	40
94	Dinosaurs take to the air. <i>Nature</i> , 2003, 421, 323-324.	13.7	30
95	ARE CURRENT CRITIQUES OF THE THEROPOD ORIGIN OF BIRDS SCIENCE? REBUTTAL TO FEDUCCIA (2002). <i>Auk</i> , 2003, 120, 550.	0.7	13
96	Structural colouration of avian skin: convergent evolution of coherently scattering dermal collagen arrays. <i>Journal of Experimental Biology</i> , 2003, 206, 2409-2429.	0.8	228
97	COHERENT SCATTERING OF ULTRAVIOLET LIGHT BY AVIAN FEATHER BARBS. <i>Auk</i> , 2003, 120, 163.	0.7	48
98	High-speed video analysis of wing-snapping in two manakin clades(Pipridae: Aves). <i>Journal of Experimental Biology</i> , 2003, 206, 3693-3706.	0.8	97
99	A Fourier Tool for the Analysis of Coherent Light Scattering by Bio-Optical Nanostructures. <i>Integrative and Comparative Biology</i> , 2003, 43, 591-602.	0.9	100
100	Coherent Scattering of Ultraviolet Light by Avian Feather Barbs. <i>Auk</i> , 2003, 120, 163-170.	0.7	4
101	Are Current Critiques of the Theropod Origin of Birds Science? Rebuttal to Feduccia (2002). <i>Auk</i> , 2003, 120, 550-561.	0.7	2
102	Coherent Scattering of Ultraviolet Light by Avian Feather Barbs. <i>Auk</i> , 2003, 120, 163-170.	0.7	2
103	Are Current Critiques of the Theropod Origin of Birds Science? Rebuttal to Feduccia (2002). <i>Auk</i> , 2003, 120, 550-561.	0.7	1
104	Reactionâ€“diffusion models of within-feather pigmentation patterning. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2002, 269, 781-792.	1.2	76
105	Why Ornithologists Should Care About The Theropod Origin of Birds. <i>Auk</i> , 2002, 119, 1-17.	0.7	60
106	Shh-Bmp2 signaling module and the evolutionary origin and diversification of feathers. <i>The Journal of Experimental Zoology</i> , 2002, 294, 160-176.	1.4	132
107	The Evolutionary Origin And Diversification Of Feathers. <i>Quarterly Review of Biology</i> , 2002, 77, 261-295.	0.0	263
108	Why Ornithologists Should Care about the Theropod Origin of Birds. <i>Auk</i> , 2002, 119, 1-17.	0.7	4

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109	Theory of the growth and evolution of feather shape. <i>The Journal of Experimental Zoology</i> , 2001, 291, 30-57.	1.4	91
110	Branched integumental structures in <i>Sinornithosaurus</i> and the origin of feathers. <i>Nature</i> , 2001, 410, 200-204.	13.7	172
111	A new genus for the Andean Green Pihas (<i>Cotingidae</i>). <i>Ibis</i> , 2001, 143, 307-309.	1.0	7
112	<i>Longisquama</i> Fossil and Feather Morphology. <i>Science</i> , 2001, 291, 1899c-1902.	6.0	18
113	A Preliminary Phylogenetic Hypothesis for the <i>Cotingas</i> (<i>Cotingidae</i>) Based on Mitochondrial DNA. <i>Auk</i> , 2000, 117, 236-241.	0.7	29
114	Development and evolutionary origin of feathers. , 1999, 285, 291-306.		267
115	Two-dimensional Fourier analysis of the spongy medullary keratin of structurally coloured feather barbs. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1999, 266, 13-22.	1.2	157
116	Phylogenetic Analysis of the Nest Architecture of Neotropical Ovenbirds (<i>Furnariidae</i>). <i>Auk</i> , 1999, 116, 891-911.	0.7	167
117	Development and evolutionary origin of feathers. , 1999, 285, 291.		10
118	Sexual selection and the evolution of mechanical sound production in manakins (<i>Aves: Pipridae</i>). <i>Animal Behaviour</i> , 1998, 55, 977-994.	0.8	103
119	Coherent light scattering by blue feather barbs. <i>Nature</i> , 1998, 396, 28-29.	13.7	332
120	Phylogenetic Tests of Alternative Intersexual Selection Mechanisms: Trait Macroevolution in a Polygynous Clade (<i>Aves: Pipridae</i>). <i>American Naturalist</i> , 1997, 149, 668-692.	1.0	124
121	Display Behavior and Natural History of the Yellow-Crowned Manakin (<i>Heterocercus flavivertex</i>): Tj ETQq1 1 0.784314 rgBT /Overlock 0.7 22	0.7	22
122	Phylogenetic Relationships of the Cinnamon Tyrant, <i>Neopipo cinnamomea</i> , to the Tyrant Flycatchers (<i>Tyrannidae</i>). <i>Condor</i> , 1995, 97, 650-662.	0.7	13
123	Structural color production by constructive reflection from ordered collagen arrays in a bird (<i>Philepitta castanea: Eurylaimidae</i>). <i>Journal of Morphology</i> , 1994, 222, 61-72.	0.6	36
124	Species Status of the White-Fronted Manakin, <i>Lepidothrix serena</i> (<i>Pipridae</i>), with Comments on Conservation Biology. <i>Condor</i> , 1994, 96, 692-702.	0.7	15
125	Phylogenetic Analysis of the Evolution of Alternative Social Behavior in the Manakins (<i>Aves: Pipridae</i>). <i>Evolution; International Journal of Organic Evolution</i> , 1994, 48, 1657.	1.1	48
126	PHYLOGENETIC ANALYSIS OF THE EVOLUTION OF ALTERNATIVE SOCIAL BEHAVIOR IN THE MANAKINS (AVES:) Tj ETQq0 0 0 rgBT /Overlock 1.1 74	1.1	74

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127	Phylogenetic Analysis of the Evolution of Display Behavior in the Neotropical Manakins (Aves: Tj ETQq1 1 0.784314 rgBT /Overlock 101	0.9	217
128	Monophyly and Phylogeny of the Schiffornis Group (Tyrannoidea). Condor, 1989, 91, 444.	0.7	51
129	Patterns and Processes of Diversification: Speciation and Historical Congruence in Some Neotropical Birds. Evolution; International Journal of Organic Evolution, 1988, 42, 603.	1.1	133
130	PATTERNS AND PROCESSES OF DIVERSIFICATION: SPECIATION AND HISTORICAL CONGRUENCE IN SOME NEOTROPICAL BIRDS. Evolution; International Journal of Organic Evolution, 1988, 42, 603-620.	1.1	276