Arthur Bradley

List of Publications by Year
in descending order

119 papers	6,158 citations	76196 40 h-index	79541 73 g-index
119 all docs	119 docs citations	119 times ranked	2365 citing authors

#	Article	IF	Citations
1	Timeâ€course of the visual Impact on presbyopes of a low dose miotic. Ophthalmic and Physiological Optics, 2021, 41, 73-83.	1.0	1
2	Correction of presbyopia: old problems with old (and new) solutions. Australasian journal of optometry, The, 2020, 103, 21-30.	0.6	21
3	Impact of monovision on dynamic accommodation of early presbyopes. Ophthalmic and Physiological Optics, 2020, 40, 47-59.	1.0	4
4	Resolution acuity across the visual field for mesopic and scotopic illumination. Journal of Vision, 2020, 20, 7.	0.1	9
5	Accommodative Behavior, Hyperopic Defocus, and Retinal Image Quality in Children Viewing Electronic Displays. Optometry and Vision Science, 2020, 97, 628-640.	0.6	11
6	The Impact of IOL Abbe Number on Polychromatic Image Quality of Pseudophakic Eyes . Clinical Ophthalmology, 2020, Volume 14, 2271-2281.	0.9	8
7	Optical and imaging properties of a novel multiâ€segment spectacle lens designed to slow myopia progression. Ophthalmic and Physiological Optics, 2020, 40, 549-556.	1.0	24
8	IMI â€“ Clinical Myopia Control Trials and Instrumentation Report. , 2019, 60, M132.		91
9	Small-pupil versus multifocal strategies for expanding depth of focus of presbyopic eyes. Journal of Cataract and Refractive Surgery, 2019, 45, 647-655.	0.7	8
10	Small Text on Product Labels Poses a Special Challenge for Emerging Presbyopes. Optometry and Vision Science, 2019, 96, 291-300.	0.6	4
11	Validation of a Clinical Aberrometer Using Pyramidal Wavefront Sensing. Optometry and Vision Science, 2019, 96, 733-744.	0.6	18
12	Riccoâ€™s law and absolute threshold for foveal detection of black holes. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2019, 36, B35.	0.8	2
13	Psychophysical study of the optical origin of starbursts. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2019, 36, B97.	0.8	7
14	Accommodation in Early Presbyopes Fit with Bilateral or Unilateral Near Add. Optometry and Vision Science, 2018, 95, 43-52.	0.6	6
15	Reducing starbursts in highly aberrated eyes with pupil miosis. Ophthalmic and Physiological Optics, 2018, 38, 26-36.	1.0	10
16	Experimental investigation of accommodation in eyes fit with multifocal contact lenses using a clinical autoâ€refractor. Ophthalmic and Physiological Optics, 2018, 38, 152-163.	1.0	27
17	The effect of spherical aberration on visual performance and refractive state for stimuli and tasks typical of night viewing. Journal of Optometry, 2018, 11, 144-152.	0.7	8
18	Simulation of a central scotoma using contact lenses with an opaque centre. Ophthalmic and Physiological Optics, 2018, 38, 76-87.	1.0	11

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19	Accommodative Behavior of Young Eyes Wearing Multifocal Contact Lenses. Optometry and Vision Science, 2018, 95, 416-427.	0.6	31
20	Accommodation and pupil behaviour of binocularly viewing early presbyopes. Ophthalmic and Physiological Optics, 2017, 37, 128-140.	1.0	13
21	Liquid Crystal Spatial Light Modulators for Simulating Zonal Multifocal Lenses. Optometry and Vision Science, 2017, 94, 867-875.	0.6	1
22	Accommodative Behavior of Eyes Wearing Aspheric Single Vision Contact Lenses. Optometry and Vision Science, 2017, 94, 971-980.	0.6	7
23	Interaction of aberrations, diffraction, and quantal fluctuations determine the impact of pupil size on visual quality. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2017, 34, 481.	0.8	22
24	The Effect of Light Level and Small Pupils on Presbyopic Reading Performance. , 2016, 57, 5656.		17
25	Neural bandwidth of veridical perception across the visual field. Journal of Vision, 2016, 16, 1.	0.1	41
26	Expanding binocular depth of focus by combining monovision with diffractive bifocal intraocular lenses. Journal of Cataract and Refractive Surgery, 2016, 42, 1288-1296.	0.7	14
27	Effect of Target Luminance on Optimum Pupil Diameter for Presbyopic Eyes. Optometry and Vision Science, 2016, 93, 1409-1419.	0.6	13
28	Can Down-gaze During Near Work Cause Peripheral Deprivation in Asian Eyes?. Optometry and Vision Science, 2016, 93, 1513-1524.	0.6	1
29	<scp>IUR</scp>ead: a new computerâ€based reading test. Ophthalmic and Physiological Optics, 2015, 35, 500-513.	1.0	16
30	Effect of ocular transverse chromatic aberration on detection acuity for peripheral vision. Ophthalmic and Physiological Optics, 2015, 35, 70-80.	1.0	8
31	The Effects of Increasing Ocular Surface Stimulation on Blinking and Tear Secretion. , 2015, 56, 4211.		22
32	Modelling the effects of secondary spherical aberration on refractive error, image quality and depth of focus. Ophthalmic and Physiological Optics, 2015, 35, 28-38.	1.0	31
33	Focus correction in an apodized system with spherical aberration. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2015, 32, 1556.	0.8	4
34	Influence of spherical aberration, stimulus spatial frequency, and pupil apodisation on subjective refractions. Ophthalmic and Physiological Optics, 2014, 34, 309-320.	1.0	29
35	Wavefront Refraction and Correction. Optometry and Vision Science, 2014, 91, 1154-1155.	0.6	5
36	Polychromatic Refractive Error from Monochromatic Wavefront Aberrometry. Optometry and Vision Science, 2014, 91, 1167-1174.	0.6	11

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37	Impact of contact lens zone geometry and ocular optics on bifocal retinal image quality. Ophthalmic and Physiological Optics, 2014, 34, 331-345.	1.0	43
38	Chromatic aberration and polychromatic image quality with diffractive multifocal intraocular lenses. Journal of Cataract and Refractive Surgery, 2014, 40, 1192-1204.	0.7	54
39	Retinal image quality during accommodation. Ophthalmic and Physiological Optics, 2013, 33, 497-507.	1.0	50
40	The relationship between anisometropia and amblyopia. Progress in Retinal and Eye Research, 2013, 36, 120-158.	7.3	121
41	The potential for and challenges of spherical and chromatic aberration correction with new IOL designs. British Journal of Ophthalmology, 2013, 97, 677-678.	2.1	2
42	Spherical Aberration and the Sign of Defocus. Optometry and Vision Science, 2013, 90, 1284-1291.	0.6	47
43	Modelling the impact of spherical aberration on accommodation. Ophthalmic and Physiological Optics, 2013, 33, 482-496.	1.0	46
44	Impact of primary spherical aberration, spatial frequency and <scp>S</scp>tiles <scp>C</scp>rawford apodization on wavefront determined refractive error: a computational study. Ophthalmic and Physiological Optics, 2013, 33, 444-455.	1.0	42
45	Comparing the Optical Properties of Soft Contact Lenses On and Off the Eye. Optometry and Vision Science, 2013, 90, 924-936.	0.6	26
46	Quantitative Analysis of Tear Film Fluorescence and Discomfort During Tear Film Instability and Thinning. , 2013, 54, 2645.		47
47	Scale and Spatial Distribution of Aberrations Associated with Tear Breakup. Optometry and Vision Science, 2012, 89, 1590-1600.	0.6	35
48	Forward light scatter analysis of the eye in a spatially-resolved double-pass optical system. Optics Express, 2011, 19, 7417.	1.7	20
49	Unbiased estimation of refractive state of aberrated eyes. Vision Research, 2011, 51, 1932-1940.	0.7	48
50	Phase changes induced by optical aberrations degrade letter and face acuity. Journal of Vision, 2010, 10, 18-18.	0.1	28
51	Measurement of the Time Course of Optical Quality and Visual Deterioration during Tear Break-Up. , 2010, 51, 3318.		59
52	Adaptation to astigmatic blur. Journal of Vision, 2010, 10, 22-22.	0.1	80
53	Visual Impact of Zernike and Seidel Forms of Monochromatic Aberrations. Optometry and Vision Science, 2010, 87, 300-312.	0.6	74
54	The mechanisms of vision loss associated with a cotton wool spot. Vision Research, 2009, 49, 2826-2834.	0.7	26

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55	Blinking and Tear Break-Up During Four Visual Tasks. Optometry and Vision Science, 2009, 86, E106-E114.	0.6	181
56	Calculation of retinal image quality for polychromatic light. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2008, 25, 2395.	0.8	72
57	Validation of an Off-Eye Contact Lens Shack-Hartmann Wavefront Aberrometer. Optometry and Vision Science, 2008, 85, E817-E828.	0.6	46
58	Probing the causes of visual acuity loss in patients diagnosed with functional amblyopia. Ophthalmic and Physiological Optics, 2005, 25, 175-178.	1.0	9
59	Testâ€"Retest Reliability of Clinical Shack-Hartmann Measurements. , 2004, 45, 351.		98
60	Understanding the Neural Basis of Amblyopia. Neuroscientist, 2004, 10, 106-117.	2.6	114
61	Accuracy and precision of objective refraction from wavefront aberrations. Journal of Vision, 2004, 4, 9.	0.1	425
62	Predicting subjective judgment of best focus with objective image quality metrics. Journal of Vision, 2004, 4, 7.	0.1	172
63	Validation of a combined corneal topographer and aberrometer based on Shackâ€"Hartmann wave-front sensing. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2004, 21, 683.	0.8	8
64	Validation of a Clinical Shack-Hartmann Aberrometer. Optometry and Vision Science, 2003, 80, 587-595.	0.6	110
65	Comparison of Monochromatic Ocular Aberrations Measured with an Objective Cross-Cylinder Aberroscope and a Shack-Hartmann Aberrometer. Optometry and Vision Science, 2003, 80, 15-25.	0.6	16
66	Use of Retroillumination to Visualize Optical Aberrations Caused by Tear Film Break-Up. Optometry and Vision Science, 2003, 80, 69-78.	0.6	38
67	Design Principles and Limitations of Wave-Front Guided Contact Lenses. Eye and Contact Lens, 2003, 29, S167-S170.	0.8	26
68	Relationship between Refractive Error and Monochromatic Aberrations of the Eye. Optometry and Vision Science, 2003, 80, 43-49.	0.6	186
69	Nonveridical Visual Perception in Human Amblyopia. , 2003, 44, 1555.		103
70	Estimating Visual Quality from Wavefront Aberration Measurements. Journal of Refractive Surgery, 2003, 19, .	1.1	83
71	Estimating visual quality from wavefront aberration measurements. Journal of Refractive Surgery, 2003, 19, S579-84.	1.1	21
72	Statistical variation of aberration structure and image quality in a normal population of healthy eyes. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2002, 19, 2329.	0.8	529

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73	Isolation of stimulus characteristics contributing to Weber's law for position. Vision Research, 2002, 42, 1137-1148.	0.7	23
74	A statistical model of the aberration structure of normal, well-corrected eyes. Ophthalmic and Physiological Optics, 2002, 22, 427-433.	1.0	139
75	Predicting Optical Effects of Tear Film Break Up on Retinal Image Quality Using the Shack-Hartmann Aberrometer and Computational Optical Modeling. Advances in Experimental Medicine and Biology, 2002, 506, 1141-1147.	0.8	26
76	Vernier acuity with compound gratings: the whole is equal to the better of its parts. Vision Research, 1999, 39, 3681-3691.	0.7	5
77	Apodization by the Stilesâ€“Crawford effect moderates the visual impact of retinal image defocus. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1999, 16, 812.	0.8	52
78	The role of neural and optical factors in limiting visual resolution in myopia. Vision Research, 1998, 38, 1713-1721.	0.7	58
79	Entoptic image quality of the retinal vasculature. Vision Research, 1998, 38, 2685-2696.	0.7	23
80	Comparison of the eyeâ€™s wave-front aberration measured psychophysically and with the Shackâ€“Hartmann wave-front sensor. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1998, 15, 2457.	0.8	99
81	Predicting the effects of optical defocus on human contrast sensitivity. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1998, 15, 2536.	0.8	51
82	Spherical Aberration of the Reduced Schematic Eye with Elliptical Refracting Surface. Optometry and Vision Science, 1997, 74, 548-556.	0.6	48
83	Use of Liquid-Crystal Adaptive-Optics to Alter the Refractive State of the Eye. Optometry and Vision Science, 1997, 74, 581-587.	0.6	47
84	Aliased Frequencies Enable the Discrimination of Compound Gratings in Peripheral Vision. Vision Research, 1997, 37, 283-290.	0.7	18
85	Interaction between sub- and supra-Nyquist spatial frequencies in peripheral vision. Vision Research, 1997, 37, 2545-2552.	0.7	9
86	Characterization of spatial aliasing and contrast sensitivity in peripheral vision. Vision Research, 1996, 36, 249-258.	0.7	123
87	Undersampling produces non-veridical motion perception, but not necessarily motion reversal, in peripheral vision. Vision Research, 1996, 36, 1737-1744.	0.7	24
88	Consequences of Monocular Diplopia for the Contrast Sensitivity Function. Vision Research, 1996, 36, 3587-3596.	0.7	30
89	Monocular Diplopia Caused by Ocular Aberrations and Hyperopic Defocus. Vision Research, 1996, 36, 3597-3606.	0.7	38
90	MODELING OFF-AXIS VISION I: THE OPTICAL EFFECTS OF DECENTERING VISUAL TARGETS OR THE EYE'S ENTRANCE PUPIL. , 1995, , 313-337.		9

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91	Reversals of the colour-depth illusion explained by ocular chromatic aberration. Vision Research, 1995, 35, 2675-2684.	0.7	14
92	Experimental determination of the chromatic difference of magnification of the human eye and the location of the anterior nodal point. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1993, 10, 213.	0.8	23
93	Effects of Target Distance and Pupil Size on Letter Contrast Sensitivity with Simultaneous Vision Bifocal Contact Lenses. Optometry and Vision Science, 1993, 70, 476-481.	0.6	38
94	New Methods for Discriminating Neural and Optical Losses of Vision. Optometry and Vision Science, 1993, 70, 279-287.	0.6	41
95	Psychophysical measurement of the size and shape of the human foveal avascular zone. Ophthalmic and Physiological Optics, 1992, 12, 18-23.	1.0	38
96	Chromatic Aberration and Optical Power of a Diffractive Bifocal Contact Lens. Optometry and Vision Science, 1992, 69, 797-804.	0.6	15
97	Glenn A. Fry Award Lecture 1991: Perceptual Manifestations of Imperfect Optics in the Human Eye: Attempts to Correct for Ocular Chromatic Aberration. Optometry and Vision Science, 1992, 69, 515-521.	0.6	24
98	The effect of pupil size on chromostereopsis and chromatic diplopia: Interaction between the Stiles-Crawford effect and chromatic aberrations. Vision Research, 1992, 32, 2121-2128.	0.7	28
99	The chromatic eye: a new reduced-eye model of ocular chromatic aberration in humans. Applied Optics, 1992, 31, 3594.	2.1	252
100	Failures of isoluminance caused by ocular chromatic aberrations. Applied Optics, 1992, 31, 3657.	2.1	56
101	Use of interferometric visual stimulators in optometry. Ophthalmic and Physiological Optics, 1992, 12, 206-208.	1.0	2
102	Interferometric measurement of visual acuity and the effect of ocular chromatic aberration. Applied Optics, 1991, 30, 2079.	2.1	18
103	Achromatizing the human eye: the problem of chromatic parallax. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1991, 8, 686.	0.8	37
104	Interocular differences in transverse chromatic aberration determine chromostereopsis for small pupils. Vision Research, 1991, 31, 1787-1796.	0.7	22
105	Effect of Ocular Chromatic Aberration on Monocular Visual Performance. Optometry and Vision Science, 1991, 68, 599-607.	0.6	85
106	Visual Acuity Measured with Clinical Maxwellian-View Systems: Effects of Beam Entry Location. Optometry and Vision Science, 1990, 67, 811-817.	0.6	16
107	Readily visible changes in color contrast are insufficient to stimulate accommodation. Vision Research, 1990, 30, 1367-1376.	0.7	29
108	Contrast dependence and mechanisms of masking interactions among chromatic and luminance gratings. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1988, 5, 1149.	0.8	202

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109	Orientation and spatial frequency selectivity of adaptation to color and luminance gratings. Vision Research, 1988, 28, 841-856.	0.7	166
110	Effects of contrast and spatial frequency on vernier acuity. Vision Research, 1987, 27, 1817-1824.	0.7	68
111	A comparison of contrast detection and discrimination. Vision Research, 1986, 26, 991-997.	0.7	99
112	The longitudinal chromatic aberration of the human eye, and its correction. Vision Research, 1986, 26, 361-366.	0.7	128
113	Temporal sensitivity in amblyopia: An explanation of conflicting reports. Vision Research, 1985, 25, 39-46.	0.7	16
114	Is amblyopia spatial frequency or retinal locus specific?. Vision Research, 1985, 25, 47-54.	0.7	12
115	Is reduced vernier acuity in amblyopia due to position, contrast or fixation deficits?. Vision Research, 1985, 25, 55-66.	0.7	57
116	Neurophysiological evaluation of the differential response model for orientation and spatial-frequency discrimination. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1985, 2, 1607.	0.8	26
117	The effects of large orientation and spatial frequency differences on spatial discriminations. Vision Research, 1984, 24, 1889-1896.	0.7	45
118	Contrast perception above threshold is only minimally impaired in human amblyopia. Nature, 1980, 287, 463-464.	13.7	136
119	Catastrophe optics theory unveils the localised wave aberration features that generate ghost images. Ophthalmic and Physiological Optics, 0, , .	1.0	2