Peter Hanselaer

List of Publications by Year
in descending order

131	2,568	201385	223531
papers	citations	27 h-index	46 g-index

131	131	131	1699
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Impact of Color-Matching Primaries on Observer Matching: Part I â€“ Accuracy. LEUKOS - Journal of Illuminating Engineering Society of North America, 2022, 18, 104-126.	1.5	12
2	Visualization of Lighting Quality and Object Appearance When Using Multichannel Light Sources. LEUKOS - Journal of Illuminating Engineering Society of North America, 2022, 18, 232-245.	1.5	2
3	Multi-Channel LED Luminaires: An Object-Oriented Approach for Retail Lighting Based on the SOR Framework. Sustainability, 2022, 14, 5994.	1.6	0
4	Development of an image-based measurement instrument for gloss characterization. Journal of Coatings Technology Research, 2022, 19, 1567-1582.	1.2	3
5	Derivation of Brightness Scales Using Partition Scaling. LEUKOS - Journal of Illuminating Engineering Society of North America, 2021, 17, 125-139.	1.5	1
6	CAM18sl brightness prediction for unrelated saturated stimuli including age effects. Optics Express, 2021, 29, 29257.	1.7	2
7	A Comparison of Partition Scaling and Magnitude Estimation for Brightness Scaling. LEUKOS - Journal of Illuminating Engineering Society of North America, 2021, 17, 265-279.	1.5	2
8	Impact of Illumination Correlated Color Temperature, Background Lightness, and Painting Color Content on Color Appearance and Appreciation of Paintings. LEUKOS - Journal of Illuminating Engineering Society of North America, 2020, 16, 25-44.	1.5	38
9	BRDF characterization of Al-coated thermoplastic polymer surfaces. Journal of Coatings Technology Research, 2020, 17, 1195-1205.	1.2	2
10	Relationship between pupillary size, brightness, and photoreceptor responses for unrelated selfâ€luminous stimuli at low photopic light levels. Color Research and Application, 2020, 45, 977-991.	0.8	3
11	Effect of adapting field size on chromatic adaptation. Optics Express, 2020, 28, 17266.	1.7	13
12	Freeform Fresnel lenses with a low number of discontinuities for tailored illumination applications. Optics Express, 2020, 28, 24489.	1.7	11
13	Efficient Design Method of Segmented Lenses for Lighting Applications with Prescribed Intensity and Low Peak Luminance. LEUKOS - Journal of Illuminating Engineering Society of North America, 2019, 15, 281-292.	1.5	3
14	Assessing the application of an image color appearance model to basic selfâ€luminous scenes. Color Research and Application, 2019, 44, 848-858.	0.8	1
15	Safety perception of stairs with integrated lighting. Building and Environment, 2019, 166, 106389.	3.0	8
16	Development of an image-based gloss measurement instrument. Journal of Coatings Technology Research, 2019, 16, 913-921.	1.2	12
17	Pupillary light reflex, receptive field mechanism and correction for retinal position for the assessment of visual discomfort. Lighting Research and Technology, 2019, 51, 291-303.	1.2	9
18	Improving the opto-thermal performance of transmissive laser-based white light sources through beam shaping. Optics Express, 2019, 27, A235.	1.7	8

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19	Luminance spreading freeform lens arrays with accurate intensity control. Optics Express, 2019, 27, 32994.	1.7	15
20	Impact of the starting point chromaticity on memory color matching accuracy. Optics Express, 2019, 27, 35308.	1.7	8
21	Ray mapping method for off-axis and non-paraxial freeform illumination lens design. Optics Letters, 2019, 44, 771.	1.7	51
22	PILOT STUDY ON COLOR MATCHING ACCURACY USING DIFFERENT PRIMARIES. , 2019, , .		2
23	Exploring the applicability of the CAM18sl brightness prediction. Optics Express, 2019, 27, 14423.	1.7	6
24	Accurate and robust characterization of volume scattering materials using the intensity-based inverse adding-doubling method. , 2019, , .		0
25	Holistic opto-thermal simulation framework for high-brightness light sources based on fluorescent conversion. Optics Express, 2019, 27, A1324.	1.7	3
26	Evaluation and modification of von Kries chromatic adaptation transform. Color and Imaging Conference, 2019, 2019, 23-27.	0.1	2
27	Multi-channel freeform optics for glare-free lighting. , 2019, , .		0
28	Towards a New Colour Appearance Model for Self-luminous Stimuli. Journal of Science and Technology in Lighting, 2018, 41, 153-164.	0.3	1
29	A psychophysical model for visual discomfort based on receptive fields. Lighting Research and Technology, 2018, 50, 205-217.	1.2	17
30	Brightness Model for Neutral Self-Luminous Stimuli and Backgrounds. LEUKOS - Journal of Illuminating Engineering Society of North America, 2018, 14, 231-244.	1.5	8
31	Application specific extension of the MCRI: Memory colors and preferred colors of reddish meat products. Color Research and Application, 2018, 43, 899-906.	0.8	0
32	Color appearance model for self-luminous stimuli. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2018, 35, 2000.	0.8	17
33	THE INFLUENCE OF ADAPTING FIELD SIZE ON DEGREE OF CHROMATIC ADAPTATION. , 2018, , .		4
34	Receptive Field Mechanism and Pupilary Light Reflex for the Assessment of Visual Discomfort. Light & Engineering, 2018, , 75-80.	0.1	0
35	Design of a freeform, luminance spreading illumination lens with a continuous surface. , 2018, , .		0
36	Defining the Actual Luminous Surface in the Unified Glare Rating. LEUKOS - Journal of Illuminating Engineering Society of North America, 2017, 13, 201-210.	1.5	12

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37	Analysis of painted artworks' color appearance under various lighting settings. , 2017, , .		9
38	Study of chromatic adaptation using memory color matches, Part I: neutral illuminants. Optics Express, 2017, 25, 7732.	1.7	43
39	Study of chromatic adaptation using memory color matches, Part II: colored illuminants. Optics Express, 2017, 25, 8350.	1.7	39
40	Radiance based method for accurate determination of volume scattering parameters using GPU-accelerated Monte Carlo. Optics Express, 2017, 25, 22575.	1.7	6
41	Selecting the optimal synthesis parameters of InP/CdxZn‹sub›1â^'x‹/sub›Se quantum dots for a hybrid remote phosphor white LED for general lighting applications. Optics Express, 2017, 25, A1009.	1.7	16
42	Flexible design method for freeform lenses with an arbitrary lens contour. Optics Letters, 2017, 42, 5238.	1.7	25
43	Selecting the optimal synthesis parameters of InP/Cd[x]Zn[1-x]Se quantum dots when combined with different broad band phosphors to optimize color rendering and efficiency of a remote phosphor white LED. , 2017, , .		0
44	Opto-thermal design of a white light point source based on high power blue laser diodes (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 T		0
45	Evaluation of simulation alternatives for the brute-force ray-tracing approach used in backlight design. Proceedings of SPIE, 2016, , .	0.8	0
46	An Efficient Optothermal Simulation Framework for Optimization of High-Luminance White Light Sources. IEEE Photonics Journal, 2016, 8, 1-15.	1.0	15
47	Spot phosphor concept applied to a remote phosphor light-emitting diode light engine. Optical Engineering, 2016, 55, 115103.	0.5	2
48	Spot phosphor concept applied to the remote phosphor configuration of a white phosphor-converted LED. Proceedings of SPIE, 2016, , .	0.8	1
49	Opto-thermal study of cooling strategies for high-luminance white-light solid-state sources. , 2016, , .		1
50	Determination of volume scattering parameters that reproduce the luminance characteristics of diffusers. Optics Express, 2016, 24, 11727.	1.7	6
51	Analysis of energy savings of three daylight control systems in a school building by means of monitoring. Energy and Buildings, 2016, 127, 969-979.	3.1	44
52	Repeatability and reproducibility of specular gloss meters in theory and practice. Journal of Coatings Technology Research, 2016, 13, 941-951.	1.2	8
53	Design of an inexpensive integrating sphere student laboratory setup for the optical characterization of light sources. European Journal of Physics, 2016, 37, 015302.	0.3	6
54	Optical Modelling of Luminescent Cascade Systems with the Adding-Doubling Method. Springer Proceedings in Physics, 2016, , 67-80.	0.1	0

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55	Memory and preferred colours and the colour rendition of white light sources. Lighting Research and Technology, 2016, 48, 393-411.	1.2	28
56	Modelling Incomplete Chromatic Adaptation and Colour Contrast Using Memory Colour. Color and Imaging Conference, 2016, 24, 82-87.	0.1	3
57	Determination of the optimal amount of scattering in a wavelength conversion plate for white LEDs. Optics Express, 2015, 23, A1629.	1.7	7
58	Impact of cross-regional differences on color rendition evaluation of white light sources. Optics Express, 2015, 23, 30216.	1.7	12
59	Experimental validation of adding-doubling modeling of solar cells including luminescent down-shifting layers. Journal of Renewable and Sustainable Energy, 2015, 7, .	0.8	9
60	Near-field and far-field goniophotometry of narrow-beam LED arrays. Lighting Research and Technology, 2015, 47, 470-482.	1.2	8
61	Impact of the Geometrical and Optical Parameters on the Performance of a Cylindrical Remote Phosphor LED. IEEE Photonics Journal, 2015, 7, 1-14.	1.0	9
62	Design of an inexpensive integrating sphere laboratory setup for the optical characterization of a light source. Proceedings of SPIE, 2015, , .	0.8	2
63	Practical limitations of near-field goniophotometer measurements imposed by a dynamic range mismatch. Optics Express, 2015, 23, 2240.	1.7	9
64	Rayfiles including spectral and colorimetric information. Optics Express, 2015, 23, A361.	1.7	10
65	Experimental driven modelling of the color appearance of unrelated self-luminous stimuli: CAM15u. Optics Express, 2015, 23, 12045.	1.7	29
66	Chromaticity of unique white in illumination mode. Optics Express, 2015, 23, 12488.	1.7	28
67	Brightness prediction of different sized unrelated self-luminous stimuli. Optics Express, 2015, 23, 13455.	1.7	11
68	Simulation of white LEDs with a planar luminescent layer using the extended Adding-Doubling method. , 2015, , .		0
69	Calculation of the Unified Glare Rating based on luminance maps for uniform and non-uniform light sources. Building and Environment, 2015, 84, 60-67.	3.0	30
70	Absolute determination of photoluminescence quantum efficiency using an integrating sphere setup. Review of Scientific Instruments, 2014, 85, 123115.	0.6	96
71	Rapid determination of the photometric bidirectional scatter distribution function by use of a near-field goniophotometer. Proceedings of SPIE, 2014, , .	0.8	1
72	Near-field and far-field goniophotometry of focused LED arrays. , 2014, , .		1

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73	Experimental determination of the absorption and scattering properties of YAG:Ce phosphor. , 2014, , .		5
74	Estimation of the effective phase function of bulk diffusing materials with the inverse adding-doubling method. Applied Optics, 2014, 53, 2117.	0.9	27
75	Predicting the brightness of unrelated self-luminous stimuli. Optics Express, 2014, 22, 16298.	1.7	13
76	Cross-cultural variation of memory colors of familiar objects. Optics Express, 2014, 22, 32308.	1.7	28
77	A hybrid tool for spectral ray tracing simulations of luminescent cascade systems. Optics Express, 2014, 22, 24582.	1.7	5
78	Chromaticity of unique white in object mode. Optics Express, 2014, 22, 25830.	1.7	48
79	Power and photon budget of a remote phosphor LED module. Optics Express, 2014, 22, A1079.	1.7	21
80	Toward the soft metrology of surface gloss: A review. Color Research and Application, 2014, 39, 559-570.	0.8	42
81	42.3: Invited Paper: Progress in the Soft Metrology of Appearance: the Contribution of Digital Image Representations. Digest of Technical Papers SID International Symposium, 2014, 45, 603-606.	0.1	1
82	Taking the spectral overlap between excitation and emission spectra of fluorescent materials into account with Monte Carlo simulations. , 2014, , .		3
83	The use of the adding-doubling method for the optical optimization of planar luminescent down shifting layers for solar cells. Optics Express, 2014, 22, A765.	1.7	14
84	Quick evaluation method for solar modules with a luminescent down-shifting layer. , 2014, , .		0
85	Determination of the bulk scattering parameters of diffusing materials. Applied Optics, 2013, 52, 4083.	0.9	21
86	Optical determination of the junction temperature of OLEDs. Organic Electronics, 2013, 14, 2770-2776.	1.4	13
87	Determination and Optimization of the Luminescence External Quantum Efficiency of Silver-Clusters Zeolite Composites. Journal of Physical Chemistry C, 2013, 117, 6998-7004.	1.5	64
88	A batch LED reactor for the photocatalytic degradation of phenol. Chemical Engineering and Processing: Process Intensification, 2013, 71, 43-50.	1.8	75
89	Quality Assessment of Virtual Prototypes of Surgical Luminaires using Near-field Ray-data. LEUKOS - Journal of Illuminating Engineering Society of North America, 2013, 9, 189-200.	1.5	3
90	Simulating the spatial luminance distribution of planar light sources by sampling of ray files. Optics Express, 2013, 21, 24099.	1.7	10

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91	Brightness perception of unrelated self-luminous colors. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2013, 30, 1248.	0.8	25
92	Color sensitivity of the multi-exposure HDR imaging process. Advanced Optical Technologies, 2013, 2, 159-169.	0.9	1
93	Bayesian deconvolution method applied to experimental bidirectional transmittance distribution functions. Measurement Science and Technology, 2013, 24, 035202.	1.4	6
94	Impact of the accurateness of bidirectional reflectance distribution function data on the intensity and luminance distributions of a light-emitting diode mixing chamber as obtained by simulations. Optical Engineering, 2013, 52, 095101.	0.5	7
95	Optimization of colour quality of LED lighting with reference to memory colours. Lighting Research and Technology, 2012, 44, 7-15.	1.2	24
96	Overall gloss evaluation in the presence of multiple cues to surface glossiness. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 1105.	0.8	25
97	Extended adding-doubling method for fluorescent applications. Optics Express, 2012, 20, 17856.	1.7	22
98	A memory colour quality metric for white light sources. Energy and Buildings, 2012, 49, 216-225.	3.1	69
99	Linear LED tubes versus fluorescent lamps: An evaluation. Energy and Buildings, 2012, 49, 429-436.	3.1	58
100	Failure analysis of electrical-thermal-optical characteristics of LEDs based on AlGaInP and InGaN/GaN. Semiconductors, 2012, 46, 1310-1315.	0.2	8
101	Luminance-based specular gloss characterization. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2011, 28, 1322.	0.8	24
102	Optimal colour quality of LED clusters based on memory colours. Optics Express, 2011, 19, 6903.	1.7	18
103	Correlation between color quality metric predictions and visual appreciation of light sources. Optics Express, 2011, 19, 8151.	1.7	105
104	The design of a wireless batteryless biflash installation with high power LEDs. , 2011, , .		0
105	Colour appearance rating of familiar real objects. Color Research and Application, 2011, 36, 192-200.	0.8	89
106	Fluorescence errors in integrating sphere measurements of remote phosphor type LED light sources. , 2011, , .		2
107	Efficiency Evaluation of Phosphor-white High-power Light-emitting Diodes. Journal of Light and Visual Environment, 2011, 35, 199-206.	0.2	2
108	Modelling the spatial colour distribution of phosphor-white high power light-emitting diodes. , 2010, , .		3

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109	Criteria for energy efficient lighting in buildings. Energy and Buildings, 2010, 42, 341-347.	3.1	89
110	Stray light performance of a combined monochromatorâ€“spectrograph UV irradiance measuring instrument. Measurement Science and Technology, 2010, 21, 085304.	1.4	3
111	Feasibility study of a brute-force ray tracing approach to obtain luminance maps of luminaires modeled with ray files. , 2010, , .		3
112	Modeling high power light-emitting diode spectra and their variation with junction temperature. Journal of Applied Physics, 2010, 108, .	1.1	73
113	Memory colours and colour quality evaluation of conventional and solid-state lamps. Optics Express, 2010, 18, 26229.	1.7	104
114	Geometry of illumination, luminance contrast, and gloss perception. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 2046.	0.8	33
115	A new integrating sphere design for spectral radiant flux determination of light-emitting diodes. Measurement Science and Technology, 2009, 20, 095111.	1.4	29
116	High power light-emitting diode junction temperature determination from current-voltage characteristics. Journal of Applied Physics, 2008, 104, 093104.	1.1	114
117	Design of an instrument for measuring the spectral bidirectional scatter distribution function. Applied Optics, 2008, 47, 5454.	2.1	63
118	Thermal characterization of single-die and multi-die high power light-emitting diodes. Proceedings of SPIE, 2008, , .	0.8	5
119	A Narrow Beam Reflector for a Two-Dimensional Array of Power Light Emitting Diodes. LEUKOS - Journal of Illuminating Engineering Society of North America, 2008, 4, 243-254.	1.5	2
120	Power density targets for efficient lighting of interior task areas. Lighting Research and Technology, 2007, 39, 171-184.	1.2	24
121	An investigation of the chemical stability of a monomer/polymer gel dosimeter. Physics in Medicine and Biology, 2000, 45, 859-878.	1.6	170
122	On the temperature dependence of the Mottâ€“Schottky characteristics of highâ€barrier Tiâ€“pâ€Si metalâ€insulatorâ€semiconductor diodes. Journal of Applied Physics, 1987, 61, 2277-2281.	1.1	1
123	Large barrier tunnel metal-insulator-semiconductor structures. Semiconductor Science and Technology, 1987, 2, 94-101.	1.0	4
124	The influence of a HF and an annealing treatment on the barrier height of p- and n-type Si MIS structures. Applied Physics A: Solids and Surfaces, 1986, 39, 129-133.	1.4	55
125	The influence of silicide formation on the barrier height of Ti/Si MIS Schottky barriers. Semiconductor Science and Technology, 1986, 1, 376-382.	1.0	8
126	Currentâ€voltage characteristic of Tiâ€pSi metalâ€oxideâ€semiconductor diodes. Journal of Applied Physics, 1984, 56, 2309-2314.	1.1	98

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127	An experimental study of Ti-pSi MIS type Schottky barriers. Journal Physics D: Applied Physics, 1982, 15, L7-L10.	1.3	8
128	Investigation on photoelectrochemical cells based upon silicon/methanol interfaces. Part 2: p-type Si. Solar Energy Materials and Solar Cells, 1982, 7, 33-42.	0.4	5
129	Impact of Color Matching Primaries on Observer Matching: Part II â€“ Observer Variability. LEUKOS - Journal of Illuminating Engineering Society of North America, 0, , 1-18.	1.5	3
130	Road Marking Contrast Threshold Revisited. LEUKOS - Journal of Illuminating Engineering Society of North America, 0, , 1-20.	1.5	3
131	Brightness appearance of selfâ€luminous stimuli on a nonâ€uniform background. Color Research and Application, 0, , .	0.8	0