

Allard P Mosk

List of Publications by Year in descending order

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149
papers

9,336
citations

87843

38
h-index

38368

95
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152
all docs

152
docs citations

152
times ranked

5011
citing authors

#	ARTICLE	IF	CITATIONS
1	Efficient and flexible approach to ptychography using an optimization framework based on automatic differentiation. OSA Continuum, 2021, 4, 121.	1.8	9
2	Maximum information states for coherent scattering measurements. Nature Physics, 2021, 17, 564-568.	6.5	30
3	Optimizing illumination for precise multi-parameter estimations in coherent diffractive imaging. Optics Letters, 2021, 46, 254.	1.7	10
4	Scattering invariant modes of light in complex media. Nature Photonics, 2021, 15, 431-434.	15.6	23
5	Enhanced transparency in strongly scattering media. , 2021, , .		0
6	Observation of mutual extinction and transparency in light scattering. Physical Review A, 2021, 104, .	1.0	7
7	Resampling the transmission matrix in an aberration-corrected Bessel mode basis. Optics Express, 2021, 29, 24.	1.7	5
8	Optimal Control of Coherent Light Scattering for Binary Decision Problems. Physical Review Letters, 2021, 127, 253902.	2.9	7
9	Exploiting sound and noise. Nature Photonics, 2020, 14, 466-467.	15.6	0
10	Influence of the Local Scattering Environment on the Localization Precision of Single Particles. Physical Review Letters, 2020, 124, 133903.	2.9	18
11	Optical method for micrometer-scale tracerless visualization of ultrafast laser induced gas flow at a water/air interface. Applied Optics, 2020, 59, 5205.	0.9	3
12	Imaging trapped quantum gases by off-axis holography. Optics Letters, 2020, 45, 981.	1.7	5
13	Optical transmission matrix measurement sampled on a dense hexagonal lattice. OSA Continuum, 2020, 3, 637.	1.8	10
14	Mutual extinction and transparency of multiple incident light waves. Europhysics Letters, 2020, 130, 34002.	0.7	10
15	Femtosecond laser-ablation of gel and water. Optics Letters, 2020, 45, 3079.	1.7	2
16	Imaging through highly scattering environments using ballistic and quasi-ballistic light in a common-path Sagnac interferometer. Optics Express, 2020, 28, 10386.	1.7	2
17	Thermo-optical dynamics of a nonlinear GaInP photonic crystal nanocavity depend on the optical mode profile. OSA Continuum, 2020, 3, 1879.	1.8	4
18	Asymmetric cryptography with physical unclonable keys. Quantum Science and Technology, 2019, 4, 045011.	2.6	17

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19	Adaptive Control of Necklace States in a Photonic Crystal Waveguide. ACS Photonics, 2018, 5, 3984-3988.	3.2	7
20	Imaging of objects through a thin scattering layer using a spectrally and spatially separated reference. Optics Express, 2018, 26, 15073.	1.7	40
21	Three-dimensional spatially resolved optical energy density enhanced by wavefront shaping. Optica, 2018, 5, 844.	4.8	24
22	Finite-size Scaling of the Density of States in Photonic Band Gap Crystals. Physical Review Letters, 2018, 120, 237402.	2.9	28
23	Transport of Light Through White-LED Phosphor Plates. NATO Science for Peace and Security Series B: Physics and Biophysics, 2017, , 467-468.	0.2	0
24	Fano lines in the reflection spectrum of directly coupled systems of waveguides and cavities: Measurements, modeling, and manipulation of the Fano asymmetry. Physical Review A, 2017, 96, .	1.0	6
25	Authenticated communication from quantum readout of PUFs. Quantum Information Processing, 2017, 16, 200.	1.0	9
26	Secure communication with coded wavefronts. , 2017, , .		0
27	Finite size scaling of the density of states in photonic band gap crystals. , 2017, , .		0
28	Interplay of bloch waves and scattered waves in real photonic crystals. , 2017, , .		0
29	Measurement of the linear thermo-optical coefficient of Ga _{0.51} In _{0.49} P using photonic crystal nanocavities. Applied Optics, 2017, 56, 3219.	2.1	10
30	Transmitting more than 10 bit with a single photon. Optics Express, 2017, 25, 2826.	1.7	14
31	Tuning out disorder-induced localization in nanophotonic cavity arrays. Optics Express, 2017, 25, 4598.	1.7	14
32	Imaging objects through scattering layers and around corners by retrieval of the scattered point spread function. Optics Express, 2017, 25, 32829.	1.7	49
33	Frequency width of open channels in multiple scattering media. Optics Express, 2016, 24, 26472.	1.7	10
34	Measurement of the profiles of disorder-induced localized resonances in photonic crystal waveguides by local tuning. Optics Express, 2016, 24, 21939.	1.7	8
35	Nanocapillary electrokinetic tracking for monitoring charge fluctuations on a single nanoparticle. Faraday Discussions, 2016, 193, 447-458.	1.6	11
36	Controlling the intensity of light in large areas at the interfaces of a scattering medium. Physical Review A, 2016, 94, .	1.0	13

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37	How to distinguish elastically scattered light from Stokes shifted light for solid-state lighting?. Journal of Applied Physics, 2016, 119, 093102.	1.1	6
38	Optical transmission matrix as a probe of the photonic strength. Physical Review A, 2016, 94, .	1.0	16
39	Mapping the energy density of shaped waves in scattering media onto a complete set of diffusion modes. Optics Express, 2016, 24, 18525.	1.7	6
40	Roadmap on optical security. Journal of Optics (United Kingdom), 2016, 18, 083001.	1.0	338
41	Coupling of energy into the fundamental diffusion mode of a complex nanophotonic medium. New Journal of Physics, 2016, 18, 043032.	1.2	27
42	High-resolution wavefront shaping with a photonic crystal fiber for multimode fiber imaging. Optics Letters, 2016, 41, 497.	1.7	51
43	Range of Imaging and Focusing through Scattering Media. , 2016, , .		0
44	Non-invasive imaging through opaque scattering layers. Proceedings of SPIE, 2015, , .	0.8	6
45	Nanophotonic hybridization of narrow atomic cesium resonances and photonic stop gaps of opaline nanostructures. Physical Review B, 2015, 91, .	1.1	3
46	Local thermal resonance control of GaInP photonic crystal membrane cavities using ambient gas cooling. Applied Physics Letters, 2015, 106, .	1.5	15
47	Programmable multiport optical circuits in opaque scattering materials. Optics Express, 2015, 23, 3102.	1.7	38
48	Rotational memory effect of a multimode fiber. Optics Express, 2015, 23, 20569.	1.7	51
49	Femtosecond-scale switching based on excited free-carriers. Optics Express, 2015, 23, 16416.	1.7	14
50	Speckle correlation resolution enhancement of wide-field fluorescence imaging. Optica, 2015, 2, 424.	4.8	106
51	Observation of nonlinear bands in near-field scanning optical microscopy of a photonic-crystal waveguide. Journal of Applied Physics, 2015, 117, 033104.	1.1	2
52	Dispersion of coupled mode-gap cavities. Optics Letters, 2015, 40, 4488.	1.7	10
53	Highly transmitting channels for light in absorbing scattering media. , 2014, , .		0
54	Observation of intensity statistics of light transmitted through 3D random media. Optics Letters, 2014, 39, 6347.	1.7	6

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55	Interplay between multiple scattering, emission, and absorption of light in the phosphor of a white light-emitting diode. Optics Express, 2014, 22, 8190.	1.7	33
56	Programming balanced optical beam splitters in white paint. Optics Express, 2014, 22, 8320.	1.7	27
57	Superpixel-based spatial amplitude and phase modulation using a digital micromirror device. Optics Express, 2014, 22, 17999.	1.7	242
58	Transmission channels for light in absorbing random media: From diffusive to ballistic-like transport. Physical Review B, 2014, 89, .	1.1	53
59	Design of a three-dimensional photonic band gap cavity in a diamondlike inverse woodpile photonic crystal. Physical Review B, 2014, 90, .	1.1	29
60	Programming Single-Photon Wavefronts for Quantum Authentication. , 2014, , .		0
61	Quantum-secure authentication of a physical unclonable key. Optica, 2014, 1, 421.	4.8	148
62	Controlling single-photon Fock-state propagation through opaque scattering media. Applied Physics B: Lasers and Optics, 2014, 116, 603-607.	1.1	17
63	Local density of optical states in the band gap of a finite one-dimensional photonic crystal. Physical Review B, 2014, 89, .	1.1	32
64	Transmission channels for light in absorbing random media. , 2014, , .		0
65	High-resolution Imaging using Scattered Light. , 2013, , .		0
66	Focusing and Scanning Microscopy with Propagating Surface Plasmons. Physical Review Letters, 2013, 110, 266804.	2.9	44
67	SECURITY OF QUANTUM-READOUT PUFs AGAINST QUADRATURE-BASED CHALLENGE-ESTIMATION ATTACKS. International Journal of Quantum Information, 2013, 11, 1350041.	0.6	18
68	Broadband mean free path of diffuse light in polydisperse ensembles of scatterers for white light-emitting diode lighting. Applied Optics, 2013, 52, 2602.	0.9	33
69	All-optical switching of a microcavity repeated at terahertz rates. Optics Letters, 2013, 38, 374.	1.7	33
70	Optimal control of light propagation through multiple-scattering media in the presence of noise. Biomedical Optics Express, 2013, 4, 1759.	1.5	53
71	High-resolution phase and amplitude modulation using a digital micromirror device. , 2013, , .		1
72	High-resolution imaging with scattered light. , 2013, , .		0

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73	Maximum control of light propagation through turbid media in the presence of noise. , 2013, , .		0
74	Noninvasive Fluorescence Imaging through Strongly Scattering Layers. , 2013, , .		0
75	Imaging Through Scattering Media. , 2013, , .		3
76	Imaging and Focusing through Turbid Media. , 2013, , .		0
77	Observation of a stronger-than-adiabatic change of light trapped in an ultrafast switched GaAs-AlAs microcavity. Journal of the Optical Society of America B: Optical Physics, 2012, 29, A1.	0.9	12
78	Nonimaging speckle interferometry for high-speed nanometer-scale position detection. Optics Letters, 2012, 37, 1070.	1.7	14
79	Observation of Sub-Bragg Diffraction of Waves in Crystals. Physical Review Letters, 2012, 108, 083901.	2.9	14
80	Measurement of a band-edge tail in the density of states of a photonic-crystal waveguide. Physical Review B, 2012, 86, .	1.1	28
81	Nanophotonic Control of the Förster Resonance Energy Transfer Efficiency. Physical Review Letters, 2012, 109, 203601.	2.9	141
82	Optical Control of Plasmonic Bloch Modes on Periodic Nanostructures. Nano Letters, 2012, 12, 546-550.	4.5	19
83	Non-invasive imaging through opaque scattering layers. Nature, 2012, 491, 232-234.	13.7	882
84	Controlling waves in space and time for imaging and focusing in complex media. Nature Photonics, 2012, 6, 283-292.	15.6	1,150
85	Inhibited Spontaneous Emission of Quantum Dots Observed in a 3D Photonic Band Gap. Physical Review Letters, 2011, 107, 193903.	2.9	122
86	Scattering Lens Resolves Sub-100Ånm Structures with Visible Light. Physical Review Letters, 2011, 106, 193905.	2.9	243
87	Transmission eigenchannels in a disordered medium. Physical Review B, 2011, 83, .	1.1	105
88	Optimal concentration of light in turbid materials. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 1200.	0.9	19
89	Focusing light through random photonic media by binary amplitude modulation. Optics Express, 2011, 19, 4017.	1.7	173
90	Frequency bandwidth of light focused through turbid media. Optics Letters, 2011, 36, 373.	1.7	61

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91	Scattering optics resolve nanostructure. , 2011, , .		1
92	Active spatial control of plasmonic fields. Nature Photonics, 2011, 5, 360-363.	15.6	141
93	Control of Light Transmission through Opaque Scattering Media in Space and Time. Physical Review Letters, 2011, 106, 103901.	2.9	213
94	Eigenmodes in a randomly disordered medium. , 2011, , .		0
95	Signature of a three-dimensional photonic band gap observed on silicon inverse woodpile photonic crystals. Physical Review B, 2011, 83, .	1.1	38
96	Coherent optical imaging through opaque layers. , 2011, , .		0
97	Nanobiophotonics: Using the nanophotonics toolbox to manipulate biological fluorophores. , 2011, , .		0
98	Experimental observation of sub-Bragg frequency gaps in photonic crystals. , 2011, , .		0
99	Experimental signature of a broad 3D photonic band gap in silicon nanostructures. , 2011, , .		0
100	A nanophotonic probe for quantum electrodynamics in random cavities. , 2011, , .		0
101	Focusing light through turbid media by binary amplitude modulation. , 2011, , .		0
102	Coherent Optical Imaging through Opaque Layers. , 2011, , .		0
103	The information age in optics: Measuring the transmission matrix. Physics Magazine, 2010, 3, .	0.1	29
104	Exploiting disorder for perfect focusing. Nature Photonics, 2010, 4, 320-322.	15.6	645
105	Experimental studies on the mode structure of random lasers. Physical Review A, 2010, 81, .	1.0	29
106	Observation of Spatial Fluctuations of the Local Density of States in Random Photonic Media. Physical Review Letters, 2010, 105, 013904.	2.9	72
107	Spatial threshold in amplifying random media. Optics Letters, 2010, 35, 3063.	1.7	7
108	Photonic interactions of resonant cesium atoms and opal photonic crystals. , 2009, , .		0

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109	Observation of fluctuations of the local density of states in disordered photonic media. , 2009, , .		0
110	The influence of fabrication deviations on the photonic band gap of three-dimensional inverse woodpile nanostructures. Journal of Applied Physics, 2009, 105, 093108.	1.1	27
111	Relaxation oscillations in long-pulsed random lasers. Physical Review A, 2009, 80, .	1.0	20
112	Optimal Transmission of Light through Disordered Materials. , 2009, , .		0
113	Optimal concentration of light in turbid materials. , 2009, , .		0
114	What is the real quality factor of an ultrafast planar photonic microcavity?. , 2009, , .		0
115	Controlling fluorescent proteins by manipulating the local density of photonic states. Proceedings of SPIE, 2009, , .	0.8	0
116	Spectral emission imaging to map photonic properties below the crystal surface of 3D photonic crystals. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 2101.	0.9	3
117	Manipulation of the local density of photonic states to elucidate fluorescent protein emission rates. Physical Chemistry Chemical Physics, 2009, 11, 2525.	1.3	24
118	Controlling Fluorescent Proteins by Manipulating the Local Density of Photonic States. , 2009, , .		0
119	Color Control of Natural Fluorescent Proteins by Photonic Crystals. Small, 2008, 4, 492-496.	5.2	49
120	Phase control algorithms for focusing light through turbid media. Optics Communications, 2008, 281, 3071-3080.	1.0	386
121	Universal Optimal Transmission of Light Through Disordered Materials. Physical Review Letters, 2008, 101, 120601.	2.9	306
122	Spatial amplitude and phase modulation using commercial twisted nematic LCDs. Applied Optics, 2008, 47, 2076.	2.1	99
123	Demixing light paths inside disordered metamaterials. Optics Express, 2008, 16, 67.	1.7	185
124	Wavelength dependence of light diffusion in strongly scattering macroporous gallium phosphide. Physical Review A, 2008, 77, .	1.0	4
125	Focusing of light by disordered metamaterials. , 2007, , .		0
126	Trapping of Rb Atoms by ac Electric Fields. Physical Review Letters, 2007, 98, 223002.	2.9	28

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127	Focusing coherent light through opaque strongly scattering media. <i>Optics Letters</i> , 2007, 32, 2309.	1.7	1,461
128	Gain Narrowing in Few-Atom Systems. <i>Physical Review Letters</i> , 2007, 98, 103601.	2.9	13
129	Spatial refractive index sensor using whispering gallery modes in an optically trapped microsphere. <i>Applied Physics Letters</i> , 2007, 90, 161101.	1.5	46
130	Quantitative analysis of several random lasers. <i>Optics Communications</i> , 2007, 278, 110-113.	1.0	44
131	Spatial Extent of Random Laser Modes. <i>Physical Review Letters</i> , 2007, 98, 143901.	2.9	137
132	Laser threshold of Mie resonances. <i>Optics Letters</i> , 2006, 31, 1432.	1.7	25
133	Intrinsic intensity fluctuations in random lasers. <i>Physical Review A</i> , 2006, 74, .	1.0	61
134	Rotationally induced Penning ionization of ultracold photoassociated helium dimers. <i>Europhysics Letters</i> , 2005, 70, 190-196.	0.7	8
135	Light scattering from three-level systems: The Tmatrix of a point dipole with gain. <i>Physical Review A</i> , 2005, 71, .	1.0	5
136	Spatial Quantum Correlations in Multiple Scattered Light. <i>Physical Review Letters</i> , 2005, 95, 173901.	2.9	56
137	Atomic Gases at Negative Kinetic Temperature. <i>Physical Review Letters</i> , 2005, 95, 040403.	2.9	43
138	Hyperfine-changing collisions in an optically trapped gas of ultracold cesium and lithium. <i>Physical Review A</i> , 2004, 70, .	1.0	17
139	Analysis of photoassociation spectra for giant helium dimers. <i>Physical Review A</i> , 2004, 69, .	1.0	24
140	Giant Helium Dimers Produced by Photoassociation of Ultracold Metastable Atoms. <i>Physical Review Letters</i> , 2003, 91, 073203.	2.9	61
141	Optical pumping of metastable NH radicals into the paramagnetic ground state. <i>Physical Review A</i> , 2003, 68, .	1.0	17
142	Low-cost mechanical shutter for light beams. <i>Review of Scientific Instruments</i> , 2002, 73, 4402-4404.	0.6	18
143	Mixture of ultracold lithium and cesium atoms in an optical dipole trap. <i>Applied Physics B: Lasers and Optics</i> , 2001, 73, 791-799.	1.1	75
144	Atomic deuterium adsorbed on the surface of liquid helium. <i>Physical Review A</i> , 2001, 64, .	1.0	1

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145	Resonance enhanced two photon spectroscopy of magnetically trapped atomic hydrogen. , 2000, 127, 175-180.		1
146	Photoassociation of Spin-Polarized Hydrogen. Physical Review Letters, 1999, 82, 307-310.	2.9	46
147	Optical Excitation of Atomic Hydrogen Bound to the Surface of Liquid Helium. Physical Review Letters, 1998, 81, 4440-4443.	2.9	19
148	Comment on "A New Type of Evaporative Cooling for Neutral Atoms": Physical Review Letters, 1998, 81, 3046-3046.	2.9	1
149	van Putten and Mosk reply. Physics Magazine, 0, 3, .	0.1	2