Herman L Offerhaus

List of Publications by Year
in descending order

123	3,460	147726	149623
papers	citations	31 h-index	56 g-index

128	128	128	3364
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Axonâ€Myelin Unit Blistering as Early Event in <scp>MS</scp> Normal Appearing White Matter. Annals of Neurology, 2021, 89, 711-725.	2.8	39
2	Tethering Cells via Enzymatic Oxidative Crosslinking Enables Mechanotransduction in Nonâ€Cellâ€Adhesive Materials. Advanced Materials, 2021, 33, e2102660.	11.1	10
3	Comparison of three types of fiber optic sensors for temperature monitoring in a groundwater flow simulator. Sensors and Actuators A: Physical, 2021, 331, 112682.	2.0	11
4	Classifying Raman spectra of extracellular vesicles based on convolutional neural networks for prostate cancer detection. Journal of Raman Spectroscopy, 2020, 51, 293-300.	1.2	79
5	A First Step towards Determining the Ionic Content in Water with an Integrated Optofluidic Chip Based on Near-Infrared Absorption Spectroscopy. Optics, 2020, 1, 175-190.	0.6	0
6	Temperature and Consolidation Sensing Near Drinking Water Wells Using Fiber Bragg Grating Sensors. Water (Switzerland), 2020, 12, 3572.	1.2	0
7	Microfluidics control the ballistic energy of thermocavitation liquid jets for needle-free injections. Journal of Applied Physics, 2020, 127, .	1.1	24
8	Cancer-ID: Toward Identification of Cancer by Tumor-Derived Extracellular Vesicles in Blood. Frontiers in Oncology, 2020, 10, 608.	1.3	20
9	Study on multiple waveguide platforms for waveguide integrated Raman spectroscopy. OSA Continuum, 2020, 3, 1322.	1.8	4
10	High-gain waveguide amplifiers in Si₃N₄ technology via double-layer monolithic integration. Photonics Research, 2020, 8, 1634.	3.4	36
11	Nonlinear multispectral imaging for tumor delineation. Journal of Biomedical Optics, 2020, 25, .	1.4	2
12	Thermal effects on tapered holmium-doped fiber amplifiers. Optical Engineering, 2020, 59, 1.	0.5	1
13	Fundamental mode intensity evolution in tapered optical fibres. Laser Physics, 2020, 30, 126204.	0.6	4
14	Dynamic Consolidation Measurements in a Well Field Using Fiber Bragg Grating Sensors. Sensors, 2019, 19, 4403.	2.1	4
15	Possibilities for Groundwater Flow Sensing with Fiber Bragg Grating Sensors. Sensors, 2019, 19, 1730.	2.1	10
16	Hyperspectral imaging in biomedical applications. Journal of Optics (United Kingdom), 2019, 21, 010202.	1.0	9
17	Analysis and modeling of CLBG using the transfer matrix method. , 2019, , .		0
18	Numerical study of submicroparticle acoustophoresis using higher-order modes in a rectangular microchannel. Journal of Sound and Vibration, 2018, 415, 169-183.	2.1	3

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19	Label-Free Prostate Cancer Detection by Characterization of Extracellular Vesicles Using Raman Spectroscopy. Analytical Chemistry, 2018, 90, 11290-11296.	3.2	82
20	Design Considerations to Realize Differential Absorption-Based Optofluidic Sensors for Determination of Ionic Content in Water. IEEE Sensors Journal, 2018, 18, 6051-6058.	2.4	2
21	Role of temperature in de-mixing absorbance spectra composed of compound electrolyte solutions. Applied Optics, 2018, 57, 7871.	0.9	1
22	Early interferometric detection of rolling contact fatigue induced micro-cracking in railheads. NDT and E International, 2017, 86, 14-19.	1.7	3
23	Editorial for special issue on nano-optomechanics. Journal of Optics (United Kingdom), 2017, 19, 080401.	1.0	1
24	Advances in nonlinear optical spectroscopies: a historical perspective of developments and applications presented at ECONOS. Journal of Raman Spectroscopy, 2016, 47, 1111-1123.	1.2	5
25	Intracellular Delivery of Poorly Soluble Polyphenols: Elucidating the Interplay of Self-Assembling Nanocarriers and Human Chondrocytes. Analytical Chemistry, 2016, 88, 7014-7022.	3.2	10
26	Optofluidic interferometry chip designs of differential NIR absorbance based sensors for identification and quantification of electrolytes. , 2016, , .		1
27	In-chip direct laser writing of a centimeter-scale acoustic micromixer. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2015, 14, 1.	1.0	17
28	Hybrid imaging of fluorescently labeled cancer drugs and label-free four-wave mixing microscopy of cancer cells and tissues. Journal of Biomedical Optics, 2015, 20, 086006.	1.4	3
29	Raman microscopy for cellular investigations â€" From single cell imaging to drug carrier uptake visualization. Advanced Drug Delivery Reviews, 2015, 89, 71-90.	6.6	129
30	Skin penetration behavior of lipid-core nanocapsules for simultaneous delivery of resveratrol and curcumin. European Journal of Pharmaceutical Sciences, 2015, 78, 204-213.	1.9	85
31	Imaging local acoustic pressure in microchannels. Applied Optics, 2015, 54, 6482.	2.1	12
32	Identification and quantification of 16 inorganic ions in water by Gaussian curve fitting of near-infrared difference absorbance spectra. Applied Optics, 2015, 54, 5937.	2.1	8
33	Epi-detection of vibrational phase contrast coherent anti-Stokes Raman scattering. Optics Letters, 2014, 39, 5814.	1.7	1
34	In situdissolution analysis of pharmaceutical dosage forms using coherent anti-Stokes Raman scattering (CARS) microscopy. Proceedings of SPIE, 2014, , .	0.8	0
35	Q-factor measurements through injection locking of a semiconductor-glass hybrid laser with unknown intracavity losses. Optics Letters, 2014, 39, 1748.	1.7	5
36	CARS microscopy as a tool for studying the distribution of micronised drugs in adhesive mixtures for inhalation. Journal of Raman Spectroscopy, 2014, 45, 495-500.	1.2	22

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37	A hybrid semiconductor-glass waveguide laser. Proceedings of SPIE, 2014, , .	0.8	11
38	Coherent anti-Stokes Raman scattering microscopy driving the future of loaded mesoporous silica imaging. Acta Biomaterialia, 2014, 10, 4870-4877.	4.1	17
39	Coherent anti-Stokes Raman Scattering (CARS) Microscopy Visualizes Pharmaceutical Tablets During Dissolution. Journal of Visualized Experiments, 2014, , .	0.2	3
40	Nonlinear Optics Approaches Towards Subdiffraction Resolution in CARS Imaging. Neuromethods, 2014, , 291-324.	0.2	2
41	In situ dissolution analysis using coherent anti-Stokes Raman scattering (CARS) and hyperspectral CARS microscopy. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 85, 1141-1147.	2.0	39
42	High precision wavelength estimation method for integrated optics. Optics Express, 2013, 21, 17042.	1.7	5
43	In plantaimaging of Î”9-tetrahydrocannabinolic acid inCannabis sativa L.with hyperspectral coherent anti-Stokes Raman scattering microscopy. Journal of Biomedical Optics, 2013, 18, 046009.	1.4	5
44	Stimulated-emission pumping enabling sub-diffraction-limited spatial resolution in coherent anti-Stokes Raman scattering microscopy. Physical Review A, 2013, 87, .	1.0	26
45	25 kHz narrow spectral bandwidth of a wavelength tunable diode laser with a short waveguide-based external cavity. Laser Physics Letters, 2013, 10, 015804.	0.6	57
46	Hyperspectral coherent anti-Stokes Raman scattering microscopy for in situ analysis of solid-state crystal polymorphs. Proceedings of SPIE, 2013, , .	0.8	1
47	Phase aspects of (broadband) stimulated Raman scattering. Reviews in Analytical Chemistry, 2012, 31, 1-6.	1.5	5
48	Ground-state depletion for subdiffraction-limited spatial resolution in coherent anti-Stokes Raman scattering microscopy. Physical Review A, 2012, 86, .	1.0	33
49	A common path interferometer for stimulated Raman scattering (SRS) and coherent anti-Stokes Raman scattering measurements (CARS). Proceedings of SPIE, 2012, , .	0.8	0
50	Computational optimization of phase shaped CARS. Proceedings of SPIE, 2012, , .	0.8	0
51	Background-free nonlinear microspectroscopy with vibrational molecular interferometry. , 2012, , .		0
52	Polyglutamine Aggregate Structure In Vitro and In Vivo; New Avenues for Coherent Anti-Stokes Raman Scattering Microscopy. PLoS ONE, 2012, 7, e40536.	1.1	14
53	Rapid identification of heterogeneous mixture components with hyperspectral coherent antiâ€Stokes Raman scattering imaging. Journal of Raman Spectroscopy, 2012, 43, 651-655.	1.2	32
54	Development and applications of nonlinear optical spectroscopy: 10th ECONOS/30th ECW meeting in Enschede, The Netherlands. Journal of Raman Spectroscopy, 2012, 43, 593-594.	1.2	1

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55	Sub-diffraction-limited spatial resolution in CARS microscopy by ground state depletion. , 2012, , .		0
56	Stimulated Emission Pumping Enabling Sub-Diffraction-Limited Spatial Resolution in CARS Microscopy. , 2012, , .		0
57	Coherent control of vibrational transitions: Discriminating molecules in mixtures. Faraday Discussions, 2011, 153, 227.	1.6	5
58	Enhanced surface plasmon polariton propagation length using a buried metal grating. Journal of Applied Physics, 2011, 109, .	1.1	23
59	Implementation of vibrational phase contrast coherent anti-Stokes Raman scattering microscopy. Applied Optics, 2011, 50, 1839.	2.1	1
60	Pharmaceutical applications of non-linear imaging. International Journal of Pharmaceutics, 2011, 417, 163-172.	2.6	55
61	Imaging of surface plasmon polariton interference using phase-sensitive photon scanning tunneling microscope. Applied Physics A: Materials Science and Processing, 2011, 103, 673-676.	1.1	3
62	Investigation of adaptive laser pulse shaping by direct estimation of group delay profile. Optics Communications, 2011, 284, 3748-3758.	1.0	1
63	Phaseâ€shaping strategies for coherent antiâ€Stokes Raman scattering. Journal of Raman Spectroscopy, 2011, 42, 1859-1863.	1.2	20
64	A theoretical investigation of superâ€resolution CARS imaging via coherent and incoherent saturation of transitions. Journal of Raman Spectroscopy, 2011, 42, 1854-1858.	1.2	25
65	Background-Free Nonlinear Microspectroscopy with Vibrational Molecular Interferometry. Physical Review Letters, 2011, 107, 253902.	2.9	15
66	Vibration transfers to measure the performance of vibration isolated platforms on site using background noise excitation. Review of Scientific Instruments, 2011, 82, 065111.	0.6	6
67	Single polarization Yb. , 2011, , .		0
68	Vibrational phase contrast CARS microscopy for quantitative analysis. , 2010, , .		2
69	Heterodyne interferometric polarization coherent antiâ€Stokes Raman scattering (HIPâ€CARS) spectroscopy. Journal of Raman Spectroscopy, 2010, 41, 1678-1681.	1.2	11
70	Dynamic Process Measurements in the Complex Plane with Vibrational Phase Contrast CARS. , 2010, , .		0
71	Vibrational Phase Contrast CARS Imaging. , 2010, , .		0
72	Spatially dependent Rabi oscillations: An approach to sub-diffraction-limited coherent anti-Stokes Raman-scattering microscopy. Physical Review A, 2010, 81, .	1.0	40

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73	Visualizing Resonances in the Complex Plane with Vibrational Phase Contrast Coherent Anti-Stokes Raman Scattering. Analytical Chemistry, 2010, 82, 7656-7659.	3.2	26
74	Exploring, tailoring, and traversing the solution landscape of a phase-shaped CARS process. Optics Express, 2010, 18, 2695.	1.7	12
75	Modeling of mode locking in a laser with spatially separate gain media. Optics Express, 2010, 18, 22996.	1.7	3
76	Tailoring a coherent control solution landscape by linear transforms of spectral phase basis. Optics Express, 2010, 18, 973.	1.7	5
77	Large scale scanning probe microscope: Making the shear-force scanning visible. American Journal of Physics, 2010, 78, 562-566.	0.3	3
78	Spectral phase shaping for high resolution CARS spectroscopy around 3000 cm-1. , 2009, , .		0
79	Background free CARS imaging by local phase detection. Proceedings of SPIE, 2009, , .	0.8	1
80	Highâ€resolution narrowband CARS spectroscopy in the spectral fingerprint region. Journal of Raman Spectroscopy, 2009, 40, 1229-1233.	1.2	11
81	Laser induced damage reduction in single-mode fiber devices. Laser Physics, 2009, 19, 1030-1033.	0.6	1
82	Chemically selective imaging by spectral phase shaping for broadband CARS around 3000 cm^â^'1. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 559.	0.9	14
83	Large bandwidth, highly efficient optical gratings through high index materials. Optics Express, 2009, 17, 4268.	1.7	21
84	A route to sub-diffraction-limited â€¨CARS Microscopy. Optics Express, 2009, 17, 22632.	1.7	63
85	Vibrational Phase Contrast Microscopy by Use of Coherent Anti-Stokes Raman Scattering. Physical Review Letters, 2009, 103, 043905.	2.9	63
86	Chemical Imaging of Oral Solid Dosage Forms and Changes upon Dissolution Using Coherent Anti-Stokes Raman Scattering Microscopy. Analytical Chemistry, 2009, 81, 2085-2091.	3.2	89
87	COHERENT ANTI-STOKES RAMAN SCATTERING MICROSCOPY TO MONITOR DRUG DISSOLUTION IN DIFFERENT ORAL PHARMACEUTICAL TABLETS. Journal of Innovative Optical Health Sciences, 2009, 02, 37-43.	0.5	26
88	Femtosecond spectral phase shaping for CARS spectroscopy and imaging. Springer Series in Chemical Physics, 2009, , 523-525.	0.2	0
89	73-nm tuning of a double-clad Yb3+-doped fiber laser based on a hybrid array. Laser Physics, 2008, 18, 353-356.	0.6	4
90	Linear polarization Yb3+-doped fiber laser with novel innerclad structures. Laser Physics, 2008, 18, 1340-1343.	0.6	1

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91	Near-field observation of spatial phase shifts associated with Goos-HÃnschen and Surface Plasmon Resonance effects. Optics Express, 2008, 16, 1958.	1.7	13
92	Application of spectral phase shaping to high resolution CARS spectroscopy. Optics Express, 2008, 16, 7985.	1.7	35
93	Background free CARS imaging by phase sensitive heterodyne CARS. Optics Express, 2008, 16, 15863.	1.7	59
94	Shot noise limited heterodyne detection of CARS signals. , 2008, , .		5
95	Shot noise limited heterodyne detection of CARS signals. Optics Express, 2007, 15, 15207.	1.7	67
96	Holographic injection locking of a broad area laser diode via a photorefractive thin-film device. Optics Express, 2007, 15, 17587.	1.7	4
97	Wide wavelength-tuning of a double-clad Yb3+-doped fiber laser based on a fiber Bragg grating array. Laser Physics Letters, 2007, 4, 880-883.	0.6	32
98	Single-frequency operation of a broad-area laser diode by injection locking of a complex spatial mode via a double phase conjugate mirror. Optics Letters, 2006, 31, 1061.	1.7	16
99	Accurate and unbiased estimation of power-law exponents from single-emitter blinking data. Journal of Chemical Physics, 2006, 125, 204713.	1.2	31
100	Noncritical phase-matched lithium triborate optical parametric oscillator for high resolution coherent anti-Stokes Raman scattering spectroscopy and microscopy. Applied Physics Letters, 2006, 89, 251116.	1.5	41
101	Engineered plasmon focusing on functional gratings. , 2005, 5840, 359.		0
102	Compact high-resolution spectral phase shaper. Review of Scientific Instruments, 2005, 76, 123105.	0.6	12
103	Creating Focused Plasmons by Noncollinear Phasematching on Functional Gratings. Nano Letters, 2005, 5, 2144-2148.	4.5	44
104	Application of a time-resolved event counting technique in velocity map imaging. Review of Scientific Instruments, 2002, 73, 4206-4213.	0.6	56
105	Photoionization Microscopy. Physical Review Letters, 2002, 88, 133001.	2.9	77
106	Characteristics of Q-switched cladding-pumped ytterbium-doped fiber lasers with different high-energy fiber designs. IEEE Journal of Quantum Electronics, 2001, 37, 199-206.	1.0	121
107	Non-reciprocal transmission via phase conjugation in multimode optical fibres. Optics Communications, 2001, 190, 357-365.	1.0	2
108	Spatial alignment of diatomic molecules in intense laser fields: I. Experimental results. Journal of Physics B: Atomic, Molecular and Optical Physics, 2001, 34, 4919-4938.	0.6	59

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109	Spatial alignment of diatomic molecules in intense laser fields: II. Numerical modelling. Journal of Physics B: Atomic, Molecular and Optical Physics, 2001, 34, 4939-4956.	0.6	26
110	A magnifying lens for velocity map imaging of electrons and ions. Review of Scientific Instruments, 2001, 72, 3245-3248.	0.6	68
111	The light-induced structural phase transition in confining gallium and its photonic applications. Journal of Luminescence, 2000, 87-89, 646-648.	1.5	2
112	Hexagonally Poled Lithium Niobate: A Two-Dimensional Nonlinear Photonic Crystal. Physical Review Letters, 2000, 84, 4345-4348.	2.9	468
113	High-energy, high-power ytterbium-doped Q-switched fiber laser. Optics Letters, 2000, 25, 37.	1.7	172
114	Large Mode Area Fibers for High Power Applications. Optical Fiber Technology, 1999, 5, 185-196.	1.4	124
115	Passive Q-switching of fiber lasers using a broadband liquefying gallium mirror. Applied Physics Letters, 1999, 74, 3619-3621.	1.5	49
116	Passively Q-switched 01-mJ fiber laser system at 153 ?m. Optics Letters, 1999, 24, 388.	1.7	225
117	Parametric oscillator directly pumped by a 155-Âµm erbium-fiber laser. Optics Letters, 1999, 24, 975.	1.7	25
118	Single shot beam quality (M2) measurement using a spatial Fourier transform of the near field. Optics Communications, 1998, 151, 65-68.	1.0	6
119	Micro-machining workstation for a diode pumped Nd:YAG high-brightness laser system. Review of Scientific Instruments, 1998, 69, 2118-2119.	0.6	4
120	High-energy single-transverse-mode Q-switched fiber laser based on a multimode large-mode-area erbium-doped fiber. Optics Letters, 1998, 23, 1683.	1.7	124
121	Power scaling in passively mode-locked large-mode area fiber lasers. IEEE Photonics Technology Letters, 1998, 10, 1718-1720.	1.3	35
122	Diode-pumped 1-kHz high-power Nd:YAG laser with excellent beam quality. , 1997, 3092, 29.		0
123	All solid-state diode pumped Nd:YAG MOPA with stimulated Brillouin phase conjugate mirror. Optics Communications, 1996, 128, 61-65.	1.0	14