

Hoon Kim

List of Publications by Year in descending order

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132
papers

1,474
citations

279487

23
h-index

377514

34
g-index

133
all docs

133
docs citations

133
times ranked

940
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiple-Aperture Direct-Detection Receiver Based on Maximal Ratio Combining for FSO Communication. IEEE Photonics Technology Letters, 2022, 34, 405-408.	1.3	6
2	Variable Focus Lens-Based Beam Steering and Divergence Control for WDM Free-Space Optical Communication. , 2022, , .		3
3	Monolithically Integrable Optical Single Sideband Transmitters for Inter-datacenter Applications. , 2022, , .		1
4	Dynamic Adaptive Beam Control System Using Variable Focus Lenses for Laser Inter-Satellite Link. IEEE Photonics Journal, 2022, 14, 1-8.	1.0	7
5	Field Experiment of Photonic Radar for Low-RCS Target Detection and High-Resolution Image Acquisition. IEEE Access, 2021, 9, 63559-63566.	2.6	17
6	Length of Pseudorandom Binary Sequence Required to Train Artificial Neural Network Without Overfitting. IEEE Access, 2021, 9, 125358-125365.	2.6	5
7	Beaconless PAT and adaptive beam control using variable focus lens for free-space optical communication systems. APL Photonics, 2021, 6, .	3.0	19
8	Mitigation of Scintillation in FSO Using RSOA-Based Spectrum-Sliced Incoherent Light. IEEE Photonics Technology Letters, 2021, 33, 227-230.	1.3	7
9	Comparison of UCA-OAM and UCA-MIMO systems for sub-THz band line-of-sight spatial multiplexing transmission. Journal of Communications and Networks, 2021, 23, 83-90.	1.8	10
10	Generation of Broadband Optical SSB Signal Using Dual Modulation of DML and EAM. Journal of Lightwave Technology, 2021, 39, 3064-3071.	2.7	9
11	Non-Mechanical Beam Steering and Adaptive Beam Control Using Variable Focus Lenses for Free-Space Optical Communications. Journal of Lightwave Technology, 2021, 39, 7600-7608.	2.7	21
12	Optimum Symbol Distribution of Probabilistically Shaped PAM Signals in Amplifier-less IM-DD Systems. , 2021, , .		0
13	Variable Focus Lens-Based Optical Beam Steering and Adaptive Beam Control Techniques for Free-Space Optical Communications. , 2021, , .		0
14	Low-Complexity Nonlinear Electrical Equalization for Directly Modulated Laser-based Transmission Systems. , 2021, , .		1
15	Recent Advances in Optical Sideband Transmitters. , 2021, , .		0
16	Low-Complexity, Loop-Unrolled Decision-Feedback Equalizer for IM/DD System Using PAM Formats. , 2021, , .		2
17	Low-Complexity Second-Order Volterra Equalizer for DML-Based IM/DD Transmission System. Journal of Lightwave Technology, 2020, 38, 1735-1746.	2.7	38
18	Mitigation of Scintillation Effect Using Spectrum-Sliced Incoherent Light Source for Free-Space Optical Communication. , 2020, , .		3

#	ARTICLE	IF	CITATIONS
19	DC Component Recovery in Kramers-Kronig Receiver Utilizing AC-Coupled Photo-Detector. Journal of Lightwave Technology, 2020, 38, 4307-4314.	2.7	9
20	Nonlinear Equalizer Based on Absolute Operation for IM/DD System Using DML. IEEE Photonics Technology Letters, 2020, 32, 426-429.	1.3	20
21	Low-complexity nonlinear equalizer based on absolute operation for C-band IM/DD systems. Optics Express, 2020, 28, 19617.	1.7	16
22	Transmission of 36-Gbaud PAM-8 Signal in IM/DD System Using Pairwise-Distributed Probabilistic Amplitude Shaping. , 2020, , .		6
23	Reduced-state MLSE for an IM/DD system using PAM modulation. Optics Express, 2020, 28, 38505.	1.7	35
24	Recovery of DC Component in Kramers-Kronig Receiver Utilizing AC-Coupled Photo-Detector. , 2020, , .		4
25	Beam Control and Tracking Techniques for Free-Space Optical Communications. , 2020, , .		0
26	Low-Complexity Nonlinear Equalizer for IM/DD Systems. , 2020, , .		0
27	Low-Complexity Equalizer based on Volterra Series and Piecewise Linear Function for DML-based IM/DD System. , 2020, , .		2
28	Generalized model of optical single sideband generation using dual modulation of DML and EAM. Optics Express, 2020, 28, 28491.	1.7	12
29	Low-Complexity Nonlinear Equalizer based on Absolute Operation for C-band PAM Signal Generated by Using Directly Modulated Laser. , 2020, , .		1
30	A Compact Angle-of-Arrival Tracking System for Free-Space Optical Communication Systems. , 2020, , .		3
31	Beam Control and Tracking Techniques for High-Altitude Airborne Free-Space Optical Communication Systems. , 2020, , .		5
32	Wide Field-of-View Transceiver Design for Bidirectional Free-space Optical Communication Systems. , 2019, , .		3
33	Probabilistic Amplitude Shaping for IM/DD System Using Hard-Decision Decoding. , 2019, , .		0
34	Transmission of 107-Gb/s PAM-4 Signal over 25 km of SSMF using O-band Commercial Off-the-Shelf DML. , 2019, , .		2
35	CSPR Measurement Method for Optical Single-Sideband Signal. IEEE Photonics Technology Letters, 2019, 31, 1100-1103.	1.3	9
36	Beam Size Optimization and Adaptation for High-Altitude Airborne Free-Space Optical Communication Systems. IEEE Photonics Journal, 2019, 11, 1-13.	1.0	46

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37	Alignment Error Mitigation Techniques for Airborne Free-Space Optical Communication Systems. , 2019, , .		0
38	Low-Complexity Quadratic Equalizer for DML-based IM/DD Systems. , 2019, , .		3
39	Toward Practical Kramers-Kronig Receiver: Resampling, Performance, and Implementation. Journal of Lightwave Technology, 2019, 37, 461-469.	2.7	63
40	Dither-Frequency Tuning Technique for RSOA-Based Coherent WDM PON. IEEE Photonics Technology Letters, 2019, 31, 7-10.	1.3	3
41	Probabilistically shaped coded modulation for IM/DD system. Optics Express, 2019, 27, 12126.	1.7	38
42	Coherent versus Kramers-Kronig Transceivers in Metro Applications: A Power Consumption Perspective. , 2019, , .		17
43	80-km Reach 28-Gb/s RSOA-based Coherent WDM PON Using Dither-Frequency-Tuning SBS Suppression Technique. , 2019, , .		0
44	A Simple Time-Domain CSPR Measurement Method for Optical Single Sideband Signal. , 2019, , .		0
45	RoF-Based Mobile Fronthaul Networks Implemented by Using DML and EML for 5G Wireless Communication Systems. Journal of Lightwave Technology, 2018, 36, 2874-2881.	2.7	64
46	Broadband IF-Over-Fiber Transmission With Parallel IM/PM Transmitter Overcoming Dispersion-Induced RF Power Fading for High-Capacity Mobile Fronthaul Links. IEEE Photonics Journal, 2018, 10, 1-9.	1.0	29
47	IF-over-Fiber Technology Aiming at Efficient Bandwidth Utilization and Perfect Centralized Control for Next-Generation Mobile Fronthaul Links in C-RAN Architectures. IEICE Transactions on Communications, 2018, E101.B, 952-960.	0.4	5
48	Impact of the IQ Imbalance on the Performance of Kramers-Kronig Receiver. , 2018, , .		1
49	Kramers-Kronig Direct Detection of 40-Gb/s OFDM Signal Generated by Using EML. , 2018, , .		4
50	Link Availability of Airborne Free-Space Optical Communication Systems under Effect of Generalized Misalignment. , 2018, , .		4
51	Link Availability of Terrestrial Free-Space Optical Communication Systems in Korea Estimated by Using Macro-Meteorological Data. , 2018, , .		0
52	Signal Processing for Optical Communication System Assisted by Computer Vision Techniques. , 2018, , .		0
53	Performance Improvement of RSOA-based Coherent WDM PON Using SBS Suppression and Erasing Frequency-Dithering Tone. , 2018, , .		4
54	Performance Analysis of Kramers-Kronig Receiver in the Presence of IQ Imbalance. IEEE Photonics Technology Letters, 2018, 30, 2171-2174.	1.3	4

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55	Adaptive beam control techniques for airborne free-space optical communication systems. Applied Optics, 2018, 57, 7462.	0.9	39
56	Comments on "Capacities for Long-Distance Free-Space Optical Links Under Beam Wander Effects". IEEE Photonics Technology Letters, 2018, 30, 1991-1993.	1.3	0
57	Kramers-Kronig receiver operable without digital upsampling. Optics Express, 2018, 26, 13810.	1.7	84
58	RoF-based Optical Fronthaul Technology for 5G and Beyond. , 2018, , .		11
59	Image Processing Techniques for Signal Processing in Optical Communication Systems. , 2018, , .		0
60	Compensation of Mode Coupling in MDM Transmission System Using Digital Optical Phase Conjugation. , 2018, , .		2
61	Impact of Multipath Interference on the Performance of RoF-Based Mobile Fronthaul Network Implemented by Using DML. Journal of Lightwave Technology, 2017, 35, 145-151.	2.7	32
62	Transmission of 28-Gb/s Duobinary and PAM-4 Signals Using DML for Optical Access Network. IEEE Photonics Technology Letters, 2017, 29, 130-133.	1.3	53
63	Ultrahigh-speed short-reach fiber-optic links based on directly modulated lasers. , 2017, , .		0
64	Simultaneous Transmission of Aggregated Microwave and Millimeter-wave Signals over Fiber with Parallel IM/PM Transmitter for Mobile Fronthaul Links. , 2017, , .		3
65	28-Gbps VCSEL-based optical access network with >14-dB power budget using 10G-class optical components. , 2017, , .		0
66	Carrier-phase-estimation algorithm featuring fast trackability for high-speed coherent WDM PON based on RSOA. Optics Express, 2017, 25, 14282.	1.7	6
67	Transmission of 5156-Gb/s OOK signal using 155- μm directly modulated laser and duobinary electrical equalizer. Optics Express, 2016, 24, 22555.	1.7	38
68	Space-efficient fiber ribbon composed of reduced-cladding single-mode fibers. Optical Fiber Technology, 2016, 31, 178-183.	1.4	0
69	Effects of Electrical and Optical Equalizations in 28-Gb/s RSOA-Based WDM PON. IEEE Photonics Technology Letters, 2016, 28, 2537-2540.	1.3	9
70	Photonic UP-conversion of carrierless amplitude phase signals for wireless communications on the KA-band. Microwave and Optical Technology Letters, 2016, 58, 2068-2070.	0.9	3
71	25-Gb/s OOK Transmission Using 1.5- μm 10G-Class VCSEL for Optical Access Network. Journal of Lightwave Technology, 2016, 34, 3790-3795.	2.7	5
72	Optical fronthaul technologies for next-generation mobile communications. , 2016, , .		3

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73	28-Gb/s Upstream Transmission in RSOA-based WDM PON Using Polar RZ PAM-N Format and Direct Detection. , 2016, , .		4
74	25-Gb/s OOK and 4-PAM Transmission over >35-km SSMF Using Directly Modulated 1.5- μ m VCSEL. , 2016, , .		3
75	Transmission of 51.56-Gb/s OOK Signal over 15 km of SSMF Using Directly-Modulated 1.55- μ m DFB Laser. , 2016, , .		1
76	Investigation of optical frequency comb generation with sharp spectral edges using external modulators. , 2015, , .		0
77	20-Gb/s Operation of RSOA using Polar Return-to-Zero 4-PAM Modulation Format and Direct Detection. , 2015, , .		2
78	1.55- μ m directly modulated VCSEL link for optical access applications. , 2015, , .		0
79	20-Gb/s Polar RZ 4-PAM Transmission Over 20-km SSMF Using RSOA and Direct Detection. IEEE Photonics Technology Letters, 2015, 27, 1116-1119.	1.3	19
80	Space-efficient single-mode fiber with reduced cladding diameter. , 2015, , .		0
81	Optimum Linewidth of Spectrum-Sliced Incoherent Light Source Using a Gain-Saturated Semiconductor Optical Amplifier. Journal of Lightwave Technology, 2015, 33, 3744-3750.	2.7	2
82	25.2923-Gb/s optical link using EML for mobile fronthaul network of LTE-A systems. , 2015, , .		0
83	Transmission Performance of OOK and 4-PAM Signals Using Directly Modulated 1.5- μ m VCSEL for Optical Access Network. Journal of Lightwave Technology, 2015, 33, 3243-3249.	2.7	29
84	Direct-Detection Receiver for Polarization-Division-Multiplexed OOK Signals. IEEE Photonics Technology Letters, 2015, 27, 2238-2241.	1.3	5
85	25-Gb/s TDM Optical Link Using EMLs for Mobile Fronthaul Network of LTE-A System. IEEE Photonics Technology Letters, 2015, 27, 1825-1828.	1.3	14
86	5-Gb/s upstream transmission using an RSOA seeded by ultra-narrow spectrum-sliced incoherent light. Optical Fiber Technology, 2015, 21, 137-140.	1.4	5
87	1.5- μ m, 10-Gbps 4-PAM VCSEL transmission for optical access networks. , 2014, , .		3
88	Ethernet transport system supporting delay-sensitive real-time traffics. International Journal of Communication Systems, 2014, 27, 2366-2376.	1.6	2
89	10-Gb/s, 20-km VCSEL Optical Access Link at 1.5 μ m with 23-dB Power Budget. , 2014, , .		3
90	A simple carrier-phase estimator for high-speed RSOA-based coherent WDM PON. Optics Express, 2014, 22, 30975.	1.7	7

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91	Upstream transmission of 5.35-Gb/s spectrum-sliced incoherent light signal using RSOA. , 2014, , .		0
92	Performance Improvement of Ultranarrow Spectrum Sliced Incoherent Light Using Offset Filtering. IEEE Photonics Technology Letters, 2014, 26, 870-873.	1.3	5
93	Characterization of Directly Modulated Self-Seeded Reflective Semiconductor Optical Amplifiers Utilized as Colorless Transmitters in WDM-PONs. Journal of Lightwave Technology, 2013, 31, 1727-1733.	2.7	23
94	1.5- μm 10-Gb/s VCSEL Link for Optical Access Applications. IEEE Photonics Technology Letters, 2013, 25, 2160-2163.	1.3	8
95	A Low-Complexity, Low-Cycle-Slip-Probability, Format-Independent Carrier Estimator with Adaptive Filter Length. Journal of Lightwave Technology, 2013, 31, 3806-3812.	2.7	4
96	On Decision Aided Carrier Phase and Frequency Offset Estimation in Coherent Optical Receivers. Journal of Lightwave Technology, 2013, 31, 2055-2069.	2.7	37
97	10-Gb/s/channel WDM PON using ultra-narrow spectrum-sliced incoherent light source. , 2013, , .		0
98	A broadcast-overlaid full-duplex WDM-PON based on offset polarization multiplexing. , 2012, , .		0
99	Photonic frequency up-conversion using directly modulated RSOA and delay interferometer. , 2012, , .		0
100	A Broadcast-Capable WDM Passive Optical Network Using Offset Polarization Multiplexing. Journal of Lightwave Technology, 2012, 30, 2329-2336.	2.7	6
101	Transmission of 10-Gb/s incoherent light over 20-km SSMF without dispersion compensation. , 2012, , .		0
102	Ultranarrow Spectrum-Sliced Incoherent Light Source for 10-Gb/s WDM PON. Journal of Lightwave Technology, 2012, 30, 3157-3163.	2.7	24
103	A Broadcast-Capable WDM-PON Based on Polarization-Sensitive Weak-Resonant-Cavity Fabry-Perot Laser Diodes. Journal of Lightwave Technology, 2012, 30, 355-361.	2.7	25
104	Symmetric 10-Gb/s WDM-PON Using Directly Modulated Lasers for Downlink and RSOAs for Uplink. Journal of Lightwave Technology, 2012, 30, 1891-1899.	2.7	22
105	DC-Balanced Line Coding for Downlink Modulation in Bidirectional WDM PONs Using Remodulation. IEEE Photonics Technology Letters, 2011, 23, 1331-1333.	1.3	9
106	Transmission of 10-Gb/s Directly Modulated RSOA Signals in Single-Fiber Loopback WDM PONs. IEEE Photonics Technology Letters, 2011, 23, 965-967.	1.3	35
107	A Dual-Detector Optical Receiver for WDM PON Utilizing Directly Modulated RSOAs and Delay Interferometers. IEEE Photonics Technology Letters, 2011, 23, 1733-1735.	1.3	7
108	A WDM-PON enabling broadcast service based on polarization multiplexing. , 2011, , .		1

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109	6-GHz Radio-Over-Fiber Upstream Transmission Using a Directly Modulated RSOA. IEEE Photonics Technology Letters, 2011, 23, 1730-1732.	1.3	3
110	Directly modulated laser transmitter driven by DC-balanced line-coded signals. , 2010, , .		0
111	Return-to-zero transmitter for WDM-PONs using incoherent-light-injected fabry-perot laser diodes. IEEE Journal on Selected Areas in Communications, 2010, 28, 936-942.	9.7	1
112	Directly Modulated Laser Driven by Low-Bandwidth Duobinary Signals. IEEE Photonics Technology Letters, 2010, 22, 1306-1308.	1.3	3
113	10-Gb/s Operation of RSOA Using a Delay Interferometer. IEEE Photonics Technology Letters, 2010, 22, 1379-1381.	1.3	68
114	Line coding to enhance the performance of 10-Gb/s CPFSK-ASK directly modulated signals. Optics Express, 2010, 18, 8360.	1.7	16
115	Pulsed-incoherent-light-injected Fabry-Perot laser diode for WDM passive optical networks. Optics Express, 2010, 18, 1714.	1.7	7
116	Multimode-injection-locked Fabry-Perot laser diode as remote seeding light for WDM-PONs. , 2010, , .		0
117	Bidirectional WDM PON using directly modulated lasers for downlink and RSOAs for uplink. , 2010, , .		1
118	Phase-modulated subcarrier-multiplexed transmission systems. , 2009, , .		0
119	A Novel Method for Providing Precise Time Synchronization in a Distributed Control System Using Boundary Clock. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 2824-2829.	2.4	14
120	Full-Duplex Radio-Over-Fiber System Using Phase-Modulated Downlink and Intensity-Modulated Uplink. IEEE Photonics Technology Letters, 2009, 21, 9-11.	1.3	40
121	EML-Based Optical Single Sideband Transmitter. IEEE Photonics Technology Letters, 2008, 20, 243-245.	1.3	42
122	Inter-channel nonlinear crosstalk in analog phase-modulated wavelength-division-multiplexed systems. Optics Express, 2008, 16, 20687.	1.7	4
123	Integrated Transmitter with Amplitude and Phase Modulations. , 2008, , .		1
124	Nonlinear Optical Crosstalk in Analog Phase-Modulated Wavelength-Division-Multiplexed Systems. , 2008, , .		1
125	Radio-Over-Fiber System for TDD-Based OFDMA Wireless Communication Systems. Journal of Lightwave Technology, 2007, 25, 3419-3427.	2.7	36
126	Raman Crosstalk Suppression in CATV Overlay Passive Optical Network. IEEE Photonics Technology Letters, 2007, 19, 695-697.	1.3	10

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127	Effects of intraband crosstalk on incoherent light using SOA-based noise suppression technique. IEEE Photonics Technology Letters, 2006, 18, 1542-1544.	1.3	12
128	Impact of dispersion, PMD, and PDL on the performance of spectrum-sliced incoherent light sources using gain-saturated semiconductor optical amplifiers. Journal of Lightwave Technology, 2006, 24, 775-785.	2.7	34
129	Effects of low cut-off frequency of optical receiver on the performance of lightwave systems using pilot tones. Optics Communications, 2006, 261, 245-248.	1.0	1
130	Cost-Effective 10-Gb/s Optical Duobinary Transmission Systems Using a Nonbuffered X-Cut LiNbO_3 Mach-Zehnder Modulator. IEEE Photonics Technology Letters, 2004, 16, 1188-1190.	1.3	5
131	Demonstration of optical duobinary transmission system using phase modulator and optical filter. IEEE Photonics Technology Letters, 2002, 14, 1010-1012.	1.3	20
132	Lengths of PRBSs Required to Train ANN Equalizer for PAM Signal without Overfitting. Optics Express, 0, , .	1.7	0