Sujan Rajbhandari

List of Publications by Year
in descending order

102	3,395	218381	149479
papers	citations	26 h-index	56 g-index

104	104	104	2514
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Impact of Dynamic Traffic on Vehicle-to-Vehicle Visible Light Communication Systems. IEEE Systems Journal, 2022, 16, 3512-3521.	2.9	7
2	Ergodic capacity and error performance of spatial diversity UWOC systems over generalized gamma turbulence channels. Optics Communications, 2022, 505, 127476.	1.0	6
3	The BER Performance of the LDPC-Coded MPPM over Turbulence UWOC Channels. Photonics, 2022, 9, 349.	0.9	9
4	An experimental evaluation of a 3D visible light positioning system in an industrial environment with receiver tilt and multipath reflections. Optics Communications, 2021, 483, 126654.	1.0	10
5	A Heuristic Approach for Optical Transceiver Placement to Optimize SNR and Illuminance Uniformities of an Optical Body Area Network. Sensors, 2021, 21, 2943.	2.1	0
6	Optimum Device and Modulation Scheme Selection for Optical Wireless Communications. Journal of Lightwave Technology, 2021, 39, 2281-2287.	2.7	8
7	Impact of Vehicle Headlights Radiation Pattern on Dynamic Vehicular VLC Channel. Journal of Lightwave Technology, 2021, 39, 3162-3168.	2.7	23
8	Statistical channel modelling of dynamic vehicular visible light communication system. Vehicular Communications, 2021, 29, 100339.	2.7	9
9	Evaluation of a Switched Combining Based Distributed Antenna System (DAS) for Pedestrian-to-Vehicle Communications. IEEE Transactions on Vehicular Technology, 2021, 70, 11005-11010.	3.9	3
10	Vehicular Visible Light Positioning Using Receiver Diversity with Machine Learning. Electronics (Switzerland), 2021, 10, 3023.	1.8	3
11	Performance of Spatial Diversity DCO-OFDM in a Weak Turbulence Underwater Visible Light Communication Channel. Journal of Lightwave Technology, 2020, 38, 2271-2277.	2.7	31
12	Optical Antennas for Wavelength Division Multiplexing in Visible Light Communications beyond the Ã‰tendue Limit. Advanced Optical Materials, 2020, 8, 1901139.	3.6	29
13	Visible Light Communications for Industrial Applicationsâ€”Challenges and Potentials. Electronics (Switzerland), 2020, 9, 2157.	1.8	50
14	Investigation of 3 dB Optical Intensity Spot Radius of Laser Beam under Scattering Underwater Channel. Sensors, 2020, 20, 422.	2.1	4
15	Transmitter and receiver technologies for optical wireless. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190182.	1.6	26
16	LDPC-Coded CAP with Spatial Diversity for UVLC Systems over Generalized-Gamma Fading Channel. Sensors, 2020, 20, 3378.	2.1	5
17	Precision indoor threeâ€dimensional visible light positioning using receiver diversity and multiâ€layer perceptron neural network. IET Optoelectronics, 2020, 14, 440-446.	1.8	9
18	The Statistical Temporal Properties of Vehicular Visible Light Communication Channel. , 2020, , .		4

#	Article	IF	Citations
19	A Study of Yearly Sunlight Variance Effect on Vehicular Visible Light Communication for Emergency Service Vehicles. , 2020, , .		7
20	Study of MIMO m-CAP with Equalizer for a Band- Limited VLC System. , 2020, , .		0
21	Applications of Visible Light Communication for Distance Estimation: a Short Survey. , 2019, , .		2
22	Pedestrian and Cyclist Detection and Intent Estimation for Autonomous Vehicles: A Survey. Applied Sciences (Switzerland), 2019, 9, 2335.	1.3	56
23	Optical single carrier-interleaved frequency division multiplexing for visible light communication systems. Optik, 2019, 194, 162910.	1.4	7
24	Indoor Intruder Tracking Using Visible Light Communications. Sensors, 2019, 19, 4578.	2.1	10
25	Investigation of Complexity and Regulatory Role of Physiological Activities During a Pacing Exercise. IEEE Access, 2019, 7, 152334-152346.	2.6	1
26	Neural Network-Based Joint Spatial and Temporal Equalization for MIMO-VLC System. IEEE Photonics Technology Letters, 2019, 31, 821-824.	1.3	28
27	An Experimental Analysis of the Effect of Reflections on the Performance of Visible Light Positioning Systems in Warehouses. , 2019, , .		3
28	A Novel 3D Visible Light Positioning Method Using Received Signal Strength for Industrial Applications. Electronics (Switzerland), 2019, 8, 1311.	1.8	15
29	Dead-Zones Limitation in Visible Light Positioning Systems for Unmanned Aerial Vehicles. , 2019, , .		5
30	A Comparison of APD- and SPAD-Based Receivers for Visible Light Communications. Journal of Lightwave Technology, 2018, 36, 2435-2442.	2.7	68
31	Flexible Glass Hybridized Colloidal Quantum Dots for Gb/s Visible Light Communications. IEEE Photonics Journal, 2018, 10, 1-11.	1.0	12
32	Performance Comparison of Equalization Techniques for SI-POF Multi-Gigabit Communication With PAM- M and Device Non-Linearities. Journal of Lightwave Technology, 2018, 36, 2301-2308.	2.7	17
33	Reducing Noise Pollution of Emergency Vehicle Sirens with an Early Warning System. , 2018, , .		0
34	Application of Visible Light Communication in an Industrial Environment. , 2018, , .		6
35	MIMO Visible Light Communications Using a Wide Field-of-View Fluorescent Concentrator. IEEE Photonics Technology Letters, 2017, 29, 306-309.	1.3	21
36	A comparative study of optical concentrators for visible light communications. Proceedings of SPIE, 2017, , .	0.8	5

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37	A Multigigabit per Second Integrated Multiple-Input Multiple-Output VLC Demonstrator. Journal of Lightwave Technology, 2017, 35, 4358-4365.	2.7	40
38	A review of gallium nitride LEDs for multi-gigabit-per-second visible light data communications. Semiconductor Science and Technology, 2017, 32, 023001.	1.0	205
39	Demonstration of a multi-hop underwater visible light communication system. , 2017, , .		7
40	OFDM-PWM scheme for visible light communications. Optics Communications, 2017, 385, 213-218.	1.0	21
41	Design, Fabrication, and Application of GaN-Based Micro-LED Arrays With Individual Addressing by N-Electrodes. IEEE Photonics Journal, 2017, 9, 1-11.	1.0	22
42	Hybrid POF/VLC link with M-PAM and MLP equaliser. , 2017, , .		8
43	Development, performance and application of novel GaN-based micro-LED arrays with individually addressable n-electrodes. , 2017, , .		1
44	Analysis of nonline-of-sight visible light communications. Optical Engineering, 2017, 56, 1.	0.5	5
45	High Bandwidth GaN-Based Micro-LEDs for Multi-Gb/s Visible Light Communications. IEEE Photonics Technology Letters, 2016, 28, 2023-2026.	1.3	276
46	Multi-layer perceptron as equalisers for multilevel pulse amplitude modulation scheme in SI-POF. , 2016, , .		1
47	LED Based Wavelength Division Multiplexed 10 Gb/s Visible Light Communications. Journal of Lightwave Technology, 2016, 34, 3047-3052.	2.7	187
48	Single carrier optical FDM in visible light communication. , 2016, , .		4
49	A review on effects of the atmospheric turbulence on laser beam propagation â€" An analytic approach. , 2016, , .		4
50	100 Mb/s wavelength division multiplexing visible light communications link using a triple-junction photo-diode. , 2016, , .		2
51	Spatial and wavelength division multiplexing for high-speed VLC systems: An overview. , 2016, , .		3
52	Design of a visible light communication system for deep sea divers based on analogue frequency modulation. , 2016, , .		3
53	Wide field-of-view fluorescent antenna for visible light communications beyond the Ã©tendue limit. Optica, 2016, 3, 702.	4.8	73
54	Demonstration of a MIMO visible light communication system utilizing analog circuits. , 2016, , .		0

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55	A high speed generalised space shift keying link with micro-LEDs and CMOS APD receiver. , 2016, , .		3
56	High-Speed Integrated Visible Light Communication System: Device Constraints and Design Considerations. IEEE Journal on Selected Areas in Communications, 2015, 33, 1750-1757.	9.7	106
57	Multi-band carrier-less amplitude and phase modulation with decision feedback equalization for bandlimited VLC systems. , 2015, , .		15
58	A 200 Mb/s VLC demonstration with a SPAD based receiver. , 2015, , .		28
59	Spectral Shape Impact of Nonlinear Compensator Signal in LTE RoF System. IEEE Photonics Technology Letters, 2015, 27, 2481-2484.	1.3	4
60	Novel Fast Color-Converter for Visible Light Communication Using a Blend of Conjugated Polymers. ACS Photonics, 2015, 2, 194-199.	3.2	57
61	Integrated multiple-input multiple-output visible light communications systems: recent progress and results. Proceedings of SPIE, 2015, , .	0.8	4
62	Multi-band carrier-less amplitude and phase modulation for bandlimited visible light communications systems. IEEE Wireless Communications, 2015, 22, 46-53.	6.6	68
63	Visible light communication using laser diode based remote phosphor technique. , 2015, , .		30
64	Multi-Gigabit integrated MIMO visible light communication system: Progress and updates. , 2015, , .		3
65	Demonstration of 2.3 Gb/s RGB white-light VLC using polymer based colour-converters and GaN micro-LEDs. , 2015, , .		17
66	Experimental proof-of-concept of optical spatial modulation OFDM using micro LEDs. , 2015, , .		13
67	Experimental Error Performance of Modulation Schemes Under a Controlled Laboratory Turbulence FSO Channel. Journal of Lightwave Technology, 2015, 33, 244-250.	2.7	36
68	Fluorescent Redâ€Emitting BODIPY Oligofluorene Starâ€Shaped Molecules as a Color Converter Material for Visible Light Communications. Advanced Optical Materials, 2015, 3, 536-540.	3.6	44
69	Management of metabolic resources for a 20-km cycling time-trial using different types of pacing. Journal of Human Sport and Exercise, 2015, 10, .	0.2	1
70	Visible Light Communications: Improving data rate, link margin and field of view. , 2014, , .		3
71	Imaging-MIMO visible light communication system using μLEDs and integrated receiver. , 2014, , .		14
72	Demonstration of a Bi-directional visible light communication with an overall sum-rate of 110 Mb/s using LEDs as emitter and detector. , 2014, , .		12

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73	Design and analysis of an angularâ€segmented fullâ€mobility visible light communications receiver. Transactions on Emerging Telecommunications Technologies, 2014, 25, 591-599.	2.6	51
74	Visible Light Communications: 170 Mb/s Using an Artificial Neural Network Equalizer in a Low Bandwidth White Light Configuration. Journal of Lightwave Technology, 2014, 32, 1807-1813.	2.7	109
75	Compensating for Optical Beam Scattering and Wandering in FSO Communications. Journal of Lightwave Technology, 2014, 32, 1323-1328.	2.7	57
76	A 3-Gb/s Single-LED OFDM-Based Wireless VLC Link Using a Gallium Nitride $mu{m LED}$. IEEE Photonics Technology Letters, 2014, 26, 637-640.	1.3	722
77	Effectiveness of blue-filtering in WLED based indoor Visible light communication. , 2014, , .		14
78	A 20-Mb/s VLC Link With a Polymer LED and a Multilayer Perceptron Equalizer. IEEE Photonics Technology Letters, 2014, 26, 1975-1978.	1.3	25
79	Visible Light Communication Using a Blue GaN $mu $ LED and Fluorescent Polymer Color Converter. IEEE Photonics Technology Letters, 2014, 26, 2035-2038.	1.3	109
80	Online artificial neural network equalization for a visible light communications system with an organic light emitting diode based transmitter. , 2013, , .		2
81	Wavelet-Neural Network VLC Receiver in the Presence of Artificial Light Interference. IEEE Photonics Technology Letters, 2013, 25, 1424-1427.	1.3	14
82	Evaluation of the beam wondering in free space optics by image analysis. , 2013, , .		1
83	Comparative study of classifiers to mitigate intersymbol interference in diffuse indoor optical wireless communication links. Optik, 2013, 124, 4192-4196.	1.4	11
84	Improvement of Transmission Bandwidth for Indoor Optical Wireless Communication Systems Using an Elliptical Lambertian Beam. IEEE Photonics Technology Letters, 2013, 25, 107-110.	1.3	13
85	Modelling of free space optical link for groundâ€toâ€train communications using a Gaussian source. IET Optoelectronics, 2013, 7, 1-8.	1.8	51
86	Route diversity analyses for free-space optical wireless links within turbulent scenarios. Optics Express, 2013, 21, 7641.	1.7	22
87	Experimental wavelet based denoising for indoor infrared wireless communications. Optics Express, 2013, 21, 13779.	1.7	6
88	Visible light communications: 375ÂMbits/s data rate with a 160ÂkHz bandwidth organic photodetector and artificial neural network equalization [Invited]. Photonics Research, 2013, 1, 65.	3.4	22
89	A MIMO-ANN system for increasing data rates in organic visible light communications systems. , 2013, , .		21
90	Hybrid pulse position modulation and binary phase shift keying subcarrier intensity modulation for free space optics in a weak and saturated turbulence channel. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 1680.	0.8	26

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91	Performance Analysis of Ethernet/Fast-Ethernet Free Space Optical Communications in a Controlled Weak Turbulence Condition. Journal of Lightwave Technology, 2012, 30, 2188-2194.	2.7	71
92	Coherent Heterodyne Multilevel Polarization Shift Keying With Spatial Diversity in a Free-Space Optical Turbulence Channel. Journal of Lightwave Technology, 2012, 30, 2689-2695.	2.7	64
93	Improvement of the Transmission Bandwidth for Indoor Optical Wireless Communication Systems Using a Diffused Gaussian Beam. IEEE Communications Letters, 2012, 16, 1316-1319.	2.5	19
94	Exploiting Equalization Techniques for Improving Data Rates in Organic Optoelectronic Devices for Visible Light Communications. Journal of Lightwave Technology, 2012, 30, 3081-3088.	2.7	72
95	Adaptive â€˜softâ€™ sliding block decoding of convolutional code using the artificial neural network. Transactions on Emerging Telecommunications Technologies, 2012, 23, 672-677.	2.6	3
96	Ethernet FSO Communications Link Performance Study Under a Controlled Fog Environment. IEEE Communications Letters, 2012, 16, 408-410.	2.5	42
97	Investigation of FSO ground-to-train communications in a laboratory environment. , 2011, , .		7
98	Waveletâ€”Artificial Neural Network Receiver for Indoor Optical Wireless Communications. Journal of Lightwave Technology, 2011, 29, 2651-2659.	2.7	15
99	A Fast Ethernet FSO Link Performance Under the Fog Controlled Environment. , 2011, , .		2
100	The use of linear projections in the visual analysis of signals in an indoor optical wireless link. , 2010, , .		0
101	Performance of diffused indoor optical wireless links employing neural and adaptive linear equalizers. , 2007, , .		4
102	Experimental evaluation of adaptive maximum power point tracking for a standalone photovoltaic system. Energy Systems, 0, , 1.	1.8	1