Ioannnis Papakonstantinou

List of Publications by Year
in descending order

86 papers	3,117 citations	147801 31 h-index	161849 54 g-index
90 all docs	90 docs citations	90 times ranked	3180 citing authors

#	Article	IF	Citations
1	Ultrasensitive plano-concave optical microresonators for ultrasound sensing. Nature Photonics, 2017, 11, 714-719.	31.4	255
2	Intelligent Multifunctional VO₂/SiO₂/TiO₂ Coatings for Self-Cleaning, Energy-Saving Window Panels. Chemistry of Materials, 2016, 28, 1369-1376.	6.7	221
3	Carbonâ€Nanotubeâ€"PDMS Composite Coatings on Optical Fibers for Allâ€Optical Ultrasound Imaging. Advanced Functional Materials, 2016, 26, 8390-8396.	14.9	120
4	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.	4.6	109
5	The Hidden Potential of Luminescent Solar Concentrators. Advanced Energy Materials, 2021, 11, 2002883.	19.5	102
6	Laser-generated ultrasound with optical fibres using functionalised carbon nanotube composite coatings. Applied Physics Letters, 2014, 104, .	3.3	101
7	Broadband miniature optical ultrasound probe for high resolution vascular tissue imaging. Biomedical Optics Express, 2015, 6, 1502.	2.9	99
8	A bioinspired solution for spectrally selective thermochromic VO_2 coated intelligent glazing. Optics Express, 2013, 21, A750.	3.4	90
9	Through-needle all-optical ultrasound imaging in vivo: a preclinical swine study. Light: Science and Applications, 2017, 6, e17103-e17103.	16.6	90
10	A Multi-CAP Visible-Light Communications System With 4.85-b/s/Hz Spectral Efficiency. IEEE Journal on Selected Areas in Communications, 2015, 33, 1771-1779.	14.0	85
11	Losses in luminescent solar concentrators unveiled. Solar Energy Materials and Solar Cells, 2016, 144, 40-47.	6.2	82
12	Polydimethylsiloxane Composites for Optical Ultrasound Generation and Multimodality Imaging. Advanced Functional Materials, 2018, 28, 1704919.	14.9	81
13	Sensitive and specific detection of explosives in solution and vapour by surface-enhanced Raman spectroscopy on silver nanocubes. Nanoscale, 2017, 9, 16459-16466.	5.6	78
14	Visible light communications: real time 10 Mb/s link with a low bandwidth polymer light-emitting diode. Optics Express, 2014, 22, 2830.	3.4	73
15	Exploiting Equalization Techniques for Improving Data Rates in Organic Optoelectronic Devices for Visible Light Communications. Journal of Lightwave Technology, 2012, 30, 3081-3088.	4.6	72
16	FirstLight: Pluggable Optical Interconnect Technologies for Polymeric Electro-Optical Printed Circuit Boards in Data Centers. Journal of Lightwave Technology, 2012, 30, 3316-3329.	4.6	71
17	Multi-band carrier-less amplitude and phase modulation for bandlimited visible light communications systems. IEEE Wireless Communications, 2015, 22, 46-53.	9.0	68
18	Transition, radiation and propagation loss in polymer multimode waveguide bends. Optics Express, 2007, 15, 669.	3.4	62

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19	On the ability of FÃ¶rster resonance energy transfer to enhance luminescent solar concentrator efficiency. Nano Energy, 2017, 32, 263-270.	16.0	60
20	Optical fiber ultrasound transmitter with electrospun carbon nanotube-polymer composite. Applied Physics Letters, 2017, 110, 223701.	3.3	54
21	Wavelength-Multiplexed Polymer LEDs: Towards 55 Mb/s Organic Visible Light Communications. IEEE Journal on Selected Areas in Communications, 2015, 33, 1819-1828.	14.0	51
22	All-Optical Rotational Ultrasound Imaging. Scientific Reports, 2019, 9, 5576.	3.3	47
23	Atomic layer deposition of vanadium oxides: process and application review. Materials Today Chemistry, 2019, 12, 396-423.	3.5	46
24	Origin of Performance Enhancement in TiO₂â€Carbon Nanotube Composite Perovskite Solar Cells. Small Methods, 2019, 3, 1900164.	8.6	45
25	Bandwidth limits of luminescent solar concentrators as detectors in free-space optical communication systems. Light: Science and Applications, 2021, 10, 3.	16.6	45
26	Low-Cost, Precision, Self-Alignment Technique for Coupling Laser and Photodiode Arrays to Polymer Waveguide Arrays on Multilayer PCBs. IEEE Transactions on Advanced Packaging, 2008, 31, 502-511.	1.6	43
27	Combined Effect of Temperature Induced Strain and Oxygen Vacancy on Metalâ€Insulator Transition of VO₂ Colloidal Particles. Advanced Functional Materials, 2020, 30, 2005311.	14.9	42
28	Integrated optical and electronic interconnect PCB manufacturing research. Circuit World, 2010, 36, 5-19.	0.9	40
29	Thermochromic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:msub><mml:mrow><mml:mtext>VO</mml:mtext></mml:mrow><mml:mrow><mml:mn>2</mm linebreak="goodbreak" linebreakstyle="after">âˆ’</mml:mo><mml:msub><mml:mrow><mml:mtext>SiO</mml:mtext></mml:mrow><mml:mrow><mml:mn>2 nanocomposite smart window coatings with narrow phase transition hysteresis and transition gradient width. Solar Energy Materials and Solar Cells, 2019, 200, 109944.	6.2	40
30	Fundamental limits of concentration in luminescent solar concentrators revised: the effect of reabsorption and nonunity quantum yield. Optica, 2015, 2, 841.	9.3	38
31	1.4-Mb/s White Organic LED Transmission System Using Discrete Multitone Modulation. IEEE Photonics Technology Letters, 2013, 25, 615-618.	2.5	34
32	Unique and universal dew-repellency of nanocones. Nature Communications, 2021, 12, 3458.	12.8	33
33	Homeotropic alignment and FÃ¶rster resonance energy transfer: The way to a brighter luminescent solar concentrator. Journal of Applied Physics, 2014, 116, 173103.	2.5	31
34	Fluorine-Free Transparent Superhydrophobic Nanocomposite Coatings from Mesoporous Silica. Langmuir, 2020, 36, 13426-13438.	3.5	31
35	Delayed Lubricant Depletion of Slippery Liquid Infused Porous Surfaces Using Precision Nanostructures. Langmuir, 2021, 37, 10071-10078.	3.5	31
36	Efficiency and loss mechanisms of plasmonic Luminescent Solar Concentrators. Optics Express, 2013, 21, A735.	3.4	28

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37	All-Silicone-based Distributed Bragg Reflectors for Efficient Flexible Luminescent Solar Concentrators. Nano Energy, 2020, 70, 104507.	16.0	28
38	2.7 Mb/s With a 93-kHz White Organic Light Emitting Diode and Real Time ANN Equalizer. IEEE Photonics Technology Letters, 2013, 25, 1687-1690.	2.5	27
39	Flexible and fluorophore-doped luminescent solar concentrators based on polydimethylsiloxane. Optics Letters, 2016, 41, 713.	3.3	27
40	A 20-Mb/s VLC Link With a Polymer LED and a Multilayer Perceptron Equalizer. IEEE Photonics Technology Letters, 2014, 26, 1975-1978.	2.5	25
41	TiO2 nanofiber photoelectrochemical cells loaded with sub-12Ânm AuNPs: Size dependent performance evaluation. Materials Today Energy, 2018, 9, 254-263.	4.7	23
42	Optimization of the thermochromic glazing design for curtain wall buildings based on experimental measurements and dynamic simulation. Solar Energy, 2021, 216, 14-25.	6.1	23
43	Visible light communications: 375ÂMbits/s data rate with a 160ÂkHz bandwidth organic photodetector and artificial neural network equalization [Invited]. Photonics Research, 2013, 1, 65.	7.0	22
44	Improved thermochromic properties in bilayer films of VO₂with ZnO, SnO₂and WO₃coatings for energy efficient glazing. Journal of Materials Chemistry C, 2018, 6, 12555-12565.	5.5	22
45	High-Performance Planar Thin Film Thermochromic Window via Dynamic Optical Impedance Matching. ACS Applied Materials & Interfaces, 2020, 12, 8140-8145.	8.0	22
46	A MIMO-ANN system for increasing data rates in organic visible light communications systems. , 2013, , .		21
47	A 1-Mb/s Visible Light Communications Link With Low Bandwidth Organic Components. IEEE Photonics Technology Letters, 2014, 26, 1295-1298.	2.5	21
48	Optical 8-channel, 10 Gb/s MT pluggable connector alignment technology for precision coupling of laser and photodiode arrays to polymer waveguide arrays for optical board-to-board interconnects. , 2008, , .		16
49	Radiation- and Bound-Mode Propagation in Rectangular, Multimode Dielectric, Channel Waveguides With Sidewall Roughness. Journal of Lightwave Technology, 2009, 27, 4151-4163.	4.6	16
50	A Fully Bidirectional Optical Network With Latency Monitoring Capability for the Distribution of Timing-Trigger and Control Signals in High-Energy Physics Experiments. IEEE Transactions on Nuclear Science, 2011, 58, 1628-1640.	2.0	14
51	Impact of curvature on the optimal configuration of flexible luminescent solar concentrators. Optics Letters, 2017, 42, 2695.	3.3	14
52	Modal Dispersion Mitigation in Standard Single-Mode Fibers at 850 nm With Fiber Mode Filters. IEEE Photonics Technology Letters, 2010, 22, 1476-1478.	2.5	13
53	Experimental Verification of Visible Light Communications based on Multi-Band CAP Modulation. , 2015, , .		13
54	Bioinspired Multifunctional Glass Surfaces through Regenerative Secondary Mask Lithography. Advanced Materials, 2021, 33, e2102175.	21.0	13

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55	Mitigation of hysteresis due to a pseudo-photochromic effect in thermochromic smart window coatings. Scientific Reports, 2018, 8, 13249.	3.3	11
56	Particle Size Evolution during the Synthesis of Gold Nanoparticles Using <i>In Situ</i> Time-Resolved UVâ€"Vis Spectroscopy: An Experimental and Theoretical Study Unravelling the Effect of Adsorbed Gold Precursor Species. Journal of Physical Chemistry C, 2020, 124, 27662-27672.	3.1	11
57	Precision-Microfabricated Fiber-Optic Probe for Intravascular Pressure and Temperature Sensing. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-12.	2.9	11
58	Integrated optical and electronic interconnect printed circuit board manufacturing. Circuit World, 2008, 34, 21-26.	0.9	10
59	Spacer-Defined Intrinsic Multiple Patterning. ACS Nano, 2020, 14, 12091-12100.	14.6	10
60	Insertion Loss and Misalignment Tolerance in Multimode Tapered Waveguide Bends. IEEE Photonics Technology Letters, 2008, 20, 1000-1002.	2.5	8
61	Influence of Depth of Interaction upon the Performance of Scintillator Detectors. PLoS ONE, 2014, 9, e98177.	2.5	8
62	Thermoresponsive Black VO2â€"Carbon Nanotube Composite Coatings for Solar Energy Harvesting. ACS Applied Nano Materials, 2020, 3, 8848-8857.	5.0	8
63	Large Scale Production of Photonic CrystalsÂonÂScintillators. IEEE Transactions on Nuclear Science, 2016, 63, 639-643.	2.0	7
64	Micron resolution, high-fidelity three-dimensional vascular optical imaging phantoms. Journal of Biomedical Optics, 2019, 24, 1.	2.6	7
65	A route to engineered high aspect-ratio silicon nanostructures through regenerative secondary mask lithography. Nanoscale, 2022, 14, 1847-1854.	5.6	7
66	Organic visible light communications: Recent progress. , 2014, , .		6
67	Light Extraction From Scintillating Crystals Enhanced by Photonic Crystal Structures Patterned by Focused Ion Beam. IEEE Transactions on Nuclear Science, 2016, 63, 644-648.	2.0	6
68	Innovative Optical and Electronic Interconnect Printed Circuit Board Manufacturing research. , 2008, , .		5
69	Next Generation Visible Light Communications: 10 Mb/s with Polymer Light-Emitting Diodes. , 2014, , .		5
70	The Effect of Alkali Metal (Na, K) Doping on Thermochromic Properties of VO2 Films. MRS Advances, 2018, 3, 1863-1869.	0.9	5
71	Influence of Lithium and Lanthanum Treatment on TiO 2 Nanofibers and Their Application in nâ€iâ€p Solar Cells. ChemElectroChem, 2019, 6, 3590-3598.	3.4	5
72	Dynamically configurable, successively switchable multispectral plasmon-induced transparency. Optics Letters, 2019, 44, 3829.	3.3	5

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73	Real-time needle guidance with photoacoustic and laser-generated ultrasound probes. Proceedings of SPIE, 2015, , .	0.8	4
74	Highly sensitive optical microresonator sensors for photoacoustic imaging. Proceedings of SPIE, 2014, , .	0.8	3
75	A combined experimental and theoretical study into the performance of multilayer vanadium dioxide nanocomposites for energy saving applications. , 2018, , .		3
76	Optical interferometric temperature sensors for intravascular blood flow measurements. , 2019, , .		3
77	The impact of bead milling on the thermodynamics and kinetics of the structural phase transition of VO2 particulate materials and their potential for use in thermochromic glazing. Solar Energy Materials and Solar Cells, 2022, 242, 111783.	6.2	3
78	Online artificial neural network equalization for a visible light communications system with an organic light emitting diode based transmitter. , 2013, , .		2
79	3D printed micro-scale fiber optic probe for intravascular pressure sensing. , 2018, , .		2
80	Universal Theory of Light Scattering of Randomly Oriented Particles: A Fluctuational-Electrodynamics Approach for Light Transport Modeling in Disordered Nanostructures. ACS Photonics, 2022, 9, 672-681.	6.6	2
81	Component and System Level Studies of Radiation Damage Impact on Reflective Electroabsorption Modulators for Use in HL-LHC Data Transmission. IEEE Transactions on Nuclear Science, 2013, 60, 386-393.	2.0	1
82	Passive Optical Networks for Timing-Trigger and Control applications in high energy physics experiments. , 2010, , .		0
83	Timing Performance Improvement of Scintillator Detectors via Inclusion of Reflection Metasurfaces. , 2014, , .		0
84	Fiber optic ultrasound transducers with carbon/PDMS composite coatings. , 2014, , .		0
85	Influence of Lithium and Lanthanum Treatment on TiO 2 Nanofibers and Their Application in nâ€iâ€p Solar Cells. ChemElectroChem, 2019, 6, 3529-3529.	3.4	0
86	Optical fiber laser ultrasound transmitter with electrospun composite for minimally invasive medical imaging. , 2017, , .		0