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<b>EFFICIENT SINGLE-SPATIAL-MODE PPKTP WAVEGUIDE SOURCE FOR HIGH DIMENSIONAL ENTANGLEMENT-BASED QKD</b> .....	1804
<i>Zhong, Tian; Wong, Franco N. C.; Restelli, Alessandro; Bienfang, Joshua C.</i>	
<b>LOW-NOISE FREQUENCY DOWN-CONVERSION AT THE SINGLE PHOTON LEVEL</b> .....	1806
<i>Lenhard, Andreas; Zaska, Sebastian; Blum, Susanne; Morigi, Giovanna; Becher, Christoph</i>	
<b>DESIGN OF AN INTEGRATED III-V SEMICONDUCTOR SINGLE-PLASMON SOURCE</b> .....	1808
<i>Gan, Choon How; Hugonin, Jean-Paul; Lalanne, Philippe</i>	
<b>MULTIDIMENSIONAL QUANTUM INFORMATION ENCODING IN THE TIME DOMAIN</b> .....	1810
<i>Hayat, Alex; Xing, Xingxing; Feizpour, Amir; Steinberg, Aephraim M.</i>	
<b>DEEP ULTRAVIOLET LED-BASED OZONE SENSOR</b> .....	1812
<i>Bilenko, Yuri; Bettles, Tim; Gaska, Remis; Degner, Martin; Ewald, Hartmut</i>	
<b>DEEP ULTRAVIOLET LED-BASED SELECTIVE SENSOR FOR COMBUSTION GASES</b> .....	1814
<i>Degner, Martin; Ewald, Hartmut; Bilenko, Yuri; Yang, Jinwei; Gaska, Remis</i>	
<b>III-NITRIDE OPTOCHEMICAL NANOSENSORS</b> .....	1816
<i>Teubert, Jorg; Eickhoff, Martin</i>	
<b>EFFICIENT UV EMITTERS FOR SENSING AND DISINFECTION</b> .....	1817
<i>Shatalov, M.; Lumev, A.; Hu, X.; Sun, W.; Jain, R.; Yang, J.; Dobrinsky, A.; Deng, J.; Bilenko, Yu.; Moe, C. G.; Wraback, M.; Shur, M.; Gaska, R.</i>	
<b>SUB-THRESHOLD TIME-RESOLVED SPECTROSCOPY OF MID-UV ALGAN LASER DIODE STRUCTURES PSEUDOMORPHICALLY GROWN ON BULK ALN</b> .....	1819
<i>Garrett, Gregory A.; Rotella, Paul; Shen, Hongen; Wraback, Michael; Wunderer, Thomas; Chua, Christopher L.; Yang, Zhihong; Northrup, John E.; Johnson, Noble M.</i>	
<b>OPEN-PATH GREENHOUSE GAS SENSOR FOR UAV APPLICATIONS</b> .....	1821
<i>Khan, Amir; Schaefer, David; Roscoe, Bryan; Sun, Kang; Tao, Lei; Miller, David; Lary, David J.; Zondlo, Mark A.</i>	
<b>LATERALLY COUPLED DISTRIBUTED-FEEDBACK GAS-BASED DIODE LASERS FOR ATMOSPHERIC GAS DETECTION AT 2 μM</b> .....	1823
<i>Briggs, Ryan M.; Frez, Clifford; Ksendzov, Alexander; Franz, Kale J.; Bagheri, Mahmood; Forouhar, Siamak</i>	
<b>RAPID DIAGNOSIS OF BREAST CANCER CELL WITH COHERENT ANTI-STOKES RAMAN SCATTERING MICROSCOPY</b> .....	1825
<i>Lee, Jang Hyuk; Yoon, Ally; Shin, Sang-Mo; Oh, Myoung-Kyu; Ko, Do-Kyeong</i>	
<b>RANDOM LASER EMISSION IN INNOVATIVE STRUCTURED OPTOFLUIDIC CHANNEL</b> .....	1827
<i>Bhaktha, B. N. Shivakiran; Noblin, X.; Bachelard, N.; Sebbah, P.</i>	
<b>BROADBAND EXTINCTION OF CORE-SHELL MICROSPHERES</b> .....	1829
<i>de Silva, Vashista C.; Stewart, James L.; Shalae, Vladimir M.; Drachev, Vladimir P.</i>	
<b>GAN NANOWIRES SYNTHESIZED BY ELECTROLESS ETCHING METHOD</b> .....	1831
<i>Najar, A.; Slimane, A. B.; Anjum, D. H.; Ng, T. K.; Ooi, B. S.</i>	
<b>ROOM TEMPERATURE PLASMON NANOLASER</b> .....	1833
<i>Ma, R.-M.; Oulton, R. F.; Sorger, V. J.; Bartal, G.; Zhang, X.</i>	
<b>HIGHLY CONFINEMENT OF TERAHERTZ RADIATION USING HYBRID PLASMONIC WAVEGUIDE</b> .....	1835
<i>You, Borwen; Lu, Ja-Yu; Chang, Wei-Lun; Yu, Chin-Ping; Liu, Tze-An; Peng, Jin-Long</i>	
<b>SUBMICRON IMAGING BY USING ANGLE-RESOLVED SURFACE PLASMON RESONANCE MICROSCOPY ON NANOHOLE ARRAYS</b> .....	1837
<i>Cao, Z. L.; Zhang, L.; Ong, H.C.</i>	
<b>EFFICIENT MODE CONVERTERS FOR PLASMONIC OPTICAL NANOCIRCUITS</b> .....	1839
<i>Hung, Yun-Ting; Huang, Jer-Shing</i>	
<b>ULTRA-BROADBAND, EFFICIENT AND UNIDIRECTIONAL RANDOM-NANOSLITS COUPLER FOR METALINSULATOR-METAL PLASMONS</b> .....	1841
<i>Li, Guangyuan; Xu, Anshi</i>	
<b>OPTICAL CHARACTERIZATION OF AG NANOPARTICLES FABRICATED USING HETEROGENEOUS CONDENSATION IN AIR</b> .....	1843
<i>Lama, Pemba; Suslov, Anatoliy; Dorsinville, Roger</i>	
<b>SELF-ASSEMBLED PLASMONIC NANORINGS</b> .....	1845
<i>Lerond, Thomas; Proust, Julien; Yockell-Lelievre, Helene; Gerard, Davy; Plain, Jerome</i>	
<b>AN ULTRAFast ALL-OPTICAL SILICON-BASED NANORING MODULATOR</b> .....	1847
<i>Sederberg, S.; Driedger, D.; Elezzabi, A. Y.</i>	
<b>SELF-REFERENCED PHOTONIC CRYSTAL BIOSENSORS FOR IN SITU BINDING STUDIES</b> .....	1849
<i>Schilling, Ryan; Aydin, Deniz; Levi, Ofer</i>	
<b>PHOTONIC BANDGAP PLASMONIC WAVEGUIDES</b> .....	1851
<i>Markov, Andrey; Reinhardt, Carsten; Ung, Bora; Evlyukhin, Andrey B.; Cheng, Wei; Chichkov, Boris N.; Skorobogatiy, Maksim</i>	
<b>PLASMONIC AXICON MICRO-LENSES FOR CHEMICAL SENSING</b> .....	1853
<i>Proust, Julien; Martin, Jerome; Gerard, Davy; Bijeon, Jean Louis; Plain, Jerome</i>	
<b>A PLASMONIC AFFINITY BIOSENSOR WITH DUAL POLARIZATION BASED ON HYBRID PLASMONIC PLATFORM</b> .....	1855
<i>Bahrani, F.; Alam, M. Z.; Aitchison, J. S.; Mojahedi, M.</i>	
<b>EFFICIENT COUPLING TO METAL-DIELECTRIC-METAL PLASMONIC WAVEGUIDES WITH SUBWAVELENGTH SLIT STRUCTURES</b> .....	1857
<i>Huang, Yin; Min, Changjun; Veronis, Georgios</i>	

<b>A NANOPLASMONIC CONTOUR BOWTIE FOR NANOSCALE CONFINEMENT OF MIDINFRARED RADIATION</b> .....	1859
<i>Sederberg, S.; Elezabi, A. Y.</i>	
<b>MITIGATION OF OPTICAL BISTABILITY IN SI-BASED MID-IR INFRARED PHOTONIC CRYSTAL CAVITIES USING SURFACE TREATMENTS</b> .....	1861
<i>Shankar, Raji; Bulu, Irfan; Leijssen, Rick; Leonard, Kogos; Loncar, Marko</i>	
<b>ANALYSES OF CARRIER FREQUENCY FLUCTUATION OF W-BAND ROF SIGNALS USING TWO FREE-RUNNING LASERS FOR HIGH-SPEED ROF TRANSMISSION</b> .....	1863
<i>Kanno, Atsushi; Kuri, Toshiaki; Hosako, Iwao; Kawanishi, Tetsuya; Yasumura, Yoshihiro; Yoshida, Yuki; Kitayama, Ken-ichi</i>	
<b>ALL-OPTICAL MICROWAVE MIXING AND BANDPASS FILTERING BASED ON PHASE MODULATION OF A BROADBAND OPTICAL SOURCE</b> .....	1865
<i>Xue, Xiaoxiao; Zheng, Xiaoping; Zhang, Hanyi; Zhou, Bingkun</i>	
<b>MULTI-STAGE ELECTRICAL PMD COMPENSATOR IN DIGITAL COHERENT RECEIVERS FOR HIGHER-ORDER PMD MITIGATION</b> .....	1867
<i>He, Xuan; Wang, Junyi; Pan, Z.</i>	
<b>10-GBPS UPLINK TRANSMISSION IN WDM-PON WITH RSOA-BASED COLORLESS ONUS AND MZI-BASED EQUALIZERS</b> .....	1869
<i>Su, Ting; Zhang, Min; Liu, Mingtao; Liu, Lei; Wang, Yanhong; Han, Weiping; Chen, Xue</i>	
<b>EFFICIENT AND WIDELY TUNABLE, SINGLE-MODE DIODEPUMPED SUB-100 FS YB<sup>3+</sup> :CAGDALO<sub>4</sub> LASER</b> .....	1871
<i>Agnesi, A.; Greborio, A.; Pirzio, F.; Ugolotti, E.; Reali, G.; Guandalini, A.; der Au, J. Aus</i>	
<b>EXPERIMENTAL DEMONSTRATION OF A SMOOTH EVOLUTION SCHEME FROM CONVENTIONAL TDM-PON TO TDM-OFDM-PON</b> .....	1873
<i>Li, Juhao; Yang, Hui; Lin, Bangjiang; He, Yongqi; Chen, Zhangyuan</i>	
<b>EFFECT OF GROUP-VELOCITY DISPERSION IN MULTILEVEL AMPLITUDE REGENERATOR BASED ON A NONLINEAR AMPLIFYING LOOP MIRROR</b> .....	1875
<i>Roethlingshoefer, T.; Toth, D.; Onishchukov, G.; Schmauss, B.; Leuchs, G.</i>	
<b>4 × 25-GHZ 2-PS MULTICOLOR ULTRASHORT PULSE GENERATION WITH A SINGLE PHASE MODULATOR AND MAMYSHEV RESHAPER</b> .....	1877
<i>Huo, Li; Li, HongFeng; Wang, Qiang; Lou, Caiyun</i>	
<b>LARGE-SCALE LASER SPECTRAL COMPRESSION USING A TRUE DISPERSION-INCREASING FIBER</b> .....	1879
<i>Chuang, Hsiu-Po; Huang, Chen-Bin</i>	
<b>CHARACTERIZATION OF THE RIN-TO-PHASE-NOISE CONVERSION IN THE MODE-LOCKED FIBER LASERS</b> .....	1881
<i>Wu, Kan; Shum, Perry Ping; Ouyang, Chunmei</i>	
<b>MOLECULES WITH A ONE OCTAVE FREQUENCY DOMAIN FOR THE MEASUREMENT OF THE 1-FS OPTICAL PULSE WIDTH</b> .....	1883
<i>Imasaka, Tomoko; Imasaka, Totaro</i>	
<b>DISCRETELY TUNABLE FREE SPECTRAL RANGE OF A FREQUENCY COMB BY TEMPORAL PHASE MODULATION OF A PERIODIC PULSE TRAIN</b> .....	1885
<i>Malacarne, Antonio; Azana, Jose</i>	
<b>OPTICAL STOPPING EFFECT ON AS<sub>20</sub>S<sub>80</sub> SYSTEM FILM WAVEGUIDE</b> .....	1887
<i>Zou, Liner; Yao, Songtao; Chen, Baoxue; Hamanaka, Hiromi; Iso, Mamoru</i>	
<b>WAVELENGTH SCALING OF HOLLOW-CORE FIBER COMPRESSOR DESIGN PARAMETERS</b> .....	1889
<i>Granados, Eduardo; Chen, Li-Jin; Lai, Chien-Jen; Hong, Kyung-Han; Kartner, Franz X.</i>	
<b>COMMON-MODE PROPERTY OF AMPLITUDE-TO-PHASE NOISE CONVERSION IN CARRIER-ENVELOPE PHASE MEASUREMENT AND ITS EFFECT ON PHASE STABILIZATION</b> .....	1891
<i>Takehata, Masayuki; Oota, Wataru; Takada, Hideyuki; Nakamura, Shinki; Torizuka, Kenji</i>	
<b>APOPTOSIS DETECTION AT CELLULAR LEVEL BY QUANTITATIVE THREE-DIMENSIONAL IMAGING</b> .....	1893
<i>Cheng, Nai-Chia; Hsieh, Tsung-Hsun; Lai, Chien-Chih; Tjju, Jeng-Wei; Lin, Ming-Yi; Huang, Ding-Wei; Huang, Sheng-Lung</i>	
<b>MULTI-WAVELENGTH MICRORING-BASED OPTICAL PULSE TRAIN GENERATOR</b> .....	1895
<i>Wang, Shang; Wu, Hui</i>	
<b>TRANSIENT MEASUREMENT OF LASER WAKEFIELD AT THE SILEX-I: TI: SAPPHIRE LASER</b> .....	1897
<i>Dong, Jun; Peng, Zhi-tao; Lu, Zhong-gui; Sun, Zhi-hong; Wang, Xiao-dong; Su, Jing-qin; Xie, Na; Xia, Yan-wen; Guo, Yi; Sun, Li; Wu, Yu-chi; Zhu, Bin; Tang, Jun; Liu, Hua; Yuan, Hao-yu</i>	
<b>TWO-COLOR DEEP-ULTRAVIOLET 40-FS PULSES AT 100 KHZ</b> .....	1899
<i>Adachi, Shunsuke; Shen, Huan; Horio, Takuya; Suzuki, Toshinori</i>	
<b>10 GHZ PULSE REPETITION RATE ERGO LASER MODELOCKED BY A 1550 NM INAS/GAAS QUANTUM-DOT SESAM</b> .....	1901
<i>Resan, B.; Oehler, A. E. H.; Zhang, Z. Y.; Kurnulis, S.; Zhou, K. J.; Wang, Q.; Mangold, M.; Suedmeyer, T.; Keller, U.; Hogg, R. A.; Weingarten, K. J.</i>	
<b>IMPROVEMENT OF DOUBLE-PASS CROSSED-POLARIZED WAVE EFFICIENCY AND BEAM QUALITY VIA IMAGING</b> .....	1903
<i>Iliev, Marin; Meier, Amanda; Durfee, Charles</i>	
<b>GENERATION OF SUB-50-FS PULSES IN THE NEAR INFRARED BY OPTICAL PARAMETRIC AMPLIFIERS BASED ON BIBO CRYSTALS</b> .....	1905
<i>Tzankov, Pancho; Isaienko, Oleksandr; Shumay, Igor; Stockwell, Dave; Xu, Lin; Moisan, Nicolas; Boschetto, Davide</i>	

<b>DESIGN OF A “SHAPE-OPTIMIZED” ELECTROMAGNETIC ABSORBER WITH MAXIMIZED HEAT TRANSFER TO THE SURROUNDING</b> .....	1907
<i>Dewanjee, Arnab; James, Daniel F. V.; Mojahedi, Mo.</i>	
<b>SPECTROMETER-LESS RAMAN DETECTION USING ROTATING, TUNABLE BAND-PASS FILTERS</b> .....	1909
<i>Biedrzycki, S.; Buric, M.; Falk, J.; Woodruff, S.</i>	
<b>SIMULATION OF GRADING DOUBLE HETERO-JUNCTION NON-POLAR INGAN SOLAR CELL</b> .....	1911
<i>Wang, Hsun-Wen; Yu, Pei-Chen; Han, Hau-Vei; Lin, Chien-Chung; Kuo, Hao-Chung; Lin, Shiuian-Huei</i>	
<b>FIBER-FORMAT PICOSECOND SOURCE FOR COHERENT RAMAN MICROSCOPY</b> .....	1913
<i>Lefrancois, Simon; Kong, Lingjie; Wadsworth, William; Herda, Robert; Zach, Armin; Holtom, Gary; Xie, X. Sunney; Wise, Frank W.</i>	
<b>ULTRASENSITIVE IMMUNOSENSOR BASED ON ELECTROGENERATED CHEMILUMINESCENCE QUENCHING OF CDS/TIO<sub>2</sub> NANOTUBE ARRAYS FOR DETECTION OF ANTIGEN</b> .....	1915
<i>Gao, Zhi-Da; Zhuang, Qian-Lan; Li, Cheng-Yong; Song, Yan-Yan</i>	
<b>IN-VIVO OCT IMAGING USING WAVELENGTH SWEPT FIBER LASER BASED ON DISPERSION TUNING</b> .....	1917
<i>Takubo, Yuya; Yamashita, Shinji</i>	
<b>MODELING INGAAS/ALGAAS/AU DISTRIBUTED FEEDBACK LASERS FOR BIOMEDICAL APPLICATIONS</b> .....	1919
<i>Shih, Meng-Mu</i>	
<b>HIGH-PERFORMANCE SPECTRAL-DOMAIN OPTICAL LOW-COHERENCE REFLECTOMETRY WITH AN INTEGRATED ARRAYED-WAVEGUIDE GRATING</b> .....	1921
<i>Chang, L.; Akca, B. I.; Sengo, G.; Worhoff, K.; de Ridder, R. M.; Pollnau, M.</i>	
<b>AMPLIFICATION WITHOUT INVERSION IN A DEGENERATE DOUBLE LAMBDA SYSTEM</b> .....	1923
<i>Singh, Niharika; D'Souza, R.; Lawande, Q. V.; Jagatap, B. N.</i>	
<b>LOW INTENSITY INELASTIC PHOTON SCATTERING IN SILICON WIRE WAVEGUIDE BELOW THE BANDGAP</b> .....	1925
<i>Clemmen, S.; Perret, A.; Saftoui, J.; Bogaerts, W.; Baets, R.; Gorza, S.-P.; Emplit, Ph.; Massar, S.</i>	
<b>MICRO-INTEGRATED, NARROW LINEWIDTH EXTENDED CAVITY DIODE LASER FOR ATOM INTERFEROMETRY IN SPACE</b> .....	1927
<i>Kurbis, Ch.; Luvsandamdin, E.; Sahm, A.; Wicht, A.; Peters, A.; Erbert, G.; Trankle, G.</i>	
<b>PHOTOLUMINESCENCE MEASUREMENT OF QUANTUM DOT PHOTONIC CRYSTAL CAVITY WITH CURVED-MICROFIBER</b> .....	1929
<i>Ahn, Byeong-Hyeon; Kim, Ju-Young; Lee, Chang-Min; Lim, Hee-Jin; Lee, Yong-Hee</i>	
<b>OPTICAL ASSESSMENT OF ANISOTROPY IN EX VIVO RAT BLADDERS</b> .....	1931
<i>Alali, Sanaz; Aitken, Karen J.; Bagli, Darius J.; Vitkin, I. Alex</i>	
<b>EXPERIMENTAL INVESTIGATION OF TRANSPARENT SILICON CARBIDE AS A PROMISING MATERIAL FOR ATOM CHIPS</b> .....	1933
<i>Huet, Landry; Ammar, Mahdi; Morvan, Erwan; Sarazin, Nicolas; Pocholle, Jean-Paul; Reichel, Jakob; Guerlin, Christine; Schwartz, Sylvain</i>	
<b>POLARIZATION-DEGENERATE QUANTUM DOT EMISSION IN PHOTONIC CRYSTAL CAVITIES</b> .....	1935
<i>Thijssen, A. C. T.; Cryan, M. J.; Rarity, J. G.; Oulton, R.</i>	
<b>NEUTRAL ATOMIC SPIN CONTROL WITH OPTICAL FREQUENCY COMBS</b> .....	1937
<i>Quraishi, Qudsia; Malinovsky, Vladimir S.; Alexander, Jason; Prieto, Violeta; Rowlett, Chris; Lee, Patricia</i>	
<b>NEW APPROACH TO FABRICATE A DEEP FIELD STOP LAYER ON THE BACKSIDE OF POWER SEMICONDUCTOR IGBT</b> .....	1939
<i>Omori, K.; Seino, T.; Yamaguchi, Y.; Kobayashi, N.; Kudo, T. J.; Sano, K.</i>	
<b>RESONANT INTERACTION BETWEEN 4F-4F TRANSITIONS OF EU ION AND THE SURFACE PLASMON BY AG NANO-FILM FOR THE MIRROR TYPE OF DISPLAYS</b> .....	1941
<i>Lee, Seong Min; Jang, Cheol; Choi, Kyung Cheol</i>	
<b>BIOSENSORS BY MEANS OF LASER INDUCED FORWARD TRANSFER TECHNIQUE</b> .....	1943
<i>Chatzipetrou, M.; Tsekenis, G.; Filippidou, M. K.; Tsouti, V.; Thanos, D.; Chatzandroulis, S.; Zergioti, I.</i>	
<b>GREEN SYNTHESIS OF SUB-10 NM GOLD NANOPARTICLES BY TWO-STEP LASER IRRADIATION</b> .....	1945
<i>de Oliveira, V. S.; Henrique, F. R.; Graff, I. L.; Schreiner, W. H.; Bezerra-Jr, A. G.</i>	
<b>FABRICATION OF MICROLENS ARRAYS IN POLYCARBONATE WITH NANOJOULE ENERGY FEMTOSECOND LASER PULSES</b> .....	1947
<i>Meunier, Trevor; Weck, Arnaud</i>	
<b>HIGH RESOLUTION DIGITAL SPECTROMETERS-ON-CHIP</b> .....	1949
<i>Bugrov, A.; Peroz, C.; Dhuey, S.; Goltsov, A.; Calo, C.; Ivonin, I.; Koshelev, A.; Sasorov, P.; Cabrini, S.; Babin, S.; Yankov, V.</i>	
<b>SINGLE-PIXEL DIGITAL HOLOGRAPHY BASED ON COMPUTATIONAL “GHOST” IMAGING</b> .....	1951
<i>Clemente, Pere; Duran, Vicente; Tajahuerce, Enrique; Torres-Company, Victor; Lancis, Jesus</i>	
<b>STABILIZATION OF AN INJECTION LOCKED HARMONICALLY MODE-LOCKED LASER VIA POLARIZATION SPECTROSCOPY FOR FREQUENCY COMB GENERATION</b> .....	1953
<i>Williams, Charles; Davila-Rodriguez, Josue; Bagnell, Kristina; Delfyett, Peter J.</i>	
<b>PROGRESS OF THE <sup>171</sup>YB OPTICAL LATTICE CLOCK AT NMIJ, AIST</b> .....	1955
<i>Yasuda, Masami; Kohno, Takuya; Hosaka, Kazumoto; Inaba, Hajime; Nakajima, Yoshiaki; Akamatsu, Daisuke; Hong, Feng-Lei</i>	
<b>LASER FREQUENCY NOISE REDUCTION IN RESONATOR FIBER OPTIC GYRO</b> .....	1957
<i>Yu, Xuhui; Ma, Huilian; Jin, Zhonghe</i>	
<b>INVESTIGATION OF LINEWIDTH OF COMB MODES IN MZM-BASED FLAT COMB GENERATOR WITH OPTICAL FEEDBACK LOOP</b> .....	1959
<i>Morohashi, Isao; Sakamoto, Takahide; Yamamoto, Naokatsu; Ogawa, Yoh; Kawanishi, Tetsuya; Hosako, Iwao</i>	

<b>CHARACTERIZATION AND SUPPRESSION EXCESS TIMING NOISE IN THE INDOOR ATMOSPHERIC TRANSFER OF OPTICAL PULSE TRAINS</b> .....	1961
<i>Park, Suhyeon; Kim, Chur; Kim, Jungwon</i>	
<b>PRACTICAL DESIGN OF A LAYERED POLYMER GRIN LENS</b> .....	1963
<i>Flynn, R. A.; Fleet, E.; Kretzer, C.; Beadie, G.</i>	
<b>HIGH-DAMAGE-THRESHOLD COMPONENTS FOR RADially AND AZIMUTHALLY POLARIZED BEAM GENERATION</b> .....	1965
<i>Statt, M.; Vargas, M.; Oliver, J. B.; Chen, S. H.; Marshall, K. L.; Dorrer, C.</i>	
<b>EQE ENHANCEMENT OF TOP-CELL OF GAAS-BASED TRIPLEJUNCTION SOLAR CELL USING GRADED-INDEX SiO<sub>2</sub> NANO-PILLARS SUB-WAVELENGTH AR-COATING</b> .....	1967
<i>Ho, Wen-Jeng; Syu, Jhih-Kai; Yu, Cheng-Ming; Lee, Yi-Yu; Liu, Jheng-Jie; Shiu, Shu-Chia; Lin, Ching-Fuh; Shiau, Hung-Bin</i>	
<b>HIGH-PURITY GENERATION AND POWER-EFFICIENT MULTIPLEXING OF OPTICAL ORBITAL ANGULAR MOMENTUM (OAM) MODES IN A RING FIBER FOR SPATIAL-DIVISION MULTIPLEXING SYSTEMS</b> .....	1969
<i>Yan, Yan; Yang, Jeng-Yuan; Yue, Yang; Mohammad, Reza; Huang, Hao; Ahmed, Nisar; Zhang, Lin; Wang, Jian; Dolinar, Sam; Tur, Moshe; Willner, Alan E.</i>	
<b>AL-DOPING IN CSLIB<sub>6</sub>O<sub>10</sub> FOR HIGH RESISTANCE AGAINST UV LASER-INDUCED DAMAGE</b> .....	1971
<i>Takachiho, K.; Yoshimura, M.; Fukushima, Y.; Lu, Z. M.; Takahashi, Y.; Sasaki, T.; Mori, Y.</i>	
<b>HIGH-RESOLUTION SPECTRAL-DOMAIN OPTICAL COHERENCE TOMOGRAPHY WITH MICROFIBER COUPLER</b> .....	1973
<i>Kim, Sunduck; Kwon, Oh-Jang; Yoon, Min-Seok; Han, Young-Geun</i>	
<b>CHARACTERIZATION OF PHOTOREFRACTIVE MATERIALS BASED ON LiF COLOR CENTER CRYSTALS FOR MID-IR VOLUMETRIC BRAGG GRATINGS</b> .....	1975
<i>Martyshkin, Dmitry V.; Fedorov, Anton V.; Arumugam, Anitha; Fedorov, Vladimir V.; Hilton, David J.; Mirov, Sergey B.</i>	
<b>EXPERIMENTAL STUDY OF THE ACOUSTO-OPTIC INTERACTION IN ALUMINOSILICATE FIBER USING THE ANTI-STOKES BRILLOUIN SIGNAL</b> .....	1977
<i>Mounfort, Francesca H.; Belal, Mohammad; Boyland, Alexander J.; Sahu, Jayanta K.</i>	
<b>MOLECULAR BEAM EPITAXY-GROWN INGAN NANOMUSHROOMS AND NANOWIRES FOR WHITE LIGHT SOURCE APPLICATIONS</b> .....	1979
<i>Gasim, A.; Ng, T. K.; Cha, D. K.; Bhattacharya, P.; Ooi, B. S.</i>	
<b>ULTRAFast LASER FABRICATION OF LOW-LOSS WAVEGUIDES IN CHALCOGENIDE GLASS WITH 0.65 DB/CM LOSS</b> .....	1981
<i>McMillen, Ben; Zhang, Botao; Chen, Kevin; Benayas, Antonio; Jaque, Daniel</i>	
<b>OPTIMIZATION OF RARE-EARTH MODIFIED IRON GARNET EPITAXIAL FILMS FOR MAGNETO-OPTIC APPLICATIONS</b> .....	1983
<i>Hwang, Jae-Yeol; Ferrera, Marcello; Razzari, Luca; Pignolet, Alain; Morandotti, Roberto</i>	
<b>CHANNEL WAVEGUIDE LASERS PRODUCED BY FEMTOSECOND AND PICOSECOND DIRECT LASER WRITING IN TI:SAPPHIRE CRYSTALS</b> .....	1985
<i>Grivas, C.; Corbari, C.; Brambilla, G.; Kazansky, P. G.; Lagoudakis, P. G.</i>	
<b>OPTICAL AND ELECTRICAL PROPERTIES OF INDIUM OXIDE THIN FILMS AS TRANSPARENT ELECTRODE TO INDIUM PHOSPHIDE</b> .....	1987
<i>Hseih, Chunhan; Ou, Fang; Yi, Fei; Ho, Seng-Tiong</i>	
<b>STATIC REROUTING OF LIGHT VIA TIP-INDUCED NANO-OXIDATION IN SILICON INTERCONNECT COMPONENTS</b> .....	1989
<i>Shen, Yiran; Divliansky, Ivan B.; Mookherjee, Shayan</i>	
<b>HIGH EFFICIENCY GAN-BASED LIGHT EMITTING DIODES WITH EMBEDDED AIR VOIDS/SiO<sub>2</sub> NANOMASKS</b> .....	1991
<i>Chiu, Ching-Hsueh; Lin, Chien-Chung; Han, Hau-Vei; Lin, Da-Wei; Chen, Yan-Hao; Liu, Che-Yu; Lan, Yu-Pin; Kuo, Hao-Chung; Lu, Tien-Chang; Wang, Shing-Chung</i>	
<b>83% BOOST IN EXTERNAL QUANTUM EFFICIENCY OF LARGE-AREA 380 NM FLIP-CHIP LIGHT-EMITTING DIODES BY INCORPORATING A SELF-TEXTURED OXIDE MASK STRUCTURE</b> .....	1993
<i>Lin, Wen-Yu; Shen, Kun-Ching; Wu, Dong-Sing; Huang, Shih-Cheng; Horng, Ray-Hua</i>	
<b>QUANTUM DOT THERMAL IMAGING OF ON-CHIP LASER EXCITED MICROFLUIDICS</b> .....	1995
<i>Choudhury, D.; Jaque, D.; Rodenas, A.; Ramsay, W. T.; Paterson, L.; Kar, A. K.</i>	
<b>PHOTONIC LIGHT-TRAPPING AND LAMBERTIAN LIMIT IN THIN FILM SILICON SOLAR CELLS</b> .....	1997
<i>Liscidini, M.; Bozzola, A.; Andreani, L. C.</i>	
<b>ENHANCING C-Si BASE PV-CELL ABSORPTION EFFICIENCY USING MICRO-HOLE ARCHITECTURE</b> .....	1999
<i>Adib, Md. Mosaddek Hossain; Mullick, Tahsin Uddin; Chowdhury, Arshad M.; Chang, Gee-Kung</i>	
<b>INFLUENCES OF INDIUM FLUCTUATION TO CARRIER TRANSPORT AND THE CURRENT-VOLTAGE TURN-ON BEHAVIOR IN THE INGAN QUANTUM WELL LEDS</b> .....	2001
<i>Wu, Yuh-Renn; Wang, Chang-Pei; Wang, Kuang-Chung; Speck, James S.</i>	
<b>EFFICIENCY AND DROOP IMPROVEMENT IN INGAN/GAN LIGHT-EMITTING DIODES BY SELECTIVELY CARRIERDISTRIBUTION MANIPULATION</b> .....	2003
<i>Lin, Da-Wei; Wang, Chao-Hsun; Chang, Shih-Pang; Ku, Pu-Hsih; Lan, Yu-Pin; Kuo, Hao-Chung; Lu, Tien-Chang; Wang, Shing-Chung; Chang, Chun-Yen</i>	
<b>STABILITY IN GROWTH OF 6H-SiC AND 3C-SiC FOR LEDS AND SOLAR CELLS</b> .....	2005
<i>Jokubavicius, Valdas; Liljedahl, Rickard; Yakimova, Rositza; Syvajarvi, Mikael</i>	
<b>OBSERVATION OF ULTRA-NARROW BAND PLASMON INDUCED TRANSPARENCY</b> .....	2007
<i>Zhang, Jing; Bai, Wenli; Cai, Likang; Xu, Yun; Song, Guofeng; Gan, Qiaoqiang</i>	



<b>WAVEGUIDED RANDOM LASER EMISSION IN DYE-DOPED HYBRID POLYMER THIN FILMS</b> .....	2009
<i>Cerdan, Luis; Costela, Angel; Garcia-Moreno, Inmaculada</i>	
<b>PLASMON INDUCED TRANSPARENCY IN THREE DIMENSIONAL METAMATERIAL OF UPRIGHT MAGNETIC META-MOLECULES</b> .....	2011
<i>Wu, Pin Chieh; Chen, Wei Ting; Yang, Kuang-Yu; Hsiao, Chih Ting; Chen, Chen Jung; Zheludev, Nikolay I.; Tsai, Din Ping</i>	
<b>POLARIZATION CONTROL OF FANO-RESONANCE IN METAMATERIAL</b> .....	2013
<i>Lee, Y. U.; Choi, E.; Kim, E. S.; Woo, J. H.; Kang, B.; Kim, J. H.; Hong, T. Y.; Kim, J. H.; Wu, J. W.</i>	
<b>AFFINE NONMAGNETIC TRANSFORMATION DESIGN AND ITS APPLICATION</b> .....	2015
<i>Xu, Hongyi; Zhang, Baile; Barbastathis, George; Sun, Handong</i>	
<b>DISPERSIVE FOURIER TRANSFORM AT 1 <math>\mu</math>M BASED ON HIGH-ORDER MODES IN FEW-MODE-FIBER</b> .....	2017
<i>Qiu, Yi; Xu, Jingjiang; Wong, Kenneth K Y.; Tsia, Kevin K</i>	
<b>BOUNDARY-INDUCED ANDERSON LOCALIZATION IN A PHOTONIC LATTICE</b> .....	2019
<i>Naether, U.; Zeuner, J. M.; Stutzer, S.; Tunnermann, A.; Nolte, S.; Molina, M. I.; Szameit, A.</i>	
<b>NONLOCAL RESPONSE OF PLASMONIC NANOROD METAMATERIALS</b> .....	2021
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<b>METAMATERIAL THERMAL ANTENNA USING THE WOLF EFFECT</b> .....	2025
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