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<i>Xu, Jingwei ; Liao, Guisheng ; Zhu, Shengqi</i>	
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<b>COMPRESSED SENSING IN ARRAY SIGNAL PROCESSING BASED ON MODULATED WIDEBAND CONVERTER</b> .....	1692
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<i>Dinesh, R ; Anila, P V ; Nijas, C M ; Sumi, M ; Mohanan, P</i>	
<b>SUBSTRATE INTEGRATED WAVEGUIDE BAND-PASS FILTER WITH COUPLED COMPLEMENTARY SPLIT RING RESONATORS</b> .....	1704
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<b>MULTI RESONANCE BASED CHIPLESS RFID TAG WITH HIGH DATA ENCODING CAPACITY</b> .....	1708
<i>Nijas, C M ; Deepak, U ; Sujith, R ; Mohanan, P.</i>	
<b>THREAT ANALYSIS OF SMART MOBILE DEVICE</b> .....	1712
<i>Pu, Shi ; Chen, Zhonguo ; Huang, Chen ; Liu, Yiming ; Zen, Bing</i>	
<b>A NOVEL ADAPTIVE WIDEBAND BEAMFORMER BASED ON UNIFORM LINEAR ARRAY</b> .....	1715
<i>Liu, Chengcheng ; Hu, Dexiu ; Zhao, Yongjun</i>	
<b>CHANNEL SELECTION AND ANALYSIS OF GEOSTATIONARY INTERFEROMETRIC SUB-MILLIMETER SOUNDER</b> .....	1719
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<b>LASER PROCESSING OF MONO- AND MULTI-LAYER POLYMERIC MATERIALS</b> .....	1723
<i>Candiani, A. ; Sozzi, M. ; Cucinotta, A. ; Selleri, S.</i>	
<b>LINEARITY PERFORMANCE OF OPTOELECTRONIC FREQUENCY DOWN-CONVERSION BY USING DUAL-SERIES POLARIZATION MODULATOR</b> .....	1724
<i>Lv, Qiang ; Xu, Kun</i>	
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<b>PROPAGATION OF RADIAL GAUSSIAN-SHELL MODEL BEAM ARRAY IN NON-KOLMOGOROV TURBULENCE .....</b>	<b>1736</b>
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<b>HEMISPHERICAL DIELECTRIC RESONATOR ANTENNA LOADED WITH A PHOTONIC BAND GAP STRUCTURE FOR WIDEBAND AND HIGH GAIN APPLICATIONS .....</b>	<b>1740</b>
<i>Mukherjee, Biswajeet ; Patel, Pragati ; Mukherjee, Jayanta</i>	
<b>INFLUENCE OF SUBSTRATE ON THE RF-RELATED ELECTRIC CHARACTERISTICS FOR W-BAND ALGAN/GAN HEMTS .....</b>	<b>1744</b>
<i>Lv, Yuanjie ; Feng, Zhihong ; Tan, Xin ; Song, Xubo ; Gu, Guodong</i>	
<b>MICRO SIZE DETECTOR ANTENNAS AT 30 THZ .....</b>	<b>1748</b>
<i>Nassor, Mohammed Ahmed ; Korkmaz, Erdal ; Yegin, Korkut</i>	
<b>OPTIMUM INTEGRATION OF PASSIVE UHF RFID TAG-RECTENNA IN A SINGLE FEED DUAL BAND ANTENNA .....</b>	<b>1751</b>
<i>Vera, Gianfranco Andia ; Nawale, Shankar D. ; Duroc, Yvan ; Tedjini, Smail</i>	
<b>EFFICIENT NANOANTENNA SIMULATION FOR IR ENERGY HARVESTING AND DETECTION DEVICES .....</b>	<b>1755</b>
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<b>MULTIPHYSICS SIMULATIONS OF CARRIER TRANSPORT AND ELECTRODYNAMICS IN TWO-DIMENSIONAL ELECTRON SYSTEMS .....</b>	<b>1757</b>
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<b>DYNAMICS OF LONG-WAVE INFRARED RANGE THERMOCOUPLE DETECTORS .....</b>	<b>1761</b>
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<i>Treuttel, J. ; Gatilova, L. ; Yang, F. ; Maestrini, A. ; Jin, Y. ; Cavanna, A. ; Vacelet, T. ; Tamazouzt, F. ; Krieg, J-M. ; Goldstein, C.</i>	
<b>70 NM GATE-LENGTH THZ INP-BASED IN0.7GA0.3AS/IN0.52AL0.48AS HEMT WITH FMAX OF 540GHZ .....</b>	<b>1769</b>
<i>Zhang, Lisen ; Feng, Zhihong ; Xing, Dong ; Liang, Shixiong ; Wang, Junlong ; Gu, Guodong ; Wang, Yuangang ; Xu, Peng</i>	
<b>LASER SCANNING TERAHERTZ IMAGING SYSTEM FOR MATERIAL SCIENCE AND INDUSTRIAL APPLICATIONS .....</b>	<b>1773</b>
<i>Tonouchi, Masayoshi</i>	
<b>TERAHERTZ BIOMEDICAL APPLICATIONS .....</b>	<b>1774</b>
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<b>A 1.2-GHZ BANDWIDTH VARIABLE GAIN AMPLIFIER WITH CONTINUOUS DB-LINEAR CONTROL IN 65NM CMOS .....</b>	<b>1776</b>
<i>Lu, Zhenghao ; Ma, Kaixue ; Yeo, Kiat-Seng</i>	
<b>AREA EFFICIENT INTER-COUPLED DIFFERENTIAL INJECTION ENHANCEMENT WIDE LOCKING RANGE INJECTION LOCKED FREQUENCY DIVIDER .....</b>	<b>1780</b>
<i>Nagarajan, Mahalingam ; Kaixue, Ma ; Seng, Yeo Kiat ; Meng, Lim Wei</i>	
<b>DESIGN OF A 60 GHZ RECEIVER RF FRONT-END INTEGRATED WITH SUBSTRATE INTEGRATED WAVEGUIDE .....</b>	<b>1784</b>
<i>Sun, Shufeng ; Huang, Yi</i>	
<b>A WIDEBAND 60 GHZ VCO WITH LINEAR TUNING RANGE .....</b>	<b>1788</b>
<i>Zou, Qiong ; Ma, Kaixue ; Yeo, Kiat Seng</i>	
<b>A 60-GHZ 26.3-DB GAIN 5.3-DB NF LOW-NOISE AMPLIFIER IN 65-NM CMOS USING Q-FACTOR ENHANCED INDUCTORS .....</b>	<b>1792</b>
<i>Meng, Fanyi ; Ma, Kaixue ; Yeo, Kiat Seng ; Xu, Shanshan ; Boon, Chirn Chye ; Lim, Wei Meng</i>	
<b>A HYBRID CMOS CLOCK DIVIDER FOR PLL OF 60GHZ TRANSCIEVER .....</b>	<b>1796</b>
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<b>A 60-GHZ ON-CHIP ANTENNA OVER AN AMC USING A STANDARD 65-NM CMOS TECHNOLOGY .....</b>	<b>1800</b>
<i>Yang, Wanlan ; Ma, Kaixue ; Yeo, Kiat Seng ; Lim, Wei Meng ; Lu, Lu</i>	
<b>TRANSIENT FIRST-ORDER INTERFERENCE OF TWO INDEPENDENT THERMAL LIGHT BEAMS .....</b>	<b>1804</b>
<i>Liu, Jianbin ; Le, Mingnan ; Bai, Bin ; Wang, Wentao ; Xu, Zhuo</i>	
<b>IMPROVING THE MAXIMUM TRANSMISSION DISTANCE OF CONTINUOUS VARIABLE QUANTUM KEY DISTRIBUTION BY USING A NOISELESS LINEAR AMPLIFIER .....</b>	<b>1808</b>
<i>Xu, Bingjie ; Zeng, Bing</i>	
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<i>Xue, Xiaobo ; Chen, Zhongjie ; Peng, Xiang ; Chen, Jingbiao ; Guo, Hong</i>	
<b>HIGH PERFORMANCE SUPERCONDUCTOR SINGLE PHOTON DETECTOR WITH ENHANCED SYSTEM EFFICIENCY AT INFRARED WAVELENGTH .....</b>	<b>1816</b>
<i>Zhang, Labao ; Jia, Tao ; Gu, Min ; Kang, Lin ; Zhu, Guanghao ; Chen, Jian ; Wu, Peiheng</i>	
<b>EXCITED STATE ATOMIC OPTICAL FILTERS .....</b>	<b>1820</b>
<i>Luo, Bin ; Yin, Longfei ; Zhong, Lei ; Chen, Zhongjie ; Guo, Hong</i>	
<b>CENTER FREQUENCY AND BANDWIDTH INDEPENDENTLY TUNABLE FILTER USING MEMS DIGITALLY TUNABLE CAPACITORS .....</b>	<b>1824</b>
<i>Kawai, Kunihiro ; Okazaki, Hiroshi ; Narahashi, Shoichi</i>	
<b>ARTIFICIAL NEURAL NETWORKS FOR EFFICIENT RF MEMS MODELING .....</b>	<b>1828</b>
<i>Vietzoreck, L. ; Milijic, M. ; Marinkovi, Z. ; Kim, T. ; Markovic, V. ; Pronic-Rancic, O.</i>	

<b>RESEARCH ADVANCES IN MILLIMETER WAVE AND THZ ANTENNAS WITH MEMS PROCESS</b> .....	1831
<i>Hong, Wei ; Hao, Zhangcheng ; Zhu, Xicheng ; Yu, Shunhua ; Jiang, Mei ; Chen, Li ; Chen, Peng ; Tang, Hongjun ; Chen, Jixin</i>	
<b>MEMS — BICMOS MONOLITHIC INTEGRATION</b> .....	1832
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<b>ANISOTROPIC PLASMONIC METAMATERIALS FOR NANOPHOTONIC APPLICATIONS</b> .....	1836
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<b>PROPAGATION VELOCITY MODULATION AND ELECTROMAGNETIC ENERGY CONCENTRATION OF GUIDED WAVE ON CORRUGATED METAL SURFACE</b> .....	1845
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<b>MODELING AND DESIGN OF MULTIFUNCTIONAL NANOMATERIAL BASED FLEXIBLE ANTENNA</b> .....	1849
<i>Xu, Yili ; Li, Er-Ping ; Wei, Xing-Chang</i>	
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<b>MULTIPHYSICS MODELING OF A TRIPLE-SCALE GRAPHENE SHEET — MAGNETIC NANOWIRE — FSS GYROTROPIC METASURFACE</b> .....	1857
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<i>Ayari, Anthony ; Barois, Thomas ; Perisanu, Sorin ; Vincent, Pascal ; Purcell, Stephen</i>	
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<b>ROBUST MINIMUM VARIANCE BEAMFORMING</b> .....	1877
<i>Gao, Qiubin ; Shi, Wei ; Sun, Shaohui</i>	
<b>RANGE-ANGLE PERFORMANCES OF COHERENT MIMO LONG-RANGE RADARS</b> .....	1881
<i>Le Chevalier, Francois</i>	
<b>AUTO-FOCUSING UWB ARRAY RADAR IMAGING OF A TARGET IN UNKNOWN MOTION USING MULLER AND BUFFINGTON METRICS AND CROSS-RANGE BLURRINESS</b> .....	1885
<i>Sakamoto, Takuya ; Sato, Toru ; Aubry, Pascal ; Yarovoy, Alexander</i>	
<b>MINIMUM REDUNDANCY MIMO ARRAY DESIGN USING CYCLIC PERMUTATION OF PERFECT DISTANCE (CPPD)</b> .....	1889
<i>Dong, Jian ; Liu, Fang ; Jiang, Yi ; Hu, Binghao ; Shi, Ronghua</i>	
<b>DEVELOPMENT OF ENTRANCE LINK USING MILLIMETER-WAVE DIGITAL RADIO-ON-RADIO FOR SMALL CELL MOBILE ACCESS</b> .....	1893
<i>Kumamoto, Kazuo ; Tsukamoto, Katsutoshi</i>	
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<i>Kado, Yuichi ; Nogami, Yuma ; Kobayashi, Akihiro</i>	
<b>HIGH-SPEED PHOTONIC DEVICE TECHNOLOGIES IN OPTICAL FIBER CONNECTED MILLIMETER-WAVE RADAR SYSTEM FOR FOREIGN OBJECT DEBRIS DETECTION ON RUNWAYS</b> .....	1899
<i>Yamamoto, Naokatsu ; Umezawa, Toshimasa ; Kanno, Atsushi ; Akahane, Kouichi ; Kawanishi, Tetsuya</i>	
<b>IMPROVING RESILIENCE OF ACCESS NETWORKS BY THE SYNERGISTIC USE OF WIRED AND WIRELESS TECHNOLOGIES</b> .....	1903
<i>Fukada, Youichi ; Kani, Jun-ichi ; Terada, Jun ; Yoshimoto, Naoto ; Iwatsuki, Katsumi ; Otsuji, Taiichi</i>	
<b>TOWARD FREQUENCY- AND ENERGY-EFFICIENT HIGH MOBILITY WIRELESS</b> .....	1904
<i>Adachi, Fumiyuki</i>	
<b>RECENT PROGRESS ON TERAHERTZ COMMUNICATIONS AT 300 GHZ FOR PRACTICAL SHORT-RANGE APPLICATIONS</b> .....	1908
<i>Song, Ho-Jin ; Tajima, Takuro ; Yaita, Makoto ; Kagami, Osamu</i>	
<b>300-GHZ-BAND WIRELESS COMMUNICATIONS WITH HIGH-POWER PHOTONIC SOURCES</b> .....	1911
<i>Nagatsuma, Tadao</i>	
<b>THE ANALYSIS OF ADVECTION FOG ATTENUATION ALGORITHMS IN TERAHERTZ WAVE BAND</b> .....	1915
<i>Haiying, Li ; Zhensen, Wu ; Leke, Lin ; Zhenwei, Zhao ; Changsheng, Lu ; Xin, Zhang</i>	
<b>FREQUENCY AND IMPEDANCE RECONFIGURABLE ANTENNAS FOR TERAHERTZ PHOTOMIXERS</b> .....	1919
<i>Unlu, Mehmet ; Yilmaz, Adem ; Yilmaz, Cihat</i>	
<b>VOLTAGE-CONTROLLED 2P LIQUID-CRYSTAL TERAHERTZ PHASE SHIFTER WITH INDIUM-TIN-OXIDE (ITO) NANOWHISKERS AS TRANSPARENT ELECTRODES</b> .....	1923
<i>Yang, Chan-Shan ; Pan, Ru-Pin ; Yu, Peichen ; Pan, Ci-Ling</i>	

<b>TERAHERTZ TIME-DOMAIN SPECTROSCOPY: PRINCIPLES AND RECENT DEVELOPMENTS</b> .....	1926
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<b>ELECTROMAGNETIC INTERFERENCE ANALYSIS FOR MULTIPLE ANTENNAS LAYOUT OF SATELLITE GROUND STATION</b> .....	1927
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<b>CHARACTERIZING HARMONIC COMPONENTS OF ELECTROMAGNETIC INTERFERENCE SPECTRUM BASED ON GREY SYSTEM MODEL</b> .....	1931
<i>Niu, Mu ; Su, Donglin ; Wei, Ying ; Shang, Xiaofan ; Chen, Yao</i>	
<b>GROUNDING AND CABLING ASPECTS INSIDE THE ITER CRYOSTAT</b> .....	1935
<i>van Deursen, Alexander ; Beltran, David ; van der Laan, Piet</i>	
<b>TOWARDS ELECTROMAGNETIC CHARACTERIZATION OF MEERKAT TELESCOPE</b> .....	1939
<i>Wiid, Pieter Gideon ; Reader, Howard Charles</i>	
<b>FREQUENCY-RESPONSE VARIABILITY OF VOLTAGES INDUCED BY FIELD-TO-WIRE COUPLING IN RANDOM BUNDLES OF TWISTED-WIRE PAIRS ON-BOARD SMALL SATELLITES</b> .....	1943
<i>Spadacini, Giordano ; Grassi, Flavia ; Pignari, Sergio A. ; Marliani, Filippo</i>	
<b>PARADIGM OF SENSITIVITY ANALYSIS IN EMC STOCHASTIC ENCLOSED ENVIRONMENTS</b> .....	1947
<i>Lallechere, S. ; GIRARD, S. ; Slama, R. ; Jannet, B. ; Bonnet, P. ; Paladian, F.</i>	
<b>A POWER WAVE THEORY OF ANTENNAS AND COUPLING INTO COMPLEX SYSTEMS</b> .....	1951
<i>Farr, Everett G.</i>	
<b>ANALYTICAL MODEL FOR THE HPEM RADIATION FROM HELICAL ANTENNAS</b> .....	1955
<i>Giri, D.V.</i>	
<b>A SHORTED DUAL-POLARIZED CROSS BOWTIE DIPOLE ANTENNA FOR MOBILE COMMUNICATION SYSTEMS</b> .....	1959
<i>Wu, Wei-Jun ; Fan, Rong ; Zhang, Zhi-Ya ; Zhang, Wei ; Zhang, Qi</i>	
<b>AN ACTIVE E-FIELD SENSOR BASED ON LASER DIODE FOR EMP MEASUREMENT</b> .....	1963
<i>Kong, Xu ; Xie, Yanzhao</i>	
<b>INFLUENCE OF H62, H96 BRASS ELECTRODE MATERIALS ON SELF-BREAKDOWN VOLTAGE DEVIATION OF A GAS SWITCH</b> .....	1967
<i>Wang, Zhaoyang ; Li, Kejie ; Wang, Di ; Xie, Yanzhao</i>	
<b>AUTONOMOUS ELECTROMAGNETIC ATTACKS DETECTION CONSIDERING A COTS COMPUTER AS A MULTI-SENSOR SYSTEM</b> .....	1971
<i>Kasmi, Chaouki ; Lopes-Esteves, Jose ; Renard, Mathieu</i>	
<b>INTERFERENCE EFFECTS OF MULTIPLE PULSES ON MICROCONTROLLER</b> .....	1975
<i>Zhang, Hui ; Shi, Lihua ; Zhou, Yinghui ; Ma, Rupo</i>	
<b>SOME FEATURES OF THE PULSE ELECTRICAL DISTURBANCES INFLUENCE ON DIGITAL DEVICES FUNCTIONING</b> .....	1979
<i>Parfenov, Yury V. ; Radasky, William A. ; Titov, Boris A. ; Zdoukhov, Leonid N.</i>	
<b>EXPERIMENTAL INVESTIGATION AND ELECTRO-THERMAL-STRESS MODELING OF GAAS AND LDMOS FET UNDER CONDUCTIVE ELECTROMAGNETIC PULSE (EMP)</b> .....	1983
<i>Zhou, Liang ; Zhou, Wei-Feng ; Cheng, Zhang ; Lin, Liang ; Yin, Wen-Yan ; Mao, Jun-Fa</i>	
<b>TRANSIENT RESPONSES ANALYSIS OF SOME ULTRA-WIDEBAND FILTERS IN THE PRESENCE OF WIDEBAND ELECTROMAGNETIC PULSES</b> .....	1987
<i>Liu, Qi-Feng ; Jiang, Zheng ; Yin, Wen-Yan ; Fang, Chong-Hua ; Liu, Jing-Wei</i>	
<b>BRIEF HISTORICAL REVIEW AND BIBLIOGRAPHY FOR INTENTIONAL ELECTROMAGNETIC INTERFERENCE (IEMI)</b> .....	1991
<i>Radasky, William A. ; Backstrom, Mats</i>	
<b>ESTIMATION OF FAILURE PROBABILITY OF THE END INDUCED CURRENT DEPENDING ON UNCERTAIN PARAMETERS OF A TRANSMISSION LINE</b> .....	1995
<i>Larbi, M. ; Besnier, P. ; Pecqueux, B.</i>	
<b>STATISTICAL CHARACTERIZATION OF LINE-IMBALANCE IN DIFFERENTIAL LINES</b> .....	1999
<i>Wu, Xinglong ; Yang, Yuehong ; Grassi, Flavia ; Spadacini, Giordano ; Pignari, Sergio A.</i>	
<b>SAFETY ASSESSMENT OF A TRANSMISSION LINE WITH EMC REQUIREMENTS</b> .....	2003
<i>Kouassi, A. ; Bourinet, J-M. ; Lallechere, S. ; Bonnet, P. ; Fogli, M.</i>	
<b>ANALYSIS OF EM EMISSION FROM CRYPTOGRAPHIC DEVICES</b> .....	2007
<i>Sone, Hideaki ; Hayashi, Yu-ichi ; Mizuki, Takaaki</i>	
<b>A SYNTHESIS OF THEORETICAL AND EXPERIMENTAL STUDY ON POWER LINE COMMUNICATION OVER AN AIRCRAFT TREE-SHAPED NETWORK</b> .....	2011
<i>Degardin, Virginie ; Laly, Pierre ; Lienard, Martine ; Degauque, Pierre</i>	
<b>A FRAMEWORK FOR CHARACTERIZING ELECTROMAGNETIC INTERFERENCE FROM INDOOR POWER LINE COMMUNICATIONS</b> .....	2015
<i>Mescco, A. ; Pagani, P. ; Zeddani, A. ; Ney, M.</i>	
<b>A STUDY ON ELECTROMAGNETIC DISTURBANCE AND IMMUNITY OF WIRELESS SENSOR UNIT IN SUBSTATION</b> .....	2018
<i>Bo, An ; Weidong, Zhang ; Haijie, Ma ; Xiang, Cui ; Yang, Jin ; Fanbo, Meng</i>	
<b>EMC IMPACT OF ONLINE EMBEDDED WIRE DIAGNOSIS</b> .....	2022
<i>Incarbone, Luca ; Auzanneau, Fabrice ; Martin, Stephane</i>	
<b>HIGH-FREQUENCY ELECTROMAGNETIC FIELD COUPLING TO A LONG FINITE LINE WITH VERTICAL RISERS</b> .....	2026
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<b>MUTUAL COUPLING REDUCTION OF A 2.6 GHZ DUAL-ELEMENT MIMO ANTENNA SYSTEM WITH EBG STRUCTURES</b> .....	2030
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<b>ON ADVANCED TRANSMITTER AND RECEIVER MODELS FOR THE EMC ANALYSIS OF MODERN COMMUNICATION SYSTEMS</b> .....	2034
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<b>THREE-DIMENSIONAL LIGHTNING CHARACTERISTICS RELATIVE TO REFLECTIVITY AND AIRFLOW STRUCTURE IN WINTER THUNDERSTORM</b> .....	2046
<i>Nishihashi, Masahide ; Fujiwara, Chusei ; Kusunoki, Kenichi ; Yoshida, Satoru ; Hayashi, Syugo ; Inoue, Hanako ; Arai, Ken-ichiro ; Shimose, Ken-ichi ; Kato, Ryohei ; Saito, Sadao ; Sato, Eiichi ; Mashiko, Wataru ; Suzuki, Hiroto</i>	
<b>FDTD ANALYSIS OF LIGHTNING ELECTROMAGNETIC PULSES CONSIDERING TOPOGRAPHY AND PRESENCE OF GROUNDED STRIKE OBJECT</b> .....	2050
<i>Aoki, Masanori ; Baba, Yoshihiro ; Ametani, Akihiro ; Nagaoka, Naoto ; Itamoto, Naoki ; Rakov, Vladimir A.</i>	
<b>CO-SITE ELECTROMAGNETIC INTERFERENCE TROUBLESHOOTING AND VALIDATION OF SUPPRESSING PERFORMANCE BY EXTRAPOLATION METHOD</b> .....	2054
<i>Xie, Ma</i>	
<b>A NEW SPATIAL POWER COMBINER BASED ON 32-WAY RIDGED WAVEGUIDES</b> .....	2058
<i>Ning, Yuemin ; Sun, Jiawen ; Liu, Jinxian ; Jiang, Wanshun</i>	
<b>DISTANCE BOUNDARY OF ANTENNA ISOLATION CALCULATION IN ENGINEERING</b> .....	2062
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<b>MEASUREMENTS OF ELECTROMAGNETIC INTERFERENCE IN AN OPERATING <math>\pm 800</math> KV DC CONVERTER STATION</b> .....	2066
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