|  |
| --- |
| ▼ الاسم المستخدم في نشر البحوث حسب الكوكل سكولر Mohammed Nadhim Abbas |

|  |
| --- |
| ▼ الاتجاهات البحثية  * Nanotechnology, Plasmonics, Photonic devices, RF Circuit design |

|  |
| --- |
| ▼ الدرجة العلمية أستاذ مساعد |

|  |
| --- |
| ▼ الأبحاث المنشورة |

1. Saif H. Abdulnabi, **Mohammed Nadhim Abbas** “Design an All-Optical Combinational Logic CircuitsBased on Nano-Ring Insulator-Metal-Insulator PlasmonicWaveguides” Photonics **2019**, 6(1), 30
2. Saif H. Abdulnabi, **Mohammed Nadhim Abbas** “All-optical logic gates based on nanoring insulator–metal–insulator plasmonic waveguides at optical communications band” Journal of Nanophotonics, 2019, Vol. 13, Issue 1
3. **Mohammed Nadhim Abbas**, Farooq A Khaleel “Wide-range tunable subwavelength band-stop filter for the far-infrared wavelengths based on single-layer graphene sheet” Ukr. J. Phys. Opt. 2019, Volume 20, Issue 1, 37-45
4. Farooq A Khaleel, **Mohammed Nadhim Abbas**"On the Use of 6th-Order Tunable Complementary Metal-Oxide-Semiconductor Varactor based Filter in Ultra-Wideband Low Noise Amplifier"  The Open Electrical & Electronic Engineering Journal, 2018, 12, 21-33
5. **Mohammed Nadhim Abbas**, Farooq A Khaleel “Mixed Linearity Improvement Techniques for Ultra-wideband Low Noise Amplifier” International Journal of Electrical and Computer Engineering (IJECE) Volume 8, Issue 4, 2018
6. **Mohammed Nadhim Abbas**, Farooq A Khaleel “Pre-LNA Filtering Linearization Method for Low-Power Ultra-Wideband CMOS LNA” The Journal of Engineering (IET)  Volume 2018, Issue 3,  March 2018
7. Farooq A Khaleel, **Mohammed Nadhim Abbas** “Tunable linearity enhancement for 180nm CMOS LNA with active feedback” The Journal of Engineering (IET)  Volume 2017, Issue 7,  p. 312 – 317, July 2017
8. Farooq A Khaleel, **Mohammed Nadhim Abbas** “Ultra low power and highly linearized LNA for V-band RF applications in 180 nm CMOS technology”   
   IEICE Electronics Express, Volume 14, Issue 5(2017)
9. **Mohammed Nadhim Abbas**, Ahmed Abdulredha Ali “An efficient Four Channels 3D Plasmonic Demultiplexer” International Journal of Computer Applications (0975 – 8887) Volume 130 – No.9, November 2015
10. **Mohammed Nadhim Abbas**, “Quality Factor Improvement for Nano Cavity” International Journal of Computer Applications (0975 – 8887) Volume 127 – No.9, October 2015
11. **Mohammed Nadhim Abbas**, Duaa S. Mohammed “Quality Factor Improvement for Nano Cavity” International Journal of Computer Applications (0975 – 8887) Volume 127 – No.4, October 2015
12. **Mohammed Nadhim Abbas**, Ahmed Abdulredha Ali “Design a 90 Degree Splitter WDM using Plasmonic Technique” International Journal of Computer Applications (0975 – 8887) Volume 125 – No.9, September 2015
13. **Mohammed Nadhim Abbas**, Hadi K. Shamkhi “Diabolo Optical Antenna for Enhancing and Confining Electric Field Resonance” International Journal of Computer Applications (0975 – 8887) Volume 97 – No.23, July 2014
14. Ahmed M. Sana, **Mohammed Nadhim Abbas**, Saleem M. Ridha “QGA Based MC-CDMA Detector” International Journal of Computer Applications (0975 – 8887), 2013
15. Mohammed Nadhim Abbas, Cheng-Wen Cheng, Yia-Chung Chang, Min-Hsiung Shih “An omni-directional mid-infrared plasmonic polarizer” Nanotechnology 23 (2012) 444007 (Impact Factor=3.9)
16. Cheng-Wen Cheng, **Mohammed Nadhim Abbas**, Chao-Wei Chiu, Kun-Ting Lai, Min-Hsiung Shih and Yia-Chung Chang “Wide-angle polarization independent infrared broadband absorbers based on metallic multisizeddisk arrays” Opt. Express 20, 10376-10381 (2012) (Impact Factor = 3.9; Ranking: 3/64 in Optics)
17. **Mohammed Nadhim Abbas**, Shih-Hsin Hsu, Yia-Chung Chang, and Yu-Ju Hung, "Using off-specular ellipsometry spectra of dielectric grating-coupled plasmon mode for biosensing," J. Opt. Soc. Am. B 29, 363-369 (2012) (Impact Factor=2.1)
18. Cheng-Wen Cheng, **Mohammed Nadhim Abbas**, Min-Hsiung Shih and Yia-Chung Chang "Characterization of the surface plasmon polariton band gap in an Ag/SiO2/Ag T-shaped periodical structure" Opt. Express 19, 23698-23705 (2011) (Impact Factor = 3.9; Ranking: 3/64 in Optics)
19. **Mohammed Nadhim Abbas**, Cheng-Wen Cheng, Yia-Chung Chang, Min-Hsiung Shih, Hung-Hsin Chen, and Si-Chen Lee"Angle and polarization independent narrow-band thermal emitter made of metallic disk on SiO2" Appl. Phys. Lett. 98, 121116 (2011) (Impact Factor = 3.8)
20. Cheng-Wen Cheng, **Mohammed Nadhim Abbas**, Zi-Chang Chang, Min-Hsiung Shih, Chih-Ming Wang, M. C. Wu, and Yia-Chung Chang"Angle-independent Plasmonic Infrared Band-stop Reflective Filter Based on the Ag/SiO2/Ag T-shaped Array" Optics Letters, Vol. 36, Issue 8, pp. 1440-1442 (2011). (Impact Factor=3.9)
21. **Mohammed Nadhim Abbas**, Yia-Chung Chang, and M. H. Shih, "Plasmon-polariton band structures of asymmetric T-shaped plasmonic gratings" Opt. Express 18, 2509-2514 (2010) (Impact Factor = 3.9; Ranking: 3/64 in Optics)
22. Chih-Ming Wang, Yia-Chung Chang, **Mohammed Nadhim Abbas**, M. H. Shih and Din Ping Tsai “T-shaped plasmonic array as a narrow-band thermal emitter or biosensor” Opt. Exp. 17, 13526 (2009). (Impact Factor = 3.9; Ranking: 3/64 in Optics)
23. **Mohammed Nadhim Abbas**, Saif A. Mohammed and Marwan R. Shaker”Improvement of Slantlet Transform-Based OFDM using Space Time Block Coding” EF/208, Journal of Baghdad University (2008)
24. **Mohammed Nadhim Abbas**, Saif A. Mohammed “SLANTLET TRANSFORM BASED OFDM SCHEME“ EE/167 Journal of Baghdad University (2007)
25. Mohammed Nadhim Abbas, M. H. Shih, Yia-Chung Chang, ”A fork-shaped plasmonic device with polarization-controllable optical confinement” Proc. SPIE 8457, Plasmonics: Metallic Nanostructures and Their Optical Properties X, 84572E (October 9, 2012); doi:10.1117/12.929405
26. Mohammed Nadhim Abbas, Cheng-Wen Cheng, Yia-Chung Chang, Min-Hsiung Shih, Hung-Hsin Chen, and Si-Chen Lee, “Plasmonic thermal emitter using perfect absorber made of metallic disk on SiO2 ”, 2012 Conference on Lasers and Electro-Optics (CLEO), sponsored by The Optical Society (OSA), @ San Jose, CA, USA (2012.05.06-05.11).
27. Mohammed N. Abbas, Yia-Chung Chang and M. H. Shih, "Plasmonic cavity made of defect in an array of asymmetric T-shaped structures", Proc. SPIE 8096, 80962G (2011).
28. Mohammed Nadhim Abbas, Cheng-Wen Cheng, Yia-Chung Chang, and M. H. Shih "Angle and polarization independent plasmonic infrared band-stop filter with metallic disk on SiO2" [OptoeElectronics and Communications Conference (OECC), 2011 16th](http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=5999540) On page(s): 313 - 314
29. Mohammed Nadhim Abbas, Yia-Chung Chang, and M. H. Shih, “Analysis of Plasmon-polariton band structures of T-shaped plasmonic gratings” Proc. of SPIE Vol. 7754 775422-1 (2010)
30. Cheng-Wen Cheng, Zi-Chang Chang, Mohammed Nadhim Abbas, M. H. Shih, Chih-Ming Wang, M. C. Wu and Yia-Chung Chang, “Characterization of the localized surface plasmon ploariton mode in Ag/SiO2/Ag T-shaped array ”, in Integrated Photonics Research, Silicon and Nanophotonics, OSA Technical Digest (CD) (Optical Society of America, 2010), paper ITuB4. (2010/07/25~2010/07/28).
31. Mohammed Nadhim Abbas, Yia-Chung Chang, and M. H. Shih, "Photonic band structures of asymmetric T-shaped plasmonic gratings" APS March Meeting Portland, Oregon, USA (2010)

|  |
| --- |
| ▼ الكتب والمؤلفات  1. N/A |

|  |
| --- |
| ▼ رسائل الماجستير الذي اشرف عليها  1. Design and simulation of improved linearity CMOS low noise amplifier 2. High Quality Factor Plasmonic 3. A wavelength Division Multiplexing (WDM) Structure 4. Optical antenna design in IR-visible range using plasmonic technique |

|  |
| --- |
| ▼ اطاريح الدكتوراه الذي اشرف عليها  1. 1. Design and Implementation of a Plasmonic All-Optical Logic gates |