

Document details

< Back to results | 1 of 1

Export Download Print E-mail Save to PDF Add to List More... >

[Full Text](#) View at Publisher

Proceedings of the 2018 7th International Conference on Computer and Communication Engineering, ICCCE 2018
16 November 2018, Article number 8539304, Pages 114-118
7th International Conference on Computer and Communication Engineering, ICCCE 2018; Kuala Lumpur; Malaysia; 19 September 2018 through 20 September 2018; Category numberCFP1839D-USB; Code 142740

Dual Band Antenna Design Using Stacked Series Array for Ka- Band Application (Conference Paper)

Rafiqul, I.M. ✉, Nibir, R. ✉, Mukit, N. ✉, Abdinasir, S.O. ✉, Habaebi, M.H. ✉, Yasmin, S. ✉

Dept. of Electrical and Computer Engineering, Kulliyyah of Engineering, International Islamic University Malaysia, Jalan Gombak, Kuala Lumpur, 53100, Malaysia

Abstract

[View references \(9\)](#)

In this paper, a dual band stack series array antenna is designed for the future 28 GHz Ka-band application. Dual-layer substrate Technology is used to achieve multiple resonant frequencies with higher bandwidths. Antenna is designed based on stack array of double layer with patches and resonators in different layers. Designed dual-band antennas can resonate at single band of (28 GHz) and dual band (28 and 30 GHz). All results of the simulation are fabricated and tested. The test result shows that the antennas have high gain, wide bandwidth and higher efficiencies. Both the proposed antenna configurations have shown a good candidate for 5G millimetre wave (mmWave) application. © 2018 IEEE.

SciVal Topic Prominence ⓘ

Topic: Antennas | Millimeter waves | on-chip antenna

Prominence percentile: 91.434 ⓘ

Author keywords

Dual-layer substrate and multiband antenna Stack series array

Indexed keywords

Engineering controlled terms: 5G mobile communication systems Antenna arrays Bandwidth Millimeter waves Natural frequencies Slot antennas

Engineering uncontrolled terms: Antenna configurations Different layers Dual band antennas Dual-layer substrates Higher efficiency Millimetre waves Multiband antennas Series array

Engineering main heading: Microwave antennas

Metrics ⓘ

0 Citations in Scopus
0 Field-Weighted Citation Impact



PlumX Metrics Usage, Captures, Mentions, Social Media and Citations beyond Scopus.

Cited by 0 documents

Inform me when this document is cited in Scopus:

[Set citation alert >](#)

[Set citation feed >](#)

Related documents

Modeling of Multiband/Wideband Stack Series Array Antenna Configuration for 5G Application

Osman, A.S. , Islam, M.R. , Habaebi, M.H. (2016) Proceedings - 6th International Conference on Computer and Communication Engineering: Innovative Technologies to Serve Humanity, ICCCE 2016

Gamma shaped monopole patch antenna for tablet PC

Rafiqul, I.M. , Habib, M.S. , Abdullah, K. (2015) ARPN Journal of Engineering and Applied Sciences



Low sidelobe level microstrip patch array: Em design and performance analysis

Manohar, R. , Dutta, M. , Singh, H.

[View all related documents based on references](#)

References (9)

[View in search results format >](#)

All [Export](#)  Print  E-mail [Save to PDF](#) [Create bibliography](#)

[Find more related documents in Scopus based on:](#)

[Authors >](#) [Keywords >](#)

- 1 Shorbagyl, M.E., Shubair, R.M., Al Hajri, M.I., Mallat, N.K.
On the design of millimetre-wave antennas for 5g
(2016) Microwave Symposium (MMS), 2016 16th Mediterranean
14-16 Nov

- 2 Rida, A., Tentzeris, M., Nikolaou, S.
Design of low cost microstrip antenna arrays for mm-Wave applications

(2011) IEEE Antennas and Propagation Society, AP-S International Symposium (Digest), art. no. 5996916, pp. 2071-2073. Cited 8 times.
ISBN: 978-142449563-4
doi: 10.1109/APS.2011.5996916

[View at Publisher](#)

- 3 Alam, A.H.M.Z., Islam, M.R., Khan, S., Salleh, N.N.A.N.M., Aziz, N.
Tunable bandpass filter using rf mems switches
(2009) IJUM Engineering Journal (ISSN: 1511-788X), 10 (2), pp. 69-79. Cited 4 times.

- 4 Alsaleh, A.A.A., Islam, M.R., Nordin, M.A.W., Al-Askari, S.
Design and Optimization of Dual Band Microstip Patch Antenna Using Slots Pair

(2016) Proceedings - 6th International Conference on Computer and Communication Engineering: Innovative Technologies to Serve Humanity, ICCCE 2016, art. no. 7808356, pp. 439-442. Cited 3 times.
ISBN: 978-150902427-8
doi: 10.1109/ICCCE.2016.98

[View at Publisher](#)

- 5 Wu, J., Huang, W.N., Cheng, Y.J., Fan, Y.
A broadband high-gain planar array antenna for V-band wireless communication

(2014) Proceedings of 3rd Asia-Pacific Conference on Antennas and Propagation, APCAP 2014, art. no. 6992482, pp. 309-312. Cited 2 times.
ISBN: 978-147994354-8
doi: 10.1109/APCAP.2014.6992482

[View at Publisher](#)

- 6 Qasim, A.M., Abdul Rahman, T.
A compact & high gain series array planar antenna for 60-GHz WPAN applications

(2010) 2010 IEEE Asia-Pacific Conference on Applied Electromagnetics, APACE 2010 - Proceedings, art. no. 5720110. Cited 10 times.
ISBN: 978-142448566-6
doi: 10.1109/APACE.2010.5720110

[View at Publisher](#)

- 7 Haraz, O., Ali, M.M.M., Elboushi, A., Sebak, A.-R.
Four-element dual-band printed slot antenna array for the future 5G mobile communication networks

(2015) IEEE Antennas and Propagation Society, AP-S International Symposium (Digest), 2015-October, art. no. 7304386, pp. 1-2. Cited 17 times.
ISBN: 978-147997815-1
doi: 10.1109/APS.2015.7304386

[View at Publisher](#)

-
- 8 Cabrol, P., Pietraski, P.
60 GHz patch antenna array on low cost Liquid-Crystal Polymer (LCP) substrate

(2014) 2014 IEEE Long Island Systems, Applications and Technology Conference, LISAT 2014, art. no. 06845230. Cited 7 times.
ISBN: 978-147993850-6
doi: 10.1109/LISAT.2014.6845230

[View at Publisher](#)

-
- 9 Osman, A.S., Islam, M.R., Habaebi, M.H.
Modeling of Multiband/Wideband Stack Series Array Antenna Configuration for 5G Application

(2016) Proceedings - 6th International Conference on Computer and Communication Engineering: Innovative Technologies to Serve Humanity, ICCCE 2016, art. no. 7808338, pp. 349-354. Cited 2 times.
ISBN: 978-150902427-8
doi: 10.1109/ICCCE.2016.80

[View at Publisher](#)

© Copyright 2019 Elsevier B.V., All rights reserved.

[< Back to results](#) | 1 of 1

[^ Top of page](#)

About Scopus

[What is Scopus](#)
[Content coverage](#)
[Scopus blog](#)
[Scopus API](#)
[Privacy matters](#)

Language

[日本語に切り替える](#)
[切换到简体中文](#)
[切换到繁體中文](#)
[Русский язык](#)

Customer Service

[Help](#)
[Contact us](#)

ELSEVIER

[Terms and conditions](#) ↗ [Privacy policy](#) ↗

Copyright © 2019 Elsevier B.V. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

We use cookies to help provide and enhance our service and tailor content. By continuing, you agree to the use of cookies.

 RELX Group™