

Look Up Full Text

Full Text from Publisher

Find PDF

Export...

Add to Marked List

On Two-Dimensional Power Associative Algebras Over Algebraically Closed Fields and R

By: [Ahmed, H](#) (Ahmed, H.)^[1,2]; [Bekbaev, U](#) (Bekbaev, U.)^[3]; [Rakhimov, I](#) (Rakhimov, I.)^[4]

LOBACHEVSKII JOURNAL OF MATHEMATICS

Volume: 40 Issue: 1 Pages: 1-13 Special Issue: SI

DOI: 10.1134/S1995080219010025

Published: JAN 2019

Document Type: Article

Abstract

In this paper we describe all power-associative algebra structures on a two-dimensional vector space over algebraically closed fields and \mathbb{R} . The list of all two-dimensional left(right) unital power-associative algebras, along with their unit elements, is specified. Also we compare the result of the paper with that results obtained earlier.

Keywords

Author Keywords: [power-associative algebra](#); [isomorphism](#); [classification](#); [unital algebra](#)

Author Information

Reprint Address: Ahmed, H (reprint author)

Taiz Univ, Dept Math, Fac Sci, Taizi 3086, Yemen.

Reprint Address: Ahmed, H (reprint author)

Univ Putra Malaysia, Dept Math, Fac Sci, Serdang 43400, Selangor Darul, Malaysia.

Addresses:

[1] Taiz Univ, Dept Math, Fac Sci, Taizi 3086, Yemen

[2] Univ Putra Malaysia, Dept Math, Fac Sci, Serdang 43400, Selangor Darul, Malaysia

[3] Int Islamic Univ Malaysia, Dept Engn Sci, Fac Engn, Kuala Lumpur 50728, Malaysia

[4] Univ Putra Malaysia, Inst Math Res, Lab Cryptog Anal & Struct, Serdang, Selangor, Malaysia

E-mail Addresses: huida_m7@yahoo.com; bekbaev@iiu.edu.my; rakhimov@upm.edu.my

Publisher

MAIK NAUKA/INTERPERIODICA/SPRINGER, 233 SPRING ST, NEW YORK, NY 10013-1578 USA

Categories / Classification

Research Areas: Mathematics

Web of Science Categories: Mathematics

Document Information

Language: English

Accession Number: WOS:000464212300001

ISSN: 1995-0802

eISSN: 1818-9962

Other Information

IDS Number: HS9UN

Cited References in Web of Science Core Collection: 24

Times Cited in Web of Science Core Collection: 0

[See fewer data fields](#)

Citation Network

In Web of Science Core Collection

0

Times Cited

Create Citation Alert

24

Cited References

[View Related Records](#)

Use in Web of Science

Web of Science Usage Count

0

Last 180 Days

0

Since 2013

[Learn more](#)

This record is from:

Web of Science Core Collection

- Emerging Sources Citation Index

[Suggest a correction](#)

If you would like to improve the quality of the data in this record, please [suggest a correction](#).

Cited References: 24

Showing 24 of 24

[View All in Cited References page](#)

(from Web of Science Core Collection)

| | | |
|-----|---|------------------|
| 1. | Classifications of two-dimensional Jordan algebras over the algebraically closed fields and By: Ahmed, H.; Bekbaev, U.; Rakhimov, I. arXiv:1710.00948v3 Published: 2017 | Times Cited: 1 |
| 2. | Classification of 2-dimensional evolution algebras, their groups of automorphisms and derivation algebras By: Ahmed, H.; Bekbaev, U.; Rakhimov, I. arXiv:1711.05364 Published: 2017 | Times Cited: 1 |
| 3. | Two-dimensional left (right) unital algebras over algebraically closed fields and By: Ahmed, H.; Bekbaev, U.; Rakhimov, I. arXiv:1712.06731v2 Published: 2017 | Times Cited: 1 |
| 4. | Classification of two-dimensional Jordan algebras By: Ahmed, Houida; Bekbaev, Ural; Rakhimov, Isamiddin 13TH IMT-GT INTERNATIONAL CONFERENCE ON MATHEMATICS, STATISTICS AND THEIR APPLICATIONS (ICMSA2017) Book Series: AIP Conference Proceedings Volume: 1905 Article Number: UNSP 030003 Published: 2017 | Times Cited: 2 |
| 5. | Complete Classification of Two-Dimensional Algebras By: Ahmed, Houida; Bekbaev, U.; Rakhimov, I. 4TH INTERNATIONAL CONFERENCE ON MATHEMATICAL SCIENCES (ICMS4): MATHEMATICAL SCIENCES: CHAMPIONING THE WAY IN A PROBLEM BASED AND DATA DRIVEN SOCIETY Book Series: AIP Conference Proceedings Volume: 1830 Article Number: UNSP 070016 Published: 2017 | Times Cited: 5 |
| 6. | On power-associativity of rings By: Albert, A. A. Summa Brasil. Math. Volume: 2 Pages: 21-32 Published: 1948 | Times Cited: 2 |
| 7. | POWER-ASSOCIATIVE RINGS By: ALBERT, AA TRANSACTIONS OF THE AMERICAN MATHEMATICAL SOCIETY Volume: 64 Issue: NOV Pages: 552-593 Published: 1948 | Times Cited: 231 |
| 8. | Two-dimensional real algebras with zero divisors By: Althoen, S.; Hansen, K. Acta Sci. Math. (Sceged) Volume: 56 Pages: 23-42 Published: 1992 | Times Cited: 4 |
| 9. | WHEN IS R^2 A DIVISION ALGEBRA By: ALTHOEN, SC; KUGLER, LD AMERICAN MATHEMATICAL MONTHLY Volume: 90 Issue: 9 Pages: 625-635 Published: 1983 | Times Cited: 15 |
| 10. | On the variety of two dimensional real associative algebras By: Ancochea Bermudez, J. M.; Fresan, J.; Sanchez Hernandez, J. Int. J. Contemp. Math. Sci. Volume: 2 Issue: 26 Pages: 1293-1305 Published: 2007 | Times Cited: 1 |
| 11. | On classification of m-dimensional algebras By: Bekbaev, U. 37TH INTERNATIONAL CONFERENCE ON QUANTUM PROBABILITY AND RELATED TOPICS (QP37) Book Series: Journal of Physics Conference Series Volume: 819 Article Number: UNSP 012012 Published: 2017 | Times Cited: 2 |
| 12. | Complete classification of two-dimensional general, commutative, commutative Jordan, division and evolution algebras By: Bekbaev, U. arXiv: 1705.01237 Published: 2017 | Times Cited: 2 |
| 13. | Contractions of two dimensional Jordan algebras By: Bermudez, J. M. Ancochea; Campoamor-Stursberg, R.; Vergnolle, L. Garcia; et al. JOURNAL OF ALGEBRA Volume: 319 Issue: 6 Pages: 2395-2409 Published: MAR 15 2008 | Times Cited: 9 |