

You have **Guest** access to ScienceDirect. [Find out more...](#)

[Sign in](#)

[Journals](#) [Books](#)

[Download full text in PDF](#)

[Export](#)

This document does not have an outline.

# Indagationes Mathematicae (Proceedings)



Volume 92, Issue 1, 20  
March 1989, Pages 1-13

## On some q-operators with applications

N.A. Al-Salam

[Show more](#)

doi:10.1016/S1385-7258(89)80011-3

[Get rights and content](#)

[Under an Elsevier user license](#)

[Open Archive](#)

### Recommended articles

[Note on a q-series trans...](#)

1966, Journal of Combi... [more](#)

[On an orthogonal polyn...](#)

1982, Indagationes Ma... [more](#)

[An umbral approach to ...](#)

2013, Linear Algebra a... [more](#)

[View more articles »](#)

### Citing articles (0)

---

[Download full text in PDF](#)

## References

1. R.P. Argawal

- Certain fractional  $q$ -integrals and  $q$ -derivatives**  
Proc. Camb. Phil. Soc., 66 (1969), pp. 365–370
2. N.A. Al-Salam  
**Some operational formulas for the  $q$ -Laguerre polynomials**  
The Fibonacci Quarterly, 22 (1984), pp. 166–170
3. W.A. Al-Salam  
**Operational representations for the Laguerre and other polynomials**  
Duke Math. J., 31 (1964), pp. 127–142
4. W.A. Al-Salam  
**Some fractional  $q$ -integrals and  $q$ -derivatives**  
Proc. Edinb. Math. Soc, 15 (1966), pp. 135–140
5. W.A. Al-Salam, L. Carlitz  
**Some orthogonal  $q$ -polynomials**  
Math. Nachr., 30 (1965), pp. 47–61
6. W.A. Al-Salam, M.E.H. Ismail  
**Some operational Formulas**  
J. of Math. Anal, and Appl., 51 (1975), pp. 208–218
7. G.E. Andrews, R. Askey  
**Classical orthogonal polynomials**  
Lecture Notes in Mathematics 1171, Springer Verlag (1980)
8. G.G. Bilodeau  
**Gegenbauer polynomials and fractional derivatives**  
American Math. Monthly, 71 (1964), pp. 1026–1028
9. J.L. Burchnall  
**A note on the polynomials of Hermite**  
Quarterly J. of Math. (Oxf), 12 (1941), pp. 9–11

10. L. Carlitz  
**A note on the Laguerre polynomials**  
Michigan Math. J., 7 (1960), pp. 219–223
  
11. T.S. Chihara  
**An Introduction to Orthogonal Polynomials**  
Gordon and Breach (1978)
  
12. J. Cigler  
**Operatormethoden für q-Identitäten**  
Monatshefte für Math., 88 (1979), pp. 87–105
  
13. J. Cigler  
**Some remarks on Rota's umbral calculus**  
Indag. Math., 40 (1978), pp. 27–42
  
14. H.W. Gould  
**An expansion of the operator  $(xp + q\Delta)nf(x)$**   
Glasnik Matematički, 8 (1973), pp. 259–272
  
15. H.W. Gould, A.T. Hopper  
**Operational formulas connected with two generalizations of Hermite polynomials**  
Duke Math. J., 29 (1962), pp. 51–64
  
- Hadwiger, 1943 H. Hadwiger  
**Über eine Formel mit einem speziellen Differentialoperator**  
Comm. Math. Helv. (1943), pp. 353–357
  
17. W. Hahn  
**Über Orthogonalpolynome die q-Differenzgleichungen genügen**  
Mathematische Nachrichten, 2 (1949), pp. 4–34
  
18. M.E.H. Ismail  
**The basic Bessel functions and polynomials**  
SIAM J. Math. Anal., 12 (1981), pp. 454–468
  
19. F.H. Jackson  
**Generalization of the differential operative**

**symbol with an extended form of Boole's equation  $\theta(\theta-1)\dots(\theta-n+1)=x^n \frac{dn}{dx^n}$**

Messenger of Mathematics, 38 (1909), pp. 57–61

20. F.H. Jackson  
**On generalized functions of Legendre and Bessel**  
Trans. Royal Soc. Edinburgh, 41 (1903), pp. 1–28
21. T. Koornwinder  
**Jacobi polynomials, III. An analytic proof of the addition formula**  
SIAM J. Math. Anal., 6 (1975), pp. 533–543
22. N. Meller  
**On an operational calculus for the operator  $B\alpha$**   
Vych. Math. Izd-vo Akad. Nauk SSSR #6 (1960), pp. 161–168
23. S. Osipov  
**On the expansion of a polynomial of the operator  $B\alpha$**   
U.S.S.R. Comput. Math. Phys., 3 (1963), pp. 250–256
24. Rahman, M., An integral representation and some transformation properties of ( $q$ -Bessel functions, To appear.
25. O.V. Viskov  
**L.B. Redei identity for the Laguerre polynomials**  
Acta Sci. Math., 39 (1977), pp. 27–28  
(translated from the russian)
26. E.T. Whittaker, G.N. Watson  
A Course of Modern Analysis (1927) Fourth edition, Cambridge

[Information](#)  
[About ScienceDirect](#) [Contact and support](#) [for advertisers](#)  
[Terms and conditions](#) [Privacy policy](#)

---

Copyright © 2015 Elsevier B.V. or its licensors or contributors.  
ScienceDirect® is a registered trademark of Elsevier B.V.

Cookies are used by this site. To decline or learn more, visit our [Cookies](#) page

[Switch to Mobile Site](#)