

# PHYSICAL REVIEW C

## NUCLEAR PHYSICS

*Editor*

H. H. BARSCHALL

*Associate Editors*

G. J. DREISS

M. S. WEISS

*Assistant to the Editors*

M. DE LORIA-JUDD

Published by the  
American Institute of Physics  
for

**The American Physical Society**

### Officers

*President*

JOSEPH E. MAYER

University of California  
San Diego

*Vice-President*

W. K. H. PANOFSKY

Stanford University

*Vice-President Elect*

CHIEN-SHIUNG WU

Columbia University

*Executive Secretary*

W. W. HAVENS, JR.

Columbia University

*Treasurer*

J. A. BURTON

Bell Telephone Laboratories

*Editor in Chief*

S. A. GOUDSMIT

Brookhaven National Laboratory

*Regional Secretaries:*

*Central States*

MURRAY PESHKIN

Argonne National Laboratory

*Western States*

WARD WHALING

California Institute of Technology

*Southwest and Mountain States*

JAMES PHILLIPS

Los Alamos Scientific Laboratory

*Southeastern States*

L. W. SEAGONDOLLAR

North Carolina State University

*Secretary Emeritus*

K. K. DARROW

Bell Telephone Laboratories (retired)

*Treasurer Emeritus*

S. L. QUIMBY

Columbia University

*Office of the Society*

The American Physical Society  
335 East 45 Street  
New York, N. Y. 10017.

Manuscripts for publication should be submitted to the Editor, *Physical Review*, Brookhaven National Laboratory, Upton, N. Y. 11973. The authors' institutions are requested to pay a publication charge of \$70 per page which, if honored, entitles them to 100 free reprints. An additional \$15 is requested for advance publication of the abstract in *Physical Review Abstracts*.

**Proof and all correspondence** concerning papers in the process of publication should be addressed as follows: Supervisor, *Physical Review C*, Brookhaven National Laboratory, Upton, New York 11973.

Reference must be made to title, author, journal, and scheduled date of publication.

### Annual Subscription Prices

|                                      | APS Members |               | Nonmembers |                |
|--------------------------------------|-------------|---------------|------------|----------------|
| Physical Review A or C . . . . .     | \$15.00     | (18) * 35.00  | \$ 40.00   | (43) * 60.00   |
| Physical Review B or D . . . . .     | 30.00       | (36) * 70.00  | 80.00      | (86) *120.00   |
| Any one monthly issue of B or D . .  | 15.00       | (18) * 35.00  |            |                |
| Physical Review Index . . . . .      | 3.50        | (4) * 7.50    | 9.00       | (9.50) * 13.00 |
| Phys. Rev. A-D (incl. Index) . . . . | 90.00       | (108) *210.00 | 240.00     | (258) *360.00  |

*The prices in parentheses are for subscribers outside North America.*

\*These are optional air freight prices for subscribers in Southeast Asia, Southwest Asia, and Oceania.

### Back Numbers

*Yearly back-number rate when complete year is available:*

|                                                |          |
|------------------------------------------------|----------|
| 1953 through 1963, inclusive . . . . .         | \$ 48.00 |
| 1964 through 1968, inclusive . . . . .         | 65.00    |
| 1969 . . . . .                                 | 130.00   |
| 1970 through 1971: Phys. Rev. A or C . . . . . | 35.00    |
| Phys. Rev. B or D . . . . .                    | 70.00    |
| 1972 . . . . . Phys. Rev. A or C . . . . .     | 45.00    |
| Phys. Rev. B or D . . . . .                    | 90.00    |

*Single-copy back-number rate:*

|                                        |      |
|----------------------------------------|------|
| 1953 through 1968, inclusive . . . . . | 2.00 |
| 1969 . . . . .                         | 3.00 |
| 1970 through 1971 . . . . .            | 4.00 |
| 1972 . . . . .                         | 5.00 |

*Single copies of monthly index issues:*

|                                        |      |
|----------------------------------------|------|
| 1964 through 1968, inclusive . . . . . | 2.00 |
| 1969 . . . . .                         | 3.00 |

*Semiannual cumulative indexes:*

|                                            |       |
|--------------------------------------------|-------|
| 1964 through 1968, inclusive . . . . .     | 2.00  |
| 1969 . . . . .                             | 3.00  |
| 1970 through 1971: single copies . . . . . | 5.00  |
| yearly rate . . . . .                      | 8.00  |
| 1972 . . . . . single copies . . . . .     | 6.00  |
| yearly rate . . . . .                      | 10.00 |

**Subscriptions, renewals, orders for back numbers, and changes of address** should be addressed to the Circulation Department, American Institute of Physics, 335 East 45 Street, New York, N. Y. 10017. For change of address, allow at least six weeks' advance notice; send both old and new addresses and, if possible, please include an address stencil imprint from the mailing envelope of a recent issue. **For your convenience a change of address form is included in every issue of *Physics Today***; please use it if possible.

Permission is granted to quote from this journal in scientific articles, with the customary acknowledgment of the source. Reproduction of figures and tables is permitted provided that the author's consent is obtained and that the editorial office is notified. Reproduction of whole articles for commercial purposes requires written permission of both Editor and author.