

AD-A010 858

BIBLIOGRAPHY OF SOVIET MATERIAL ON INTER-
NAL WAVES, NUMBER 4, JANUARY-MAY 1975

Stuart G. Hibben, et al

Informatics, Incorporated

Prepared for:

Defense Advanced Research Projects Agency
Navy Foreign Language Services

6 June 1975

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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Bibliography of Soviet Material on Internal Waves January - May 1975		5. TYPE OF REPORT & PERIOD COVERED Scientific . . . Interim
7. AUTHOR(s) S. G. Hibben, L. H. Boylan, M. Ness		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Informatics Inc. 6000 Executive Boulevard Rockville, Maryland 20852		8. CONTRACT OR GRANT NUMBER(s) N00600-75-C-0018
11. CONTROLLING OFFICE NAME AND ADDRESS Defense Advanced Research Projects Agency/TAO 1400 Wilson Boulevard Arlington, Virginia 22209		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS DARPA Order No. 2790 Program Code No. L13003
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) U. S. Navy Foreign Language Services 4301 Suitland Road, Bldg. 5. Washington, D. C. 20390		12. REPORT DATE June 6, 1975
		13. NUMBER OF PAGES 22
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
15. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES Scientific . . . Interim		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Internal Waves Capillary Waves Surface Signature Turbulent Flow Ocean Microstructure		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This is the fourth bibliography of Soviet open-source publications relating to internal wave studies. It covers material received from January through May 1975. Main selection criteria are studies of small-scale variation in ocean parameters and of airborne techniques for deducing internal wave conditions. An index of serial source abbreviations is appended.		

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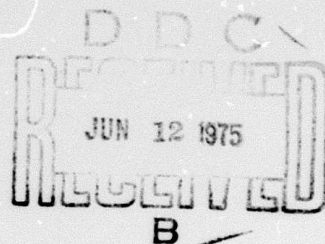
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No. 4, January - May 1975

Sponsored by

Defense Advanced
Research Projects Agency

DARPA Order No. 2790



ARPA Order No. 2790
Program Code No. L13003
Name of Contractor:
Informatics Inc.

Effective Date of Contract:
July 1, 1974

Contract Expiration Date:
June 30, 1975

Amount of Contract: \$306,023

Contract No. N00600-75-C-0018

Principal Investigator:

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Short Title of Work:

"Internal Waves"

This research was supported by the Defense Advanced Research Projects Agency and was monitored by the U. S. Navy Foreign Language Service under Contract No. N00600-75-C-0018. The publication of this report does not constitute approval by any government organization or Informatics Inc. of the inferences, findings, and conclusions contained herein. It is published solely for the exchange and stimulation of ideas.

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INTRODUCTION

This is the fourth bibliography of Soviet open-source publications relating to internal wave studies. It covers material received from January through May 1975. Main selection criteria are studies of small-scale variation in ocean parameters and of airborne techniques for deducing internal wave conditions.

An index of serial source abbreviations is appended.

1. Abuzyarov, V. K., et al. Morskiye gidrologicheskiye informatsii i prognozy (Marine hydrological information and forecasts). Leningrad, Gidrometeoizdat, 1974, 219 pp. (RBL, 10/74, #603)
2. Agafonova, Ye. G., L. I. Galerkin, and A. S. Monin. Statistics of temperature and salinity of the surface of the World Ocean. DAN SSSR, v. 221, no. 1, 1975, 205-208.
3. Akusticheskiye metody i sredstva issledovaniya okeana. Tezisy dokladov Pervoy Dal'nevostochnoy akust. konf. "Chelovek i okean", Vladivostok, 1-6. Oktyabrya 1974 g. Ch. 2. (Acoustic methods and equipment in the study of the ocean. Proceedings of the First Far East Conference on Acoustics "Man and the Ocean", Vladivostok, 1-6 October 1974. Part 2). Vladivostok, 1974, 321 pp.
4. Aleksandrov, A. P., and E. S. Vayndruk. Measurement of the parameters of an aerated sea layer as a method for the remote study of near-surface vertical turbulence. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 122-128.
5. Alekseyev, G. V., A. P. Nagurnyy, V. G. Savchenko, and A. O. Shpaykher. Instability of internal waves as a mechanism of heat transfer from the Atlantic waters to the Arctic basin. Problemy Arktiki i Antarktiki, no. 45, 1974, 94-99.
6. Atlanticheskiy gidrofizicheskiy poligon-70. Meteorologicheskiye i gidrofizicheskiye issledovaniya. (Atlantic hydrophysical program Poligon-70, meteorological and hydrophysical research). Moskva, Nauka, 1974, 316 pp.
7. Azizov, S. G. Velocity distribution in a dispersed turbulent flow. Tr. VNII vodosnabzh., kanaliz., gidrotekhn. sooruzh. i inzh. gidrogeol., no. 46, 1974, 66-70. (RZhMekh, 2/75, #2B901).

8. Babiy, M. V., and L. V. Cherkesov. Generation of internal waves in a coastal zone. IN: Sb. Mor. gidrofiz. issled. No. 2(65), Sevastopol', 1974, 13-22. (RZhMekh, 2/75, #2B475).
9. Belousov, I. M., G. M. Valyashko, A. M. Gorodnitskiy, A. A. Shreyder, and A. P. Sedov. Study of the structure of weakly anomalous magnetic fields in the Atlantic Ocean. Okeanologiya, no. 1, 1975, 95-101.
10. Belyayev, V. S., A. N. Gezentsvey, and R. V. Ozmidov. Intensity spectra of micropulsations of flow velocity and dissipation of kinetic energy in the ocean. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 31-41.
11. Belyayev, V. S., A. N. Gezentsvey, and R. V. Ozmidov. Spectral characteristics of pulsations of electroconductivity field in the ocean. IN: ibid., 42-49.
12. Benilov, A. Yu. On the spectrum of Reynolds stress. IN: ibid., 115-122.
13. Benilov, A. Yu., and I. D. Lozovatskiy. On the inertia interval in spectra of turbulence in a stratified fluid (Heisenberg-Monin model). IN: ibid., 83-91.
14. Berezov, V. V., A. V. Nebylov, V. N. Potepukh, and V. G. Sholokh. Algorithm for converting sea wave energy spectrum from a stationary to a moving system of coordinates. Leningradskiy institut aviatsionnogo priborostroyeniya, Trudy, no. 88, 1974, 12-15. (RZhGeofiz, 2/75, #2B137)
15. Besekerskiy, V. A., V. B. Diomidov, A. V. Nebylov, and E. I. Yarovoy. Spectral model of error in radar altimeter measurements of the height of an object moving close to a perturbed sea surface. ibid., no. 88, 3-11. (RZhRadiot, 2/75, #2G104)

16. Borshchevskiy, Yu. T., and E. M. Litvinenko. On the structure of turbulence in a boundary layer. MZhiG, no. 1, 1975, 8-13.
17. Bukatov, A. Ye. Internal waves in a sea with a density discontinuity layer generated by periodic oscillations of a portion of the bottom. IN: Sb. Mor. gidrofiz. issled. No. 1(64). Sevastopol', 1974, 44-52. (RZhGeofiz, 1/75, #1V98)
18. Dobroklonskiy, S. V., and M. L. Pyzhevich. An example of calculation by indirect methods of vertical velocity of flow and vertical coefficient of turbulence viscosity in the ocean. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 150-155.
19. Dotsenko, S. F. Internal waves excited by a source in fluid flow with a discontinuity layer. IN: Sb. Morsk. Gidrofiz. issled. No. 2(65). Sevastopol', 1974, 45-54. (RZhMekh, 2/75, #2B476)
20. Dotsenko, S. F., and L. V. Cherkesov. The effect of a floating plate on waves generated by a source. PM, v. 11, no. 1, 1975, 93-99.
21. Dzhaugashtin, K. Ye. Calculation of the spectrum of isotropic turbulence. MZhiG, no. 6, 1974, 161-164.
22. Dzhioyev, T. Z. Numerical experiments on the calculation of density field in the Black Sea. IN: Sb. Issled. nekot. uravneniy mat. fiz. Tbilisi, Tbilis. un-t, 1974, 51-58. (RZhMekh, 1/75, #1B533)
23. Eydel'man, A. Ye. The IKS-2 correlator for determination of statistical characteristics of turbulence. Teor. i prikl. mekh. Resp. mezhved. temat. nauch.-tekhn. Sb., no. 5, 1974, 68-92. (RZhMekh, 1/75, #1B1314)
24. Filippov, Yu. G. Questions on the spread of an admixture in the sea. Trudy GOIN no. 121, 1974, 107-113.

25. Finkel'shteyn, M. I. Airborne radar measurement of ice thickness. Author's certificate USSR, published 12/29/73. (RZhGeofiz, 11/74, #11V41 P)
26. Fomin, L. M., and A. D. Yampol'skiy. On the vertical structure of inertial motions in the sea. Okeanologiya, no. 1, 1975, 33-40.
27. Galkin, L. N., and L. M. Lunichkina. On the effect of internal waves on sound propagation in a distinctly stratified medium. Akusticheskiy zhurnal, no. 1, 1975, 112-114.
28. Ganson, P. P., A. V. Khokhlov, and V. F. Sytnikov. Some results of study of thermohaline structure by a towed measuring system. IN: Sb. Mor. gidrofiz. issled. no. 1(64), Sevastopol', 1974, 177-183. (RZhGeofiz, 1/75, #1V181).
29. Glukhovskiy, B. Kh. (ed.) Problems of dynamics of the sea. (Collection of articles). Moskva, Gidrometeoizdat, 1974, 199 pp. (KL, 8/75, #6290)
30. Goroshko, V. I. Turbulent diffusion of an admixture in a sea coastal zone. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 145-150.
31. Gusev, A. M., V. V. Alekseyev, and A. A. Aleksandrov. Energy distribution in the ocean and the atmosphere as a result of their thermal and dynamic interaction. IN: Sb. Fiz. morya i atmosfery, Moskva, Nauka, 1974, 85-89. (RZhGeofiz, 12/74, #12B262)
32. Inozemtseva, A. G., Yu. A. Kukushkin, V. F. Nozdrev, V. V. Nevzorov, V. G. Paramonov, and V. F. Chernov. Microphasometric method for studying eddy formations in inertial hydroacoustic sensors. IN: Sb. Materialy 2-y Vses. konf. po vopr. metodiki i tekhn. ul'trazvuk spektroskopii. Vil'nyus, 1973. Kaunas, 1974, 50-52. (RZhF, 1/75, #1Zh1082)

33. Isayev, I. L., and Yu. P. Lomanov. Effect of meteorological conditions on the structure of the temperature field of the ocean surface. IN: Sb. Morsk. gidrofiz. issled. No. 2(65), Sevastopol', 1974, 110-120. (RZhMekh, 2/75, #2B507)
34. Ivanov, A. P. Fizicheskiye osnovy gidrooptiki (Physical principles of hydrooptics). Minsk. Nauka i tekhnika, 1975, 30 p. (ZhPS, v. 22, no. 3, 1975, 580)
35. Ivanov, E. I., V. A. Volichev, and I. G. Kopp. Use of automatic systems for determining the statistical characteristics of turbulent flow, in the case of measuring by miniature impeller-type current meter. Novocherkas. inzh.-melior. in-t. Trudy, v. 13, no. 5, 1974, 303-305. (RZhMekh, 1/75, #1B1312)
36. Ivanov, V. F., and L. V. Cherkesov. Korteweg-de Vries type equation for internal waves. IN: Sb. Morsk. gidrofiz. issled. No. 2(65). Sevastopol', 1974, 5-12. (RZhMekh, 2/75, #2B474)
37. Ivanov, Yu. A., Ye. G. Morozov, and A. S. Samodurov. Internal gravity waves in the ocean. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 91-98.
38. Joint Soviet-American measurements of oceanic turbulence during the 11th cruise of the R/V Dmitriy Mendeleyev. Okeanologiya, no. 1, 1975, 191-194.
39. Karabashev, G. S., and R. V. Ozmidov. Study of admixture diffusion in the sea by means of luminescent tracers and a towed sensor. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 135-144.
40. Karabasheva, E. I., and V. J. Paka. Observation of internal waves in the Central Atlantic. IN: ibid., 108-114.

41. Karabasheva, E. I., V. D. Pozdynin, and V. I. Shkurenko. Small-scale turbulence in the Norwegian Sea and the Gulf Stream. Okeanologiya, v. 15, no. 1, 1975, 41-46.
42. Kirichek, A. D., V. I. Paka, Yu. D. Mikhaylov, and V. I. Shkurenko. On the fine structure of the waters of the Baltic Sea. FAiO, no. 1, 1975, 99-102.
43. Kolesnikov, A. G. Avtomatizatsiya nauchnykh issledovaniy morey i okeanov. Materialy IV vsesoyuz. shkoly. (Automation of research on the seas and the oceans. Proceedings of the IVth All-Union Seminar). Sevastopol', 1973, 216 pp. (KL, 50/74, #42759)
44. Konyayev, K. V. Experimental study of short-period internal waves in the sea. FAiO, no. 3, 1975, 285-296.
45. Konovalov, Ye. A., V. D. Matytsin, and V. N. Yasenskiy. On an approximate method of computing the dispersion of turbulence signals. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane Moskva, Nauka, 1974, 131-135.
46. Konovalov, Ye. A., and V. N. Yasenskiy. Some problems in the use of structural functions for determining geometric parameters of anisotropy of a turbulence field. IN: ibid., 129-131.
47. Konovalova, I. Z. Spatial variability of coefficients of horizontal turbulent diffusion in the coastal zone. Trudy GOIN, no. 121, 1974, 90-95.
48. Kordzadze, A. A. O yedinstvennosti resheniya kvazilineynykh zadach dinamiki okeana. Preprint. (On the uniqueness of a solution to quasilinear problems in ocean dynamics. Preprint.) Novosibirsk, 1974, 18 pp. (KLDV, 11/74, #21272)
49. Korotayev, G. K. Effect of random sea waves on a vortical near-surface boundary layer. IN: Sb. Mor. gidrofiz. issled. No. 1(64). Sevastopol', 1974, 27-33. (RZhGeofiz, 1/75, #1V31)

50. Kozhelupova, N. G. Determining spatial spectra of a temperature fluctuation field in the upper ocean layer. FAiO, no. 1, 1975, 96-99.
51. Kuftarkov, Yu. M. Theory of turbulence origin in a stratified fluid. IN: Sb. Mor. gidrofiz. issled. No. 1(64). Sevastopol', 1974, 34-43. (RZhGeofiz, 1/75, #1V38)
52. Kulyayev, R. L. Study of finite-amplitude internal waves. ZhPMTF, no. 1, 1975, 96-105.
53. Kushnir, V. M. On the "splicing" of stationary portions of nonstationary hydrophysical processes. IN: Sb. Morsk. gidrofiz. issled. No. 2(65). Sevastopol', 1974, 102-109. (RZhMekh, 2/75, #2B503)
54. Kuzin, A. F., V. F. Postnov, V. M. Yankovskiy, and A. V. Tal'kov. Effect of temperature on the parameters of turbulence. Tr. Kazan. aviats. in-ta. no. 167, 1974, 29-33. (RZhMekh, 1/75, #1B1044)
55. Kuz'min, K. I. On a possible correlation between atmospheric internal waves and cyclones at an altitude of about 90-100 km. FAiO, no. 2, 1975, 207-209.
56. Leykin, I. A., I. Ye. Ostrovskiy, A. D. Rozenberg, V. G. Ruskevich, and I. M. Fuks. The effect of long waves on the energy spectra of radio signals scattered by sea surface. IVUZ Radiofiz, no. 3, 1975, 346-357.
57. Lineykin, P. S. On an equation of density diffusion. FAiO, no. 1, 1975, 90-92.
58. Lozovatskiy, I. D. On the balance of turbulent energy in the ocean. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 71-75.

59. Makova, V. I. Experimental study of the mechanism of energy transfer from wind to waves. Trudy GOIN, no. 121, 1974, 148-
60. Makova, V. I. Specific aspects of the dynamic regime of turbulence in the near-water atmospheric layer for different stages of sea wave development. FAiO, no. 3, 1975, 297-307.
61. Marchuk, G. I. (ed.). Raznostnyye i spektral'nyye metody resheniya zadach dinamiki atmosfery i okeana. Trudy simpoziuma. Novosibirsk, 17-22 Sept. 1973. (Differential and spectral methods of solving problems of atmosphere and ocean dynamics. Symposium proceeding. Novosibirsk, 17-22 Sept. 1973). Novosibirsk, 1974, 136 p. (KL, 8/75, #63.4)
62. Merkulov, A. P., and V. M. Kudryavtsev. Turbulence and its role in the eddy effect. IN: Sb. Nekotor. vopr. issled. vikhrev. effekta i yego prim. primeneniya. Kuybyshev, 1974, 31-39. (RZhMekh, 2/75, #2B890)
63. Metodika geofizicheskikh issledovaniy okeanov. (Methods used in the geophysical study of oceans). Moskva, Nauka, 194 pp. (RBL, 9/74, #366).
64. Miropol'skiy, Yu. Z., and V. G. Neyman. Internal waves and temperature microstructure in the Timor Sea. FAiO, no. 11, 1974, 1181-1193.
65. Miropol'skiy, Yu. Z., N. I. Solntseva, and B. N. Filyushkin. On the horizontal variability of the Vaisala-Brunt frequency in the ocean. Okeanologiya, no. 1, 1975, 25-32.
66. Noiseyev, G. A. On the effective use of continuous measurements in an objective analysis of physical fields in the ocean. IN: Sb. Mor. gidrofiz. issled. No. 1(64). Sevastopol', 1974, 118-130. (RZhGeofiz, 1/75, #1B180)
67. Monin, A. S., V. M. Kamenkovich, and V. G. Kort. Izmenchivost' Mirovogo okeana. (Variability of the World Ocean). Leningrad, Gidrometeoizdat, 1974.

68. Nabatov, V. N., V. T. Paka, and V. I. Shkurenko. On the use of hot-wire anemometers in a flow with temperature pulsations. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 162-174.
69. Novikov, E. A. Statistical irreversibility of turbulence. Arch. mech. stosow., 26, no. 4, 1974, 741-745. (RZhMekh, 2/75, #2B883)
70. Ostrovskiy, L. A., and Ye. N. Pelinovskiy. Refraction of nonlinear sea waves in the coastal zone. FAiO, no. 1, 1975, 67-74.
71. Ozmidov, P. V. (ed.). Issledovaniye izmenchivosti gidrofizicheskikh poley v okeane. Sbornik statey. (Investigation of the variability of hydrophysical fields in the ocean. Collection of articles). Moskva, Nauka, 1974, 211 p.
72. Ozmidov, P. V., V. S. Belyayev, M. M. Lyubimtsev, and V. I. Paka. Investigation of the variability of hydrophysical fields in an ocean test area. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 3-31.
73. Panteleyev, N. A. Investigation of the fine turbulent structure of the ocean. Okeanologiya, no. 1, 1975, 195.
74. Paritskiy, A. S., and E. S. Vayndruk. Ultrasonic method for sea wave measurements. Otkr izobr, no. 3, 1975, 93.
75. Plakhin, Ye. A. Some characteristics of the microstructure of the ocean in areas with strong currents. IN: Sb. Gidrofiz. i gidrooptich. issled. v Atlant. i Tikhom okeanakh. Moskva, Nauka, 1974, 25-39. (RZhGeofiz, 12/74, #12V63)
76. Pluzhnikov, V. M., and M. S. Khlystunov. Frequency piezoelectric pressure indicator for oceanological research. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 175-197.

77. Pozdynin, V. D. Statistical estimates of the parameters of small-scale ocean turbulence. IN: *ibid.* 50-61.
78. Sabel'nikov, V. A. On the exchange factor in anisotropic homogeneous turbulent flows with an average velocity gradient. Uch. zap. Tsentr. aerogidrodinam. in-ta, no. 4, 1974, 20-28. (RZhMekh, 2/75, #2B894)
79. Samodurov, A. S. On the generation of trains of internal waves in the ocean. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 99-108.
80. Sekerzh-Zen'kovich, Ya. I. Theory of composite stationary capillary-gravity waves with a finite amplitude. DAN SSSR, v. 220, no. 5, 1975, 1038-1041.
81. Shershnev, A. Ye. The fourth equipment-test cruise of the fisheries R/V Akademik Knipovich. Ekspres informatsii. Ser. a, no. 1, 1975, 4-8.
82. Shishkov, Yu. A. Meteorological data from experimental studies of turbulence in the ocean. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 66-71.
83. Smutek, R. Motion of a solid particle in a turbulent medium. Vodohosp. cas, no. 3, 1974, 254-269. (RZhMekh, 2/75, #2B903)
84. Spidchenko, A. N. Statisticheskiy analiz okeanograficheskoy informatsii i razrabotka novykh posobiy. Sbornik statey. (Statistical analysis of oceanographic data and development of new aids. Collection of articles). Moskva, Gidrometeoizdat, 1974, 96 pp. (KL, 3/75, #1996)
85. Taldykin, Ye. I. Waves at the surface of an infinite-depth viscous fluid, obliquely striking a finite dock. IN: Sb. Razrabotka effektivn. tekhnol. protsessov uborki i pererabotki zern. maslich. i tekhn. kul'tur. Rostov-na-Donu, 1974, 164-169. (RZhMekh, 1/75, #1B527)

86. Tareyev, B. A. Internal gravity waves in a continuously stratified ocean. IN: Dinamika baroklinykh vozmushcheniy v okeane. Izd. Moskovskogo Universiteta, 1974, 132-180.
87. Vasilenko, V. M., and L. M. Krivelevich. Statistical characteristics of currents, based on observations in the Atlantic test area. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 76-83.
88. Vayndruk, E. S., G. Yu. Narodnitskiy, A. S. Paritskiy, and V. A. Baburin. Equipment for modeling a perturbed sea surface. Otkr izobr, no. 7, 1975, 116.
89. Vo Van Lan', and A. A. Pivovarov. Temperature waves in a stratified sea. IN: Sb. Fizika morya i atmosfery. Moskva, Nauka, 1974, 68-72. (RZhMekh, 1/75, #1B535)
90. Voinov, O. V., and V. V. Voinov. Numerical method for calculating nonstationary motion of an ideal incompressible fluid with free surfaces. DAN SSSR, v. 22, no. 3, 1975, 559-562.
91. Volichev, V. A., E. I. Ivanov, and I. G. Kopp. Automatic system for recording instantaneous velocity of turbulent flow, with subsequent statistical processing by computer. Tr. Novocherkas. inzh. -melior. in-ta, no. 5, 1974, 298-302. (RZhMekh, 1/75, #1B1304)
92. Volkov, A. P., K. N. Fedorov, and V. P. Shevtsov. Probing of current speed in the ocean by the cross-beam method. FAiO, no. 2, 1975, 186-
93. Vorob'yev, V. P., N. N. Korchashkin, and O. N. Nikolayev. An attempt at studying the microstructure of the electrical conductivity field in the ocean by the sounding method. IN: Sb. Issled. izmenchivosti gidrofiz. poley v okeane. Moskva, Nauka, 1974, 61-65.

94. Vorob'yev, V. P., and L. G. Palevich. Designing a recording system for studying the fine structure of the ocean. IN: *ibid.* 155-162.
95. Voronovich, A. G. Three-wave resonant interaction and self-modulation of internal waves. *Okeanologiya*, no. 1, 1975, 194-195.
96. Yavorskiy, I. N. Effect of finite-amplitude surface waves on hydro-acoustic signal transmission. IN: *Sb. Otbor i peredacha informatsii*, no. 42, 1974, 44-52.
97. Yaropol'skiy, M. V., and N. A. Volkov, Laboratory investigation of internal wave flows. IN: *Sb. Materialy XXVIII Nauch. -tekhn. konf. Leningr. in-ta vod. transp.*, 1974. Leningrad, 1974, 155-156. (*RZhMekh*, 1/75, #1B528)
98. Zagorodnikov, A. A. Relationship between the parameters of the Doppler spectrum of a radio signal reflected from the sea surface, and spatial characteristics of the sea waves. *RiE*, no. 2, 1975, 288-292.
99. Zheleznyak, M. I., and V. A. Shnaydman. Numerical modeling of turbulent exchange in a two-phase stratified flow in a channel. *Meteorologiya i gidrologiya*, no. 3, 1975, 58-67.
100. Zolotarev, A. A. Problem of vessel wake. IN: *Sb. Mor. gidrofiz. issled.* No. 1(64). Sevastopol', 1974, 53-63. (*RZhMekh*, 1/75, #1B513)

SOURCE ABBREVIATIONS

AiT	-	Avtomatika i telemekhanika
APP	-	Acta physica polonica
DAN ArmSSR	-	Akademiya nauk Armyanskoy SSR. Doklady
DAN AzSSR	-	Akademiya nauk Azerbaydzhanskoy SSR. Doklady
DAN BSSR	-	Akademiya nauk Belorusskoy SSR. Doklady
DAN SSSR	-	Akademiya nauk SSSR. Doklady
DAN TadSSR	-	Akademiya nauk Tadzhikskoy SSR. Doklady
DAN UkrSSR	-	Akademiya nauk Ukrainskoy SSR. Dopovidi
DAN UzbSSR	-	Akademiya nauk Uzbekskoy SSR. Doklady
DBAN	-	Bulgarska akademiya na naukite. Doklady
EOM	-	Elektronnaya obrabotka materialov
FAiO	-	Akademiya nauk SSSR. Izvestiya. Fizika atmosfera i okeana
FGiV	-	Fizika goreniya i vzryva
FiKhOM	-	Fizika i khimiya obrabotka materialov
F-KhMM	-	Fiziko-khimicheskaya mekhanika materialov
FMiM	-	Fizika metallov i metallovedeniye
FTP	-	Fizika i tekhnika poluprovodnikov
FTT	-	Fizika tverdogo tela
FZh	-	Fiziologicheskiy zhurnal
GiA	-	Geomagnetizm i aeronomiya
GiK	-	Geodeziya i kartografiya
IAN Arm	-	Akademiya nauk Armyanskoy SSR. Izvestiya. Fizika
IAN Az	-	Akademiya nauk Azerbaydzhanskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk

IAN B	-	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
IAN Biol	-	Akademiya nauk SSSR. Izvestiya. Seriya biologicheskaya
IAN Energ	-	Akademiya nauk SSSR. Izvestiya. Energetika i transport
IAN Est	-	Akademiya nauk Estonskoy SSR. Izvestiya. Fizika matematika
IAN Fiz	-	Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya
IAN Fizika zemli	-	Akademiya nauk SSSR. Izvestiya. Fizika zemli
IAN Kh	-	Akademiya nauk SSSR. Izvestiya. Seriya khimicheskaya
IAN Lat	-	Akademiya nauk Latviyskoy SSR. Izvestiya
IAN Met	-	Akademiya nauk SSSR. Izvestiya. Metally
IAN Mold	-	Akademiya nauk Moldavskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh i matematicheskikh nauk
IAN SO SSSR	-	Akademiya nauk SSSR. Sibirskoye otdeleniye. Izvestiya
IAN Tadzh	-	Akademiya nauk Tadzhiksoy SSR. Izvestiya. Otdeleniye fiziko-matematicheskikh i geologo-khimicheskikh nauk
IAN TK	-	Akademiya nauk SSSR. Izvestiya. Tekhnicheskaya kibernetika
IAN Turk	-	Akademiya nauk Turkmenskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh, i geologicheskikh nauk
IAN Uzb	-	Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
IBAN	-	Bulgarska akademiya na naukite. Fizicheski institut. Izvestiya na fizicheskaya institut s ANEB
I-FZh	-	Inzhenerno-fizicheskiy zhurnal

IIR	-	Izobretatel' i ratsionalizator
ILEI	-	Leningradskiy elektrotekhnicheskii institut. Izvestiya
IT	-	Izmeritel'naya tekhnika
IVUZ Avia	-	Izvestiya vysshikh uchebnykh zavedeniy. Aviatsionnaya tekhnika
IVUZ Cher	-	Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya
IVUZ Energ	-	Izvestiya vysshikh uchebnykh zavedeniy. Energetika
IVUZ Fiz	-	Izvestiya vysshikh uchebnykh zavedeniy. Fizika
IVUZ Geod	-	Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka
IVUZ Geol	-	Izvestiya vysshikh uchebnykh zavedeniy. Geologiya i razvedka
IVUZ Gorn	-	Izvestiya vysshikh uchebnykh zavedeniy. Gornyy zhurnal
IVUZ Mash	-	Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye
IVUZ Priboro	-	Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye
IVUZ Radioelektr	-	Izvestiya vysshikh uchebnykh zavedeniy. Radioelektronika
IVUZ Radiofiz	-	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika
IVUZ Stroi	-	Izvestiya vysshikh uchebnykh zavedeniy. Stroitel'stvo i arkhitektura
KhVE	-	Khimiya vysokikh energiy
KiK	-	Kinetika i kataliz
KL	-	Knizhnaya letopis'
Kristall	-	Kristallografiya
KSpF	-	Kratkiye soobshcheniya po fizike

LZhS	-	Letopis' zhurnal'nykh statey
MiTOM	-	Metallovedeniye i termicheskaya obrabotka materialov
MP	-	Mekhanika polimerov
MTT	-	Akademiya nauk SSSR. Izvestiya. Mekhanika tverdogo tela
MZhiG	-	Akademiya nauk SSSR. Izvestiya. Mekhanika zhidkosti i gaza
NK	-	Novyye knigi
NM	-	Akademiya nauk SSSR. Izvestiya. Neorganicheskiye materialy
NTO SSSR	-	Nauchno-tekhnicheskiye obshchestva SSSR
OiS	-	Optika i spektroskopiya
OMP	-	Optiko-mekhanicheskaya promyshlennost'
Otkr izobr	-	Otkrytiya, izobreteniya, promyshlennyye obraztsy, tovarnyye znaki
PF	-	Postepy fizyki
Phys abs	-	Physics abstracts
PM	-	Prikladnaya mekhanika
PMM	-	Prikladnaya matematika i mekhanika
PSS	-	Physica status solidi
PSU	-	Pribory i sistemy upravleniya
PTE	-	Pribory i tekhnika eksperimenta
Radiotekh	-	Radiotekhnika
RiE	-	Radiotekhnika i elektronika
RZhAvtom	-	Referativnyy zhurnal. Avtomatika, telemekhanika i vychislitel'naya tekhnika
RZhElektr	-	Referativnyy zhurnal. Elektronika i yeye primeneniye

RZhF	-	Referativnyy zhurnal. Fizika
RZhFoto	-	Referativnyy zhurnal. Fotokinotekhnika
RZhGeod	-	Referativnyy zhurnal. Geodeziya i aeros"- yemka
RZhGeofiz	-	Referativnyy zhurnal. Geofizika
RZhInf	-	Referativnyy zhurnal. Informatics
RZhKh	-	Referativnyy zhurnal. Khimiya
RZhMekh	-	Referativnyy zhurnal. Mekhanika
RZhMetrolog	-	Referativnyy zhurnal. Metrologiya i izmer- itel'naya tekhnika
RZhRadiot	-	Referativnyy zhurnal. Radiotekhnika
SovSciRev	-	Soviet science review
TiEKh	-	Teoreticheskaya i eksperimental'naya khimiya
TKiT	-	Tekhnika kino i televideniya
TMF	-	Teoreticheskaya i matematicheskaya fizika
TVT	-	Teplofizika vysokikh temperatur
UFN	-	Uspekhi fizicheskikh nauk
UFZh	-	Ukrainskiy fizicheskii zhurnal
UMS	-	Ustalost' metallov i splavov
UNF	-	Uspekhi nauchnoy fotografii
VAN	-	Akademiya nauk SSSR. Vestnik
VAN BSSR	-	Akademiya nauk Belorusskoy SSR. Vestnik
VAN KazSSR	-	Akademiya nauk Kazakhskoy SSR. Vestnik
VBU	-	Belorusskiy universitet. Vestnik
VNDKh SSSR	-	VNDKh SSSR. Informatsionnyy byulleten'
VLU	-	Leningradskiy universitet. Vestnik. Fizika, khimiya
VMU	-	Moskovskiy universitet. Vestnik. Seriya fizika, astronomiya

ZhETF	-	Zhurnal eksperimental'noy i teoreticheskoy fiziki
ZhETF P	-	Pis'ma v Zhurnal eksperimental'noy i teoreticheskoy fiziki
ZhFKh	-	Zhurnal fizicheskoy khimii
ZhNiPFiK	-	Zhurnal nauchnoy i prikladnoy fotografii i kinematografii
ZhNKh	-	Zhurnal neorganicheskoy khimii
ZhPK	-	Zhurnal prikladnoy khimii
ZhPMTF	-	Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki
ZhPS	-	Zhurnal prikladnoy spektroskopii
ZhTF	-	Zhurnal tekhnicheskoy fiziki
ZhVMMF	-	Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki
ZL	-	Zavodskaya laboratoriya