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2.03.81.

From: CDFE
For: Distribution
Subject: Analysis of bibliographic publications concerned with photonuclear reactions

Since analogous (in a way) bibliographic publications on photonuclear reactions are being currently released by two organizations--the MSU Institute of Nuclear Physics CDFE (the Information Bulletin (IB) "Photonuclear Data") and USA National Bureau of Standards (NBS Special Publication (SP) 380 "Photonuclear Data Index"), it is of interest to compare the activities of both Centres.

For such a comparison, we have selected IB N1 of CDFE and SP 380.1 (Supplement 1) of NBS, both containing information about papers published in 1977.

The results of the analysis have turned out to be the following.

Out of 96 papers covered in IB N1 and of 85 in SP 380.1, only 49 are common. The remaining papers are distributed as follows:

Table 1

	IB N1	SP 380.1
1. Total number	47	36
2. The number of papers taken from journals, which are covered in only one of the publications	27	3
3. The number of papers covered by both publications	20	33
of them: 1. in the energy region between the nucleonic and mesonic thresholds	20	4
2. in the energy region below the nucleonic, and above the mesonic thresholds	—	29

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Papers constituting position 2 of table 1 (...journals, which are covered in only one of the publications) have been published in the following journals:

- cc. Cullen Lammner Poonyae Seitz
- Daz Daz Lemuel Schmidt
- Hendrickson Chauvato Schweser

Table 2

IB N1	SP 380.1
Izv. Akad.Nauk SSSR, ser.fiz. (in Russian) - 7	Journ. of Phys. <u>G</u> : Nucl.Phys. - 3
Zh.Eksp. I Teoret.Fiz. Pis'ma v Red. (in Russian) - 2	
Ukrainsk.Fiz.Zhurnal (in Russian) - 1	
"Probl.Jad.Fiz. I Kosmich.Luchei (in Russian) - 1	
"Voprosi Atomn.Nauki I Technici (in Russian) - 6	
Austr.Journ. of Phys. - 4	
Nucl.Instrum. and Methods - 5	
Il Nuovo Cimento - 1	

Papers contributed in position 3.1 of table 1 (...between the nucleonic and mesonic thresholds - in fact omitted) and covering the common (for both Centres) range of photonuclear physics have been published in the following journals:

Table 3

Omitted in the preparation of IB N1	Omitted in the preparation of SP 380.1
Yadern. Fiz. - 1	Yadern. Fiz. - 3
Nucl. Phys. <u>A</u> - 1	Nucl. Phys. <u>A</u> - 6
Phys. Lett. <u>B</u> - 1	Phys. Lett. <u>B</u> - 1
Phys. Rev. <u>C</u> - 1	Phys. Rev. <u>C</u> - 5
	Z. Phys. <u>A</u> - 3
	Canad.Journ. of Phys. - 1
	Phys.Rev.Lett. - 1

From the data of tables 1 - 3 we can draw the following conclusion:

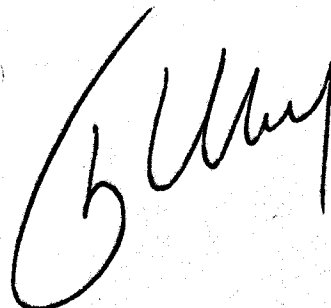
The coverage of papers on photonuclear reactions in the range of excitation energy of atomic nuclei between the nucleonic and mesonic thresholds (the range of giant resonances) is considerably more complete in IB N1 than in SP 380.1:

	IB N1	SP 380.1
1. Total number	47	7
of them: 1. position 2 of table 1 (...journals, which are covered in only one of the publications)	27	3
2. position 3.1 of table 1 (...between the nucleonic and mesonic thresholds)	20	4

Keeping in mind 49 papers common for both publications, the total numbers of papers on the common for both publications branch of photonuclear physics in question will be:

"Information Bulletin N1 CDFE "Photonuclear Data - 1977" - 96
 "NBS Special Publication 380. Supplement 1 "Photonuclear Data Index 1973 - 1977" - 56

Sincerely Yours



B.S. Ishkhanov

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