

RANG LISTA FIZIČARA SRBIJE

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Kratak sadržaj: U ovom radu je prikazana rang lista 20 najboljih istraživača fizike Srbije. Da bi se naučno-istraživački rad istraživača vrednovao, on treba da se bavi naučno-istraživačkim radom i da objavljuje naučne publikacije, koje drugi naučnici citiraju. Rangiranje istraživača vrši se prema h-indeksu i broju citata. Istraživači sa istim h-indeksom rangirani su prema ukupnom broju citata. Prikazana lista fizičara obuhvata 20 istraživača sa minimalnim h-indeksom 26. Određivanje h-indeksa i broja citata je uređeno pomoću baze podataka Google Scholar-a.

Ključne reči: h-indeks, citati, istraživači u fizici, rangiranje, baza podataka Google Scholar, bibliografski podaci.

BEST-RANKING PHYSICISTS IN SERBIA

Abstract: This paper contains the 20 best-ranking physicists in Serbia. For a scientist to enter the list, they need to practice scientific work and publish academic publications which other scientists may refer to. The scientists are evaluated based on the h-index and the number of references. The scientists with the same h-index are ranked by the total number of references. This list of physicists includes 20 scientists and researchers with the minimal h-index of 26. The h-index and the number of references were determined by using the Google Scholar database.

Key Words: h-index, citations, references, physics researchers, ranking, Google Scholar database, bibliographic data, reference data.

1. UVOD

Postupci merenja u naučnoj metrci kvantitativno određuju količinu, broj i kvalitet naučnih radova, njihovo citiranje, h-indeks, g-indeks [1, 2]. Upućivanje/citiranje je referenca data u naučnom radu jednog istraživača na naučni rad drugog istraživača. Navod/citat je referenca koju je od jednog drugog istraživača dobio autor naučnog rada [3]. Efikasan način merenja naučnih performansi je merenje citata, jer ako nekoga često citiraju drugi naučnici, verovatno je bolji istraživač. Najvažnije osnovne informacije o citatima su: koja publikacija, ko je i u kojoj publikaciji se pozivao. Navod može biti pozitivan, negativan ili neutralan [4].

h-indeks je objavio fizičar Jorge Hirš (*Jorge E. Hirsch*) sa Kalifornijskog univerziteta u San Dijegu 2005. godine [5]: „Naučnik ima h-indeks ako h-indeks njegovih N radova ima najmanje h citiranja svaki i ako preostalih ($N-h$) radova nemaju više od h citata svaki.”

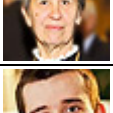
h-indeks, poznat i pod nazivom Hirš indeks, zasnovan je na referencama [6]. h-indeks je broj h naučnih publikacija istraživača koji su dobili najmanje h citata u literaturi [7-36]. Vrednovanje naučnih radova je efikasno sa brojem citata, naime ako jednu publikaciju drugi naučnici mnogo citiraju tada je autor tog rada kvalitetniji istraživač. Osnovni podaci citata su: ime i prezime istraživača kojeg citira, koji rad se citira, u kojoj publikaciji je citirao. Citat može biti pozitivan, negativan ili neutralan.

2. RANG LISTA FIZIČARA SRBIJE

U Srbiji postoji više Univerziteta na kojima se izučava fizika i 2 instituta od nacionalnog značaja za Republiku Srbiju Univerziteta u Beogradu – *Institut fizike u Beogradu* (<http://www.ipb.ac.rs/en/>) i *Institut za nuklearne nauke „Vinča”* (<https://www.vin.bg.ac.rs/>). U tabeli 1. je prikazana rang lista 20 najboljih fizičara Srbije sa bibliografskim podacima: ime i prezime istraživača, Orcid ID, naziv institucije gde istraživač radi, naučne discipline istraživača (najviše 5), h-indeks (najmanjim 26) i ukupan broj citata [7].

Tabela 1 – Rang lista fizičara Srbije

1.		Predrag Čirković Research assistant, Vinca Institute of Nuclear Sciences Verified email at cern.ch Physics electronics engineering computer sciences	Orcid ID: 0000-0002-5865-1952 Citations 79172 h-index 132 i10-index 523
2.		Velimir R. Radmilović Serbian Academy of Sciences and Arts, University of Belgrade Verified email at tmf.bg.ac.rs Physical Metallurgy Phase Transformations Nanoscience and nanotech...	Orcid ID: 0000-0003-3326-4320 Citations 11078 h-index 51 i10-index 136

3.		Zoran Lj. Petrović Institute of Physics, University of Belgrade, Serbia Verified email at ipb.ac.rs nonequilibrium processes low temperature plasma breakdown in gases plasma applications positrons in traps gases and living	Orcid ID: 0000-0001-6569-9447 Citations 10092 h-index 50 i10-index 207
4.		Jovan M. Nedeljković Senior chemist, Institut of nuclear sciences Vinca, Belgrade, Serbia Verified email at vinca.rs nanomaterials physical chemistry	Orcid ID: 0000-0003-4347-5236 Citations 6907 h-index 42 i10-index 131
5.		Miroslav D. Dramićanin Professor, Vinca Institute of Nuclear Sciences, University of Belgrade, Serbia Verified email at vinca.rs Spectroscopy Materials Science Luminescence lanthanide ions Thermographic phosphors	Orcid ID: 0000-0003-4750-5359 Citations 6499 h-index 38 i10-index 138
6.		Zoran V. Popović Director of Center for Solid State Physics and New Materials, Institute of Physics, Belgrade, Serbia Verified email at ipb.ac.rs Solid state spectroscopy Raman scattering Phonons Strongly correlated electron systems Nanomaterials	Orcid ID: 0000-0002-9421-4119 Citations 4087 h-index 35 i10-index 117
7.		Teodor Atanacković Department of Mechanics, Faculty of Technical Sciences, University of Novi Sad Verified email at uns.ac.rs Mechanics	Orcid ID: 0000-0002-8714-1388 Citations 4086 h-index 35 i10-index 93
8.		Stevan Pilipović Profesor matematike, Univerzitet u Novom Sadu Verified email at dmi.uns.ac.rs matematika mehanika medicina fizika	Orcid ID: 0000-0002-5443-4467 Citations 5016 h-index 34 i10-index 149
9.		Milan S. Dimitrijević Astronomical Observatory Verified email at aob.rs Astronomy	Orcid ID: 0000-0001-9138-8642 Citations 6066 h-index 32 i10-index 151
10.		Gyula Mester Professor, Óbuda University, Budapest, University of Szeged, Hungary, University of Novi Sad, Serbia Verified email at bgk.uni-obuda.hu – Homepage Unmanned Autonomous Systems Flying Cars Self-Driving Cars Citation Analysis Smart City	Orcid ID: 0000-0001-7796-2820 Citations 1975 h-index 30 i10-index 52
11.		Luka Č. Popović Astronomical Observatory Verified email at aob.rs astronomy	Orcid ID: 0000-0003-2398-7664 Citations 3252 h-index 29 i10-index 88
12.		Zorana Dohčević-Mitrović research professor, Institute of physics Belgrade No verified email nanoscience	Orcid ID: 0000-0001-9577-4807 Citations 2498 h-index 29 i10-index 65
13.		Livija Cvetičanin University of Novi Sad, Serbia ; Óbuda University, Doctoral School of Safety, Budapest, Hungary Verified email at bgk.uni-obuda.hu Nonlinear Vibrations Dynamics of Mass Variable Systems	Orcid ID: 0000-0002-1061-4685 Citations 2614 h-index 28 i10-index 81
14.		Nenad Vukmirović Research Professor, Institute of Physics Belgrade Verified email at ipb.ac.rs – Homepage Theoretical condensed matter physics Computational materials science	Orcid ID: 0000-0001-9138-8642 Citations 2595 h-index 28 i10-index 57
15.		Radoš Gajić Professor, Institute of Physics, Belgrade Verified email at ipb.ac.rs solid state physics	Orcid ID: 0000-0003-3755-9759 Citations 2450 h-index 28 i10-index 65
16.		Fedor Mesinger Serbian Academy of Sciences and Arts Verified email at sanu.ac.rs Meteorology Numerical modeling	Orcid ID: 0000-0002-8667-9012 Citations 7305 h-index 26 i10-index 45
17.		Željko V. Šljivančanin Vinca Institute of Nuclear Sciences, Belgrade, Serbia Verified email at vinca.rs Condensed Matter Physics	Orcid ID: 0000-0001-8575-2575 Citations 4675 h-index 26 i10-index 37

18.		Nikola Konjević Faculty of Physics, University of Belgrade Verified email at ff.bg.ac.rs plasma spectroscopy Stark broadening	Orcid ID:	Citations 4124 h-index 26 i10-index 65
19.		Branko Dragovich (Dragović) Institute of Physics, Belgrade, Serbia Verified email at ipb.ac.rs Mathematical Physics Theoretical Physics p-Adic and Adelic Analysis Theoretical Approaches to BioInformation Systems (TABIS)	Orcid ID: 0000-0002-5818-0150	Citations 2165 h-index 26 i10-index 54
20.		Rastko Vasilic Faculty of Physics, University of Belgrade Verified email at ff.bg.ac.rs anodization luminescence materials science applied physics	Orcid ID: 0000-0002-5818-0150	Citations 1808 h-index 26 i10-index 44

3. ZAKLJUČAK

U radu smo prikazali rang listu 20 najboljih fizičara Srbije. Na rang listi 3 fizičara ima h-indeks 50 ili više. Sa liste 16 istraživača (80%) je sa Univerziteta iz Beograda, dok je 4 istraživača (20%) sa Univerziteta iz Novog Sada. Rezultati ukazuju da je glavni centar fizičara-istraživača Beograd. Polovina fizičara istražuje fiziku u institutima – 6 iz Instituta za fiziku u Beogradu, a 4 iz Instituta za nuklearne nauke „Vinča“, dok su preostali fizičari 2 astronomi, 2 sa fizičkog fakulteta i 2 fizičara iz Srpske akademije nauka i umetnosti (SANU).

Rang lista ukazuje na važnost da svaki istraživač iz Srbije ima Google Scholar profil. Poteškoće prilikom formiranja rang liste su: ne navođenje činjenice da je istraživač iz Srbije (*Serbia*) kako bi ga videli drugi naučnici iz sveta (samo 8 istraživača je navelo da je iz Srbije, što je manje od polovine istraživača!), ne navođenje jasno istaknute oblasti istraživanja (na primer: *physics*), ne usaglašenost imena istraživača u preostalim značajnim bazama za praćenje aktivnosti samog istraživača na svetskoj sceni.

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