Anexa nr. 13.1 *Fişa de verificare CS2/CS1*

ACADEMIA NAVALĂ „MIRCEA CEL BĂTRÂN”
Centru de Cercetari Interdisciplinar în Domeniul Maritim

Denumirea postului: **CERCETATOR II CIVIL** poziţia **6 (ID 1530606)**

Domeniul postului: **CHIMIE**
Comisia de specialitate a CNADTCU/CCCDI: **Anexa nr. 4 - COMISIA DE CHIMIE**

FIŞA DE VERIFICARE

a îndeplinirii standardelor universitare
pentru postul de **Cercetător ştiinţific gradul II/ Cercetător ştiinţific gradul I**
publicat Monitorul Oficial al României, partea a III-a nr. ……

Candidat: **VATAMANU PETRISOR JENEL** Data naşterii **27-FEBRUARIE-1970**

Funcţia actuală : **CERCETATOR STIINTIFIC CS3**

Instituţia: **ACADEMIA NAVALĂ „MIRCEA CEL BĂTRÂN”**

1. Studiile universitare

Nr. crt.	Instituția de învățământ superior	Domeniul	Perioada	Titlul acordat
1.	**UNIVERSITATEA DUNAREA DE JOS**	**CHIMIE-FIZICA**	**1989-1995**	**LICENTA**
2.	**UNIVERSITATEA ALEXANDRU IOAN CUZA IASI**	**CHIMIE-FIZICA**	**1995-1996**	**MASTER**

2. Studiile de doctorat

Nr. crt.	Instituția organizatoare de	Domeniul	Perioada	Titlul ştiinţific acordat
1.	**QUEEN'S UNIVERSITY, KINGSTON, ONTARIO, CANADA**	**CHIMIE TEORETICA SI COMPUTATIONALA**	**1999-2004**	**DOCTORAT (Ph. D.)**

3. Studii şi burse postdoctorale (stagii de cel puţin 6 luni)

Nr. crt.	Instituția organizatoare	Domeniul	Perioada	Finalitate
1.	**DALHOIUSE UNIVERSITY, HALIFAX, NOVA SCOTIA, CANADA**	**CHIMIE TEORETICA**	**2004-2005**	
2.	**UNIVERSITY OF CALGARY , CALGARY, ALBERTA, CANADA**	**CHIMIE TEORETICA**	**2005-2006**	

4. Grade didactice/profesionale

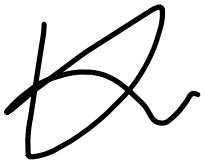
Nr. crt.	Instituția	Domeniul	Perioada	Titlul/postul didactic sau gradul/postul profesional
1.	**ACADEMIA NAVALA „MIRCEA CEL BATRAN”, CONSTANTA ROMANIA**	**CHIMIE**	**2023-2024 (job curent)**	**1) CERCETATOR STIINTIFIC CS3** **2) CADRU DIDACTIC AUXILIAR**

5. Îndeplinirea standardelor Academiei:

Standard	Îndeplinit / neîndeplinit
Deținerea diplomei de doctor în domeniul postului scos la concurs	**DA**
Certificat de competentă lingvistică - nivel minim B1 sau echivalent	**DA**
Îndeplinirea standardelor minimale naționale pentru ocuparea funcției de Cercetător științific gradul II/ Cercetător științific gradul I, standarde aprobate potrivit art. 156 din Legea învățământului superior nr. 199/2023, cu modificările și completările ulterioare.	**DA**

Data, Semnătura candidatului

11-JUNE-2024



ANEXA CU VERIFICAREA PENTRU COMISIA DE CHIMIE: DETALII

Verificare pentru Chimie: https://www.edu.ro/sites/default/files/Comisia%204_CHIMIE.pdf

Pentru CS2 selectează Nmax = 30 articole ce satisfac condițiile:

i) Nmax==30, și,
ii) nAP>=15, și,
iii) h_index >= 10.

De asemeni, este implicit ca trebuie si: h_index_total >= 10.

Lista celor Nmax = 30 lucrări selectate pentru a calcula: Nmax, FIC, nD, nAP, conform anexei 4 la linkul: https://www.edu.ro/sites/default/files/Comisia%204_CHIMIE.pdf (comisia de Chimie), este:

1) Ma Z//, Xie Z//, Liu J, **Vatamanu J***, Xing L*, Li W, "Distinct roles: Co-solvent and additive synergy for expansive electrochemical range and low-temperature aqueous batteries", *Energy Storage Materials*, **2024**, 66, 103203,
DOI: **https://doi.org/10.1016/j.ensm.2024.103203**
stat:{
FIC = **20.4** (ESM,2024)
nAP = nAP + 1 ? YES (corespondent co-author); nAP(cumulat) = 1
}

2) Yang C, Xia J, Cui C, Pollard T, **Vatamanu J**, Faraone A, Dura JA, Tyagi M, Kattan A, Thimsen E, Xu J, Song W, Hu E, Ji X, Hou S, Zhang X, Ding MS, Hwang S, Su D, Ren Y, Yang X-Q, Wang H, Borodin O*, Wang C*, "All-temperature zinc batteries with high-entropy aqueous electrolyte", *Nature Sustainability*, **2023**, 6, 325–335, DOI **https://doi.org/10.1038/s41893-022-01028-x**
stat:{
FIC = **27.7** (NatSus,2023)
nAP = nAP + 1 ? NU ;
}

3) Ma L//*, **Vatamanu J**//, Hahn NT, Pollard T, Borodin O*, Petkov V., Schroeder MA, Ren Y, Ding MS, Lou C*, Allen JL, Wang C, Xu K* "Highly reversible Zn metal anode enabled by sustainable hydroxyl chemistry", *Proceedings of the National Academy of Sciences (PNAS)*, **2022**, 119, e2121138119,
DOI: **https://doi.org/10.1073/pnas.2121138119**
stat:{
FIC = **11.1**(PNAS,2022)
nAP = nAP + 1 ? YES ; (co-first author); nAP(cumulat) = 2
}

4) Luo X, Xing L*, **Vatamanu J**, Chen J, Chen J, Liu M, Wang C, Xu K, Li W "Inhibiting manganese (II) from catalyzing electrolyte decomposition in lithium-ion batteries", *Journal of Energy Chemistry*, **2022**, 65, 1, DOI: **https://doi.org/10.1016/j.jechem.2021.05.022**
stat:{
FIC = **13.1**(JEngChem,2022)
nAP = nAP + 1 ? NU ;
}

5) Ma Z//, Chen J//, **Vatamanu J**, Borodin O, Bedrov D, Zhou X, Zhang W, Li W, Xu K*, Xing L* "Expanding the low-temperature and high-voltage limits of aqueous lithium-ion battery", *Energy Storage Materials*, **2022**, 45, 803, DOI: **https://doi.org/10.1016/j.ensm.2021.12.045**
stat:{
FIC = **20.4**(ESM,2022)
nAP = nAP + 1 ? NU ;
}

6) Cao L//, Li D//, Pollard T//, Deng T, Zhang B, Yang C, Chen L, **Vatamanu J**, Hu E, Hourwitz MJ, Ma L, Ding M, Li Q, Hou S, Gaskell H, Fourkas JT, Yang X-Q, Xu K*, Borodin O*, Wang C* "Fluorinated interphase enables reversible aqueous zinc battery chemistries", *Nature Nanotechnology*, **2021**, 16, 902, DOI: **https://doi.org/10.1038/s41565-021-00905-4**
stat:{
FIC = **38.3**(NatNano,2021)
nAP = nAP + 1 ? NU ;
}

7) Liu M, **Vatamanu J**, Chen X, Xing L*, Xu K*, Li W "Hydrolysis of LiPF6-Containing Electrolyte at High Voltage", *ACS Energy Lett.* **2021**, 6, 2096, DOI: **https://doi.org/10.1021/acsenergylett.1c00707**
stat:{
FIC = **22.0**(ACSEngLett,2020,LX)
nAP = nAP + 1 ? NU ;
}

8) Chen L, Zhang J, Li Q, **Vatamanu J**, Ji X, Pollard TP, Cui C, Hou S, Chen J, Yang C, Ma L, Din MS, Garaga M, Greenbaum S, Lee H-S, Borodin O*, Xu K*, Wang C* "A 63 m Superconcentrated Aqueous Electrolyte for High-Energy Li-Ion Batteries", *ACS Energy Lett.* **2020**, 5, 968, DOI: **https://doi.org/10.1021/acsenergylett.0c00348**
stat:{
FIC = **22.0**(ACSEngLett,2020,w63m)
nAP = nAP + 1 ? NU ;
}

9) Chen J, **Vatamanu J**, Xing L*, Borodin O, Chen H, Guan X, Liu X, Xu K*, Li W "Improving Electrochemical Stability and Low-Temperature Performance with Water/Acetonitrile Hybrid Electrolytes", *Advanced Energy Materials*, **2020**, 10, 1902654, DOI**:** **https://doi.org/10.1002/aenm.201902654**
stat:{
FIC = **27.8**(AEM,2020)
nAP = nAP + 1 ? NU ;
}

10) Wang C, Xing L*, **Vatamanu J**, Chen Z, Lan G, Li W, Xu K* "Overlooked electrolyte destabilization by manganese (II) in lithium-ion batteries", *Nature Communications*, **2019**, 10, 3423,
DOI: **https://doi.org/10.1038/s41467-019-11439-8**
stat:{
FIC = **17.7**(NatCom,2019)
nAP = nAP + 1 ? NU ;
}

11) **Vatamanu J***, Borodin P, Bedrov D "Application of Screening Functions as Cutoff-Based Alternatives to Ewald Summation in Molecular Dynamics Simulations Using Polarizable Force Fields", *Journal of chemical theory and computation*, **2018**, 14, 768-783, DOI: **https://doi.org/10.1021/acs.jctc.7b01043**
stat:{
FIC =**6.0** (JCTC,2018)
nAP = nAP + 1 ? DA ; (first author and correspondig author) ; nAP(cumulat)=3
}

12) Wang F, Borodin O, Ding MS, Gobet M, **Vatamanu J**, Fan X, Gao T, Eidson N, Liang Y, Sun W, Greenbaum S, Xu K*, Wang C* "Hybrid Aqueous/Non-aqueous Electrolyte for Safe and High-Energy Li-Ion Batteries", *Joule*, **2018**, 5, 814-815, DOI: **https://doi.org/10.1016/j.joule.2018.02.011**
stat:{
FIC =**39.8** (Joule,2018)
nAP = nAP + 1 ? NU
}

13) **Vatamanu J**, Borodin O* "Ramifications of Water-in-Salt Interfacial Structure at Charged Electrodes for Electrolyte Electrochemical Stability", *Journal of Physical Chemistry Letter*, **2017**, 8, 4362-4367,
DOI: **https://doi.org/10.1021/acs.jpclett.7b01879**
stat:{
FIC =**5.7** (JPCL,2017)
nAP = nAP + 1 ? DA (first author) ; nAP(cumulat)=4
}

14) He Y, Qiao R*, **Vatamanu J**, Borodin O, Bedrov D, Huang J, Sumpter B "The Importance of Ion Packing on the Dynamics of Ionic Liquids during Micropore Charging" , *Journal of Physical Chemistry Letter*, **2016**, 7, 36-42, DOI: **https://doi.org/10.1021/acs.jpclett.5b02378**
stat:{
FIC =**5.7** (JPCL,2016)
nAP = nAP + 1 ? NU
}

15) **Vatamanu J***, Bedrov D "Capacitive Energy Storage: Current and Future Challenges", (perspective, invited), *Journal of Physical Chemistry Letter*, **2015,** 18, 3594-3609, DOI: **https://doi.org/10.1021/acs.jpclett.5b01199**
stat:{
FIC =**5.7** (JPCL,2015)
nAP = nAP + 1 ? DA (first author, corresponding author) ; nAP(cumulat)=5
}

16) **Vatamanu J***, Vatamanu M, Bedrov D* "Non-Faradic energy storage by ionic liquids in nanoporous electrodes.", ACS Nano, **2015**, 9, 5999–6017, DOI: **https://doi.org/10.1021/acsnano.5b00945**
stat:{
FIC =**17.1** (ACSNano,2015)
nAP = nAP + 1 ? DA (first author, corresponding author) ; nAP(cumulat)=6
}

17) Hu Z, **Vatamanu J***, Borodin O, Bedrov D "A comparative study of alkylimidazolium room temperature ionic liquids with FSI and TFSI anions near charged electrodes", **2014**, *Electrochimica Acta*, 145, 40-52, DOI: **https://doi.org/10.1016/j.electacta.2014.08.072**
stat:{
FIC =**6.6** (EA,2014)
nAP = nAP + 1 ? DA (corresponding author) ; nAP(cumulat)=7
}

18) McOwen DW, Seo DM, Borodin O, **Vatamanu J**, Boyle PD, Henderson WA* "Concentrated Electrolytes: Tailoring Electrolyte Properties by Eliminating Bulk Solvent", *Energy & Environmental Science*, **2014**, 7, 416-426, DOI: **https://doi.org/10.1039/C3EE42351D**
stat:{
FIC = **32.5** (E&ES,2014)
nAP = nAP + 1 ? NU
}

19) Hu, Z., **Vatamanu J***, Borodin O, Bedrov D "A molecular dynamics simulation study of the electric double layer and capacitance of [BMIM][PF6] and [BMIM][BF4] room temperature ionic liquids near charged surfaces"**,** *Physical Chemistry Chemical Physics*, **2013,** 15, 14234-14247, DOI: **https://doi.org/10.1039/C3CP51218E**
stat:{
FIC = **3.3** (PCCP,2013)
nAP = nAP + 1 ? ? DA (corresponding author) ; nAP(cumulat)=8
}

20) Xing L, **Vatamanu J***, Borodin O, Bedrov D* "On the Atomistic Nature of Capacitance Enhancement Generated by Ionic Liquid Electrolyte Confined in Subnanometer Pores", *Journal of Physical Chemistry Letters*, **2013**, *4*, 132-140, DOI: **https://doi.org/10.1021/jz301782f**
stat:{
FIC = **5.7** (JPCL,2013)
nAP = nAP + 1 ? DA (corresponding author) ; nAP(cumulat)=9
}

21) **Vatamanu J**, Hu Z, Bedrov D*, Perez C, Gogotsi Y "Increasing Energy Storage in Electrochemical Capacitors with Ionic Liquid Electrolytes and Nanostructured Carbon Electrodes", **2013,** *Journal of Physical Chemistry Letters*, 4, 2829-2837, DOI: **https://doi.org/10.1021/jz401472c**
stat:{
FIC = **5.7** (JPCL,2013,inc)
nAP = nAP + 1 ? DA (first author) ; nAP(cumulat)=10
}

22) **Vatamanu J***, Borodin O, Bedrov D, Smith GD "Molecular Dynamics Simulation Study of the Interfacial Structure and Differential Capacitance of Alkylimidazolium Bis(trifluoromethanesulfonyl)imide [Cnmim][TFSI] Ionic Liquids at Graphite Electrodes", *J. Phys. Chem. C*, **2012**, 116 , 7940–7951,
DOI: **https://doi.org/10.1021/jp301399b**
stat:{
FIC = **3.7** (JPCC,2012,cap)
nAP = nAP + 1 ? DA (first author, corresponding author) ; nAP(cumulat)=11
}

23) **Vatamanu J***, Borodin O, Smith GD "Molecular dynamics simulation studies of the structure of a mixed carbonate/LiPF6 electrolyte near graphite surface as a function of electrode potential", *Journal of Physical Chemistry C*, **2012**, 116, 1114-1121, DOI: **https://doi.org/10.1021/jp2101539**
stat:{
FIC = **3.7** (JPCC,2012,bat)
nAP = nAP + 1 ? DA (first author, corresponding author) ; nAP(cumulat)=12

}

24) **Vatamanu J***, Cao, L, Borodin O, Bedrov D, Smith GD "On the influence of surface topography on the electric double layer structure and differential capacitance of graphite/ionic liquid interfaces", *Journal of Physical Chemistry Letters*, **2011**, 2, 2267-2272, DOI: **https://doi.org/10.1021/jz200879a**
stat:{
FIC = **5.7** (JPCL,2011)
nAP = nAP + 1 ? DA (first author, corresponding author) ; nAP(cumulat)=13
}

25) **Vatamanu J***, Borodin O, Smith GD "Molecular simulations of the electric double layer structure, differential capacitance, and charging kinetics for N-methyl-N-propylpyrrolidinium bis-(fluorosulfonyl)-imide at graphite electrodes", *Journal of Physical Chemistry B*, **2011**, 115, 3073-3084,
DOI: **https://doi.org/10.1021/jp2001207**
stat:{
FIC = **3.3** (JPCB,2011)
nAP = nAP + 1 ? DA (first author, corresponding author) ; nAP(cumulat)=14
}

26) **Vatamanu J**, Kusalik PG* "Observation of two-step nucleation in methane hydrates", *Phys. Chem. Chem. Phys*., **2010**, 12, 15065- 15072, DOI: **https://doi.org/10.1039/C0CP00551G**
stat:{
FIC = **3.3** (PCCP,2010)
nAP = nAP + 1 ? DA (first author) ; nAP(cumulat)=15
}

27) **Vatamanu J**, Borodin O*, Smith GD "Molecular insights into the potential and temperature dependences of the differential capacitance of a room-temperature ionic liquid at graphite electrodes", *Journal of the American Chemical Society*, **2010**, 132, 14825-14833, DOI: **https://doi.org/10.1021/ja104273r**
stat:{
FIC = **15.0** (JACS,2010)
nAP = nAP + 1 ? DA (first author) ; nAP(cumulat)=16
}

28) **Vatamanu J**, Kusalik PG, "Heterogeneous Crystal Growth of Methane Hydrate on Its sII [001] Crystallographic Face", *J. Phys. Chem. B* **2008**, 112, 8, 2399–2404,
DOI: **https://doi.org/10.1021/jp077583k**
stat:{
FIC = **3.3** (JPCB,2008)
nAP = nAP + 1 ? DA (first author) ; nAP(cumulat)=17

}

29) **Vatamanu J**, Kusalik PG, "Unusual Crystalline and Polycrystalline Structures in Methane Hydrates", *JACS*, **2006**, 128, 49, 15588–15589, DOI: **https://doi.org/10.1021/ja066515t**
stat:{
FIC = **15.0** (JACS,2006)
nAP = nAP + 1 ? DA (first author) ; nAP(cumulat)=18
}

30) **Vatamanu J**, Kusalik PG, "Molecular Insights into the Heterogeneous Crystal Growth of sI Methane Hydrate", J. *Phys. Chem. B.*, **2006**, 110, 32, 15896–15904, DOI: **https://doi.org/10.1021/jp061684l**
stat:{
FIC = **3.3** (JPCB,2006)
nAP = nAP + 1 ? DA (first author) ; nAP(cumulat, final)=19
}

STATISTICA CELOR Nmax=30 lucrari

A. CALCULUL FACTORULUI FIC (lucrările sunt sortate in ordinea descreșterii FIC):

FIC(an:2024) = **39.8** (Joule,2018, **https://doi.org/10.1016/j.joule.2018.02.011**) +
38.3 (NatNano,2021, **https://doi.org/10.1038/s41565-021-00905-4**)+
32.5 (E&ES,2014, **https://doi.org/10.1039/C3EE42351D**) +
27.8 (AEM,2020, **https://doi.org/10.1002/aenm.201902654**) +
27.7 (NatSus,2023, **https://doi.org/10.1038/s41893-022-01028-x**)+
22.0 (ACSEngLett,2021,LX, **https://doi.org/10.1021/acsenergylett.1c00707**)+
22.0 (ACSEngLett,2020,w63m, **https://doi.org/10.1021/acsenergylett.0c00348**)+
20.4 (ESM,2024, **https://doi.org/10.1016/j.ensm.2024.103203**) +
20.4 (ESM,2022, **https://doi.org/10.1016/j.ensm.2021.12.045**) +
17.7 (NatCom,2019, **https://doi.org/10.1038/s41467-019-11439-8**) +
17.1 (ACSNano,2015, **https://doi.org/10.1021/acsnano.5b00945**) +
15.0 (JACS,2010, **https://doi.org/10.1021/ja104273r**) +
15.0 (JACS,2006, **https://doi.org/10.1021/ja066515t**) +
13.1 (JEngChem,2022, **https://doi.org/10.1016/j.jechem.2021.05.022**) +
11.1 (PNAS,2022, **https://doi.org/10.1073/pnas.2121138119**) +
6.6 (EA,2014, **https://doi.org/10.1016/j.electacta.2014.08.072**) +
6.0 (JCTC,2018, **https://doi.org/10.1021/acs.jctc.7b01043**) +
5.7 (JPCL,2017, **https://doi.org/10.1021/acs.jpclett.7b01879**) +

5.7 (JPCL,2016, **https://doi.org/10.1021/acs.jpclett.5b02378**) +
5.7 (JPCL,2015, **https://doi.org/10.1021/acs.jpclett.5b01199**) +
5.7 (JPCL,2013, **https://doi.org/10.1021/jz301782f**) +
5.7 (JPCL,2013,inc, **https://doi.org/10.1021/jz401472c**) +
5.7 (JPCL,2011, **https://doi.org/10.1021/jz200879a**) +
3.7 (JPCC,2012,cap, **https://doi.org/10.1021/jp301399b**) +
3.7 (JPCC,2012,bat, **https://doi.org/10.1021/jp2101539**) +
3.3 (PCCP,2013, **https://doi.org/10.1039/C3CP51218E**) +
3.3 (JPCB,2011, **https://doi.org/10.1021/jp2001207**) +
3.3 (PCCP,2010, **https://doi.org/10.1039/C0CP00551G**) +
3.3 (JPCB,2008, **https://doi.org/10.1021/jp077583k**) +
3.3 (JPCB,2006, **https://doi.org/10.1021/jp061684l**)

FIC = 410.6

B. CALCULUL FACTORULUI nAP:

nAP = 1 (ESM,2024, **https://doi.org/10.1016/j.ensm.2024.103203**) [corresponding co-author] +
1 (PNAS,2022, **https://doi.org/10.1073/pnas.2121138119**) [co-first author]+
1 (JCTC,2018, **https://doi.org/10.1021/acs.jctc.7b01043**) [first author, corresponding author]+
1 (JPCL,2017, **https://doi.org/10.1021/acs.jpclett.7b01879**) [first author]+
1 (JPCL,2015, **https://doi.org/10.1021/acs.jpclett.5b01199**) [first author, corresponding author] +
1 (ACSNano,2015, **https://doi.org/10.1021/acsnano.5b00945**) [first author, corresponding author] +
1 (EA,2014, **https://doi.org/10.1016/j.electacta.2014.08.072**) [corresponding author]+
1 (PCCP,2013, **https://doi.org/10.1039/C3CP51218E**) [corresponding author]+
1 (JPCL,2013, **https://doi.org/10.1021/jz301782f**) [corresponding author]+
1 (JPCL,2013,inc, **https://doi.org/10.1021/jz401472c**) [first author] +
1 (JPCC,2012,cap, **https://doi.org/10.1021/jp301399b**) [first author, corresponding author]+
1 (JPCC,2012,bat, **https://doi.org/10.1021/jp2101539**) [first author, corresponding author] +
1 (JPCL,2011, **https://doi.org/10.1021/jz200879a**) [first author, corresponding author] +
1 (JPCB,2011, **https://doi.org/10.1021/jp2001207**) [first author, corresponding author]+
1 (PCCP,2010, **https://doi.org/10.1039/C0CP00551G**) [first author]+
1 (JACS,2010, **https://doi.org/10.1021/ja104273r**) [first author] +
1 (JPCB,2008, **https://doi.org/10.1021/jp077583k**) [first author]+
1 (JACS,2006, **https://doi.org/10.1021/ja066515t**) [first author] +
1 (JPCB,2006, **https://doi.org/10.1021/jp061684l**) [first author]

nAP = 19

Observații:

1. Factorul de Impact cumulat al articolelor ca autor principal este FIC_{AP} = 145 in cele Nmax=30 articole.
2. Factorul de Impact cumulat al articolelor ca autor de corespondenta este FIC_{AC} = 101 in cele Nmax=30 articole.

C. CALCULUL FACTORULUI nD:

nD = 1 (ESM,2024, **https://doi.org/10.1016/j.ensm.2024.103203**) +
1 (NatSus,2023, **https://doi.org/10.1038/s41893-022-01028-x**)+
1 (PNAS,2022, **https://doi.org/10.1073/pnas.2121138119**) +
1 (JEngChem,2022, **https://doi.org/10.1016/j.jechem.2021.05.022**) +
1 (ESM,2022, **https://doi.org/10.1016/j.ensm.2021.12.045**) +
1 (NatNano,2021, **https://doi.org/10.1038/s41565-021-00905-4**)+
1 (ACSEngLett,2021,LX, **https://doi.org/10.1021/acsenergylett.1c00707**)+
1 (ACSEngLett,2020,w63m, **https://doi.org/10.1021/acsenergylett.0c00348**)+
1 (AEM,2020, **https://doi.org/10.1002/aenm.201902654**) +
1 (NatCom,2019, **https://doi.org/10.1038/s41467-019-11439-8**) +
1 (JCTC,2018, **https://doi.org/10.1021/acs.jctc.7b01043**) +

1 (Joule,2018, **https://doi.org/10.1016/j.joule.2018.02.011**) +
1 (JPCL,2017, **https://doi.org/10.1021/acs.jpclett.7b01879**) +
1 (JPCL,2016, **https://doi.org/10.1021/acs.jpclett.5b02378**) +
1 (JPCL,2015, **https://doi.org/10.1021/acs.jpclett.5b01199**) +
1 (ACSNano,2015, **https://doi.org/10.1021/acsnano.5b00945**) +
1 (EA,2014, **https://doi.org/10.1016/j.electacta.2014.08.072**) +
1 (E&ES,2014, **https://doi.org/10.1039/C3EE42351D**) +
1 (PCCP,2013, **https://doi.org/10.1039/C3CP51218E**) +
1 (JPCL,2013, **https://doi.org/10.1021/jz301782f**) +
1 (JPCL,2013,inc, **https://doi.org/10.1021/jz401472c**) +
1 (JPCC,2012,cap, **https://doi.org/10.1021/jp301399b**) +
1 (JPCC,2012,bat, **https://doi.org/10.1021/jp2101539**) +
1 (JPCL,2011, **https://doi.org/10.1021/jz200879a**) +
1 (JPCB,2011, **https://doi.org/10.1021/jp2001207**) +
1 (PCCP,2010, **https://doi.org/10.1039/C0CP00551G**) +
1 (JACS,2010, **https://doi.org/10.1021/ja104273r**) +
1 (JPCB,2008, **https://doi.org/10.1021/jp077583k**) +
1 (JACS,2006, **https://doi.org/10.1021/ja066515t**) +
1 (JPCB,2006, **https://doi.org/10.1021/jp061684l**)

nD = 30

Observație: FIC_D = FIC = 410.6 .

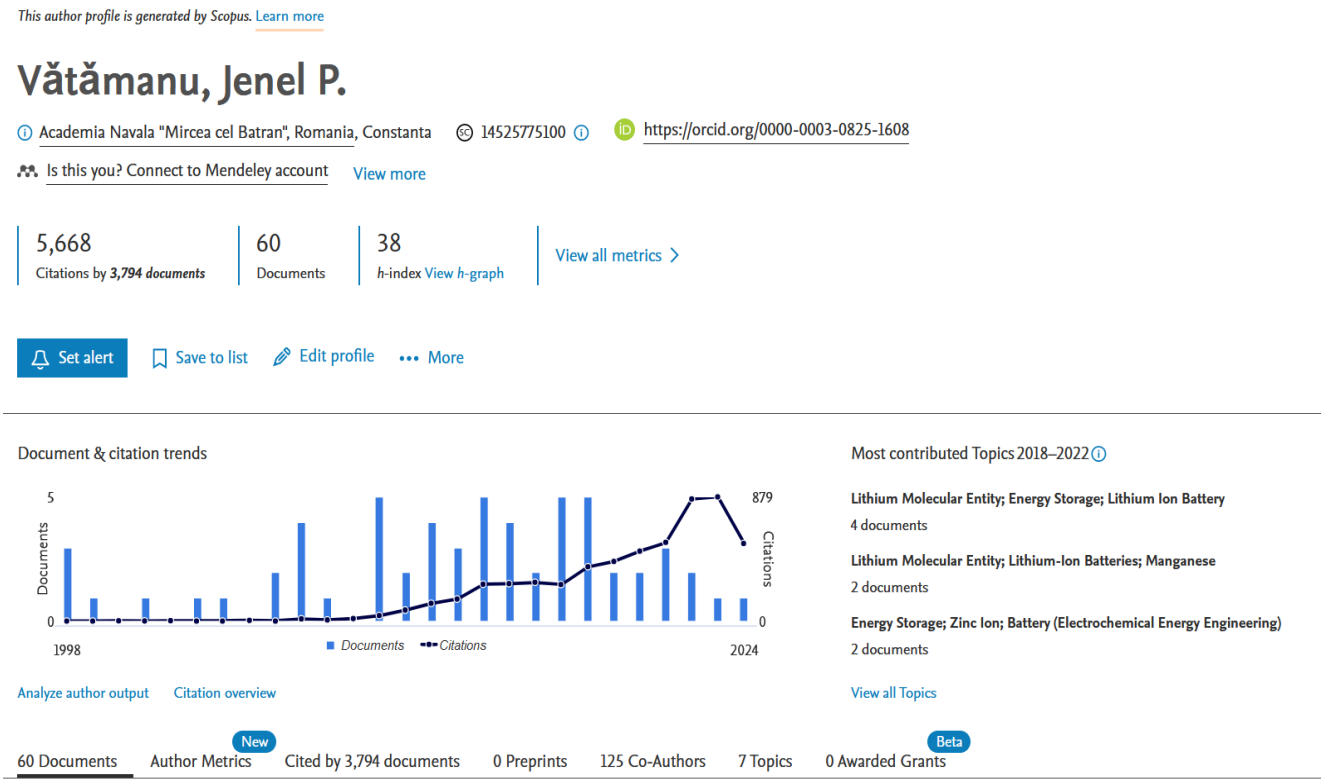
C. CALCULUL FACTORULUI h-index: (lucrările sunt sortate in ordinea descrescătoare a citărilor) citari_SCOPUS(25-Mai,2024) – pentru h-index-ul celor Nmax=30 lucrari selectate:

#nr.	citări (articol + link)
1)	**553** (NatNano,2021, **https://doi.org/10.1038/s41565-021-00905-4**)
2)	**332** (E&ES,2014, **https://doi.org/10.1039/C3EE42351D**)
3)	**307** (Joule,2018, **https://doi.org/10.1016/j.joule.2018.02.011**)
4)	**287** (JACS,2010, **https://doi.org/10.1021/ja104273r**)
5)	**188** (ACSEngLett,2020,w63m, **https://doi.org/10.1021/acsenergylett.0c00348**)
6)	**187** (JPCC,2012,bat, **https://doi.org/10.1021/jp2101539**)
7)	**185** (PCCP,2010, **https://doi.org/10.1039/C0CP00551G**)
8)	**166** (AEM,2020, **https://doi.org/10.1002/aenm.201902654**)
9)	**163** (JPCB,2011, **https://doi.org/10.1021/jp2001207**)
10)	**153** (JPCL,2011, **https://doi.org/10.1021/jz200879a**)
11)	**145** (JPCL,2017, **https://doi.org/10.1021/acs.jpclett.7b01879**)
12)	**141** (JPCC,2012,cap, **https://doi.org/10.1021/jp301399b**)
13)	**137** (JPCB,2006, **https://doi.org/10.1021/jp061684l**)
14)	**127** (NatCom,2019, **https://doi.org/10.1038/s41467-019-11439-8**)
15)	**124** (ACSEngLett,2021,LX, **https://doi.org/10.1021/acsenergylett.1c00707**)
16)	**113** (JPCL,2013,inc, **https://doi.org/10.1021/jz401472c**)

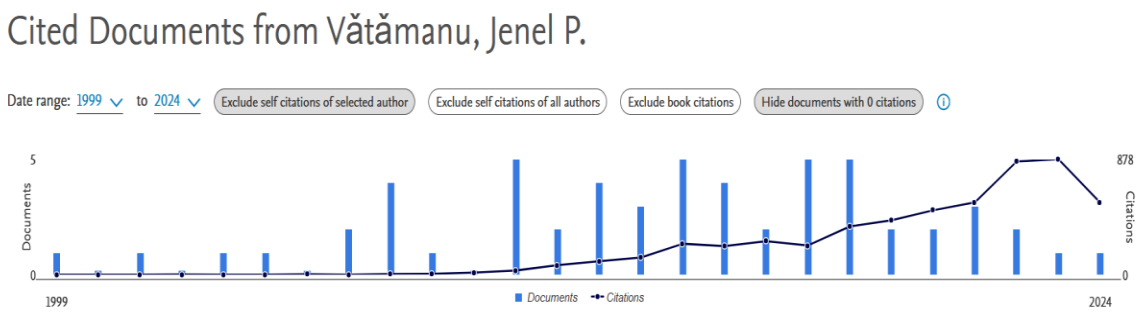
17) **108** (JACS,2006, https://doi.org/10.1021/ja066515t)
18) **108** (ACSNano,2015, https://doi.org/10.1021/acsnano.5b00945)
19) **105** (JPCL,2013, https://doi.org/10.1021/jz301782f)
20) **99** (JPCL,2015, https://doi.org/10.1021/acs.jpclett.5b01199)
21) **94** (PCCP,2013, https://doi.org/10.1039/C3CP51218E)
22) **83** (NatSus,2023, https://doi.org/10.1038/s41893-022-01028-x)
23) **77** (JPCL,2016, https://doi.org/10.1021/acs.jpclett.5b02378)
24) **61** (ESM,2022, https://doi.org/10.1016/j.ensm.2021.12.045)
25) **57** (JPCB,2008, https://doi.org/10.1021/jp077583k)
26) **50** (EA,2014, https://doi.org/10.1016/j.electacta.2014.08.072)
27) **48** (PNAS,2022, https://doi.org/10.1073/pnas.2121138119) //_____h-index=27
28) **20** (JEngChem,2022, https://doi.org/10.1016/j.jechem.2021.05.022)
29) **8** (JCTC,2018, https://doi.org/10.1021/acs.jctc.7b01043)
30) **0** (ESM,2024, https://doi.org/10.1016/j.ensm.2024.103203)

h-index-ul celor Nmax=30 lucrari selectate = 30 – 3 = 27

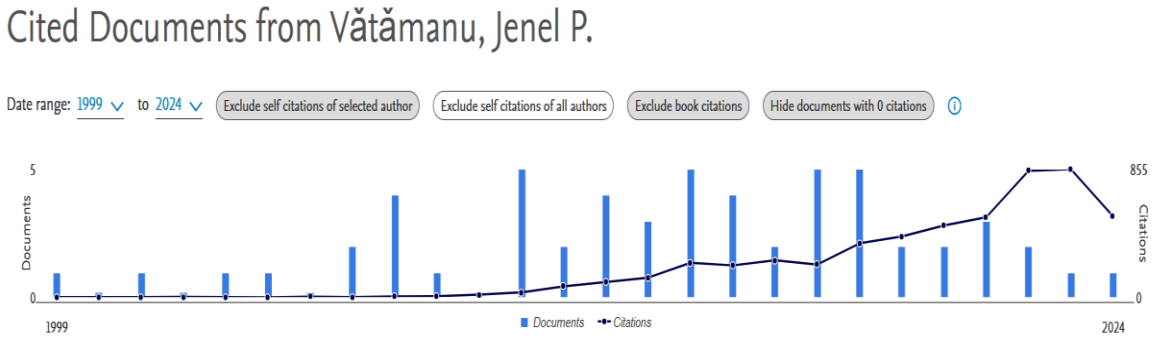
Observație:
h-index total in Scopus (June, 2024) = 38
h-index total in Google Scholar (June, 2024) = 40



Citat in SCOPUS de 5668 ori, incluzând self-citările autorului (25-Mai-2024)



Citat in SCOPUS de 5431 ori, excluzând self-citările autorului (25-Mai-2024)



Citat in SCOPUS de 5317 ori, excluzând self-citările autorului si excluzând citările din cărți. (25-Mai-2024)

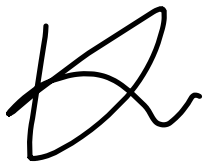
SUMARIZARE TABEL CONDITII MINIME PENTRU CS2 LA CHIMIE:
(conform: https://www.edu.ro/sites/default/files/Comisia%204_CHIMIE.pdf)

Categorie	**N_{max} (*)**	**FIC (**)**	**n_D (***)**	**n_{AP} (****)**	**h-index**	**Granturi (*****)**	**Conditii speciale**
MINIMUM NECESARE CONFERENTIAR/ CS2	**30**	**50**	**-**	**15**	**10**	**-**	**-**
AVUTE DE CANDITAT	**30**	**410.6**	**-**	**19**	**27**	**-**	**-**
VERIFICAT DACA ESTE SATISFACUT:	**DA**	**DA**	**-**	**DA**	**DA**	**-**	**-**

Data,
candidatului

Semnătura

11-JUNE-2024



Mai jos este download-at din linkul (la data de 25-Mai-2024, așadar in vigoare la data publicării jobului in Monitorul Oficial): https://www.edu.ro/sites/default/files/Comisia%204_CHIMIE.pdf

Anexa nr. 4 - COMISIA DE CHIMIE

STANDARDE MINIMALE NECESARE SI OBLIGATORII PENTRU CONFERIREA TITLURILOR DIDACTICE DIN ÎNVĂȚĂMÂNTUL SUPERIOR ȘI A GRADELOR PROFESIONALE DE CERCETARE – DEZVOLTARE

Criterii

Categorie	N_{max} (*)	FIC (**)	n_D (***)	n_{AP} (****)	h index	Granturi (*****)	Condiții speciale
Profesor/ CS1	60	120	40	30	14	2	10 publicații în reviste cu FI > 3
Habilitare	40	80	30	20	12	1	8 publicații în reviste cu FI > 3
Conferențiar / CS2	30	50	-	15	10	-	-

(*) N_{max} - primele maxim N lucrări, organizate în ordinea descrescătoare a factorilor de impact a revistelor în care au fost publicate;
(**) **FIC** - factor de impact cumulat al revistelor in care s-au publicat lucrările în cauză;
(***) n_D - număr minim de publicații în domeniul de cercetare declarat;
(****) n_{AP} - număr minim de publicații în calitate de autor principal (prim-autor și autor de corespondență);
(*****) granturi câștigate în competiții, în calitate de director.

ESTE OBLIGATORIU CA, LA POZITIA DE PROFESOR SI PENTRU ABILITARE, CANDIDADTII SA ILUSTREZE PRIN PUBLICATII UN DOMENIU PROPRIU DE CERCETARE. LISTELE DE LUCRARI „MOZAIC" NU FAC UN CANDIDAT ELIGIBIL.
Aceste standarde sunt setul minimal de standarde de concurs. Suplimentar, institutiile (universitati, institute) pot impune si alte cerinte, conform legii.
In cazul universitatilor, asupra acestora se va pronunta un organism abilitat de catre Senatul Universitatii si rezultatele vor fi aprobate de catre Senat (Legea 1/2011 art 297, 219).
In cazul institutelor asupra acestora va decide Consiliul Stiintific (Legea 319/2003, art 16(2)c).
In ambele cazuri CNATDCU va valida indeplinirea setului minimal, conform legii 1/2011, art. 166(2), 219(1), 295(1)(3) si 300(4); respectiv legii 319/2003, art. 16(2)c.

Al doilea set de condiții pentru chimie este aici:
https://www.edu.ro/sites/default/files/anexa%20ordin%206.129_2016%20standarde%20minimale_0.pdf
Copy -paste pentru Comisia 4 chimie din acest al doile-a link:

Anexa nr. 4 – COMISIA DE CHIMIE

STANDARDE MINIMALE NECESARE ŞI OBLIGATORII PENTRU CONFERIREA TITLURILOR DIDACTICE DIN ÎNVĂŢĂMÂNTUL SUPERIOR ŞI A GRADELOR PROFESIONALE DE CERCETARE – DEZVOLTARE

Criterii generale:

Categorie	N_{max} (*)	FIC (**)	FIC_D (***)	FIC_{AP} (****)	FIC_{AC} (*****)	h index
Profesor/CS1/Habilitare	50	100	70	50	25	13
Conferenţiar/CS2	30	50	-	20	-	9

(*) N_{max} – primele maxim N lucrări, organizate în ordinea descrescătoare a factorilor de impact a revistelor în care au fost publicate;
(**) **FIC** – factorul de impact cumulat minimal al revistelor în care s-au publicat lucrările în cauză;
(***) FIC_D –factorul de impact cumulat minimal din publicaţii în domeniile de cercetare declarate;
(****) FIC_{AP} –factorul de impact cumulat minimal din publicaţii în calitate de autor principal (prim-autor şi autor de corespondenţă);
(*****) FIC_{AC} –factorul de impact cumulat minimal din publicaţii în calitate de autor de corespondenţă.

Recomandări suplimetare:

- Activitatea didactică, cărţi, manuale, cursuri, suporturi de curs se pot introduce drept criterii proprii de către universităţi / institute.
- Capitolele de cărţi se echivalează cu articole cu FI = 2 (doi), în cărţile prezente în mai mult de 150 de biblioteci (vizibile în motorul de căutare UEFISCDI);
- Brevetele internaţionale (de tipul EU, WO) se echivalează (fiecare) cu un articol cu FI = 4 (patru).

Note:

- Este obligatoriu ca pentru poziţia de profesor şi pentru abilitare candidaţii să ilustreze prin publicaţii domeniile proprii de cercetare (autor de corespondenţă).
- Aceste standarde sunt setul minim de standarde de concurs. Suplimentar, instituţiile (universităţi, institute) pot impune şi alte cerinţe, conform legii. În cazul universităţilor, asupra acestora se va pronunţa un organism abilitat de către Senatul Universităţii şi rezultatele vor fi aprobate de către Senat (Legea 1/2001 art 297, 219). În cazul institutelor asupra acestora va decide Consiliul Ştiinţific (Legea 319/2003, art 16(2)c). În ambele cazuri, CNATDCU va valida îndeplinirea setului minimal, conform legii 1/2011, art. 166(2), 219(1), 295(1)(3) şi 300(4); respectiv legii 319/2003, art. 16(2)c.

Si acest al 2-lea set de condiții este de asemeni satisfăcut cu Nmax = 30 pentru CS2.

Categorie	**N_{max} (*)**	**FIC (**)**	**FIC_D (***)**	**FIC_{AP} (****)**	**FIC_{AC} (****)**	**h-index (*****)**
MINIMUM NECESARE CONFERENTIAR/ CS2	**30**	**50**	**-**	**20**	**-**	**9**
AVUTE DE CANDITAT	**30**	**410.6**	**-**	**145**	**-**	**27**
VERIFICAT DACA ESTE SATISFACUT:	**DA**	**DA**	**-**	**DA**	**-**	**DA**

Aşadar Setul Nmax=30 articole satisface ambele ANEXE 4 de la chimie existente pe internet pentru CHIMIE, la conferențiar/CS2.

Data,
candidatului

11-JUNE-2024

Semnătura