



**AVIZUL
COMISIEI DE VERIFICARE A INFORMAȚIILOR DIN FIȘA DE VERIFICARE A
ÎNDEPLINIRII STANDARDELOR UTC-N**

Comisia de analiză a dosarelor candidaților înscriși la concursurile didactice și de verificare a informațiilor din fișa de verificare a îndeplinirii standardelor UTC-N, numită prin Decizia Rectorului Universității Tehnice din Cluj-Napoca Nr. 1079 din 13 decembrie 2023, întrunită în data de 12.04.2024, în urma verificării dosarului candidatei **MOLEA Andreia** pentru postul de **Confecențiar universitar, poziția 17** din Statul de funcții al Departamentului de Autovehicule Rutiere și Transporturi.

avizează favorabil

îndeplinirea standardelor minimale pentru poziția pe care candidează precum și concordanța dintre activitatea științifică a candidatului și domeniul științific specificat în anunțul pentru concurs.

Componența comisiei și decizia individuală a membrilor acesteia este următoarea:

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Membru:	Prof.dr.ing. Bogdan Ovidiu Varga	avizează
	Prof.dr.ing. Olimpiu Mihai Tătar	avizează

**Declarație pe propria răspundere
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Subsemnata Molea Andreia, domiciliată în Florești str. Someșului, nr. 2B, ap. 9, județul Cluj, legitimată cu C.I., seria CJ, nr. 168294, CNP 2831102124946, declar pe proprie răspundere că informațiile prezentate în prezentul dosar de concurs sunt veridice și corespund în totalitate realității.

Întocmită într-un exemplar, pe propria răspundere, cunoscând că declarațiile inexacte sunt pedepsite conform legii.

Data
09.01.2024

Semnătura
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Fișa de verificare a îndeplinirii standardelor minime CNATDCU

Comisia: Inginerie Mecanică, Mecatronică și Robotică

Nume, Prenume Molea Andreia
Funcția didactică Conferențiar
Departamentul Autovehicule Rutiere și Transporturi
Facultatea Autovehicule Rutiere, Mecatronică și Mecanica

Specificatie	Domeniul activitatilor	Indicator	Punctaj obținut	Punctaj minim grila	Realizare Indicatori
Activitatea didactica/profesionala	A.1.1	N1	2.00	2.00	Îndeplinit
		N1.1	1.00	0.00	Îndeplinit
		N1.3	1.00	1.00	Îndeplinit
	A.1.2	N2	5.00	3.00	Îndeplinit
		N.2.1	3.00	1.00	Îndeplinit
Activitatea de cercetare	A2.1+A2.3	P1+P2	19.71	5.00	Îndeplinit
		P1	19.71	3.00	Îndeplinit
	A2.2	N3	8.00	8.00	Îndeplinit
		N3.1	4.00	3.00	Îndeplinit
	A2.4+A2.5	N4	1.00	1.00	Îndeplinit
	N43	0.00	0.00	Îndeplinit	
Recunoasterea impactului activitatii	A3.1	S1+S2	12.56	10.00	Îndeplinit
	A3.2	N5	9.00	5.00	Îndeplinit
	A3.3	C	655.53	10.00	Îndeplinit

Total **741.52** **52.00**

Data: 09.01.2024

Cadru didactic,
S.L. Dr. Ing. Molea Andreia

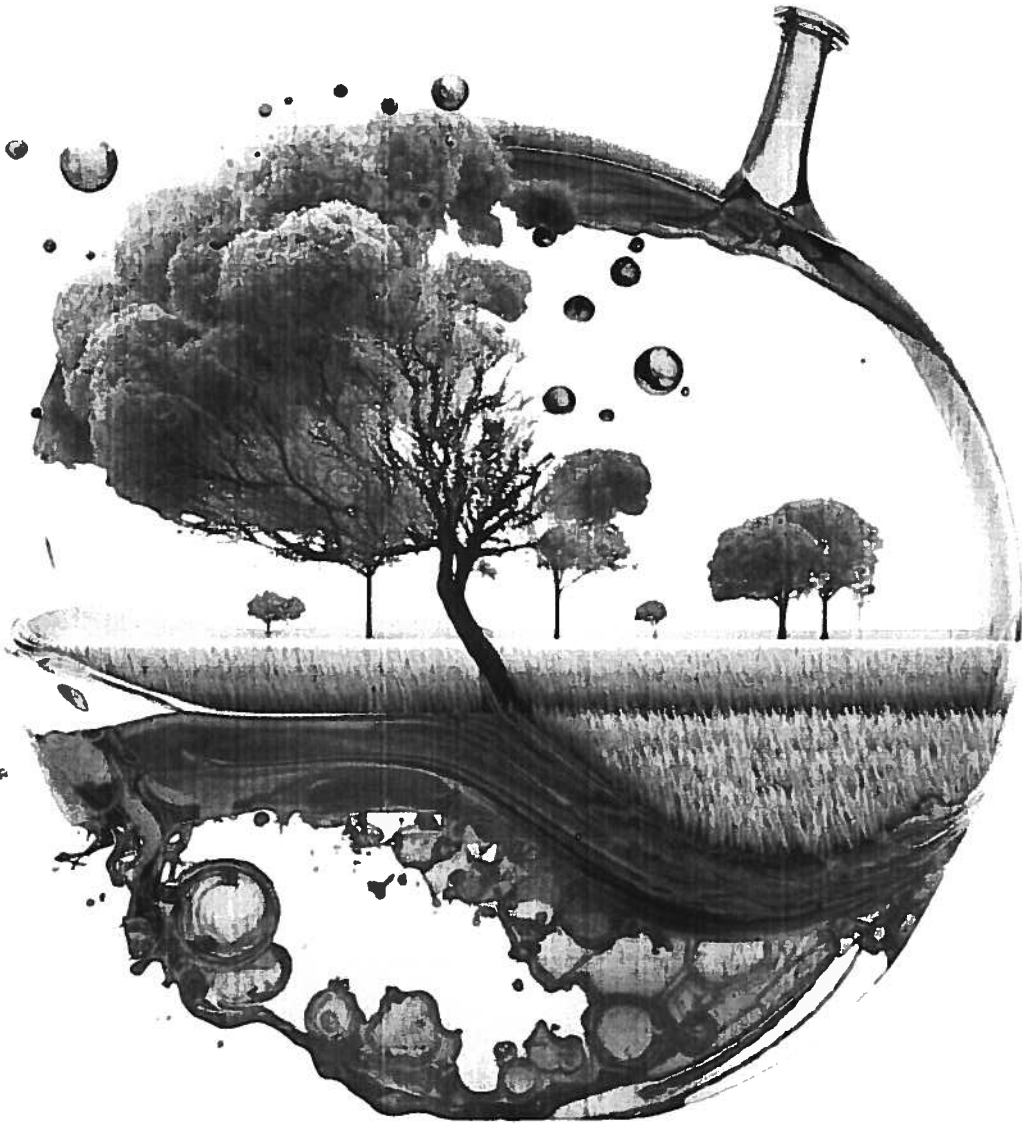
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1	Andreia Molea, Teodora Alexandrina Deac, Levente Botond Kocsis	3	Producerea, testarea și utilizarea biocombustibililor	RISOPRINT	2023	978-973-53-3153-5	1.00
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Andreia Molea
Teodora Alexandrina Deac
Levente Botond Kocsis



Producerea,
testarea și utilizarea
biocombustibililor

Această lucrare a fost concepută pentru a sprijini învățarea și înțelegerea unor concepte de bază privind producerea, testarea și utilizarea biocombustibililor solizi, lichizi și gazoși.

Ea se adresează studenților de la programele de studii de licență (Autovehicule rutiere, Ingineria transporturilor și a traficului) precum și master (Ingineria Biosistemelor în Agricultură și Industria Alimentară, Automobilul și Mediul), fiind de fapt utilă tuturor studenților și masteranzilor din universitățile tehnice care studiază cursul de Producerea, testarea și utilizarea biocombustibililor, cât și celor care lucrează în cercetare.

Andreia Molea
Teodora Alexandrina Deac
Levente Botond Kocsis

Producerea,
testarea și utilizarea
biocombustibililor

Editura RISOPRINT
Cluj-Napoca 2023

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- multi-criteria optimization," *Case Studies in Thermal Engineering*, vol. 44, p. 102729, Apr. 2023, doi: 10.1016/j.csite.2023.102729.
- [144] K. Haense, T. Barchmann, M. Dotzauer, E. Fischer, and J. Liebetrau, "Weiterbetrieb flexibilisierter Biogasanlagen – realisierbare Gebotspreise im EEG 2017," *LANDTECHNIK*, vol. 75(2), pp. 81–103, 2020.

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1	Andreia Molea, Violeta Valentina Merie, Ramona-Crina Suci	https://biblioteca.utcluj.ro/files/carti-online-cu-copertal/681-4.pdf	2023	3	1.00
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**Andreia MOLEA
Violeta Valentina MERIE
Ramona - Crina SUCIU**

**MATERIALE UTILIZATE ÎN CONSTRUCȚIA ȘI
ÎNTREȚINEREA AUTOVEHICULELOR**
Materiale solide



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Această carte a fost concepută pentru a sprijini învățarea și înțelegerea unor concepte de bază privind materialele solide - metalice, polimerice, materiale de fricțiune - utilizate în construcția autovehiculelor, perspectivele privind utilizarea materialelor avansate în construcția autovehiculelor precum și reciclarea materialelor și considerații privind vehiculele scoase din uz.

Ea se adresează, ca material didactic, studenților de la programele de studii de licență din domeniul Ingineriei Autovehiculelor (Autovehicule Rutiere), precum și de master (Automobilul și Mediul), fiind de fapt utilă tuturor studenților din universitățile tehnice care studiază cursul de materiale utilizate în construcția autovehiculelor, cât și inginerilor și celor care lucrează în cercetare.

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N2.1 Standuri de laborator (construcții/modernizări) certificate de directorul de departament

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Nr.crt.	Autori	Nr. Autori	Titlul	Anul editarii	ISBN	Punctaj individual
1	Violeta Popescu, Andreia Molea, George Liviu Popescu, Corneliu Rusu-Trisca, Ileana Cojocaru	5	Reducerea poluarii - Aplicatii. Metode fizico-chimice de separare a poluantilor	2014	978-606-11-4176-0	1.00
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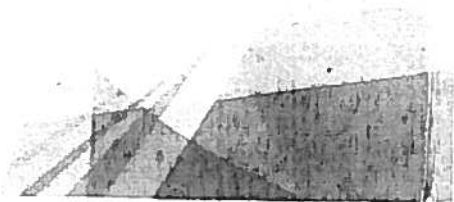
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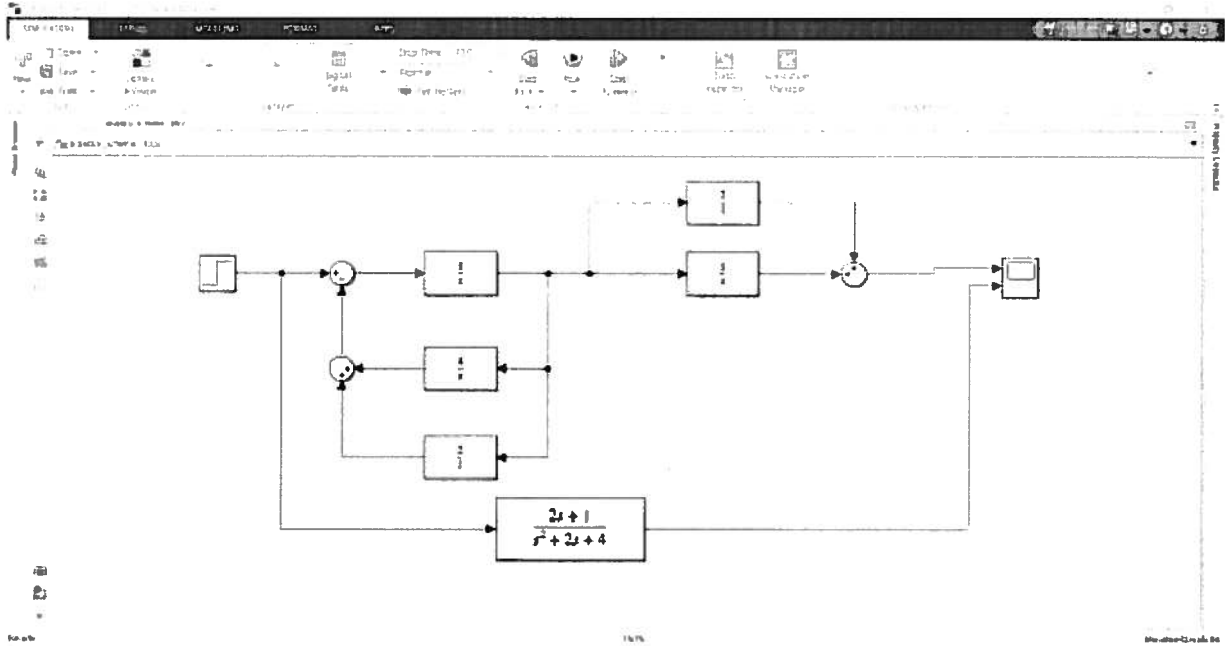
9 786061 41760



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autor, co-autor

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1	Molea Andreia, Dan Moldovanu, Barabás István	3	Teoria sistemelor - Indrumător de laborator, On-Line - Platforma Teams, 2022	2022	www.microsoft.com	1.00
Total						1.00

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	Lab 1. Structura si functionarea sistemelor automate. Functia de transfer...	November 21, 2023	Andreia Molea	
	Lab 2. Algebra schemelor bloc. Raspunsul sistemelor. Stabilitatea in plan..	December 6, 2023	Andreia Molea	
	Lab 3. Introducere in Arduino si limbaj de programare C.pdf	October 11, 2023	Andreia Molea	
	Lab 4. Controlul LED-urilor cu ajutorul potentiometrului.pdf	October 25, 2023	Andreia Molea	
	Lab 5. Masurarea distantei cu ajutorul senzorului cu ultrasunete.pdf	November 8, 2023	Andreia Molea	



```
1 % Control System Design
2 % Transfer Functions
3 % Controller: Gc(s) = (2s+1)/(s^2+2s+4)
4 % Plant: Gp(s) = 1/(s+2)
5 % Reference: R(s) = 1/s
6 % Feedback: H(s) = 1
7 % Closed-loop Transfer Function: T(s) = Gc(s)*Gp(s)/(1+Gc(s)*Gp(s)*H(s))
8 % Simplify T(s)
9 % Partial Fraction Decomposition
10 % Impulse Response
11 % Step Response
12 % Bode Plot
13 % Root Locus
14 % Nyquist Plot
15 % Margin Plot
16 % Simulation Parameters
17 % Time Vector
18 % Simulation Results
19 % Plotting
20 % End of Script
```

N3.1 Articole si publicatii BDI (neincluse in A2.1)
prim autor sau autor corespondent

Nr. crt.	Nume autori	Numar autori	Titlul lucrarii	Denumire Jurnal /ISSN	Volum/Nu- mar	Anul publicarii	nr. pagini (de la .. pana la:)	Punctaj individual
1	Dan Moldovanu, Andreea Molea, Barabas Istvan	3	Preliminary results on nano-diamond and nano-graphite testing as additive for an engine lubrication oil	INTERNATIONAL CONFERENCE ON TRIBOLOGY (ROTRIB'19), Book Series IOP Conference Series- Materials Science and Engineering	724	2020	article number 012047	1.00
2	Andreea Molea, Istvan Barabas, Ramona Suciuc	3	Influence of TiO2 Nano-particles Content on Physicochemical and Tribological Properties of Lubricant Oil	PROCEEDINGS OF THE 4TH INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING (AMMA 2018), Book Series Proceedings in Automotive Engineering		2019	190-196	1.00
3	Istvan Barabas, Andreea Molea, Ramona Suciuc	3	Fuel Properties of Diesel-Ethanol-Tetrahydrofuran Blends: Experimental and Theoretical Approaches	PROCEEDINGS OF THE 4TH INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING (AMMA 2018), Book Series Proceedings in Automotive Engineering		2019	197-208	1.00
4	Andreea Molea, Violeta Popescu, George Liviu Popescu, Ramona Crina Suciuc, Adrian Dinescu, Mariabara Moldovan	6	Synthesis and characterisation of titanium dioxide nanoparticles sensitisised with natural chlorophyll dye extracted from Mentha leaves	JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS	19(3-4)	2017	272-277	1.00
Total								4.00

N3.2 Articole si publicatii BDI (neincluse in A2.1)
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Nr. crt.	Nume autori	Numar autori	Titlul lucrarii	Denumire Jurnal /ISSN	Volum/ Numar	Anul publicarii	nr. pagini (de la .. pana la:)	Punctaj individual
1	Violeta Merie, Andreia Molea, Nicolae V. Burnete, Bogdan Neamtu, Gavril Negrea	5	Structural and optical characterization of titanium nitride thin films deposited by magnetron sputtering	Powder Metallurgy and Advanced Materials, Book Series: Materials Research Proceedings, ISSN 2474-395X	8	2018	134-142	1.00
2	Florina M. Rusu, Violeta V. Merie, Ioana M. Pinteaa, Andreia Molea	4	Adhesion analysis for chromium nitride thin films deposited by reactive magnetron sputtering	IOP Conference Series: Materials Science and Engineering	147	2016	article number 012023	1.00
3	George Liviu Popescu, Nicolae Filip, Andreia Molea, Violeta Popescu	4	The effect of using pyrolysis oils from polyethylene and diesel on the pollutant emissions from a single cylinder diesel engine	Studia Universitatis Babeş-Bolyai Chemia	60(4)	2015	273-288	1.00
4	Doina Prodan, Marioara Moldovan, Cristina Prejmorean, Laura Silaghi-Dumitrescu, Stanca Boboia, Violeta Popescu, Violeta Pascalau, Andreia Molea, Lazar Diana, Ioana Perhaita	10	Synthesis and characterization of an experimental Zn-hydroxyapatite powders with application in dentistry	Bioceramics vol 25, Book Series: Key Engineering Materials	587	2014	43-51	1.00
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2

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26

References

Dec 2015 | [STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA](#) 60 (4), pp.273-288

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3	1	4 Andreia Molea, Violeta Popescu, Neil A Rowson, Adrian M Dinescu	Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity	Powder Technology	253	2014	22-28	2.269	3.70
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N5 Prezentarea/Diseminarea rezultatelor: prezență la manifestări științifice în calitate de autor/co-autor de lucrări, profesor invitat

Nr. Crt.	Tipul activității: conferința/congres= 1; workshop international=2; profesor invitat=3	Denumire Congress, workshop/Institutia unde a fost invitat	ANUL /period a (pt. prof. invitat)	Titlul lucrării sustinute în calitate de autor sau co-autor/ Prelegeri expuse pt profesor invitat	link email/alte modalitati de justificare a activitatii	Punctaj realizat
1	1	ESFA 2023 Fuel Economy, Safety and Reliability of Motor Vehicles, The 33rd SIAR International Automotive and Transport Engineering Congress The 10th ESFA Congress hosted by POLITEHNICA University, Bucuresti	2023	Possibilities to evaluate the vehicle's accelerations through MATLAB Simulink simulations, autori: I. Dumă, A. Molea, N. Cordoș, H. Cărăușan, N. Burnete, I. Barabás, A. Todoruț, B.M. Jurchiș	http://www.siarcongress.eu/public/conferences/2/sched/Confs/5/progr-am-en_US.pdf	1.00
2	1	ESFA 2023 Fuel Economy, Safety and Reliability of Motor Vehicles, The 33rd SIAR International Automotive and Transport Engineering Congress The 10th ESFA Congress hosted by POLITEHNICA University, Bucuresti	2023	Assessment Possibilities for Trajectory Fusion of Two Vehicles in the Case of Automated Vehicles, autori: N. Cordoș, I. Barabás, A. Todoruț, I. Dumă, A. Molea, D. Moldovan, N. Burnete, M. Jurchiș, M. Ghereș	http://www.siarcongress.eu/public/conferences/2/sched/Confs/5/progr-am-en_US.pdf	1.00
3	1	AMMA 2018 - The IVth International Congress of Automotive and Transport Engineering, Cluj-Napoca	2018	Influence of TiO2 Nano-particles Content on Physicochemical and Tribological Properties of Lubricant Oil, autori: Andraia Molea, Istvan Barabas, Ramona Suciu	http://amma2018.ro/public/conferences/1/sched/Confs/1/program-en_US.pdf	1.00
4	1	AMMA 2018 - The IVth International Congress of Automotive and Transport Engineering, Cluj-Napoca	2018	Fuel Properties of Diesel-Ethanol-Tetrahydrofuran Blends: Experimental and Theoretical Approaches, autori: Istvan Barabas, Andraia Molea, Ramona Suciu	http://amma2018.ro/public/conferences/1/sched/Confs/1/program-en_US.pdf	1.00
5	1	The 11th edition of International Congress of Automotive and Transport Engineering, Mobility engineering and environment CAR 2017, Pitesti	2017	Current challenges in autonomous driving, autori: Istvan Barabas, Adrian Todoruț, Nicolae Cordoș, A Molea	http://www.car2017.ro/public/conferences/1/sched/Confs/1/program-en_US.pdf	1.00
6	1	The 11th edition of International Congress of Automotive and Transport Engineering, Mobility engineering and environment CAR 2017, Pitesti	2017	Key fuel properties and engine performances of diesel-ethanol blends, using tetrahydrofuran as surfactant additive, autori: Andraia Molea, P Visuian, Istvan Barabas, R C Suciu, Nicolae Vlad Burnete	http://www.car2017.ro/public/conferences/1/sched/Confs/1/program-en_US.pdf	1.00
7	1	9th International Conference on Materials Science & Engineering (BRAMAT 2015), Braşov	2015	Synthesis of Ag/AgCl-TiO2 and chlorophyll-sensitized Ag/AgCl-TiO2 composites powders with photocatalytic performance, autori: Andraia Molea, Violeta Popescu, Neil A. Rowson, Ileana Colocaru	file:///C:/Users/40755/Downloads/Program_Bramat2015.pdf	1.00
8	1	15th Conference on Environment and Mineral Processing, Ostrava, Czech Republic	2011	The obtaining of nanostructured nitrogen doped titanium dioxide powders in presence of triethanolamine, autori: Andraia Molea, Violeta Popescu, Neil A. Rowson	https://www.nbv.de/dms/lib-ib-hannover/063066543.pdf	1.00
9	1	The Xth Multidisciplinary National Conference – with international participation "Profesorul Dorin Pavel – the founder of romanian hydroenergetics". Sebes	2010	The obtaining of titanium dioxide by sol-gel method, autori: Andraia Molea, Violeta Popescu	http://simulinsingquire.ro/category/revista/2010/volumul-18/	1.00
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15th Conference on Environment and Mineral Processing

Part I



8. – 10. 6. 2011
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18-13 PROPRIETĂȚI OPTICE SI ELECTRICE ALE FILMELOR DE Fe₂O₃ OBȚINUTE PRIN “SPRAY PYROLYSIS”

Această intrare a fost publicată în 2010 Volumul 18 și etichetată Medina Natalia BATIN Violeta POPESCU la ianuarie 10, 2014 de RC

OPTICAL AND ELECTRICAL PROPERTIES OF Fe₂O₃ OBTAINED BY SPRAY PYROLYSIS

The paper is a review of literature data related to the optical and electrical properties of iron oxide (Fe₂O₃) films. The main optical properties studied were the transmittance, the absorption coefficient and the optical bandgap. An important electrical property which was also presented was the dark resistivity.

Cuvinte cheie: oxid de fier, filme, energia benzii interzise, absorbție, rezistivitate electrică

13 PROPRIETĂȚI OPTICE SI ELECTRICE ALE FILMELOR

18-14 PROPRIETĂȚILE STRUCTURALE ALE DIOXIDULUI DE TITAN

Această intrare a fost publicată în 2010 Volumul 18 și etichetată Andreia MOLEA Violeta POPESCU la ianuarie 10, 2014 de RC

STRUCTURAL PROPERTIES OF TITANIUM DIOXIDE

This paper presents a series of literatures data on the structure of titanium dioxide obtained by sol-gel technique. Obtaining a crystalline structure of TiO₂ depends on temperature and the thermal treatment applied later and also depend on the catalysts used in the preparation process. Photocatalytic properties of titanium dioxide are given by anatas crystalline structure, a structure obtained by heat treatment between 100 0C and 500 0C.

Cuvinte cheie: dioxid de titan, difracție de raze X, proprietăți structurale

14 PROPRIETĂȚILE STRUCTURALE ALE DIOXIDULUI

18-15 OBȚINEREA DIOXIDULUI DE TITAN PRIN METODA SOL-GEL. PROCESE DE HIDROLIZĂ

Această intrare a fost publicată în 2010 Volumul 18 și etichetată Andreia MOLEA Violeta POPESCU la ianuarie 10, 2014 de RC



OBTAINING OF TITANIUM DIOXIDE BY SOL-GEL METHOD. HYDROLYSIS PROCESSES

The paper presents a comparative study of a series of data from literature related to the obtaining of titanium dioxide by sol-gel method by hydrolysis processes. It presents the main parameters of the production process, the heat treatment applied in order to obtain crystalline phases of interest. Also the paper summarizes the treatment methods applied in order to avoid the process of agglomeration of formed particles.

Cuvinte cheie: dioxid de titan, metoda sol-gel, proces de hidroliză proprietăți fotocatalitice

15 OBTINEREA DIOXIDULUI DE TITAN PRIN METODA

18-16 OBTINEREA ANTOCIANINELOR PRIN PROCEDEE DE EXTRACȚIE

Această intrare a fost publicată în 2010 Volumul 18 și etichetată **Andreea VARGA** **George Liviu POPESCU** **Violeta POPESCU** la ianuarie 10, 2014 de RC

THE OBTAINING OF ANTHOCYANINS BY EXTRACTION

The paper presents the results obtained by extraction of anthocyanins from red cabbage by different methods (Soxhlet extraction, extraction under microwave irradiation, ultrasonic extraction, extraction by boiling). It presents a method for analysis of extracted compound using VIS spectroscopy. The variation of optical properties of the extract depending on pH is also presented.

Cuvinte cheie: antocianine, procedee de extracție, spectroscopul UVVIS

16 OBTINEREA ANTOCIANINELOR PRIN

18-17 CEN/TC 230 „ANALIZA APEI” – SCURTĂ PREZENTARE SI DOCUMENTE ÎN CURS DE ELABORARE

Această intrare a fost publicată în 2010 Volumul 18 și etichetată **Mihaela BICHIR** la ianuarie 10, 2014 de RC

CEN/TC 230 „WATER ANALYSIS” – SHORT PRESENTATION AND WORKING DOCUMENT

There is a close link between standardized methods and EU legislation and in order to fulfil the needs, TC 230 studies carefully the developments in EU legislation. In this respect, special attention is given to the proposed Water Framework Directive and to the revision of the bathing water Directive. Concerning the existing legislation, all standards elaborated in



S Atragere resurse financiare prin granturi/proiecte/contracte terți

Nr.crt	Tip proiect *	Titlul proiectului	Perioada de derulare	Valoare totala UTCN** [ech. Euro]	Valoarea alocata membrului in echipa de catre directorul de proiect*** [ech. Euro]	Punctaj individual
1	Calitatea: director = 1, membru in echipa = 2					
2	Bridge nr.122BG/2016	Proiect PN-III-P2-2.1-BG-2016-0204 , Optimizarea procesului de obținere a unor chelați aminoacizi în vederea obținerii unor materiale cu noi aplicații	2012-2016	51111	785.8	0.79
2	Parteneriate PCCA nr. 165/2012	Proiect 165/2012-PN-II-PT-PCCA-2011-3.2-1275 – “Noi generații de biomateriale pentru cosmetica dentară – COSMETICIDENT” Proiect C.I.5/1.2/2015 - „Elaborarea și	2012-2016	70000	11775	11.77
3	Proiect intern 5/1.2./2015	Caracterizarea Structurală Tribomecanică și Optică a unor Filme Subțiri de Nituri pentru Aplicații MEMS – NitriMEMS	2015-2016	5000		0.00
				Total		12.56

* Se va specifica fie tipul competitiei, fie tertii in cazul contractelor cu mediul economic

** Se va introduce valoarea fara TVA



DMCDI, Nr. 734/20.11.2023

ADEVERINȚĂ

În atenția doamnei șef lucrări dr.ing. Molea Andreia

Ca urmare a solicitării dumneavoastră și în urma analizei documentelor din arhiva Direcției pentru Managementul Cercetării, Dezvoltării și Inovării (DMCDI) vă informăm că figurați, în evidențele noastre în următoarele contracte de cercetare:

1. Proiect de tip PCCA nr. 165/2012, cu titlul "*Noi generații de biomateriale pentru stomatologia cosmetică*", director proiect ș.l.dr.ing. Popescu George, perioada 02.07.2012-31.12.2016, valoare 350.000 lei, ca **membru**;
2. Competiție internă 5/1.2./2015, cu titlul "*Elaborarea și caracterizarea structurală tribomecanică și optică a unor filme subțiri de nitruri pentru aplicații MEMS(NitriMEMS)*", director proiect ș.l.dr.ing. Merie Violeta, perioada 30.10.2015-30.09.2016, valoare 25.000 lei, ca **membru**;
3. Proiect de tip BRIDGE nr. 122BG/2016, cu titlul "*Optimizarea procesului de obținere a unor chelași ai aminoacizilor în vederea obținerii unor materiale cu noi aplicații*", director, prof.dr.ing. Popescu Violeta, perioada 01.10.2016-30.09.2018, valoare 460.000 lei, ca **membru**;

Prezenta adeverință se eliberează pentru depunerea dosarului pentru funcția de conferențiar.

Director DMCDI,

Prof.dr.ing. *Olvidiu* NEMEȘ



Direcția Resurse Umane

Str. Memorandumului Nr.28

Nr. 198 din 04/01/2024

ADEVERINȚĂ

Se adeverește prin prezenta că doamna MOLEA ANDREIA având C.I. seria CJ, nr. 168294, eliberat de SPCLEP CLUJ-NAPOCA, CNP 2831102124946, este încadrată în universitatea noastră din data de 01-10-2016, pe perioadă nedeterminată la Facultatea De Autovehicule Rutiere, Mecatronică și Mecanică, Dep. Autovehicule Rutiere și Transporturi în funcția de Sef Lucrări (Lector), și a obținut următoarele venituri nete în cadrul proiectelor PCCA 165 / 2012 POPESCU GEORGE, 112 BG /2016 - POPESCU VIOLETA respectiv ROSE AG 277- BODEA SANDA_IMPLEMENTARE:

An	Luna	Denumire Proiect	Venit net
2012	10	PCCA 165 / 2012 POPESCU GEORGE	536
2012	11	PCCA 165 / 2012 POPESCU GEORGE	912
2012	12	PCCA 165 / 2012 POPESCU GEORGE	912
2013	1	PCCA 165 / 2012 POPESCU GEORGE	912
2013	2	PCCA 165 / 2012 POPESCU GEORGE	912
2013	3	PCCA 165 / 2012 POPESCU GEORGE	912
2013	4	PCCA 165 / 2012 POPESCU GEORGE	912
2013	5	PCCA 165 / 2012 POPESCU GEORGE	912
2013	6	PCCA 165 / 2012 POPESCU GEORGE	678
2013	7	PCCA 165 / 2012 POPESCU GEORGE	678
2013	8	PCCA 165 / 2012 POPESCU GEORGE	678
2013	9	PCCA 165 / 2012 POPESCU GEORGE	678
2013	10	PCCA 165 / 2012 POPESCU GEORGE	678
2013	11	PCCA 165 / 2012 POPESCU GEORGE	678
2013	12	PCCA 165 / 2012 POPESCU GEORGE	678
2014	1	PCCA 165 / 2012 POPESCU GEORGE	678
2014	2	PCCA 165 / 2012 POPESCU GEORGE	678
2014	3	PCCA 165 / 2012 POPESCU GEORGE	1299
2014	4	PCCA 165 / 2012 POPESCU GEORGE	1299
2014	5	PCCA 165 / 2012 POPESCU GEORGE	1299
2014	6	PCCA 165 / 2012 POPESCU GEORGE	1299
2014	7	PCCA 165 / 2012 POPESCU GEORGE	1299
2014	8	PCCA 165 / 2012 POPESCU GEORGE	1299
2014	9	PCCA 165 / 2012 POPESCU GEORGE	1299
2014	10	PCCA 165 / 2012 POPESCU GEORGE	1299
2014	11	PCCA 165 / 2012 POPESCU GEORGE	1299
2014	12	PCCA 165 / 2012 POPESCU GEORGE	1299



2015	1	PCCA 165 / 2012 POPESCU GEORGE	1266
2015	2	PCCA 165 / 2012 POPESCU GEORGE	1299
2015	3	PCCA 165 / 2012 POPESCU GEORGE	1299
2015	4	PCCA 165 / 2012 POPESCU GEORGE	1299
2015	5	PCCA 165 / 2012 POPESCU GEORGE	1299
2015	6	PCCA 165 / 2012 POPESCU GEORGE	1299
2015	7	PCCA 165 / 2012 POPESCU GEORGE	1299
2015	8	PCCA 165 / 2012 POPESCU GEORGE	0
2015	9	PCCA 165 / 2012 POPESCU GEORGE	1186
2015	10	PCCA 165 / 2012 POPESCU GEORGE	1299
2015	11	PCCA 165 / 2012 POPESCU GEORGE	1299
2016	12	PCCA 165 / 2012 POPESCU GEORGE	1505
2016	1	PCCA 165 / 2012 POPESCU GEORGE	1515
2016	2	PCCA 165 / 2012 POPESCU GEORGE	1515
2016	3	PCCA 165 / 2012 POPESCU GEORGE	1515
2016	4	PCCA 165 / 2012 POPESCU GEORGE	1515
2016	5	PCCA 165 / 2012 POPESCU GEORGE	1515
2016	6	PCCA 165 / 2012 POPESCU GEORGE	1314
2016	7	PCCA 165 / 2012 POPESCU GEORGE	1515
2016	8	PCCA 165 / 2012 POPESCU GEORGE	1515
2016	9	PCCA 165 / 2012 POPESCU GEORGE	1515
2016	10	PCCA 165 / 2012 POPESCU GEORGE	1275
2016	11	PCCA 165 / 2012 POPESCU GEORGE	2817
2017	12	PCCA 165 / 2012 POPESCU GEORGE	986
2017	11	112 BG /2016 -POPESCU VIOLETA	778
2018	12	112 BG /2016 -POPESCU VIOLETA	986
2018	5	112 BG /2016 -POPESCU VIOLETA	866
2018	6	112 BG /2016 -POPESCU VIOLETA	433
2018	7	112 BG /2016 -POPESCU VIOLETA	866
2020	3	ROSE AG 277- BODEA SANDA_ IMPLEMENTARE	194

Prezenta adeverință s-a eliberat pentru a-i servi la promovarea pe post de Conferențiar universitar.

RECTOR

Prof.dr.ing. Vasile



DIRECTOR D.R.U.

Ec. Paul UULEA

C Citări în publicații BDI (WOS și Scopus)

Nota: se exclude autocitările

Nu se considera autocitare articolul în care apar autori din articolul citat, dar lipsește declarantul (persoana care completează Fișa de evaluare)

Nr.Crt	Date de identificare complete ale articolului citat	Date de identificare complete ale articolelor care citata lucrarea	Anul în care a fost citata lucrarea	Linkul articolului care citeaza	Factorul de Impact al publicației WOS în care apare citarea	Punctaj Individual
1	Birleanu, C; Pustan, M; Cioaza, M; Molea, A; Popa, F; Contiu, G; Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation, SCIENTIFIC REPORTS 12(1), article no. 5201, 2022	Wang, YY; Zhang, GL; Yang, D; Li, Y; Yin, W; Weng, YB; Electronic-Control Friction Behavior of Porous Metal-Organic Framework@Ag Nanocrystals as Self-Repairing Lubricant Additive, ACS APPLIED MATERIALS & INTERFACES Volume15 Issue29, Page 35732-35740, DOI10.1021/acscami.3c06942	2023	https://pubs.acs.org/doi/10.1021/acscami.3c06942	9.5	10.50
2	Birleanu, C; Pustan, M; Cioaza, M; Molea, A; Popa, F; Contiu, G; Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation, SCIENTIFIC REPORTS 12(1), article no. 5201, 2022	Perumal, S; Gnanam, S; Krishnasamy, K; Narayanan, P; Balasubramanian, S; Rajasekaran, K; Al-Zaharani, AA; Sarif, MM; Study of structural and spectroscopic characterization of ZnS nanoparticles and its application as supercapacitor. MODERN	2023	https://www.worldscientific.com/doi/10.1142/S0217984923501506	1.9	2.90
3	Birleanu, C; Pustan, M; Cioaza, M; Molea, A; Popa, F; Contiu, G; Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation, SCIENTIFIC REPORTS 12(1), article no. 5201, 2022	Li, W; Luo, T; Zhu, CX; Xu, DL; Dong, YF; Cao, BQ; Simple Laser-Induced Hexagonal Boron Nitride Nanospheres for Enhanced Tribological Performance, LUBRICANTS 11(5) article no. 199, 2023	2023	https://www.mdpi.com/2075-4442/11/5/199	3.5	4.50
4	Birleanu, C; Pustan, M; Cioaza, M; Molea, A; Popa, F; Contiu, G; Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation, SCIENTIFIC REPORTS 12(1), article no. 5201, 2022	Kumara, C; Armstrong, B; Lyo, I; Lee, HW; Qu, J; Organic-modified ZnS nanoparticles as a high performance lubricant additive, RSC ADVANCES 13(10), pp. 7009-7013, 2023	2023	https://pubs.rsc.org/en/content/articlelanding/2023/RA/D2RA07295E	3.9	4.90
5	Birleanu, C; Pustan, M; Cioaza, M; Molea, A; Popa, F; Contiu, G; Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation, SCIENTIFIC REPORTS 12(1), article no. 5201, 2022	Huang, HY; Lu, WQ; Yang, Q; Zhang, YJ; Hu, HY; Feng, ZF; Gan, T; Huang, ZQ; Double-template-regulated biomimetic construction and tribological properties of superdispersed calcium borate@polydopamine/cellulose acetate-laurate nanocomposite, INTERNATIONAL JOURNAL OF BIOLOGICAL	2023	https://www.sciencedirect.com/science/article/pii/S01418130230004452?via%3Dihub	8.2	9.20
6	Birleanu, C; Pustan, M; Cioaza, M; Molea, A; Popa, F; Contiu, G; Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation, SCIENTIFIC REPORTS 12(1), article no. 5201, 2022	Sose, AT; Joshi, SV; Kunche, UK; Wang, FX; Deshmukh, SA; A review of recent advances and applications of machine learning in tribology 25(6), pp. 4408-4443, 2023	2023	https://pubs.rsc.org/en/content/articlelanding/2023/CP/D2CP03692D	3.3	4.30

7	Birleanu, C; Pustan, M; Cioaza, M; Molea, A; Popa, F; Contiu, G; Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation, SCIENTIFIC REPORTS 12(1), article no. 5201, 2022	Li, W; Luo, T; Zhu, CX; Zhang, B; Cao, BQ; Graphene/h-BN Nanosheet/Nanosphere Composites Constructed by In Situ Laser Irradiation with Synergistically Improved Tribological Performance, INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH 62(1), 2023	https://pubs.acs.org/doi/10.1021/acs.iecr.2c03639	4.2	5.20
8	Birleanu, C; Pustan, M; Cioaza, M; Molea, A; Popa, F; Contiu, G; Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation, SCIENTIFIC REPORTS 12(1), article no. 5201, 2022	Kamel, BM; Mohamed, A; Gad, MS; Tribological and rheological properties of calcium grease with hybrid nano additives, JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY, DOI:10.1080/01932691.2022.2163660, 2023	https://www.tandfonline.com/doi/full/10.1080/01932691.2022.2163660	2.2	3.20
9	Birleanu, C; Pustan, M; Cioaza, M; Molea, A; Popa, F; Contiu, G; Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation, SCIENTIFIC REPORTS 12(1), article no. 5201, 2022	Del Rio, JML; Marino, F; Lopez, ER; Goncalves, DEP; Seabra, JHO; Fernandez, J; Tribological enhancement of potential electric vehicle lubricants using coated TiO2 nanoparticles as additives, JOURNAL OF MOLECULAR LIQUIDS 371, article no. 121097, 2023	https://www.sciencedirect.com/science/article/pii/S0167732222026368?via=ihub	6.0	7.00
10	Birleanu, C; Pustan, M; Cioaza, M; Molea, A; Popa, F; Contiu, G; Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation, SCIENTIFIC REPORTS 12(1), article no. 5201, 2022	Nabhan, A; Rashed, A; Taha, M; Abouzeid, R; Barhoum, A; Tribological Performance for Steel-Steel Contact Interfaces Using Hybrid MWCNTs/Al2O3 Nanoparticles as Oil-Based Additives in Engines, FLUIDS 7(12), article no. 364, 2023	https://www.mdpi.com/2311-5521/7/12/364	1.9	2.90
11	Birleanu, C; Pustan, M; Cioaza, M; Molea, A; Popa, F; Contiu, G; Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation, SCIENTIFIC REPORTS 12(1), article no. 5201, 2022	Kotkowiak, M; Piasecki, A; Characterization of Wear Properties of Pure Nickel Modified by Ni-Cr Composite and CaF2 Solid Lubricant Addition, MATERIALS 15(21), article no. 7511, 2022	https://www.mdpi.com/1996-1944/15/21/7511	3.4	4.40
12	Birleanu, C; Pustan, M; Cioaza, M; Molea, A; Popa, F; Contiu, G; Effect of TiO2 nanoparticles on the tribological properties of lubricating oil: an experimental investigation, SCIENTIFIC REPORTS 12(1), article no. 5201, 2022	Kamel, BM; Arafa, EL; Mohamed, A; Tribological and rheological properties of the lubricant containing hybrid graphene nanosheets (GNS)/titanium dioxide (TiO2) nanoparticles as an additive on calcium grease, JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY DOI:10.1080/01932691.2022.2122491, 2022	https://www.tandfonline.com/doi/full/10.1080/01932691.2022.2122491	2.2	3.20

13	Popescu, V; Molea, A ; Moldovan, M ; Lopes, PM ; Moldovan, AM; Popescu, GL; The Influence of Enzymatic Hydrolysis of Whey Proteins on the Properties of Gelatin-Whey Composite Hydrogels, MATERIALS Volume 14, Issue 13, 2021, DOI10.3390/ma14133507	Bora, AFM; Kouame, KJEP; Li, XD ; Liu, L ; Sun, Y ; Ma, Q; Liu, YB; Development, characterization and probiotic encapsulating ability of novel <i>Mimordica charantia</i> bioactive polysaccharides/whey protein isolate composite gels, INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES Volume 225, Page 454-466, 2023, DOI10.1016/j.ijbiomac.2022.11.097	2023	https://www.sciencedirect.com/science/article/abs/pii/S0141813022026563?via%3Dihub	8.2	9.20
14	Popescu, V; Molea, A ; Moldovan, M ; Lopes, PM ; Moldovan, AM; Popescu, GL; The Influence of Enzymatic Hydrolysis of Whey Proteins on the Properties of Gelatin-Whey Composite Hydrogels, MATERIALS Volume 14, Issue 13, 2021, DOI10.3390/ma14133507	Kowalczyk, D ; Szymanowska, U ; Skrzypek, T; Basiura-Cembala, M ; Bartkowiak, A ; Lupina, K ; A Comprehensive Study on Gelatin- and Whey Protein Isolate-Based Edible Films as Carriers of Fireweed (<i>Epilobium angustifolium</i> L.) Extract, FOOD AND BIOPROCESS TECHNOLOGY Volume 15, Issue 11, Page 2547-2561, 2022, DOI10.1007/s11947-022-02898-x	2022	https://link.springer.com/article/10.1007/s11947-022-02898-x	5.6	6.60
15	Popescu, V; Molea, A ; Moldovan, M ; Lopes, PM ; Moldovan, AM; Popescu, GL; The Influence of Enzymatic Hydrolysis of Whey Proteins on the Properties of Gelatin-Whey Composite Hydrogels, MATERIALS Volume 14, Issue 13, 2021, DOI10.3390/ma14133507	Mouzai, A; Boughellouta, H ; Pintado, ME; Whey protein-derived peptides: The impact of chicken pepsin hydrolysis upon whey proteins concentrate on their biological and technological properties, INTERNATIONAL DAIRY JOURNAL Volume 134, Article No. 105442, 2022, DOI10.1016/j.idatvi.2022.105442	2022	https://www.sciencedirect.com/science/article/abs/pii/S0958694622001261?via%3Dihub	3.1	4.10
16	Moldovanu, D; Molea, A ; Barabas, I ; Preliminary results on nano-diamond and nanographite testing as additive for an engine lubrication oil; INTERNATIONAL CONFERENCE ON TRIBOLOGY (ROTRIB'19) Volume 724, DOI10.1088/1757-899X/724/1/012047, IOP Conference Series-Materials Science and Engineering article no.012047, 2020	Ali, ZAAA ; Takhakh, AM ; Al-Waily, M; MATERIALS TODAY-PROCEEDINGS Volume 52, Page 1442-1450, Special Issue SI, Part 3, DOI10.1016/j.matpr.2021.11.193, 2022	2022	https://www.sciencedirect.com/science/article/abs/pii/S221478532107200X?via%3Dihub	0.0	1.00
17	Moldovanu, D; Molea, A ; Barabas, I ; Preliminary results on nano-diamond and nanographite testing as additive for an engine lubrication oil; INTERNATIONAL CONFERENCE ON TRIBOLOGY (ROTRIB'19) Volume 724, DOI10.1088/1757-899X/724/1/012047, IOP Conference Series-Materials Science and Engineering article no.012047, 2020	Guo, JD ; Zhao, YX; Sun, B; Wang, PC; Wang, ZJ; Dong, H ; Research Progress of Nano Copper Lubricant Additives on Engineering Tribology METALS Volume 11 Issue 12, ARTICLE MO. 2006, DOI10.3390/met11122006, 2021	2021	https://www.mdpi.com/2075-4701/11/12/2006	2.9	3.90

18	Moldovanu, D; Molea, A ; Barabas, I ; Preliminary results on nano-diamond and nanographite testing as additive for an engine lubrication oil; INTERNATIONAL CONFERENCE ON TRIBOLOGY (ROTRIB'19) Volume 724, DOI10.1088/1757-899X/724/1/012047, IOP Conference Series-Materials Science and Engineering article no.012047, 2020	Abdel-Rehim, AA; Akl, S; Elsoudy, S; Investigation of the Tribological Behavior of Mineral Lubricant Using Copper Oxide Nano Additives, LUBRICANTS, Volume 9, Issue 2, ARTICLE NO. 16, DOI10.3390/lubricants9020016, 2021	https://www.mdpi.com/2075-4442/9/2/16	3.5	4.50
19	Todorut, A; Molea, A; Barabas, I; Predicting the Temperature and Composition - Dependent Density and Viscosity of Diesel Fuel - Ethanol Blends, PERIODICA POLYTECHNICA-CHEMICAL ENGINEERING Volume 64, Issue 2, Page 213-220, 2020, DOI10.3311/PPch.14757	Gasparetto, H; Nunes, ALB; de Castilhos, F; Salau, NPG; Soybean oil extraction using ethyl acetate and 1-butanol: From solvent selection to thermodynamic assessment, JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY Volume 113, Page 450-460, 2022, DOI10.1016/j.jiec.2022.06.020	https://www.sciencedirect.com/science/article/abs/pii/S1226086X22003446?via%3Dihub	6.1	7.10
20	Todorut, A; Molea, A; Barabas, I; Predicting the Temperature and Composition - Dependent Density and Viscosity of Diesel Fuel - Ethanol Blends, PERIODICA POLYTECHNICA-CHEMICAL ENGINEERING Volume 64, Issue 2, Page 213-220, 2020, DOI10.3311/PPch.14757	Nita, I; Iulian, O; Osman, S; Chis, T; MEASUREMENTS AND CORRELATIONS OF THE VISCOSITY OF ISOPROPANOL MIXTURES WITH DIESEL FUEL AND BIODIESEL; STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA Volume 67, Issue 2, Page 7-21, 2022, DOI10.24193/subchem.2022.2.01	http://www.chem.ubbcluj.ro/~studiachemia/issues/chemia2022_2/01Nita_et al_7_21.pdf	0.3	1.30
21	Todorut, A; Molea, A; Barabas, I; Predicting the Temperature and Composition - Dependent Density and Viscosity of Diesel Fuel - Ethanol Blends, PERIODICA POLYTECHNICA-CHEMICAL ENGINEERING Volume 64, Issue 2, Page 213-220, 2020, DOI10.3311/PPch.14757	Razaq, L; Farooq, M; Mujtaba, MA; Sher, F; Farhan, M; Hassan, MT; Soudagar, MEM; Atabani, AE; Kalam, MA; Imran, M; Modeling Viscosity and Density of Ethanol-Diesel-Biodiesel Ternary Blends for Sustainable Environment; SUSTAINABILITY Volume 12, Issue 12, Article no. 5186, 2020, DOI10.3390/su12125186	https://www.mdpi.com/2071-1050/12/12/5186	3.9	4.90
22	Barabas, I; Molea, A; Suci, R; Fuel Properties of Diesel-Ethanol-Tetrahydrofuran Blends: Experimental and Theoretical Approaches; PROCEEDINGS OF THE 4TH INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING (AMMA 2018); Page 197-208, 2019, DOI10.1007/978-3-319-94409-8_24	Wang, Z; Hu, Y; Jiang, Y; Cheng, C; Qiu, R; Gutheil, E; A study on puffing and micro-explosion characteristics of diesel/ethanol/tetrahydrofuran blend fuel droplets; ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, Volume 45, Issue 2, Page 4160-4177, 2023, DOI10.1080/15567036.2023.2202646	https://www.tandfonline.com/doi/abs/10.1080/15567036.2023.2202646?journalCode=ueso20	2.9	3.90

23	Barabas, I; Molea, A; Suci, R; Fuel Properties of Diesel-Ethanol-Tetrahydrofuran Blends: Experimental and Theoretical Approaches; PROCEEDINGS OF THE 4TH INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING (AMMA 2018); Page 197-208, 2019, DOI10.1007/978-3-319-94409-8_24	Al-Lami, M; Havasi, D; Batha, B; Pusztai, E; Mika, LT; Isobaric Vapor-Liquid Equilibria for Binary Mixtures of Biomass-Derived gamma-Valerolactone plus Tetrahydrofuran and 2-Methyltetrahydrofuran; JOURNAL OF CHEMICAL AND ENGINEERING DATA Volume 65, Issue 6, Page 3063-3071, 2020, DOI10.1021/acs.jced.0c00084	2020	https://pubs.acs.org/doi/10.1021/acs.jced.0c00084	2.6	3.60
24	Molea, A; Barabas, I; Suci, R; Influence of TiO2 Nano-particles Content on Physicochemical and Tribological Properties of Lubricant Oil; PROCEEDINGS OF THE 4TH INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING (AMMA 2018), Page 190-196, 2019, DOI10.1007/978-3-319-94409-8_23	Roselina, NRN; Mohamad, NS; Kasolang, S; Evaluation of TiO2 nanoparticles as viscosity modifier in palm oil bio-lubricant; 6TH INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING 2019 (ICAME 2019), Volume 834, article no. 012032, 2020, DOI10.1088/1757-899X/834/1/012032	2020	https://iopscience.iop.org/article/10.1088/1757-899X/834/1/012032	0.0	1.00
25	Merie, VV; Molea, A; Burnete, VN; Neamtu, BV; Negrea, G; Structural and optical characterization of titanium nitride thin films deposited by magnetron sputtering; POWDER METALLURGY AND ADVANCED MATERIALS Volume 8, Page134-142, 2018, DOI10.21741/9781945291999-15	Ravikumar, MP; Quach, TA; Urupalli, B; Murikinati, MK; Venkatarishnan, SM; Do, TO; Mohan, S; Observation of inherited plasmonic properties of TiN in titanium oxynitride (TiOxNy) for solar-drive photocatalytic applications; ENVIRONMENTAL RESEARCH Volume 229, article no. 115961, 2023, DOI10.1016/j.envres.2023.115961	2023	https://www.sciencedirect.com/science/article/abs/pii/S0013935123007533?via%3Dihub#preview-section-references	8.3	9.30
26	Merie, VV; Molea, A; Burnete, VN; Neamtu, BV; Negrea, G; Structural and optical characterization of titanium nitride thin films deposited by magnetron sputtering; POWDER METALLURGY AND ADVANCED MATERIALS Volume 8, Page134-142, 2018, DOI10.21741/9781945291999-15	Konusev, F; Pavlov, S; Lauk, A; Kabyshev, A; Novikov, V; Gadirov, R; Tarbokov, V; Remnev, G; Effect of short-pulsed ion irradiation on the optical and electrical properties of titanium nitride films deposited by reactive magnetron sputtering; NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS Volume 526, Page 51-59, 2022, DOI10.1016/j.nimb.2022.06.011	2022	https://www.sciencedirect.com/science/article/abs/pii/S0168583X2200163X?via%3Dihub	1.3	2.30
27	Merie, VV; Molea, A; Burnete, VN; Neamtu, Molea, A; Popescu, V; Popescu, GI; Suci, RC; Dinescu, A; Moldovan, M; Synthesis and characterisation of titanium dioxide nanoparticles sensitised with natural chlorophyll dye extracted from Mentha leaves; JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume 19, Issue 3-4, Page 272-277, 2017	Ma, YC; Yang, DY; Jiang, Q; Zhu, K; Yuan, HY; Barbinta-Patrascu, ME; Ungureanu, C; Suica-Bunghiez, IR; Iordache, AM; Petrovic, SM; Ispas, A; Zgura, I; Performant silver-based biohybrids generated from orange and grapefruit wastes; JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume 20, Issue 9-10, Page 551-557, 2018	2020	https://www.sciencedirect.com/science/article/pii/S1566514018300653	2.3	3.30
28		https://oam.inoe.ro/articles/performant-silver-based-biohybrids-generated-from-orange-and-grapefruit-wastes/fulltext	2018		0.5	1.50

	<p>Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757- 899X/252/1/012096</p>	<p>Biswas, A; Wang, HC; Autonomous Vehicles Enabled by the Integration of IoT, Edge Intelligence, 5G, and Blockchain; SENSORS Volume 23, Issue 4, article no. 1963, 2023, DOI10.3390/s23041963</p>	<p>2023</p>	<p>https://www.mdpi.com/1424-8220/23/4/1963</p>	<p>3.9</p>	<p>4.90</p>
<p>30</p>	<p>Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757- 899X/252/1/012096</p>	<p>Frizziero, I; Donnici, G; Galie, G; Pala, G; Pilla, M; Zamagna, E; QFD and SDE Methods Applied to Autonomous Minibus Redesign and an Innovative Mobile Charging System (MBS); INVENTIONS Volume 8, Issue 1, article no. 1, 2023, DOI10.3390/inventions8010001</p>	<p>2023</p>	<p>https://www.mdpi.com/2411-5134/8/1/1</p>	<p>3.4</p>	<p>4.40</p>
<p>31</p>	<p>Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757- 899X/252/1/012096</p>	<p>Katis, C; Karlis, A; Evolution of Equipment in Electromobility and Autonomous Driving Regarding Safety Issues; ENERGIES Volume 16, Issue 3, article no. 1271, 2023, DOI10.3390/en16031271</p>	<p>2023</p>	<p>https://www.mdpi.com/1996-1073/16/3/1271</p>	<p>3.2</p>	<p>4.20</p>
<p>32</p>	<p>Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757- 899X/252/1/012096</p>	<p>Zsombok, I; Zoldy, M; Modelling, Simulation and Validation of Hybrid Vehicle Fuel Consumption; ACTA POLYTECHNICA HUNGARICA Volume 20, Issue 5, Page 61-74, 2023</p>	<p>2023</p>	<p>http://acta.uni-obuda.hu/Zsombok_Zoldy_134.pdf</p>	<p>1.7</p>	<p>2.70</p>
<p>33</p>	<p>Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757- 899X/252/1/012096</p>	<p>Li, X; Xiao, YW; Zhao, XD; Ma, XW; Wang, XT; Modeling mixed traffic flows of human-driving vehicles and connected and autonomous vehicles considering human drivers' cognitive characteristics and driving behavior interaction; PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS Volume 609, article no. 128368, 2023, DOI10.1016/j.physa.2022.128368</p>	<p>2023</p>	<p>https://www.sciencedirect.com/science/article/abs/pii/S0378437122009268?via%3Dihub</p>	<p>3.3</p>	<p>4.30</p>

34	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012096	Balachandran, A; Chen, TL; Goh, JYM; McGill, S; Rosman, G; Stent, S; Leonard, JJ; Human-Centric Intelligent Driving: Collaborating with the Driver to Improve Safety; ROAD VEHICLE AUTOMATION 9, Page 85-109, 2023 DOI:10.1007/978-3-031-11112-9_8	2023	https://link.springer.com/chapter/10.1007/978-3-031-11112-9_8	0.0	1.00
35	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012096	Raouf, I; Khan, A; Khalid, S; Sohail, M; Azad, MM; Kim, HS; Sensor-Based Prognostic Health Management of Advanced Driver Assistance System for Autonomous Vehicles: A Recent Survey; MATHEMATICS Volume 10, Issue 18, article no. 3233, 2022, DOI:10.3390/math10183233	2022	https://www.mdpi.com/2227-7390/10/18/3233	2.4	3.40
36	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012096	Al-Saadi, Z; Van, DP; Amani, AM; Fayyazi, M; Sajjadi, SS; Pham, DB; Jazar, R; Khayyam, H; Intelligent Driver Assistance and Energy Management Systems of Hybrid Electric Autonomous Vehicles; SUSTAINABILITY Volume 14, Issue 15, article no. 9378, 2022, DOI:10.3390/su14159378	2022	https://www.mdpi.com/2071-1050/14/15/9378	3.9	4.90
37	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012096	Malarczyk, M; Tapamo, JR; Kaminski, M; Application of Neural Data Processing in Autonomous Model Platform-A Complex Review of Solutions, Design and Implementation; ENERGIES Volume 15, Issue 13, article no. 4766, 2022, DOI:10.3390/en15134766	2022	https://www.mdpi.com/1996-1073/15/13/4766	3.2	4.20
38	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012096	Memon, R; Arezoo, K; Alipour, K; Ghamari, M; Autonomous Driving Systems: An Overview of Challenges in Safety, Reliability and Privacy; 2022 15TH INTERNATIONAL CONFERENCE ON HUMAN SYSTEM INTERACTION (HSI)	2022	https://ieeexplore.ieee.org/document/9869489	0.0	1.00

39	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012096	Shahbakhsh, M; Emad, GR; Cahoon, S; Industrial revolutions and transition of the maritime industry: The case of Seafarer's role in autonomous shipping; ASIAN JOURNAL OF SHIPPING AND LOGISTICS Volume 38, Issue 1, Page 10-18, 2022, DOI10.1016/j.ajsl.2021.11.004	2022	https://www.sciencedirect.com/science/article/pii/S2092521221000511?via%3Dihub	3.1	4.10
40	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012096	Chen, JY; Chen, HB; Gao, JB; Dave, K; Quaranta, R; Business models and cost analysis of automated valet parking and shared autonomous vehicles assisted by internet of things; PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART D-JOURNAL OF AUTOMOBILE ENGINEERING Volume 235, Issue 9, Page 2456-2469, 2021, DOI10.1177/095440702199444	2021	https://journals.sagepub.com/doi/10.1177/0954407021994445	1.7	2.70
41	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012096	Uzair, M; Who is Liable When a Driverless Car Crashes?; WORLD ELECTRIC VEHICLE JOURNAL Volume 12, Issue 2, article no. 62, 2021, DOI10.3390/wevj12020062	2021	https://www.mdpi.com/2032-6653/12/2/62	2.3	3.30
42	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012096	Balasekaran, G; Jayakumar, S; de Prado, RP; An Intelligent Task Scheduling Mechanism for Autonomous Vehicles via Deep Learning; ENERGIES Volume 14, Issue 6, article no. 1788, 2021, DOI10.3390/en14061788	2021	https://www.mdpi.com/1996-1073/14/6/1788	3.2	4.20
43	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012096	Khatab, E; Onsy, A; Varley, M; Abouelfarag, A; Vulnerable objects detection for autonomous driving: A review; INTEGRATION-THE VLSI JOURNAL Volume 78, 2021, DOI10.1016/j.vlsi.2021.01.002	2021	https://www.sciencedirect.com/science/article/abs/pii/S0167926021000055?via%3Dihub	1.9	2.90

44	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012096	Franke, IS; Kohler, A; Elze, A; Control the Autonomous! - User Interfaces for Monitoring and Dispatching Autonomous Vehicles; 2021 IEEE INTELLIGENT TRANSPORTATION SYSTEMS CONFERENCE (ITSC), Page 2292-2297, DOI10.1109/ITSC48978.2021.9564635	2021	https://ieeexplore.ieee.org/document/9564635	0.0	1.00
45	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012097	Bae, S; Isele, D; Fujimura, K; Moura, SJ; Risk-Aware Lane Selection on Highway with Dynamic Obstacles; 2021 32ND IEEE INTELLIGENT VEHICLES SYMPOSIUM (IV), Page 652-659, DOI10.1109/IV48863.2021.9575610	2021	https://ieeexplore.ieee.org/document/9575610	0.0	1.00
46	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012098	Hoque, S; Arafat, MY; Xu, SX; Maiti, A; Wei, YC; A Comprehensive Review on 3D Object Detection and 6D Pose Estimation With Deep Learning; IEEE ACCESS Volume 9, Page 143746-143770, 2021, DOI10.1109/ACCESS.2021.3114399	2021	https://ieeexplore.ieee.org/document/9543652	3.9	4.90
47	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012099	Lederman, C; Kirk, KT; Perry, V; Kraczek, B; Simulation environment for developing of quad-copter controls incorporating physical environment in urban setting; UNMANNED SYSTEMS TECHNOLOGY XXIII Volume 11758, article no. 117580G, 2021, DOI10.1117/12.2586218	2021	https://www.spiedigitallibrary.org/conference-proceedings-of-spie/11758/2586218/Simulation-environment-for-quad-copter-controls-incorporating-physical/10.1117/12.2586218.short?SSO=1	0.0	1.00
48	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012100	Lombard, A; Buisson, J; Abbas-Turki, A; Galland, S; Koukam, A; Curvature-Based Geometric Approach for the Lateral Control of Autonomous Cars; JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS Volume 357, Issue 14, Page 9378-9398, 2020, DOI10.1016/j.ifranklin.2020.07.015	2020	https://www.sciencedirect.com/science/article/abs/pii/S0016003220304628?via=ihub	4.1	5.10

49	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757- 899X/252/1/012101	Alawadhi, M; Almazrouie, J; Kamil, M; Khalil, KA; A systematic literature review of the factors influencing the adoption of autonomous driving; INTERNATIONAL JOURNAL OF SYSTEM ASSURANCE ENGINEERING AND MANAGEMENT Volume 11, Issue 6, Page 1065-1082, Special Issue 5j, 2020, DOI10.1007/s13198-020-00961-4	2020	https://link.springer.com/article/10.1007/s13198-020-00961-4	2.0	3.00
50	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757- 899X/252/1/012102	Horeis, TF; Kain, T; Muller, JS; Plinkke, F; Heinrich, J; Wesche, M; Decke, H; A Reliability Engineering Based Approach to Model Complex and Dynamic Autonomous Systems; 2020 INTERNATIONAL CONFERENCE ON CONNECTED AND AUTONOMOUS DRIVING (METROCAD 2020), Page 76-84, 2020, DOI10.1109/MetroCAD48866.2020.00020	2020	https://ieeexplore.ieee.org/document/9138648	0.0	1.00
51	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757- 899X/252/1/012103	Cisneros, JRA; Fernandez-y-Fernandez, CA; Vazquez, JJ; Blockchain Software System Proposal Applied to Electric Self-driving Cars Charging Stations: A TSP Academic Project; 2020 8TH EDITION OF THE INTERNATIONAL CONFERENCE IN SOFTWARE ENGINEERING RESEARCH AND INNOVATION (CONISOF 2020), Page 174-179, 2020, DOI10.1109/CONISOF50191.2020.00033	2020	https://ieeexplore.ieee.org/document/9307816	0.0	1.00
52	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757- 899X/252/1/012104	Alkinani, MH; Khan, WZ; Arshad, Q; Detecting Human Driver Inattentive and Aggressive Driving Behavior Using Deep Learning: Recent Advances, Requirements and Open Challenges; IEEE ACCESS Volume 8, Page105008-105030, 2020, DOI10.1109/ACCESS.2020.2999829	2020	https://ieeexplore.ieee.org/document/9107077	3.9	4.90
53	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757- 899X/252/1/012105	Tremoulet, PD; Seacrist, T; McIntosh, CW; Loeb, H; DiPietro, A; Tushak, S; Transporting Children in Autonomous Vehicles: An Exploratory Study; HUMAN FACTORS Volume 62, Issue 2, Page 278-287, Special Issue SI, article no. 0018720819853993, 2020, DOI10.1177/0018720819853993	2020	https://journals.sagepub.com/doi/10.1177/0018720819853993	3.3	4.30

54	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012106	Zoldy, M; Legal Barriers of Utilization of Autonomous Vehicles as Part of Green Mobility; PROCEEDINGS OF THE 4TH INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING (AMMA 2018), Page 243-248, 2019, DOI10.1007/978-3-319-94409-8_29	2019	https://link.springer.com/chapter/10.1007/978-3-319-94409-8_29	0.0	1.00
55	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012107	Kouchak, SM; Gaffar, A; Estimating the Driver Status Using Long Short Term Memory; LECTURE NOTES IN ARTIFICIAL INTELLIGENCE Volume 11713, Page 67-77, 2019, DOI10.1007/978-3-030-29726-8_5	2019	https://link.springer.com/chapter/10.1007/978-3-030-29726-8_5	0.3	1.30
56	Barabas, I; Todorut, A; Cordos, N; Molea, A; Current challenges in autonomous driving; INTERNATIONAL CONGRESS OF AUTOMOTIVE ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, 2017, DOI10.1088/1757-899X/252/1/012108	Yu, JK; Petnga, L; Space-based Collision Avoidance Framework for Autonomous Vehicles; CYBER PHYSICAL SYSTEMS AND DEEP LEARNING, Volume 140, Page 37-45, 2018 DOI10.1016/j.procs.2018.10.290	2018	https://www.sciencedirect.com/science/article/pii/S187705091831963X?via%3Dihub	0.0	1.00
57	Molea, A; Visuian, P; Barabas, I; Suci, RC; Burnete, NV; Key fuel properties and engine performances of diesel-ethanol blends, using tetrahydrofuran as surfactant additive; INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING - MOBILITY ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, article no. 012077, 2017, DOI10.1088/1757-899X/252/1/012077	Wu, YY; Zhang, XY; Zhang, Z; Wang, XC; Geng, ZL; Jin, C; Liu, HF; Yao, MF; Effects of diesel-ethanol-THF blend fuel on the performance and exhaust emissions on a heavy-duty diesel engine; FUEL Volume 271, article no. 117633, 2020, DOI10.1016/j.fuel.2020.117633	2020	https://www.sciencedirect.com/science/article/abs/pii/S0016236120306281?via%3Dihub	7.4	8.40
58	Molea, A; Visuian, P; Barabas, I; Suci, RC; Burnete, NV; Key fuel properties and engine performances of diesel-ethanol blends, using tetrahydrofuran as surfactant additive; INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING - MOBILITY ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, article no. 012077, 2017, DOI10.1088/1757-899X/252/1/012078	Al-Lami, M; Havasi, D; Batha, B; Pusztai, E; Mika, LT; Isobaric Vapor-Liquid Equilibria for Binary Mixtures of Biomass-Derived gamma-Valerolactone plus Tetrahydrofuran and 2-Methyltetrahydrofuran; JOURNAL OF CHEMICAL AND ENGINEERING DATA Volume 65, Issue 6, Page 3063-3071, 2020, DOI10.1021/acs.jced.0c00084	2020	https://pubs.acs.org/doi/10.1021/acs.jced.0c00084	2.6	3.60

59	Molea, A; Visulian, P; Barabas, I; Suciul, RC; Burnete, NV; Key fuel properties and engine performances of diesel-ethanol blends, using tetrahydrofuran as surfactant additive; INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING - MOBILITY ENGINEERING AND ENVIRONMENT (CAR2017) Volume 252, article no. 012077, 2017, DOI10.1088/1757-899X/252/1/012079	Jin, C; Zhang, XY; Geng, ZL; Pang, XT; Wang, XC; Ji, J; Wang, G; Liu, HF; Effects of various co-solvents on the solubility between blends of soybean oil with either methanol or ethanol; FUEL Volume 244, Page 461-471, 2019, DOI:10.1016/j.fuel.2019.01.187	2019	https://www.sciencedirect.com/science/article/abs/pii/S0016236119301875?via%3Dihub	7.4	8.40
60	Rusu, FM; Merie, VV; Pintea, IM; Molea, A; Adhesion analysis for chromium nitride thin films deposited by reactive magnetron sputtering; 7TH INTERNATIONAL CONFERENCE ON ADVANCED CONCEPTS IN MECHANICAL ENGINEERING Volume 147, article no. 012023, 2017, DOI10.1088/1757-899X/147/1/012023	Yuan, HY; Liu, GL; Qiao, ZW; Li, NX; Buenconsejo, PJS; Xi, SB; Karmakar, A; Li, MS; Cai, H; Pennycook, SJ; ADVANCED MATERIALS Volume 33, Issue 29, 2021, DOI:10.1002/adma.20210125	2021	https://onlinelibrary.wiley.com/doi/10.1002/adma.20210125	29.4	30.40
61	Popescu, GL; Filip, N; Molea, A; Popescu, V; THE EFFECT OF USING PYROLYSIS OILS FROM POLYETHYLENE AND DIESEL ON THE POLLUTANT EMISSIONS FROM A SINGLE CYLINDER DIESEL ENGINE; STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA Volume 60, Issue 4, Page 273-288, 2016	Heidari, AA; Mahdavi, H; TFC organic solvent nanofiltration membrane fabricated by a novel HDPE membrane support covered by manganese dioxide/tannic acid-Fe3+ layers; JOURNAL OF THE TAIWAN INSTITUTE OF CHEMICAL ENGINEERS Volume 135, article no. 104363, 2022, DOI:10.1016/j.jtice.2022.104363	2022	https://www.sciencedirect.com/science/article/abs/pii/S1876107022001602?via%3Dihub	5.7	6.70
62	Popescu, GL; Filip, N; Molea, A; Popescu, V; THE EFFECT OF USING PYROLYSIS OILS FROM POLYETHYLENE AND DIESEL ON THE POLLUTANT EMISSIONS FROM A SINGLE CYLINDER DIESEL ENGINE; STUDIA UNIVERSITATIS BABES-BOLYAI CHEMIA Volume 60, Issue 4, Page 273-288, 2017	Signorini, C; Marinelli, S; Voipini, V; Nobili, A; Radi, E; Rimini, B; Performance of concrete reinforced with synthetic fibres obtained from recycling end-of-life sport pitches; JOURNAL OF BUILDING ENGINEERING Volume 53, article no. 104552, 2022, DOI:10.1016/j.jobe.2022.104552	2022	https://www.sciencedirect.com/science/article/abs/pii/S2352710222005356?via%3Dihub	6.4	7.40
63	Molea, A; Popescu, V; Rowson, NA; Cojocaru, I; Dinescu, A; Dehelean, A; Lazar, M; Correlation of Physicochemical Properties with the Catalytic Performance of Fe-Doped Titanium Dioxide Powders; INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH Volume 54, Issue 30, Page 7346-7351, 2015, DOI10.1021/acs.iecr.5b00246	Gao, XT; Zhang, S; Liu, JC; Xu, SQ; Li, ZH; Enhanced active oxidative species generation over Fe-doped defective TiO2 nanosheets for boosted photodegradation; RSC ADVANCES Volume 10, Issue 67, Page 40619-40624, 2020, DOI:10.1039/d0ra08116g	2020	https://pubs.rsc.org/en/content/articlelanding/2020/RA/D0RA08116G	3.9	4.90

64	Molea, A; Popescu, V; Rowson, NA; Cojocaru, I; Dinescu, A; Dehelean, A; Lazar, M; Correlation of Physicochemical Properties with the Catalytic Performance of Fe-Doped Titanium Dioxide Powders; INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH Volume 54, Issue 30, Page 7346-7351, 2015, DOI10.1021/acs.iecr.5b00247	Shi, XC; Zhang, YB; Liu, XY; Jin, HH; Lv, HY; He, SJ; Hao, HG; Li, CY; A Mild in-Situ Method to Construct Fe-Doped Cauliflower-Like Rutile TiO2 Photocatalysts for Degradation of Organic Dye in Wastewater; CATALYSTS Volume 9, Issue 5, article no. 426, 2019, DOI10.3390/catal9050426	2019	https://www.mdpi.com/2073-4344/9/5/426	3.9	4.90
65	Molea, A; Popescu, V; Rowson, NA; Cojocaru, I; Dinescu, A; Dehelean, A; Lazar, M; Correlation of Physicochemical Properties with the Catalytic Performance of Fe-Doped Titanium Dioxide Powders; INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH Volume 54, Issue 30, Page 7346-7351, 2015, DOI10.1021/acs.iecr.5b00248	Xu, CY; Zhang, YW; Chen, JC; Lin, JY; Zhang, XH; Wang, ZH; Zhou, JH; Enhanced mechanism of the photo-thermochemical cycle based on effective Fe-doping TiO2 films and DFT calculations; APPLIED CATALYSIS B-ENVIRONMENTAL Volume 204, Page 324-334, 2017, DOI10.1016/j.apcatb.2016.11.027	2017	https://www.sciencedirect.com/science/article/abs/pii/S0926337316308852?via%3Dihub	22.1	23.10
66	Molea, A; Popescu, V; Rowson, NA; Cojocaru, I; Dinescu, A; Dehelean, A; Lazar, M; Correlation of Physicochemical Properties with the Catalytic Performance of Fe-Doped Titanium Dioxide Powders; INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH Volume 54, Issue 30, Page 7346-7351, 2015, DOI10.1021/acs.iecr.5b00249	He, HN; Sun, D; Zhang, Q; Fu, F; Tang, YG; Guo, J; Shao, MH; Wang, HY; Iron-Doped Cauliflower-Like Rutile TiO2 with Superior Sodium Storage Properties; ACS APPLIED MATERIALS & INTERFACES Volume 9, Issue 7, Page 6093-6103, 2017, DOI10.1021/acsami.6b15516	2017	https://pubs.acs.org/doi/10.1021/acsami.6b15516	9.5	10.50
67	Molea, A; Popescu, V; Rowson, NA; Cojocaru, I; Dinescu, A; Dehelean, A; Lazar, M; Correlation of Physicochemical Properties with the Catalytic Performance of Fe-Doped Titanium Dioxide Powders; INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH Volume 54, Issue 30, Page 7346-7351, 2015, DOI10.1021/acs.iecr.5b00250	Liu, K; Rykov, AI; Wang, JH; Zhang, T; Recent Advances in the Application of Mo beta bauer Spectroscopy in Heterogeneous Catalysis; ADVANCES IN CATALYSIS Volume 58, Page 1-142, 2015, DOI10.1016/bs.acat.2015.09.001	2015	https://www.sciencedirect.com/science/article/abs/pii/S0360056415000024?via%3Dihub	6.8	7.80
68	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI10.1016/j.powtec.2013.10.040	Mohsin, M; Bhatti, IA; Ashar, A; Iqbal, J; Shahid, M; Solar-energy-driven CuCo3O4@CP nanocomposite thin-film: an efficient photocatalyst for acid red 73 degradation; ZEITSCHRIFT FUR PHYSIKALISCHE CHEMIE-INTERNATIONAL JOURNAL OF RESEARCH IN PHYSICAL CHEMISTRY & CHEMICAL PHYSICS Volume 237, Issue 7, Page 901-921, 2023, DOI10.1515/zpch-2022-0120	2023	https://www.degruyter.com/document/doi/10.1515/zpch-2022-0120/html	2.5	3.50

69	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI10.1016/j.powtec.2013.10.041	Suryani, S; Damayanti, A; Heryanto, H; Rahmat, R; Syarifuddin, S; Tahir, D; High efficiency self-cleaning of nanocomposites ZnO with additional chitosan for helping electron and hole transport; INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES Volume 224, Page 125-132, 2023, DOI10.1016/j.ijbiomac.2022.10.109	2023	https://www.sciencedirect.com/science/article/abs/pii/S0141813022023558?via%3Dihub	8.2	9.20
70	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI10.1016/j.powtec.2013.10.042	Verma, N; Chundawat, TS; Chandra, H; Vaya, D; An efficient time reductive photocatalytic degradation of carcinogenic dyes by TiO2-GO nanocomposite; MATERIALS RESEARCH BULLETIN Volume 158, 2023, DOI10.1016/j.matresbull.2022.112043	2023	https://www.sciencedirect.com/science/article/abs/pii/S0025540822003142?via%3Dihub	5.4	6.40
71	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI10.1016/j.powtec.2013.10.042	Muhimnah, LC; Peng, YH; Ho, CH; Light emission, structure-phase evolution, and photocatalytic behavior in full-series multilayered GaTe1-xSx (0 ≤ x ≤ 1) with direct-transition edge; MATERIALS TODAY ADVANCES Volume 21, 2024, DOI10.1016/j.mtadv.2023.100450	2024	https://www.sciencedirect.com/science/article/pii/S2590049823001108	10	11.00
72	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI10.1016/j.powtec.2013.10.042	Meimori, MA; Akhtar, MW; Khan, MY; Khuahwar, MY; Abdullah; Kim, YS; Augmented Catalytic Performance of PVA- Assisted Fe2O3 Nano Catalyst for Water Treatment Synthesized via Green Route; ECS JOURNAL OF SOLID STATE SCIENCE AND TECHNOLOGY; Volume 12, Issue 11; DOI:10.1149/2162-8777ad07f0	2023	https://iopscience.iop.org/article/10.1149/2162-8777ad07f0	2.2	3.20
73	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI10.1016/j.powtec.2013.10.042	Gao, DX; Shu, Z; Huang, XZ; Preparation of Ag@AgCl/GO Material with Efficient Visible-Light Photocatalytic Performance; MATHEMATICAL PROBLEMS IN ENGINEERING, Volume: 2022; DOI:10.1155/2022/4350784	2022	https://www.hindawi.com/journals/mpe/2022/4350784/	1.43	2.43
74	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI10.1016/j.powtec.2013.10.042	Haneef, M; Hussain, Z; Khan, Z; Raza, M; Efficient Photocatalytic Nanocomposites of Anatase/Rutile Mixed-Phase Titania with MWCNTs and WC for Visible and UV-A Ranges; JOURNAL OF CLUSTER SCIENCE; Volume: 34; Issue: 3; Page: 1595-1604; DOI:10.1007/s10876-022-02333-3	2023	https://link.springer.com/article/10.1007/s10876-022-02333-3	2.8	3.80

75	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Paul, S; Rahman, MA; Bin Sharif, S; Kim, JH; Siddiqui, SET; Hossain, MA; TiO2 as an Anode of High-Performance Lithium-Ion Batteries: A Comprehensive Review towards Practical Application; NANOMATERIALS; Volume: 12; Issue: 12; DOI:10.3390/nano12122034	2022	https://www.mdpi.com/2022-9-4991/12/12/2034	5.3	6.30
76	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Jamila, GS; Sajjad, S; Leghari, SAK; Mehboob, M; Flox, C; Enhanced electron transport by Fe2O3 on NCQDs-MgO nanostructure for solar photocatalysis and electrocatalytic water splitting; APPLIED NANOSCIENCE; Volume: 12, Issue: 6; Page: 1815-1827; DOI:10.1007/s13204-022-02424-7	2022	https://link.springer.com/article/10.1007/s13204-022-02424-7	3.869	4.87
77	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Yalcin, M; The effect of pH on the physical and structural properties of TiO2 nanoparticles; JOURNAL OF CRYSTAL GROWTH; Volume: 585; DOI:10.1016/j.jcrysgro.2022.126603	2022	https://www.sciencedirect.com/science/article/abs/pii/S0022024822000914	1.8	2.80
78	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Roy, J; The synthesis and applications of TiO2 nanoparticles derived from phytochemical sources; JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY; Volume: 106; Page: 1-19; DOI:10.1016/j.jiec.2021.10.024	2022	https://www.sciencedirect.com/science/article/abs/pii/S1226086X21005827	6.1	7.10
79	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Mahy, JG; Lejeune, L; Haynes, T; Lambert, SD; Marcilli, RHM; Fustin, CA; Hermans, S; Eco-Friendly Colloidal Aqueous Sol-Gel Process for TiO2 Synthesis: The Peptization Method to Obtain Crystalline and Photoactive Materials at Low Temperature; CATALYSTS; Volume: 11; Issue: 7; DOI:10.3390/catal11070768	2021	https://www.mdpi.com/2021-3-4344/11/7/768	3.9	4.90
80	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Jamali, M; Tehrani, FS; Thermally stable WO3 nanostructure synthesized by hydrothermal method without using surfactant; MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS; Volume: 270; DOI:10.1016/j.mseb.2021.115721	2021	https://www.sciencedirect.com/science/article/abs/pii/S0921510721001811	3.6	4.60

81	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Szo, P; Fr, M; Pichór, W; Effect of sol composition on the properties of TiO2 powders obtained by the sol-gel method; POWDER TECHNOLOGY; Volume: 387; Page: 261-269; DOI:10.1016/j.powtec.2021.04.037	2021	https://www.sciencedirect.com/science/article/abs/pii/S003259102100317X	5.2	6.20
82	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Sridevi, DV; Ramesh, V; Sundaravardivel, E; Ultraviolet light induced dye degradation of methylene blue in the presence of photocatalytic CdSe and ZnSe nanoparticles; MATERIALS TODAY-PROCEEDINGS; Volume: 42; Page: 1244-1250; Part: 2; DOI:10.1016/j.matpr.2020.12.876	2021	https://www.sciencedirect.com/science/article/abs/pii/S2214785320405942	0	1.00
83	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Ding, W; Zheng, H; Sun, Y; Zhao, ZW; Zheng, XY; Wu, YY; Xiao, WL; Activation of MnFe2O4 by sulfite for fast and efficient removal of arsenic (III) at circumneutral pH: Involvement of Mn(III); JOURNAL OF HAZARDOUS MATERIALS; Volume: 403; DOI:10.1016/j.jhazmat.2020.123623	2021	https://www.sciencedirect.com/science/article/abs/pii/S0304389420316095	13.6	14.60
84	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Ardani, MR; Azwina, F; Wern, TY; Ramli, SF; Rezan, SA; Aziz, HA; Mohamed, AR; Characterization of titanium oxide optical band gap produced from leachate sludge treatment with titanium tetrachloride; ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH; Volume: 28; Issue: 14; Page: 17587-17601; DOI:10.1007/s11356-020-12097-w	2021	https://link.springer.com/article/10.1007/s11356-020-12097-w	5.8	6.80
85	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Muthee, DK; Dejene, BF; Impact of Synthesis pH on Nano-structural, Opto-electronic, and Photocatalytic Properties of TiO2 Nanoparticles; JOURNAL OF NANOSTRUCTURES; Volume: 11; Issue: 2; Page: 305-316; DOI:10.22052/JNS.2021.02.011	2021	https://jns.kashanu.ac.ir/article_111601.html	1.4	2.40
86	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Fang, J; Gao, XH; Sun, J; Cai, XB; Ge, GW; Li, Q; An Efficient TiO2/rGO Hybrids with Enhanced Photocatalytic Degradation Toward Reactive Red 195; ENVIRONMENTAL ENGINEERING SCIENCE; Volume: 38; Issue: 6; Page: 555-564; DOI:10.1089/ees.2020.0188	2021	https://www.liebertpub.com/doi/abs/10.1089/ees.2020.0188?journalCode=ees	1.8	2.80

87	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Wang, ZX; Yu, QL; Gauvin, F; Pan, F; Ran, QP; Brouwers, HJH; Nanodispersed TiO2 hydroxol modified Portland cement paste: The underlying role of hydration on self-cleaning mechanisms; CEMENT AND CONCRETE RESEARCH; Volume: 136; DOI:10.1016/j.cemconres.2020.106156	2020	https://www.sciencedirect.com/science/article/pii/S0008884619314899	11.4	12.40
88	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Sridevi, DV; Ramesh, V; Jayakumar, N; Sundaravadiel, E; pH dependent synthesis of TiO2 nanoparticles exerts its effect on bacterial growth inhibition and osteoblasts proliferation; AIP ADVANCES; Volume: 10; Issue: 9; DOI:10.1063/5.0020029	2020	https://pubs.aip.org/aip/adv/article/10/9/095119/990695/pH-dependent-synthesis-of-TiO2-nanoparticles	1.6	2.60
89	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Yanc, JC; Li, XY; Cheng, Y; Fan, C; Pan, C; Huang, BH; Meng, X; Zhang, JJ; Zheng, AQ; Ma, XM; Guo, LN; Luque, R; Zhang, WN; Sun, Y; Efficient and selective aqueous photocatalytic mono-dehydration of sugar alcohols using functionalized yttrium oxide nanocatalysts; GREEN CHEMISTRY; Volume: 22; Issue: 16; Page: 5333-5344; DOI:10.1039/d0gc00914h	2020	https://pubs.rsc.org/en/content/articlelanding/2020/gc/d0gc00914h	9.8	10.80
90	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Yanc, JC; Jia, YH; Fan, C; Cheng, Y; Pan, C; Huang, BH; Meng, X; Zhang, JJ; Zheng, AQ; Ma, XM; Li, XY; Luque, R; Sun, Y; Aqueous Room Temperature Mono-Dehydration of Sugar Alcohols Using Functionalized Yttrium Oxide Nanocatalysts; FRONTIERS IN CHEMISTRY; Volume: 8; DOI:10.3389/fchem.2020.00532	2020	https://www.frontiersin.org/articles/10.3389/fchem.2020.00532/full	5.5	6.50
91	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Kaushal, S; Kaur, H; Kumar, S; Badru, R; Mittal, S; Singh, P; Novel Horizon: Smart TiO2/Sq(IV)Sbp Nanocomposite with Enhanced Electrochemical and Photocatalytic Properties; RUSSIAN JOURNAL OF INORGANIC CHEMISTRY; Volume: 65; Issue: 4; Page: 616-625; DOI:10.1134/S00036023620040087	2020	https://link.springer.com/article/10.1134/S00036023620040087	2.1	3.10
92	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Ojha, A; Thareja, P; Graphene-based nanostructures for enhanced photocatalytic degradation of industrial dyes; EMERGENT MATERIALS; Volume: 3; Issue: 2; Page: 169-180; DOI:10.1007/s42247-020-00081-6	2020	https://link.springer.com/article/10.1007/s42247-020-00081-6	3.8	4.80

93	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	LI, CQ; Zhu, NY; Dong, XB; Zhang, XY; Chen, T; Zheng, SL; Sun, ZM; Tuning and controlling photocatalytic performance of TiO2/kaolinite composite towards ciprofloxacin: Role of OD/2D structural assembly; ADVANCED POWDER TECHNOLOGY; Volume: 31; Issue: 3; Page: 1241-1252; DOI:10.1016/j.apt.2020.01.007	2020	https://www.sciencedirect.com/science/article/abs/pii/S092188312030011X	5.2	6.20
94	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Liu, ZH; Wang, L; Li, Q; Xiong, X; Tao, CY; Du, J; Surfactant effect on controllable phase transformation and UV-shielding performance of titanium dioxide; MATERIALS CHEMISTRY AND PHYSICS; Volume: 240; DOI:10.1016/j.matchemphys.2019.122079	2020	https://www.sciencedirect.com/science/article/abs/pii/S0254058419308752	4.6	5.60
95	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Velardi, L; Scrimeri, L; Serra, A; Manno, D; Calcagnile, L; The synergistic role of pH and calcination temperature in sol-gel titanium dioxide powders; APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING; Volume: 125; Issue: 10; DOI:10.1007/s00339-019-3038-2	2019	https://link.springer.com/article/10.1007/s00339-019-3038-2	2.7	3.70
96	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Reddy, PNK; Shaik, DPMD; Ganesh, V; Nagamalleswari, D; Thyagarajan, K; Prasanth, PV; Structural, optical and electrochemical properties of TiO2 nanoparticles synthesized using medicinal plant leaf extract; CERAMICS INTERNATIONAL; Volume: 45; Issue: 13; Page: 16251-16260; DOI:10.1016/j.ceramint.2019.05.147	2019	https://www.sciencedirect.com/science/article/abs/pii/S0272884219312568	5.2	6.20
97	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Cuevas-Arteaga, C; Cuevas, ODE; Rosales, I; Synthesis of TiO2 nanotubular arrays and their electrochemical and photoelectrochemical properties to determine their use in photodegradation processes; CHEMICAL PHYSICS LETTERS; Volume: 721; Page: 129-140; DOI:10.1016/j.cplett.2019.02.036	2019	https://www.sciencedirect.com/science/article/abs/pii/S0009261419301551	2.8	3.80
98	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Kaur, H; Kumar, S; Verma, NK; Singh, P; Role of pH on the photocatalytic activity of TiO2 tailored by W/T mole ratio; JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS; Volume: 29; Issue: 18; Page: 16120-16135; Special Issue: SI; DOI:10.1007/s10854-018-9701-0	2018	https://link.springer.com/article/10.1007/s10854-018-9701-0	2.8	3.80

99	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Cheng, YR; Yu, HJ; Yi, LY; Liu, Y; Cao, L; Cao, R; Liu, YH; Zhao, W; Qi, T; Preparation of ground calcium carbonate-based TiO2 pigment by a two-step coating method; POWDER TECHNOLOGY; Volume: 325; Page: 568-575; DOI:10.1016/j.powtec.2017.11.040	2018	https://www.sciencedirect.com/science/article/abs/pii/S0032591017309208	5.2	6.20
100	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Singh, R; Dutta, S; Synthesis and characterization of solar photoactive TiO2 nanoparticles with enhanced structural and optical properties; ADVANCED POWDER TECHNOLOGY; Volume: 29; Issue: 2; Page: 211-219; DOI:10.1016/j.apt.2017.11.005	2018	https://www.sciencedirect.com/science/article/abs/pii/S0921883117304260	5.2	6.20
101	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Lamdab, U; Wetchakun, K; Kangwansupamonkon, W; Wetchakun, N; Effect of a pH-controlled co-precipitation process on rhodamine B adsorption of MnFe2O4 nanoparticles; RSC ADVANCES; Volume: 8; Issue: 12; Page: 6709-6718; DOI:10.1039/c7ra13570j	2018	https://pubs.rsc.org/en/content/articlelanding/2018/ra/c7ra13570j	3.9	4.90
102	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Atout, H; Alvarez, MG; Chebli, D; Bouguettoucha, A; Tichit, D; Llorca, J; Medina, F; Enhanced photocatalytic degradation of methylene blue: Preparation of TiO2/reduced graphene oxide nanocomposites by direct sol-gel and hydrothermal methods; MATERIALS RESEARCH BULLETIN; Volume: 95; Page: 578-587; DOI:10.1016/j.materresbull.2017.08.029	2017	https://www.sciencedirect.com/science/article/abs/pii/S0025540817325722	5.4	6.40
103	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Hadnadjevic-Kostic, M; Vujic, T; Marinkovic-Nedudin, R; Loncarevic, D; Markov, S; Jovanovic, D; Photo-induced properties of photocatalysts: A study on the modified structural, optical and textural properties of TiO2-ZnAl layered double hydroxide based materials; JOURNAL OF CLEANER PRODUCTION; Volume: 164; Page: 1-18; DOI:10.1016/j.jclepro.2017.06.091	2017	https://www.sciencedirect.com/science/article/abs/pii/S0959652617312611	11.1	12.10
104	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Huang, BH; Fan, C; Pan, C; Zheng, A; Ma, XQ; Li, Y; Zhang, JJ; Sun, Y; Synthesis and catalytic oxidation property of titanium-zirconium mixed oxide microsphere as well as titanium oxide microcube; POWDER TECHNOLOGY; Volume: 315; Page: 258-269; DOI:10.1016/j.powtec.2017.04.018	2017	https://www.sciencedirect.com/science/article/abs/pii/S0032591017303066	5.2	6.20

105	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Tsega, M; Dejene, FB; Tailoring luminescence properties of a sol-gel driven TiO2 nanoparticles by ammonia treatment; MATERIALS RESEARCH EXPRESS; Volume: 4; Issue: 3; DOI:10.1088/2053-1591/aa60da	2017	https://iopscience.iop.org/article/10.1088/2053-1591/aa60da	2.3	3.30
106	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Han, B; Chen, Z; Louhi-Kultanen, M; Effect of a pulsed electric field on the synthesis of TiO2 and its photocatalytic performance under visible light irradiation; POWDER TECHNOLOGY; Volume: 307; Page: 137-144; DOI:10.1016/j.powtec.2016.11.053	2017	https://www.sciencedirect.com/science/article/abs/pii/S0032591016308464	5.2	6.20
107	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Taufik, A; Saleh, R; Combination of Ternary Fe3O4/TiO2/CuO Nanocomposites and Nanographene Platelets: High Performance Photo and Sonocatalysis; INTERNATIONAL CONFERENCE ON ENGINEERING, SCIENCE AND NANOTECHNOLOGY 2016 (ICESNANO 2016); Volume: 1788; DOI:10.1063/1.4968290; AIP Conference Proceedings	2017	https://pubs.aip.org/aip/acp/article/1788/1/030037/101334/Combination-of-ternary-Fe3O4-TiO2-CuO	0	1.00
108	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Tryba, B; Tygielska, M; Colbeau-lustin, C; Kusiak-Nejman, E; Kapica-Kozar, J; Wrobel, R; Zolnierkiewicz, G; Guskos, N; Influence of pH of sol-gel solution on phase composition and photocatalytic activity of TiO2 under UV and visible light; MATERIALS RESEARCH BULLETIN; Volume: 84; Page: 152-161; DOI:10.1016/j.materresbull.2016.07.035	2016	https://www.sciencedirect.com/science/article/abs/pii/S0025540816304524	5.4	6.40
109	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Yin, L; Zhang, DD; Wang, D; Kong, XG; Huang, JF; Wang, FF; Wu, YB; Size dependent photocatalytic activity of ZnS nanostructures prepared by a facile precipitation method; MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS; Volume: 208; Page: 15-21; DOI:10.1016/j.mseb.2016.02.004	2016	https://www.sciencedirect.com/science/article/abs/pii/S0921510716000386	3.6	4.60

110	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	YUROYONO, G; NURICHAZAN; ZHARVAN, V; DAMIYATI, R; Santoso, H; Indarto, B; Pramono, YH; Zainuri, M; Darminto; Effect of Calcination Temperature on the Photocatalytic Activity of TiO2 Powders Prepared by Co-Precipitation of TiCl3; 3RD INTERNATIONAL CONFERENCE ON ADVANCED MATERIALS SCIENCE AND TECHNOLOGY (ICAMST 2015); Volume: 1725; DOI:10.1063/1.4945553; AIP Conference Proceedings	2016	https://pubs.aip.org/aip/acp/article/1725/1/020099/849 687/Effect-of-calcination-temperature-on-the	0	1.00
111	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Mihai, S; Cursaru, DI; Ghita, D; Dinescu, A; Morpho ierarhic TiO2 with plasmonic gold decoration for highly active photocatalysis properties; MATERIALS LETTERS; Volume: 162; Page: 222-225; DOI:10.1016/j.matlet.2015.10.012	2016	https://www.sciencedirect.com/science/article/abs/pii/S0167577X15306595	3	4.00
112	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Li, Zh; Wang, ZC; Li, G; Preparation of nano-titanium dioxide from ilmenite using sulfuric acid-decomposition by liquid phase method; POWDER TECHNOLOGY; Volume: 287; Page: 256-263; DOI:10.1016/j.powtec.2015.09.008	2016	https://www.sciencedirect.com/science/article/abs/pii/S0032591015300565	5.2	6.20
113	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Heo, J; Hwang, CS; Surface Properties and Photocatalytic Activities of the Colloidal ZnS:Mn Nanocrystals Prepared at Various pH Conditions; NANOMATERIALS; Volume: 5; Issue: 4; Page: 1955-1970; DOI:10.3390/nano5041955	2015	https://www.mdpi.com/2079-4991/5/4/1955	5.3	6.30
114	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Demirci, S; Ozturk, B; Yildirim, S; Bakal, F; Erol, M; Sancakoglu, O; Yigit, R; Celik, E; Synthesis and comparison of the photocatalytic activities of flame spray pyrolysis and sol-gel derived magnesium oxide nano-scale particles; MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING; Volume: 34; Page: 154-161; DOI:10.1016/j.mssp.2015.02.029	2015	https://www.sciencedirect.com/science/article/abs/pii/S1369800115001110	4.1	5.10

115	Molea, A; Popescu, V; Rowson, NA; Dinescu, AM; Influence of pH on the formulation of TiO2 nano-crystalline powders with high photocatalytic activity; POWDER TECHNOLOGY Volume 253, Page 22-28, 2014, DOI:10.1016/j.powtec.2013.10.042	Wang, B; Zhang, GX; Sun, ZM; Zheng, SL; Synthesis of natural porous minerals supported TiO2 nanoparticles and their photocatalytic performance towards Rhodamine B degradation; POWDER TECHNOLOGY; Volume: 262; Page: 1-8; DOI:10.1016/j.powtec.2014.04.050	2014	https://www.sciencedirect.com/science/article/abs/pii/S0032591014003581	5.2	6.20
116	Prodan, D; Moldovan, M; Prejmerean, C; Silaghi-Dumitrescu, L; Boboia, S; Popescu, V; Pascala, V; Molea, A; Lazar, D; Perhaita, I; Synthesis and characterization of an experimental Zn-hydroxyapatite powders with application in dentistry; BIOCERAMICS VOL25; Volume: 587; 2014; DOI:10.4028/www.scientific.net/KEM.587.43	Adams, S; Collard, M; McGahan, D; Martin, R; Phillips, S; Westaway, MC; The Impact of Contact: Isotope Geochemistry Sheds Light on the Lives of Indigenous Australians Living on the Colonial Frontier in Late 19th Century Queensland; ARCHAEOLOGIES-JOURNAL OF THE WORLD ARCHAEOLOGICAL CONGRESS; Volume: 19; Issue: 2; Page: 299-341; DOI:10.1007/s11759-023-09469-2	2023	https://link.springer.com/article/10.1007/s11759-023-09469-2	0.4	1.40
117	Prodan, D; Moldovan, M; Prejmerean, C; Silaghi-Dumitrescu, L; Boboia, S; Popescu, V; Pascala, V; Molea, A; Lazar, D; Perhaita, I; Synthesis and characterization of an experimental Zn-hydroxyapatite powders with application in dentistry; BIOCERAMICS VOL25; Volume: 587; 2014; DOI:10.4028/www.scientific.net/KEM.587.43	Li, CY; Yuan, Q; He, L; Qian, ZJ; Zhou, CX; Hong, PZ; Effects of Strontium-Hydroxyapatite Mediated Active Compounds from Hippocampus Kuda Bleeler (HKB) on Osteogenesis; COATINGS; Volume: 9; Issue: 2; DOI:10.3390/coatings9020141	2019	https://www.mdpi.com/2079-6412/9/2/141	3.4	4.40
118	Prodan, D; Moldovan, M; Prejmerean, C; Silaghi-Dumitrescu, L; Boboia, S; Popescu, V; Pascala, V; Molea, A; Lazar, D; Perhaita, I; Synthesis and characterization of an experimental Zn-hydroxyapatite powders with application in dentistry; BIOCERAMICS VOL25; Volume: 587; 2014; DOI:10.4028/www.scientific.net/KEM.587.43	Shi, PJ; Wang, Q; Yu, CP; Fan, FJ; Liu, M; Tu, ML; Lu, WH; Du, M; Hydroxyapatite nanorod and microsphere functionalized with bioactive lactoferrin as a new biomaterial for enhancement bone regeneration; COLLOIDS AND SURFACES B-BIOINTERFACES; Volume: 155; Pages: 477-486; DOI:10.1016/j.colsurfb.2017.04.042	2017	https://www.sciencedirect.com/science/article/abs/pii/S092777651730228X?via%3Dihub	5.8	6.80
119	Molea, A; Popescu, V; Rowson, NA; Effects of doping content on the structural, optical and photocatalytic activity of TiO2 nanocrystalline powders; POWDER TECHNOLOGY; Volume: 230; Page: 203-211; 2012; DOI:10.1016/j.powtec.2012.07.030;	Xu, J; Xu, F; Hu, ZA; Han, SY; Ge, YH; Photocatalytic Degradation of Pharmaceutically Active Compounds with Nano TiO2: Recent Advances and Future Trends; SCIENCE OF ADVANCED MATERIALS; Volume: 13; Issue: 11; Page: 2259-2264; DOI:10.1166/sam.2021.3849	2021	https://www.ingentaconnect.com/content/asp/sam/2021/00000013/00000011/art100251/sessionid=3p7v1b1s7pcnrx-ic-live-02	0.9	1.90
120	Molea, A; Popescu, V; Rowson, NA; Effects of doping content on the structural, optical and photocatalytic activity of TiO2 nanocrystalline powders; POWDER TECHNOLOGY; Volume: 230; Page: 203-211; 2012; DOI:10.1016/j.powtec.2012.07.030;	Preparation and Properties of Co(II) and La3+-Doped TIO2 Electrochromic Film; INTEGRATED FERROELECTRICS; Volume: 209; Issue: 58-67; Special Issue: Si; DOI:10.1080/10584587.2020.1728811	2020	https://www.tandfonline.com/doi/full/10.1080/10584587.2020.1728811	0.7	1.70

121	Molea, A; Popescu, V; Rowson, NA; Effects of doping content on the structural, optical and photocatalytic activity of TiO2 nanocrystalline powders; POWDER TECHNOLOGY; Volume: 230; Page: 203-211; 2012; DOI:10.1016/j.powtec.2012.07.030;	Ojha, A; Thareja, P; Graphene-based nanostructures for enhanced photocatalytic degradation of industrial dyes; EMERGENT MATERIALS; Volume: 3; Issue: 2; Page: 169-180; DOI:10.1007/s42247-020-00081-6	2020	https://link.springer.com/article/10.1007/s42247-020-00081-6	3.8	4.80
122	Molea, A; Popescu, V; Rowson, NA; Effects of doping content on the structural, optical and photocatalytic activity of TiO2 nanocrystalline powders; POWDER TECHNOLOGY; Volume: 230; Page: 203-211; 2012; DOI:10.1016/j.powtec.2012.07.030;	Khasevani, SG; Gholami, MR; Engineering a highly dispersed core@shell structure for efficient photocatalysis: A case study of ternary novel BIO@MIL-88A(Fe)@g-C3N4 nanocomposite; MATERIALS RESEARCH BULLETIN; Volume: 106; Page: 93-102; DOI:10.1016/j.materresbull.2018.05.024	2018	https://www.sciencedirect.com/science/article/abs/pii/S002554081830480X	5.4	6.40
123	Molea, A; Popescu, V; Rowson, NA; Effects of doping content on the structural, optical and photocatalytic activity of TiO2 nanocrystalline powders; POWDER TECHNOLOGY; Volume: 230; Page: 203-211; 2012; DOI:10.1016/j.powtec.2012.07.030;	Atout, H; Alvarez, MG; Chebli, D; Bouguettoucha, A; Tichit, D; Llorca, J; Medina, F; Enhanced photocatalytic degradation of methylene blue: Preparation of TiO2/reduced graphene oxide nanocomposites by direct sol-gel and hydrothermal methods; MATERIALS RESEARCH BULLETIN; Volume: 95; Page: 578-587; DOI:10.1016/j.materresbull.2017.08.029	2017	https://www.sciencedirect.com/science/article/abs/pii/S0025540817325722	5.4	6.40
124	Molea, A; Popescu, V; Rowson, NA; Effects of doping content on the structural, optical and photocatalytic activity of TiO2 nanocrystalline powders; POWDER TECHNOLOGY; Volume: 230; Page: 203-211; 2012; DOI:10.1016/j.powtec.2012.07.030;	Deng, SW; Yu, J; Yang, C; Chang, JH; Wang, YZ; Wang, P; Xie, SQ; Gd, I-doped TiO2 thin films coated on solid waste material: synthesis, characterization, and photocatalytic activity under UV or visible light irradiation; APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING; Volume: 123; Issue: 10; DOI:10.1007/s00339-017-1258-x	2017	https://link.springer.com/article/10.1007/s00339-017-1258-x	2.7	3.70
125	Molea, A; Popescu, V; Rowson, NA; Effects of doping content on the structural, optical and photocatalytic activity of TiO2 nanocrystalline powders; POWDER TECHNOLOGY; Volume: 230; Page: 203-211; 2012; DOI:10.1016/j.powtec.2012.07.030;	Wattanawikkam, C; Phooinkong, W; Pecharapa, W; Structural, Optical and Magnetic Properties of Diluted Magnetic Perovskite ZnTiO3 Doped with Co and Mn Prepared by Sonochemical Method; JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY; Volume: 17; Issue: 5; Page: 3620-3628; DOI:10.1166/jnn.2017.14102	2017	https://www.ingentaconnect.com/content/asp/jnn/2017/00000017/00000005/art00134	1.134	2.13
126	Molea, A; Popescu, V; Rowson, NA; Effects of doping content on the structural, optical and photocatalytic activity of TiO2 nanocrystalline powders; POWDER TECHNOLOGY; Volume: 230; Page: 203-211; 2012; DOI:10.1016/j.powtec.2012.07.030;	Aijani, M; Kaleji, BK; Optical and structural properties of TiO2 nanopowders with Ce/Sn doping at various calcination temperature and time; OPTICAL AND QUANTUM ELECTRONICS; Volume: 49; Issue: 1; DOI:10.1007/s11082-016-0851-0	2017	https://link.springer.com/article/10.1007/s11082-016-0851-0	3	4.00

127	Molea, A; Popescu, V; Rowson, NA; Effects of I-doping content on the structural, optical and photocatalytic activity of TiO2 nanocrystalline powders; POWDER TECHNOLOGY; Volume: 230; Page: 203-211; 2012; DOI:10.1016/j.powtec.2012.07.030;	Lu, HX; Lei, J; Li, XX; Shao, G; Hou, TC; Fan, BB; Chen, DL; Zhang, LW; Wang, HL; Xu, HL; Zhang, R; Synthesis and characterization of carbon-doped ZnSn(OH) ₆ with enhanced photoactivity by hydrothermal method; CRYSTAL RESEARCH AND TECHNOLOGY; Volume: 51; Issue: 1; Page: 11-15; DOI:10.1002/crat.201500039	2016	https://onlinelibrary.wiley.com/doi/abs/10.1002/crat.201500039	1.5	2.50
128	Molea, A; Popescu, V; Rowson, NA; Effects of I-doping content on the structural, optical and photocatalytic activity of TiO2 nanocrystalline powders; POWDER TECHNOLOGY; Volume: 230; Page: 203-211; 2012; DOI:10.1016/j.powtec.2012.07.030;	Li, ZH; Wang, ZC; Li, G; Preparation of nanotitanium dioxide from ilmenite using sulfuric acid-decomposition by liquid phase method; POWDER TECHNOLOGY; Volume: 287; Page: 256-263; DOI:10.1016/j.powtec.2015.09.008	2016	https://www.sciencedirect.com/science/article/abs/pii/S0032591015300565	5.2	6.20
129	Molea, A; Popescu, V; Rowson, NA; Effects of I-doping content on the structural, optical and photocatalytic activity of TiO2 nanocrystalline powders; POWDER TECHNOLOGY; Volume: 230; Page: 203-211; 2012; DOI:10.1016/j.powtec.2012.07.030;	Samet, I; Ben Nasseur, J; Chtourou, R; March, K; Stephan, O; Heat treatment effect on the physical properties of cobalt doped TiO2 sol-gel materials; MATERIALS CHARACTERIZATION; Volume: 85; Page: 1-12; DOI:10.1016/j.matchar.2013.08.007	2013	https://www.sciencedirect.com/science/article/abs/pii/S1044580313002404	4.7	5.70
130	Molea, A; Popescu, V; Rowson, NA; Effects of I-doping content on the structural, optical and photocatalytic activity of TiO2 nanocrystalline powders; POWDER TECHNOLOGY; Volume: 230; Page: 203-211; 2012; DOI:10.1016/j.powtec.2012.07.030;	Mohamed, SH; El-Hagary, M; Radwan, AS; Preparation and characterization of mixed iron-titanium oxide nanostructure; INDIAN JOURNAL OF PHYSICS; Volume: 87; Issue: 3; Page: 223-228; DOI:10.1007/s12648-012-0207-y	2013	https://link.springer.com/article/10.1007/s12648-012-0207-y	2	3.00
131	Molea, A; Popescu, V; The obtaining of titanium dioxide nanocrystalline powders; OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS; Volume: 5; Issue: 3-4; Page: 242-246; 2011;	Tale, BU; Nemade, KR; Tekade, PV; The Comprehensive study of Titanium oxide doped Conducting polymers nanocomposites for Photovoltaic applications; POLYMER-PLASTICS TECHNOLOGY AND MATERIALS; Volume: 60; Issue: 16; Page: 1775-1784; DOI:10.1080/25740881.2021.1930047	2021	https://www.tandfonline.com/doi/abs/10.1080/25740881.2021.1930047	2.7	3.70
132	Molea, A; Popescu, V; The obtaining of titanium dioxide nanocrystalline powders; OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS; Volume: 5; Issue: 3-4; Page: 242-246; 2011;	Tahir, MB; Hajra, S; Khalid, NR; Rizwan, M; Watto, GN; Development of Sol Gel Derived Nanocrystalline TiO2 Thin Films via Indigenous Spin Coating Method; JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS; Volume: 28; Issue: 1; Page: 1-8; DOI:10.1007/s10904-017-0690-x	2018	https://link.springer.com/article/10.1007/s10904-017-0690-x	4	5.00

133	Molea, A; Popescu, V; The obtaining of titanium dioxide nanocrystalline powders; OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS; Volume: 5; Issue: 3-4; Page: 242-246; 2011;	Zharvan, V; Daniyati, R; Ichzan, ASN; Yudoyono, G; Darminto; Study on Fabrication of TiO2 Thin Films by Spin - coating and their Optical Properties; 4TH INTERNATIONAL CONFERENCE ON THEORETICAL AND APPLIED PHYSICS (ICTAP) 2014; Volume: 1719; DOI:10.1063/1.4943713; AIP Conference Proceedings	2016	https://pubs.aip.org/aip/acp/article/1719/1/030018/585 TiO2-thin-films-by-spin	0	1.00
134	Molea, A; Popescu, V; The obtaining of titanium dioxide nanocrystalline powders; OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS; Volume: 5; Issue: 3-4; Page: 242-246; 2011;	Nwanya, AC; Ugwuoke, PE; Ejikeme, PM; Oparaku, OU; Ezema, FI; Jathropha Curcas and Citrus Aurantium Leaves Dye Extract for Use in Dye Sensitized Solar Cell with TiO2 Films; INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE; Volume: 7; Issue: 11; Page: 11219-11235	2013	https://www.sciencedirect.com/science/article/pii/S1452398123169380	1.5	2.50
Total						654.03

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Molea, Andreaia (Author)

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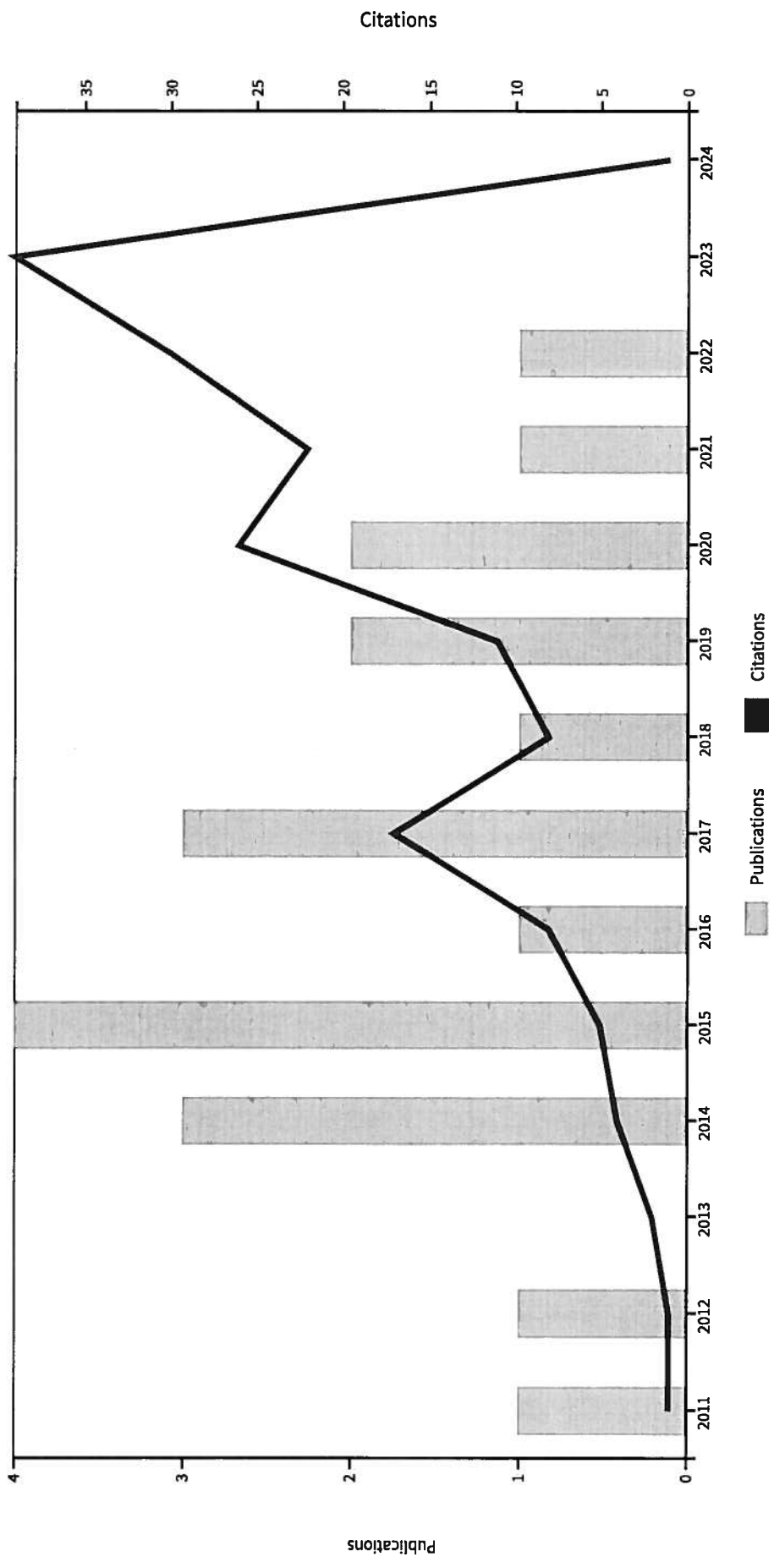
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⊖		2	1	0	0	0	1.08	14
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⊖		1	0	1	0	0	0	0.33	2
⊖		1	1	0	0	0	0	0.22	2
⊖		0	0	2	0	0	0	0.2	2



Întocmirea FIȘEI DE VERIFICARE
a îndeplinirii standardelor Universității de prezentare la concurs pentru posturile de
profesor universitar, conferențiar universitar,
cercetător științific gradul I și cercetător științific gradul II
-specificații-

Fișele de verificare pentru posturile de conferențiar universitar/ CSII și profesor universitar/ CSI se întocmesc de către fiecare candidat în funcție de standardele minimale necesare și obligatorii pentru conferirea titlurilor didactice din învățământul superior, a gradelor profesionale de cercetare-dezvoltare, a calității de conducător de doctorat și a atestatului de abilitare, prevăzute în Ordinul de ministru (OMENCS 6.129/2016) care a aprobat standardele CNATDCU pentru fiecare domeniu în parte - anexe actualizate.

Fișa de verificare va fi completată de către candidat într-un format care să faciliteze verificarea informațiilor: în coloane paralele vor fi introduse valorile standardelor minimale impuse de actele normative (stânga) și valorile finale obținute de către candidat pentru fiecare standard (dreapta).

Suplimentar, conform Art. 12 (6) din Metodologia de concurs pentru ocuparea posturilor didactice și de cercetare vacante din Universitatea Tehnică din Cluj-Napoca:

<p>La prima ocupare prin concurs a unui post didactic în UTCN: Media calculată cu formula $[(\text{media anilor de studii de licență}) + (\text{media la examenul de licență/diplomă}) + (\text{media anilor de studii de masterat}) + (\text{nota la examenul de disertație})]/4$ să fie de minimum 8. În cazul Facultății de Arhitectură și Urbanism, precum și pentru titularii unei diplome de studii superioare de lungă durată media calculată cu formula $[(\text{media anilor de studii de licență}) + (\text{media la examenul de licență/diplomă})]/2$ să fie minim 8</p> <p>Absolvent al altui sistem de educație (din străinătate) <input type="checkbox"/></p>	<p>Media anilor de studii de licență <u>6,99</u> Media la examenul de licență/diplomă <u>8,24</u> Media anilor de studii de masterat <u>10</u> Nota la examenul de disertație <u>10</u></p> <p>$[(\text{media anilor de studii de licență}) + (\text{media la examenul de licență/diplomă}) + (\text{media anilor de studii de masterat}) + (\text{nota la examenul de disertație})]/4 = 8,80 > 8$</p> <p>Calificative/punctaje/medii obținute: _____ _____</p>
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Data 09.01.2024

Semnătura candidatului _____