POSTER PRESENTATIONS

Poster Session 1 – Wednesday, 22 September 2021				
Poster No	Author	Affiliation	Poster Title	
<u>T1-1</u>	A Anghel	Babes-Bolyai University Cluj-Napoca	Determination of capsaicin and dihydrocapsaicin in topical creams using HPLC and extended standard addition calibration	
<u>T1-2</u>	D Axente	INCDTIM Cluj-Napoca	Reactors for sulfuric acid decomposition in the thermochemical production of hydrogen	
<u>T1-3</u>	A Balla	INCDTIM Cluj-Napoca	Compensation effect in catalytic oxidation of carbon monoxide	
<u>T1-4</u>	B Bosca	Babes-Bolyai University Cluj-Napoca	Dual-mode determination of selenium in biofortified <i>Allium</i> microsamples following piazselenol formation and solid phase microextraction	
<u>T1-5</u>	I Bratu	INCDTIM Cluj-Napoca	Analysis of the painting materials from the Dângău Mic wooden church, Cluj County	
<u>T1-6</u>	G Bulubasa	ICSI Rm Valcea	Investigations regarding helium isotopes separation by gas chromatography	
<u>T1-7</u>	F Covaciu	INCDTIM Cluj-Napoca	Assessment of <i>trans</i> fatty acids content in food from Romanian market	
<u>T1-8</u>	G Cristea	INCDTIM Cluj-Napoca	Assessing the isotopic fingerprint of ethanol from Transylvanian distillates	
<u>T1-9</u>	A Dehelean	INCDTIM Cluj-Napoca	Multielement analysis of fruit distillates from Transylvania area	
<u>T1-10</u>	I Feher	INCDTIM Cluj-Napoca	Mushroom's evaluation based on FT-IR fingerprint and chemometrics	
<u>T1-11</u>	V Floare-Avram	INCDTIM Cluj-Napoca	Spectrophotometric methods used for investigation of total phenolic compounds and antioxidant activity of commercial edible oils	
<u>T1-12</u>	C Lar	INCDTIM Cluj-Napoca	Synthetic Strategies for Labeled Catecholamine-Based Compounds	
<u>T1-13</u>	A Magdas	INCDTIM Cluj-Napoca	Applications of ANNs in honey recognition based on isotopic and elemental content	
<u>T1-14</u>	C Marcu	INCDTIM Cluj-Napoca	Kinetics and thermodynamics for U(VI), Fe(III) and Cr(VI) adsorption using an anion exchange resin	
<u>T1-15</u>	O Marincas	INCDTIM Cluj-Napoca	Trans fat content in edible oils commercially available in Romania	
<u>T1-16</u>	Z Moldovan	INCDTIM Cluj-Napoca	Determination of the Fatty Acids profile in edible oils using GC-MS system	
<u>T1-17</u>	Cs Molnar	INCDTIM Cluj-Napoca	Fatty acid and multielement profile of breast milk over different lactation stages	
<u>T1-18</u>	A Niculescu	ICSI Rm Valcea	Fractional distillation column design for hydrogen isotope separation	
<u>T1-19</u>	A Pirnau	INCDTIM Cluj-Napoca	Fuzzy algorithms applied in fruit spirits authentication	

<u>T1-20</u>	R H Puscas	INCDTIM Cluj-Napoca	Applications of stable isotopes for geographical and varietal recognition of Romanian and French honeys
<u>T1-21</u>	S Radu	INCDTIM Cluj-Napoca	Synthesis and Structural Analysis of Some Isotopically Labeled Amadori Products
<u>T1-22</u>	J-Zs Szucs- Balazs	INCDTIM Cluj-Napoca	Optimization of nitrogen-15 production by isotopic exchange in nitrox system
<u>T1-23</u>	V Taciuc	Babes-Bolyai University Cluj-Napoca	Finding best weighted linear regression model for heteroscedastic data by maximizing likelihood function
<u>T1-24</u>	A Trifa	Babes-Bolyai University Cluj-Napoca	Investigation of the painting of the royal icon of Jesus Christ
<u>T1-25</u>	I Udrea	Babes-Bolyai University Cluj-Napoca	The spectroscopic analysis of constituent materials of the Romanian icon, "The Entry of Lord into Jerusalem", by Grigore Ranite
<u>T1-26</u>	C Voica	INCDTIM Cluj-Napoca	Concentrations and exposure risks of toxic elements in facial cosmetics
<u>T2-1</u>	F G Apostolescu	UMF Craiova	Identification and quantification of valuable bioactive compounds from three commercial species of Stachys
<u>T2-2</u>	M Bacalum	IFIN-HH Magurele	Spectral analysis of Laurdan fluorescence reveals changes induced by AMPs in lipid membranes
<u>T2-3</u>	V Birlea	Babes-Bolyai University Cluj-Napoca	Effect of gamma radiation on some dosimetric interest compounds: an EPR study
<u>T2-4</u>	D Bogdan	INCDTIM Cluj-Napoca	Investigation of Citronella Oil as Green Corrosion Inhibitor for Carbon Steel in Acidic Media
<u>T2-5</u>	P Bulieris	INCDTIM Cluj-Napoca	PAMAM dendrimers conjugated with antimicrobial peptides
<u>T2-6</u>	R I Chelcea	Technical University Cluj-Napoca	Structural and kinetic characterization of expired drugs by 1H NMR relaxometry and FT-IR spectroscopy
<u>T2-7</u>	A Colnita	INCDTIM Cluj-Napoca	Nanotrenches-based flexible platform for surface-enhanced Raman scattering trace level detection
<u>T2-8</u>	R Crainic	Babes-Bolyai University Cluj-Napoca	¹ H NMR relaxometry and FT-IR spectroscopy used for characterization of organo-mineral fertilizers based on biosolids
<u>T2-9</u>	I Brezestean	INCDTIM Cluj-Napoca	Surface-enhanced Raman spectroscopy of endosulfan pesticide on silver nanoparticle films fabricated by convective self- assembly
<u>T2-10</u>	N E Dina	INCDTIM Cluj-Napoca	Thin layer gold-based substrate for pathogens SERS detection and quorum sensing monitoring

		Babes-Bolyai	FT-IR spectroscopy used for identification
<u>T2-11</u>	L R Dragan	University	of cancer specific biomarkers in blood
	C	Cluj-Napoca	plasma
		¥ 1	Molecular dynamics investigation of
<u>T2-12</u>	A Farcas	INCDTIM	oligonucleotide-functionalized gold
12 12		Cluj-Napoca	nanoparticles
			Surface-enhanced Raman spectroscopy of
		INCOTIN	propranolol on different SERS substrates - a
<i>T2-13</i>	C Farcau	INCDTIM	step towards dual SERS-electrochemical
		Cluj-Napoca	sensors for pharmaceutical pollution
			monitoring
		INCDTIM	¹ H NMR spectroscopic characterization of
<i>T2-14</i>	C G Floare	INCDTIM	inclusion complex of Desferrioxamine B
		Cluj-Napoca	chelator and b-Cyclodextrin
	A Chanday	Technical University	Effect of ultrasound-assisted extraction
<i>T2-15</i>	A Ghendov-	of Moldova	parameters on bioactive compounds from
	Mosanu	Chisinau	grape marc
	A Ghendov-	Technical University	Optimizing the extraction of pectin from
<u>T2-16</u>	Mosanu	of Moldova	apple pomace
	Wiosaiiu	Chisinau	
T2 17	I Kacso	INCDTIM	PAMAM dendrimers as a nanocarrier for
<u>T2-17</u>	1 Kacso	Cluj-Napoca	Nalidixic acid delivery
<u>T2-18</u>	K Kovacs	INCDTIM	Three ways to choose between two
12-10	IX IXOVACS	Cluj-Napoca	attosecond pulses
<u>T2-19</u>	D Marconi	INCDTIM	3D metallic nanotrenches arrays fabricated
12-17	D Marcom	Cluj-Napoca	using nanoimprint lithography
		Babes-Bolyai	Environmental degradation and pigments
<u>T2-20</u>	I Marica	University	influence on plastics waste determined by
<u> </u>		Cluj-Napoca	Raman Spectroscopy: sorting algorithm and
		3 1	plastic Raman database
		INCOTIN	Synthesis and molecular interaction of a
<i>T2-21</i>	M Mic	INCDTIM	novel diphenolic hidrazinyl-thiazole
		Cluj-Napoca	compound with strong antioxidant and
			antiradical activity with HSA Mine drainage treatment using
T2_22	A Moldovan	ICIA	Mine drainage treatment using Scenedesmus spp., Chlorella spp. and
<u>T2-22</u>	A Moluovali	Cluj-Napoca	Anabaena spp. microalgae
		ICIA	Potential of coltsfoot for biomonitoring
<u>T2-23</u>	A Moldovan	Cluj-Napoca	metal polluted soils
m 2 c :		ICIA	Li uptake, accumulation and effect on
<u>T2-24</u>	A Moldovan	Cluj-Napoca	Salvinia natans macrophytes metabolism
ma c -		ICIA	Metal removal from mining-impacted water
<u>T2-25</u>	A Moldovan	Cluj-Napoca	by a green technology using Salvinia natans
			Cold plasma processing of seeds as non-
<u>T2-26</u>	I Motrescu	Iasi University of Life	chemical, green technology for production
		Sciences	stimulation
TO 07	CMM	INCDTIM	Ultrasensitive spectroscopy of DNA from in
<u>T2-27</u>	C M Muntean	Cluj-Napoca	vitro grown Solanum tuberosum L. leaves
T2 20	D D D-	INCDTIM	Rydberg-type electronic excited states in
<u>T2-28</u>	R D Pasca	Cluj-Napoca	sodium-doped water clusters
T2 20	M D a !1	IFIN-HH	Melittin: a new use in cancer therapy
<u>T2-29</u>	M Raileanu	Magurele	

<u>T2-30</u>	A Soran	Babes-Bolyai University Cluj-Napoca	Materials based on lanthanide complexes with polycarboxylic acids - synthesis, spectroscopic characterization and magnetic properties
<u>T2-30</u>	A Soran	Babes-Bolyai University Cluj-Napoca	Synthesis, physicochemical properties, crystal molecular structure and DFT investigation of an organobismuth(III) bis(dimethyldithiocarbamate)
<u>T2-32</u>	R D Stoica	IFIN-HH Magurele	Separation and characterization of specific anti-dicamba antibodies using antigen type SiO2-based nano-immunosorbents
<u>T2-33</u>	A V Tomut	Babes-Bolyai University Cluj-Napoca	Compressing VQE circuit with applications in the study of small molecules
<u>T2-34</u>	C Tripon	INCDTIM Cluj-Napoca	New non-contact photopyroelectric method for thermal diffusivity investigation of porous solids: theoretical approach and mathematical simulations
<u>T2-35</u>	D Ungur	INCDTIM Cluj-Napoca	Crystallization process development of Febuxostat most stable polymorph and of a soluble salt thereof
<u>T2-36</u>	B Zorila	IFIN-HH Magurele	Effects of propolis extracts on model membranes
<u>T3-1</u>	A Barbu-Gorea	Technical University Cluj-Napoca	Researches about the recycling of mobile phone
<u>T3-2</u>	D Benea	Babes-Bolyai University Cluj-Napoca	Investigations on the magnetic properties of the RFe11Ti (R = Y, Gd and Pr) by Zr, Co and C doping
<u>T3-3</u>	E Bruj	INCDTIM Cluj-Napoca	Influence of hydrogen adding in the Stirling engine combustion process
<u>T3-4</u>	O Bruj	INCDTIM Cluj-Napoca	Minimum ac impedance determination in commercial Li-ion batteries by experimental measurements
<u>T3-5</u>	L-Buimaga Iarinca	INCDTIM Cluj-Napoca	DFT investigations of early stages of formation of aluminium oxide at Al surface
<u>T3-6</u>	A Corbu	INCDTIM Cluj-Napoca	Testing a proton-exchange membrane fuel cells for an electric vehicle mobile charging station
<u>T3-7</u>	D Cuibus	Technical University Cluj-Napoca	
<u>T3-8</u>	S Garabagiu	INCDTIM Cluj-Napoca	Design of a semiconductor thin-film thermocouple fabricated by pulsed laser deposition
<u>T3-9</u>	R Gavrea	INCDTIM Cluj-Napoca	Lead Bismuth Eutectic (LBE) as thermal agent in concentrated solar power applications
<u>T3-10</u>	A M R Gherman	INCDTIM Cluj-Napoca	Component identification of liquid mixtures by using computational models

<u>T3-11</u>	O Mocan	INCDTIM Cluj-Napoca	Developing a platform to support urban energy monitoring and the co-creation of the city's energy transition
<u>T3-12</u>	D N Piscoiu	Technical University Cluj-Napoca	Calcium oxide - lead - lead dioxide vitroceramics
<u>T3-13</u>	S Pogacian	INCDTIM Cluj-Napoca	Testing and certification of front-end electronics for particle detectors
<u>T3-14</u>	M N Pop	INCDTIM Cluj-Napoca	An energy measurement system for battery powered applications
<u>T3-15</u>	R Pop	INCDTIM Cluj-Napoca	Optimization of river flow capture at microhydro power plant intake to increase electricity production
<u>T3-16</u>	S Rada	INCDTIM Cluj-Napoca	Recycled and antimony-doped lead materials: XRD, SANS and voltammetric study
<u>T3-17</u>	O Raita	INCDTIM Cluj-Napoca	Noises and vibrations in Cluj-Napoca
<u>T3-18</u>	G A Rosca	INCDTIM Cluj-Napoca	Maintenance and efficiency monitoring of photovoltaic systems
<u>T3-19</u>	S Gergely	INCDTIM Cluj-Napoca	Advanced in automated control of dynamic laser scanning of surfaces in flying spot thermography
<u>T3-20</u>	V Surducan	INCDTIM Cluj-Napoca	Calibration of RF matrix array detectors for environmental electromagnetic field
<u>T3-21</u>	F Toadere	INCDTIM Cluj-Napoca	Enhancement of SEM images quality
<u>T3-22</u>	V Tosa	INCDTIM Cluj-Napoca	Numerical model for femtosecond pulse propagation in hollow core fibers
<u>T3-23</u>	I Toth	INCDTIM Cluj-Napoca	Reconstruction of ultrashort laser pulses by convolutional neural networks
<u>T3-24</u>	M Zagrai	INCDTIM Cluj-Napoca	Structural Evolution and Physical, Optical and Electrochemical Properties of Manganese Ions in Lead Glass
13 21		Cluj-Napoca	1

Poster Session 2 –Thursday, 23 September 2021

<u>T4-1</u>	C Banciu	ICPE-CA Bucharest	Investigation of TiO ₂ /3D free-standing graphene networks
<u>T4-2</u>	C Banciu	ICPE-CA Bucharest	Comparative study of the hydrophobic properties of silica nanoparticles functionalized with different agents
<u>T4-3</u>	I Brezestean	INCDTIM Cluj-Napoca	Spectroscopic and microscopic investigations of the graphene oxide influence on hybrid powder products based on LDH structures
<u>T4-4</u>	A Bunge	INCDTIM Cluj-Napoca	Anticoagulant properties of coated Fe-Pd ferromagnetic shape memory ribbons
<u>T4-5</u>	M A Ciolan	Alexandru Ioan Cuza University Iasi	Transparent thin film of zinc oxide for solar cells applications fabricated by pulsed laser deposition

		Alexandru Ioan Cuza	Structural and electrical properties of
<u>T4-6</u>	C Ciomaga	University Iasi	$Ba_{0.85}Ca_{0.15}Ti_{0.9}Zr_{0.1}O_3$ ceramics
		Alexandru Ioan Cuza	Effect of sintering on structural and
<u>T4-7</u>	C Ciomaga	University	electrical properties of (Ba,Sr)(Zr,Ti)O ₃
		Iasi	ceramics for energy storage applications
T1 0	A Ciorita	INCDTIM	From macro to nanoLDPE:
<u>T4-8</u>	A Cionta	Cluj-Napoca	crumbling/grinding time and impact on bacteria
T4 0	M M Codescu	ICPE-CA	The influence of pH on the stability of SiO ₂
<u>T4-9</u>	Wi Wi Codescu	Bucharest	suspensions
<u>T4-10</u>	M Coros	INCDTIM Cluj-Napoca	One step hydrothermal synthesis of nitrogen, boron co-doped graphene
		<u> </u>	Preparation and characterization of hybrid
<u>T4-11</u>	D Cosma	INCDTIM	materials based on graphene oxide and
		Cluj-Napoca	enzymes
<u>T4-12</u>	C Cristea	UMF Cluj-Napoca	Wearable and disposable sensors for wound infection biomarker monitoring
		INCDTIM	Eco-friendly method for PGM recovery
<u>T4-13</u>	M Dan	Cluj-Napoca	from spent auto converters
T4-14	A Falamas	INCDTIM	On the Resonance Raman excitation of Zinc
<u> </u>	111444444	Cluj-Napoca	Oxide nanoparticles Hyaluronic acid @ Polydopamine
<u>T4-15</u>	C Filip	INCDTIM	composite coatings: synthesis and
1415	C I mp	Cluj-Napoca	characterization
T4-16	I V Ganea	INCDTIM	Neoteric Clay-Based Material for Heavy
1710		Cluj-Napoca	Metals Removal from Mining Waters
<u>T4-17</u>	O Grad	INCDTIM	Selective Hydrogen production from formic acid decomposition on reduced graphene
1111	0 01 uu	Cluj-Napoca	oxide supported AuPd nanocomposites
T4-18	M S Gutoiu	INCDTIM	New emerging magnetic properties of
1710	1112 340014	Cluj-Napoca	FePt@SiO2 nanocomposites
m 4 40		Babes-Bolyai	Study of the Interphase Exchange Coupling and Magnetocaloric Effect in
<u>T4-19</u>	R Hirian	University Cluj-Napoca	Co3Gd4+Co7Gd12 Nanocomposite
		Ciuj-Napoca	Obtained by Mechanical Milling
TA 20	G M Ispas	INCDTIM	New magnetic polymeric hybrid composite electrode material for amperometric nitrite
<u>T4-20</u>	G M Ispas	Cluj-Napoca	sensor
		Technical University	The influence of alcohol in mouthwash on a
<u>T4-21</u>	I Lacan	Cluj-Napoca	bone regeneration cement: NMR
		Babes-Bolyai	relaxometry investigations New Drug Carrier for Slow Release: 5-
<i>T4-22</i>	G Lazar	University	Fluorouracil Formulation in Nanoporous
	G Lazai	Cluj-Napoca	Biogenic Mg-calcite from Blue Crab Shell
W 4 6 6		INCDTIM	Synthesis, characterization and
<u>T4-23</u>	C Leostean	Cluj-Napoca	photocatalytic activity of MWCNTs decorated with Cu-doped TiO ₂
			CNT-COOH/MnO2/Fe3O4 nanocomposite
TA 24	LLung	INCDTIM	as adsorbent for the removal of pesticides
<u>T4-24</u>	I Lung	Cluj-Napoca	from aqueous solution

		INCDTIM	Pulsed laser deposition of ZnS/FePt thin
<u>T4-25</u>	S Macavei	Cluj-Napoca	films on Mg (100) substrates
<u>T4-26</u>	L Magerusan	INCDTIM Cluj-Napoca	Green preparation and applicability of chitosan/carbon based nanomaterial in Sunset Yellow electrochemical detection
<u>T4-27</u>	A O Mateescu	IFIN-HH Magurele	The influence of the vacuum plasma treatment on the cotton surface deposited by Tio ₂ / Tio ₂₊ graphene nanopowder water colloidal dispersions
<u>T4-28</u>	L Mathe	INCDTIM Cluj-Napoca	Quantum transport through a quantum dot coupled to a Majorana ring
<u>T4-29</u>	S Milin	Babes-Bolyai University Cluj-Napoca	Nanotoxicity of graphene materials on A375 and HaCaT cell lines
<u>T4-30</u>	V Mirel	INCDTIM Cluj-Napoca	Current progress and perspectives on biomaterials used in surgical applications
<u>T4-31</u>	I Moigradean	Babes-Bolyai University Cluj-Napoca	Skin Cells Photooxidized with Titanium Systems Excited with VIS Light
<u>T4-32</u>	D Moldovan	Technical University Cluj-Napoca	Behavior analysis of two-component waterproofing mortars by mechanical and NMR investigations
<u>T4-33</u>	J A Moussa	University of Naples "Federico II" Italy	Modeling the interaction between bacteria and 2-D nanoflakes
<u>T4-34</u>	A Nan	INCDTIM Cluj-Napoca	Influence of crosslinking reactions of poly(benzofuran-co-arylacetic acid) with diamines on their thermal conductivity
<u>T4-35</u>	N Nechita	INCDTIM Cluj-Napoca	Plasmonic properties of metal-coated microsphere monolayers optimized for SERS applications
<u>T4-36</u>	F Nekvapil	INCDTIM Cluj-Napoca	A comparative Raman spectroscopy and XRD assessment of lattice transitions and impurities in Mn and Zn doped ferrite nanoparticles
<u>T4-37</u>	V Niculescu	ICSI Rm Valcea	Functionalized SBA-3 silica: investigation of adsorption performance towards glyphosate herbicide
<u>T4-38</u>	O Pana	INCDTIM Cluj-Napoca	CoFe ₂ O ₄ /TiO ₂ :Tb nanoparticles as an emerging magnetic photocatalyst
<u>T4-39</u>	I Petreanu	ICSI Rm Valcea	Structural assessment of silica and amino- functionalized silica nanoparticles by FTIR and Raman Spectroscopy
<u>T4-40</u>	F Pogacean	INCDTIM Cluj-Napoca	Electrochemical detection of His-Tagged CA19-9 Antigen with triple-doped graphene modified electrode
<u>T4-41</u>	A Popa	INCDTIM Cluj-Napoca	Hybrid PVDF-P(L-DOPA)-ZnO membranes for efficient pollutants removal
<u>T4-42</u>	S Pruneanu	INCDTIM Cluj-Napoca	Charge-Transfer Resistance in Nitrogen- Doped Graphene

<u>T4-43</u>	R Rada	Technical University Cluj-Napoca	Reducing, recycling and reusing of construction and demolition wastes by the incorporation in the glasses
<u>T4-44</u>	M C Rosu	INCDTIM Cluj-Napoca	TiO2 nanotubes/graphene/metal nanoparticles as suitable photocatalyst for degradation of ciprofloxacine as an emerging pollutant
<u>T4-45</u>	A Simion	Babes-Bolyai University Cluj-Napoca	Structural changes in nanostructured silica core-alumina shell microspheres doped with iron and gadolinium investigated by Solid-State NMR Spectroscopy
<u>T4-46</u>	M Singh	University of Naples "Federico II" Italy	Surface interaction studies of novel 2D materials with gram-negative and gram-positive pathogens and an enveloped virus
<u>T4-47</u>	C Socaci	INCDTIM Cluj-Napoca	Evaluation of graphene on the photocatalytic properties of copper oxides/graphene composites compared to copper oxides/graphene/TiO2 composites
<u>T4-48</u>	M L Soran	INCDTIM Cluj-Napoca	Application of nanocomposites based on CNT-COOH as adsorbents for the removal of tartrazine from aqueous solutions
<u>T4-49</u>	G Souca	Babes-Bolyai University Cluj-Napoca	Magnetic Properties of Nd2Fe14B/Fe Exchange Coupled Nanocomposite Nanoparticles obtained by Matrix Milling and Annealing
<u>T4-50</u>	M Stan	INCDTIM Cluj-Napoca	Synthesis and characterization of nickel oxide-silver-antibiotic nanocomposites
<u>T4-51</u>	M Stefan	INCDTIM Cluj-Napoca	Insights into the photocatalytic activity of g- C ₃ N ₄ -TiO ₂ :Cu nanocomposites
<u>T4-52</u>	A Stegarescu	INCDTIM Cluj-Napoca	Synthesis and characterization of Fe3O4/MnO2 nanocomposite for improving of biodiesel production
<u>T4-53</u>	V Niculescu	ICSI Rm Valcea	Mesoporous silica materials: investigation of catalytic performance towards chlorinated pesticides
<u>T4-54</u>	R – C Suciu	INCDTIM Cluj-Napoca	Multi-walled carbon nanotubes decored with Ag / TiO2 nanoparticles
<u>T4-55</u>	A Tatar	Babes-Bolyai University Cluj-Napoca	GNP-based sandwich immunosensor for SERS biomarker detection in liquid
<u>T4-56</u>	D Toloman	INCDTIM Cluj-Napoca	Effect of the Mn amount on the photocatalytic activity of Mn doped TiO2-MWCNT nanocomposites
<u>T4-57</u>	A Urda	INCDTIM Cluj-Napoca	Evaluation of N-doped graphene role in the photodegradation of sulfamethoxazole
<u>T4-58</u>	C Varodi	INCDTIM Cluj-Napoca	Electrochemical detection of 8-Hydroxy-2'- Deoxyguanosine biomarker with new graphene modified carbon electrode