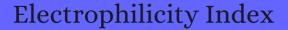
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1411	First Principles Calculations of Electric Field Effect on the (6,0) Zigzag Single-Walled Silicon Carbide Nanotube for use in Nano-Electronic Circuits. <b>2013</b> , 24, 591-604	14
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742	Investigation of Corrosion Inhibition Potentials of Some Aminopyridine Schiff Bases Using Density Functional Theory and Monte Carlo Simulation. <b>2022</b> , 5, 319	4
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740	Effect of Oriented Electric Fields on Biologically Relevant Iron-Sulfur Clusters: Tuning Redox Reactivity for Catalysis <b>2022</b> ,	O
739	Behavior of two classes of organic contaminants in the presence of graphene oxide: Ecotoxicity, physicochemical characterization and theoretical calculations <b>2022</b> , 153515	2
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734	Density functional theory study of the selective oxidation of 5-Hydroxymethylfurfural (HMF) to 5-Hydroxymethyl-2-furancarboxylic acid (HMFCA) on the Silver oxide surface (001). <b>2022</b> , 519, 112117	O
733	Synthesis, spectroscopic characterization of new series of alizarin derivatives and their anti-microbial activities: DFT and molecular docking approach. <b>2022</b> , 1256, 132527	
732	Do nitrate ions preferentially bind to Ln/An ion in nuclear waste treatment? [Answers from DFT calculations. <b>2022</b> , 215, 115691	2
731	Synthesis, spectroscopic characterizations, biological activity, DNA-binding investigation combined with DFT studies of new proton-transfer complexes of 2,4-diaminopyrimidine with 2,6-dichloro-4-nitrophenol and 3,5-dinitrosalicylic acid. <b>2022</b> , 350, 118508	1
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729	Calculation of vertical and adiabatic ionization potentials for some benzaldehydes using hybrid DFT, multilevel G3B3 and MP2 methods. <b>2022</b> , 791, 139349	3
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727	A comprehensive and current review on the role of flavonoids in lung cancer-Experimental and theoretical approaches <b>2022</b> , 98, 153938	2
726	Synthesis, spectroscopic investigation and quantum chemical computation of 2-(2-arylamino-4-aminothiazol-5-oyl) naphthalene derivatives. <b>2022</b> , 583, 126553	

725	Investigation of bond orientational order of new Schiff base and theoretical study on Covid-19 activity: A molecular dynamics based on DFT and molecular docking analysis. <b>2022</b> , 792, 139390	О
724	Quantum computational, spectroscopic investigations on N-(2-((2-chloro-4,5-dicyanophenyl)amino)ethyl)-4-methylbenzenesulfonamide by DFT/TD-DFT with different solvents, molecular docking and drug-likeness researches. <b>2022</b> , 638, 128311	35
723	Synthesis, spectroscopic characterization (FT-IR, NMR, UV-Vis), DFT study, antibacterial and antioxidant in vitro investigations of 4,6-bis((E)-1-((3-(1H-imidazol-1-yl)propyl)imino)ethyl)benzene-1,3-diol. <b>2022</b> , 1255, 132457	2
722	Thiazole derivatives: Synthesis, characterization, biological and DFT studies. <b>2022</b> , 1255, 132374	1
721	First-principles modeling of complexation of anticancer antibiotics with fullerene (C60) nanocage: Probing non-covalent interactions by vibrational and electronic spectroscopy. <b>2022</b> , 1255, 132449	1
720	Straightforward green synthesis of indeno-furan carboxylates from ninhydrin and 帐etoesters: X-Ray crystal structure, Hirshfeld and DFT investigations. <b>2022</b> , 1255, 132433	3
719	Effect of N-benzyl group in indole scaffold of thiosemicarbazones on the biological activity of their Pd(II) complexes: DFT, biomolecular interactions, in silico docking, ADME and cytotoxicity studies. <b>2022</b> , 534, 120805	1
718	Synthesis, spectral, structural and antimicrobial activities of Ethyl-4-{[-(1-(2-(4-nitrobenzoyl)hydrazono)ethyl]}-3,5-dimethyl-1H-pyrrole-2-carboxylate. <b>2022</b> , 1255, 132405	
717	Exploring the permeability of covid-19 drugs within the cellular membrane: a molecular dynamics simulation study <b>2022</b> ,	
716	Mechanistic studies on stereoselective domino $[4 + 2]$ /retro $[3 + 2]$ / $[3 + 2]$ cycloaddition reactions of oxadiazoles with strained and unstrained cycloalkenes. <b>2022</b> , 141, 1	1
715	Synthetic Aromatic Organic Compounds Bearing 4, 4-Dimethyl-3-Thiosemicarbazide Moiety: Theoretical and Experimental Approach. 1-23	
714	Drug delivery of carvedilol (cardiovascular drug) using phosphorene as a drug carrier: a DFT study. <b>2022</b> , 16, 31-46	3
713	Theoretical study of thiazole activation in sudoxicam and meloxicam: Reaction center, biotransformation, and methyl effects.	
712	Understanding the toxicity of lignin-derived phenolics towards enzymatic saccharification of lignocellulose for rationally developing effective in-situ mitigation strategies to maximize sugar production from lignocellulosic biorefinery <b>2022</b> , 126813	O
711	Quantitative structure-activity relationship study of skin sensitization of Michael acceptors based on quantum chemical descriptors. <b>2022</b> ,	
710	Weak intermolecular interactions of cysteine on BNNT, BNAlNT and BC2NNT: a DFT investigation. <b>2022</b> , 45, 1	3
709	Theoretical investigation of the mechanism and regioselectivity of the 3-isopropyl-1,6-dimethyl-naphthalene and ar-himachalene in nitration reaction: a MEDT study. <b>2022</b> , 141, 1	О
708	Properties Assessment by Quantum Mechanical Calculations for Azulenes Substituted with Thiophenlbr Furanlinyl Byridine. <b>2022</b> , 14, 354	O

707	Efficient Consecutive Synthesis of Ethyl-2-(4-Aminophenoxy) Acetate, a Precursor for Dual GK and PPARIActivators, X-ray Structure, Hirshfeld Analysis, and DFT Studies. <b>2022</b> , 12, 227	
706	Computational investigation of the alkaloids of species as phytopharmaceuticals for the inhibition of sterol 14Edemethylase protease of <b>2022</b> , 1-19	
705	Synthesis of thiophene derivatives: Substituent effect, Antioxidant activity, Cyclic voltammetry, Molecular Docking, DFT, and TD-DFT Calculations. <b>2022</b> , 1257, 132607	1
704	Bond Energies of Enamines <b>2022</b> , 7, 6354-6374	O
703	New gem-dichlorocyclopropane-pyrazole hybrids with monoterpenic skeleton: Synthesis, crystal structure, cytotoxic evaluation, molecular dynamics and theoretical study. <b>2022</b> , 1256, 132573	
702	Synthesis, structural, computational, and antiproliferative activity studies of new steroidal tetrazole derivatives. <b>2022</b> , 1256, 132577	O
701	Study of dipolar 1.3 cycloaddition reaction by DFT method, as well as study of antibacterial activity of two isomers 1.4 and 1.5 on two therapeutic targets E. coli and Helicobacter pylori, by molecular docking.	О
700	Design, Synthesis, Chemical and Biochemical Insights Into Novel Hybrid Spirooxindole-Based p53-MDM2 Inhibitors With Potential Bcl2 Signaling Attenuation <b>2021</b> , 9, 735236	7
699	Carbonyl Composition and Electrophilicity in Vaping Emissions of Flavored and Unflavored E-Liquids <b>2021</b> , 9,	2
698	Physico-Chemical Properties and DFT Calculations of 2-Methoxy [4 - (Prop-1-En-1-Yl) Phenol (ISOEUGENOL) Using Gausssian Basis Set. <b>2022</b> , 01-20	
697	Mono- and Binuclear Copper(Ii) Complexes with Different Structural Motifs and Geometries: Synthesis, Spectral Characterization, Dft Calculations and Superoxide Dismutase Enzymatic Activity.	
696	Influence of Point Defects on the Hydrogen Storage in Nickel Decorated Gec and Snc Nanotubes.	
695	Theoretical Study of the Adsorption Mechanism of Ioversol Contrast Agent on the Single-Walled Carbon Nanotube Surface.	
694	Unveiling the intramolecular $[3 + 2]$ cycloaddition reactions of C,N-disubstituted nitrones from the molecular electron density theory perspective.	O
693	Thiophene as a Gas Sensor for the Adsorption of Carbonyl Sulfide: Dft Calculations.	
692	Removal of Cationic and Anionic Dyes by Mof-199: Identifying the Adsorption Mechanism.	
691	Competitive Adsorption of Anionic and Cationic Molecules on Three Activated Carbons Derived from Agroindustrial Waste.	O
690	How the substrate affects amination reaction kinetics of nitrochlorobenzene. <b>2022</b> , 7, 833-838	

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688	Synthesis and characterization of novel copper(ii) complexes as potential drug candidates against SARS-CoV-2 main protease. <b>2022</b> , 46, 4911-4926	3
687	An experimental and computational study of new spiro-barbituric acid pyrazoline scaffolds: restricted rotation vs. annular tautomerism.	2
686	Catechin and Epicatechin. What I the More Reactive?. <b>2022</b> , 10, 53-70	Ο
685	Influence of Point Defects on the Hydrogen Storage in Nickel Decorated Gec and Snc Nanotubes.	
684	PM3 Method based QSAR Study of the Derivatives of Thiadiazole and Quinoxaline for Antiepileptic Activity using Quantum Mechanical and Energy Descriptors. <b>2022</b> , 7, 111-122	
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682	Exploration of plant-derived natural polyphenols toward COVID-19 main protease inhibitors: DFT, molecular docking approach, and molecular dynamics simulations <b>2022</b> , 12, 5357-5368	1
681	Molecular Structural, Hydrogen Bonding Interactions, and Chemical Reactivity Studies of Ezetimibe-L-Proline Cocrystal Using Spectroscopic and Quantum Chemical Approach <b>2022</b> , 10, 848014	0
680	A quest for substituent effects on novel diamino(phosphino)phosphinidenes using density functional theory method.	
679	Mechanistic elucidation of the tandem Diels-Alder/(3 + 2) cycloadditions in the design and syntheses of heterosteroids <b>2022</b> , 28, 70	O
678	In Silico Analysis of Binding Stability of Quercetin with CmpA and In Vitro Growth Inhibition Study of Cyanobacterial Species Using Azadirachta indica Extracts. 1	
677	Photodegradation of Congo Red by Modified P25-Titanium Dioxide with Cobalt-Carbon Supported on SiO2 Matrix, DFT Studies of Chemical Reactivity. <b>2022</b> , 12, 248	
676	Regioselection Switch in Nucleophilic Addition to Isoquinolinequinones: Mechanism and Origin of the Regioselectivity in the Total Synthesis of Ellipticine <b>2022</b> ,	Ο
675	Effect of cationic monomer structure on the aggregation behavior of amphoteric acrylic polymer around isoelectric point. <b>2022</b> , 4,	0
674	Hybrid Synthetic and Computational Study of an Optimized, Solvent-Free Approach to Curcuminoids <b>2022</b> , 7, 7257-7277	Ο
673	HDAC inhibitि (N-(2-hidroksifenil)-2-propilpentanamid)' in Kuantum Kimyasal Hesaplamalar ile Molekler Yap⊞Spektroskopik (IR, NMR, UV-VIS) licelemeleri ve Lineer Olmayan Optik (NLO) Analizi. <b>2022</b> , 22, 1-15	
672	Fischer and Schrock carbene complexes in the light of global and local electrophilicity-based descriptors.	

671	Computational Investigation of Chemisorption of Thiophosgene on Co@B\$\$_{8}^{ - }\$\$. <b>2022</b> , 96, 267-272	
670	Synthesis and anti-Cancer Activity of a New Hybrid Based Spirooxindole-Pyrrolidine -Thiochromene Scaffolds via [3 + 2] Cycloaddition Reaction: Computational Investigation. 1-19	О
669	Solvent-Free Synthesis of Glycoside Annulated 1,2,3-Triazole Based Dihydropyrimidinones using Copper Ferrite Nanomaterials as Heterogeneous Catalyst and DFT Studies. <b>2022</b> , 7,	2
668	The BCL Method for DSSC: Basis and Applications. <b>2022</b> , 12, 2358	
667	Spectroscopic, Solvation Effects and MD Simulation of an Adamantane-Carbohydrazide Derivative, a Potential Antiviral Agent. 1-15	1
666	Organic Compounds as Corrosion Inhibitors for Carbon Steel in HCl Solution: A Comprehensive Review <b>2022</b> , 15,	4
665	On the Mechanism of the Synthesis of Nitrofunctionalised <b>2</b> -Pyrazolines via [3+2] Cycloaddition Reactions between <b>EWG-</b> Activated Nitroethenes and Nitrylimine TAC Systems. <b>2022</b> , 3, 59-76	0
664	Electronic, Thermal, and Vibrational Properties of SiO2/SCN System: A Combined Density Functional Theory and Experimental Study. <b>2022</b> , 96, 598-610	
663	A novel chemo-phenotypic method identifies mixtures of salpn, vitamin D3, and pesticides involved in the development of colorectal and pancreatic cancer <b>2022</b> , 233, 113330	0
662	Transition-metal-based pentalene complexes as hydrogen storage materials theoretical view.	О
661	Synthesis, Structural Investigation, Hirshfeld Surface Analysis, and Biological Evaluation of -(3-Cyanothiophen-2-yl)-2-(thiophen-2-yl)acetamide <b>2022</b> , 7, 11320-11329	0
660	Cyanopropyl functionalized benzimidazolium salts and their silver N-heterocyclic carbene complexes: Synthesis, antimicrobial activity, and theoretical analysis <b>2022</b> , e2200041	О
659	DFT analysis of valproic acid adsorption onto Al/B-N/P nanocages with solvent effects <b>2022</b> , 28, 98	2
658	Synthesis of the nickel(II) complexes bearing tetradentate thiosemicarbazone through Michael addition of n-alcohols. Experimental, theoretical characterization and antioxidant properties. 1	
657	Molecular docking, X-ray crystallography, Hirshfeld surface and computational studies of N-((2,3-dichlorophenyl)(ethoxy)methyl)-2-methoxy-4-nitrobenzenamine. 1-29	
656	Reactivity and a Charge-Transfer Model Analysis in Aminopolycarboxylic-Metal Complexes 2022,	
655	Investigating the effect of Econfigurations and methoxy substitution on donor and Espacers based dyes for dye-sensitized solar cell applications Computational approach. 1	О
654	Alterations to the broad-spectrum formin inhibitor SMIFH2 improve potency.	O

653	Structureproperty relationships in para-substituted nitrobenzofurazans: electrochemical, optical, and theoretical analysis. 1	О
652	The effects of heteroatom substituents on structure, stability, and electronic properties of remote N -heterocyclic germylenes (rNHGes), at DFT.	
651	Deep oxidative desulfurization via rGO-immobilized tin oxide nanocatalyst: Experimental and theoretical perspectives. <b>2022</b> , 33, 103499	1
650	Quantum Computational Investigation of ()-1-(4-methoxyphenyl)-5-methyl-'-(3-phenoxybenzylidene)-1-1,2,3-triazole-4-carbohydrazide <b>2022</b> , 27,	12
649	Synthesis, spectral characterisation, third-order nonlinear optical properties and quantum chemical studies on (E)-4-bromo-N'-(2,4-dimethoxybenzylidene)benzohydrazide crystal for optoelectronics applications. <b>2022</b> , 33, 7883-7899	O
648	Effect of hydrogen bonds and CF group on the regioselectivity and mechanism of [3 + 2] cycloaddition reactions between nitrile oxide and 2,4-disubstituted´ cyclopentenes. A MEDT study <b>2022</b> , 28, 104	O
647	Synthesis of Crystalline Fluoro-Functionalized Imines, Single Crystal Investigation, Hirshfeld Surface Analysis, and Theoretical Exploration <b>2022</b> , 7, 9867-9878	6
646	Theoretical study of the substituent effect on the OH insertion reaction of copper carbenoids. <b>2022</b> , 141, 1	
645	Theoretical Study of Complex Aspirin and Hydroxypropyl-tyclodextrin in Solvent Phase. <b>2022</b> , 2207, 012022	
644	In Silico and In Vitro Evaluations of Fluorophoric Thiazolo-[2,3-b]quinazolinones as Anti-cancer Agents Targeting EGFR-TKD <b>2022</b> , 1	
643	Ultrasonic-Assisted Synthesis and Quantum Chemical Analysis of Spiro[Indoline-3,3?-Pyrazol]-2-One Derivatives as Effective Bactericidal and Viricidal Agents. 1-16	0
642	A New Schiff Base Molecule Prepared from Pyrimidine-2-thione: Synthesis, Spectral Characterization, Cytotoxic Activity, DFT, and Molecular Docking Studies.	
641	Influence of heteroatoms on the optoelectronic properties of triphenylamine-based dyes for DSSCs application: A computational approach. <b>2022</b> , 1210, 113644	0
640	Energy Landscapes of Carbon Clusters from Tight-Binding Quantum Potentials 2022,	O
639	Mechanistic details of domino [3+2] cycloaddition/[3,3] sigmatropic shift reactions of N-vinyl nitrones with isocyanates. <b>2022</b> , 1210, 113643	0
638	Lewis acid-catalyzed DielsAlder cycloaddition of 2,5-dimethylfuran and ethylene: a density functional theory investigation. <b>2022</b> , 141, 1	
637	Can van der Waals constants be used in the chemical reactivity analysis? A new approach as a support to minimum magnetizability principle.	
636	Quantum study on the optoelectronic properties and chemical reactivity of phenoxazine-based organic photosensitizer for solar cell purposes. <b>2022</b> , 141, 1	O

635	Physicochemical Properties and Atomic-Scale Interactions in Polyaniline (Emeraldine Base)/Starch Bio-Based Composites: Experimental and Computational Investigations <b>2022</b> , 14,	O
634	Imidazolium based superalkalis as building block for Lewis base. <b>2022</b> , 1210, 113639	1
633	Synthesis, molecular docking of 3-(2-chloroethyl)-2,6-diphenylpiperidin-4-one: Hirshfeld surface, spectroscopic and DFT based analyses. <b>2022</b> , 132993	3
632	TM-doped Mg12O12 nano-cages for hydrogen storage applications: Theoretical study. <b>2022</b> , 35, 105349	1
631	Computational study of Cu n AgAu (n´ =´ 1卧) clusters invoking DFT based descriptors. <b>2022</b> ,	
630	Exploring the maximum Fukui function sites with the frontier-controlled soft-soft reactions using 1,3-dipolar cycloaddition reactions of nitrilium betaines <b>2022</b> , 28, 116	O
629	Molecular docking, experimental FT-IR spectra, UVIV is spectra, vibrational analysis, electronic properties, Fukui function analysis of a potential bioactive agent IProflavine. <b>2022</b> , 99, 100396	1
628	Hartree-Fock and DFT studies of the optoelectronic, thermodynamic, structural and nonlinear optical properties of photochromic polymers containing styrylquinoline fragments. <b>2022</b> , 281, 125883	О
627	Synthesis, Molecular Structure, Electronic, Spectroscopic, NLO and Antimicrobial Study of N-Benzyl-2-(5-aryl)aniline Derivatives. <b>2022</b> , 133017	О
626	Redox chemistry of bis(terpyridine)manganese(II) complexes 🖪 molecular view. <b>2022</b> , 913, 116272	1
625	Iridium(III)-3-hydroxy-2-(3?-methyl-2?-thienyl)-4-oxo-4H-1-benzopyran complex: The analytical, in-vitro antibacterial and DFT studies. <b>2022</b> , 139, 109333	0
624	Spectroscopic, physicochemical, and pharmacokinetic analysis of 曲myrin mixture obtained from Protium heptaphyllum (Aubl.) Marchand resin. <b>2022</b> , 1256, 132551	1
623	Antiviral activities of 4H-chromen-4-one scaffold-containing flavonoids against SARS-CoV-2 using computational and approaches <b>2022</b> , 118775	1
622	Machine learning predictive classification models for the carcinogenic activity of activated metabolites derived from aromatic amines and nitroaromatics <b>2022</b> , 105347	О
621	Complexes of 1-(2-R(F, CH, Cl)-phenyl)-1,4-dihydro-5H-tetrazole-5-thiones with cadmium chloride: Synthesis, molecular, crystal structures and computational investigation approach <b>2022</b> , 231, 111791	O
620	Potential sensing of toxic chemical warfare agents (CWAs) by twisted nanographenes: A first principle approach <b>2022</b> , 153858	1
619	Influence of point defects on the hydrogen storage in nickel decorated GeC and SnC nanotubes 12022, 1212, 113691	
618	Synthesis, DFT computations, molecular docking studies and anticancer activity of 2-(4-fluorophenyl)-3-(5-methylisoxazol-3-yl)thiazolidin-4-one. <b>2022</b> , 39, 100859	O

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616	Interaction of Fluorouracil drug with boron nitride nanotube, Al doped boron nitride nanotube and BC2N nanotube. <b>2022</b> , 1212, 113699	1
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441	One pot, three component synthesis of fluoro and trifluoromethyl substituted unsymmetrical dihydropyrazine fused acridine-3-carboxamide using renewable 2-MeTHF solvent and their DFT studies. <b>2022</b> , 261-262, 110019	2
440	The role of herbal plants in the inhibition of SARS-CoV-2 main protease: A computational approach. <b>2022</b> , 99, 100640	
439	Insights into catalytic reduction of dyes catalyzed by nanocomposite beads Alginate@Fe3O4: Experimental and DFT study on the mechanism of reduction. <b>2022</b> , 650, 129595	1
438	Iron oxide nanoparticles loaded smart hybrid hydrogel for anti-inflammatory drug delivery: Preparation and characterizations. <b>2022</b> , 650, 129631	5

437	Adsorption study of N (-benzo[d]thiazol-2-yl)-1-(thiophene-2-yl) methanimine at mild steel/aqueous H2SO4 interface. <b>2022</b> , 33, 102169	4
436	Effect of electron donors on the photophysical and theoretical properties of BODIPY dyes based on tetrazolo[1,5-a]quinoline. <b>2022</b> , 1267, 133608	1
435	Synthesis, spectroscopic characterization, single crystal XRD, Hirshfeld Surface analysis and theoretical studies (DFT) of 4-adamantyl-(2-(substitutedbenzylidene)hydrazinyl)thiazoles. <b>2022</b> , 1267, 133620	4
434	Novel substituted isoindolinones derived from lawsone: synthesis, characterization, theoretical, biological activity and docking studies. <b>2022</b> , 1267, 133601	1
433	Physicochemical properties calculated using DFT method and changes of 5-methyluridine hemihydrate crystals at high temperatures. <b>2022</b> , 281, 121594	
432	DFT and Molecular Simulation Study of Gold Clusters as Effective Drug Delivery Systems for 5-Fluorouracil Anticancer Drug.	
431	New Bioprecursor Prodrugs of Sulfadiazine: Synthesis, X-ray Structure and Hirshfeld Analysis. <b>2022</b> , 12, 1016	О
430	Spectroscopic Quantum Chemical and Molecular Docking Study of 5,7-Dibromo-8-Quinolinol and Its Spectrophotometrically Investigated Niobium (V) Complex. 1-18	
429	Spectral characterization, solvation effects on topological aspects, and biological attributes of Fmoc-L-glutamic acid 5-tert-butyl ester: An effective reagent in anticancer evaluations. <b>2022</b> , 133793	1
428	Theoretical Study of the Structural, Optoelectronic, and Reactivity Properties of N-[5?-Methyl-3?-Isoxasolyl]-N-[(E)-1-(-2-)]Methylidene] Amine and Some of Its Fe2+, Co2+, Ni2+, Cu2+, and Zn2+ Complexes for OLED and OFET Applications. <b>2022</b> , 2022, 1-18	1
427	Effect of double bond on electronic and optical properties of coelenteramide: A time-dependent density functional theory investigation. <b>2022</b> , 113825	
426	Designing of PC 31 BM based acceptors for dye-sensitized solar cell.	O
425	A well-controlled cracks and gliding-free single-crystal Ni-rich cathode for long-cycle-life lithium-ion batteries. <b>2022</b> , 166375	1
424	A detailed density functional theory investigation on physicochemical properties of ciclopirox derivatives: A potential candidate for prevention of age-related macular degeneration. <b>2022</b> , 1268, 133678	
423	Study by DFT of the functionalization of amylose/amylopectin with glycerin monoacetate: Characterization by FTIR, electronic and adsorption properties. <b>2022</b> , 1269, 133761	O
422	Design, Synthesis, Characterization, DFT Calculations, Molecular Docking Study, and Antimicrobial Activity of Hydrazones Bearing Pyrimidine and Sugar Moieties.	
421	Spectroscopic and Molecular Docking Studies of a Novel Biologically Active Heterocyclic Compound 2-Chloro-6-Methoxypyridine-4-Carboxylic Acid by Quantum Computational Method. 1-33	
420	Imidazole and nitroimidazole derivatives as NADH -fumarate reductase inhibitors: Density functional theory studies, homology modeling, and molecular docking. <b>2022</b> , 43, 1573-1595	O

419	Synthesis, Characterization, and Evaluation of New Composites Coagulants Polyaluminum Chloride-Sodium Alginate. <b>2022</b> , 233,	
418	Tuning the reactivity of ruthenium(II) terpyridyl complexes using auxiliary ligands: kinetic and mechanistic studies.	
417	Unveiling the Chemistry of Higher-Order Cycloaddition Reactions within the Molecular Electron Density Theory. <b>2022</b> , 4, 735-752	1
416	Hydrogen storage capacity of Be 2 (NLi) 2 cluster with ultra-short berylliumBeryllium distance.	
415	Effect of Structural Variation on Spectral, NLO Properties, and Biological Activity of Pyrrole Hydrazones.	
414	XPS photoelectron lines, satellite structures and Wagner plot of Cu(II)	O
413	Synthesis, Characterization, and DFT-Based Electronic and Nonlinear Optical Properties of Methyl 1-(arylsulfonyl)-2-aryl-1H-benzo[d]imidazole-6-carboxylates.	
412	A combined study on structures and vibrational spectra of the antiviral rimantadine using SQMFF and DFT calculations. <b>2022</b> , 8, e10102	O
411	High-Performance Material for the Effective Removal of Uranyl Ion from Solution: Computationally Supported Experimental Studies. <b>2022</b> , 38, 10098-10113	1
410	DFT, hirshfeld and molecular docking studies of a hybrid compound - 2,4-Diamino-6-methyl-1,3,5-triazin-1-ium hydrogen oxalate as a promising anti -breast cancer agent. <b>2022</b> , e10355	O
409	New findings on ligand series used as SARS-CoV-2 virus inhibitors within the frameworks of molecular docking, molecular quantum similarity and chemical reactivity indices. 11, 914	
408	High capacity reversible hydrogen storage in Si substituted and Li decorated C 20 fullerene: Acumen from density functional theory simulations.	1
407	Discovery of promising cholinesterase inhibitors for Alzheimer's disease treatment through DFT, docking, and molecular dynamics studies of eugenol derivatives.	2
406	External fields in conceptual density functional theory.	O
405	Electronic, non-linear optical, optoelectronic, and thermodynamic properties of undoped and doped bis (ethylenedithio) tetraselenafulvalene (BETS) (C10H8S4Se4) molecule: first study using ab initio investigation. <b>2022</b> , 28,	
404	Anti-lung cancer drug discovery approaches by polysaccharides: an in silico study, quantum calculation and molecular dynamics study. 1-17	O
403	Exploring flexibility, intermolecular interactions and ADMET profiles of anti-influenza agent isorhapontigenin: A quantum chemical and molecular docking study. <b>2022</b> , 8, e10122	0
402	2-Aminobenzothiazole as an efficient corrosion inhibitor of AA6061-T6 in 0.5´ M HCl medium: electrochemical, surface morphological, and theoretical study.	O

401	Structural Aspects and Stability of Interactions between Phenyl-3,3'-Bis(Indolyl)Methanes and #Cyclodextrin from Density Functional Theory. 1-23	O
400	Why Ortho- and Para-Hydroxy Metabolites Can Scavenge Free Radicals That the Parent Atorvastatin Cannot? Important Pharmacologic Insight from Quantum Chemistry. <b>2022</b> , 27, 5036	0
399	Spectroscopic, molecular docking, and ecotoxicology analyses of the monomer and dimers of 3-aminocyclohexa-2,6-diene-1-sulfonic acid la theoretical approach. <b>2022</b> , 134,	
398	DFT rationalization of metal-catalyst-controlled coupling of carbazole with diazo-naphthalen-2(1H)-one. <b>2022</b> , 529, 112574	
397	Experimental and Computational Study of Novel Pyrazole Azo Dyes as Colored Materials for Light Color Paints. <b>2022</b> , 15, 5507	0
396	Introducing a new model based on electronegativity equalization principle for the analysis of the natural bond orbital reactivity in the c-DFT background.	
395	AIEgens-NLOphores coumarin-triphenylamine chalcone derivatives: Synthesis, photophysical properties and DFT computational study. <b>2022</b> , 134009	0
394	Density Functional Theoretical Computational Studies on 3-Methyl 2-Vinyl Pyridinium Phosphate. <b>2022</b> , 2022, 1-14	
393	Hardness of Molecules and Bandgap of Solids from a Generalized Gradient Approximation Exchange Energy Functional.	
392	Alterations to the broad-spectrum formin inhibitor SMIFH2 modulate potency but not specificity. <b>2022</b> , 12,	o
391	Synthesis, In´Vitro and in Cell Study of a New Spirooxindoles-Based N-Alkylated Maleimides Targeting HER2/3 Signaling Pathway. 1-25	
390	Unexpected kinetically controlled organoselenium-based isomaleimide: X-ray structure, hirshfeld surface analysis, 3D energy framework approach, and density functional theory calculation. 10,	o
389	Why Ortho- and Para-Hydroxy Metabolites Can Scavenge Free Radicals That the Parent Atorvastatin Cannot? Important Pharmacologic Insight from Quantum Chemistry.	0
388	Putrescine adsorption on pristine and Cu-decorated B12N12 nanocages: A density functional theory study. <b>2022</b> , 1215, 113836	o
387	Linear, nonlinear optical properties and structure-property relationships in ESIPT-rhodols. <b>2022</b> , 1215, 113806	0
386	New insights on the adsorption of CI-Reactive Red 141 dye using activated carbon prepared from the ZnCl2-treated waste cotton fibers: Statistical physics, DFT, COSMO-RS, and AIM studies. <b>2022</b> , 364, 119956	O
385	Bromochlorodifluoromethane interaction with pristine and doped BN nanosheets: A DFT study. <b>2022</b> , 10, 108367	1
384	The effects of biologically important divalent and trivalent metal cations on the cyclization step of dopamine autoxidation reaction: A quantum chemical study. <b>2022</b> , 15, 104153	1

383	Experimental, DFT and MD simulation studies of Mordant Black 11 dye adsorption onto polyaniline in aqueous solution. <b>2022</b> , 364, 120045	1
382	Nonlinear optical and quantum chemical studies of Palladium benzimidazole Schiff base complex. <b>2022</b> , 151, 107012	1
381	Effect of porogen agent on bio-based membranes filtration performances: Experimental and theoritical study. <b>2022</b> , 1269, 133863	
380	Regioselective synthesis of spirooxindole-pyrolidine via (GAP) chemistry process: Experimental and DFT study. <b>2022</b> , 1270, 133891	
379	A convenient one-pot synthesis, theoretical studies, and NMR-based conformational analysis of nitroarylidene dimalonates. <b>2022</b> , 1269, 133848	0
378	Theoretical vibrational spectroscopy (FT-IR), PED and DFT calculations of chromones and thiochromones. <b>2022</b> , 1270, 133972	3
377	Dianionic or tetraanionic ligand: Synthesis, Hirshfeld surface analysis, DFT, electrochemical and magnetic properties of mono- and dinuclear Cu(II) complexes derived from a deprotonated Schiff base. <b>2022</b> , 1269, 133857	
376	Molecular dynamic simulations and computational DFT of adsorption performances of malachite green on the metal fluorides in aqueous medium. <b>2022</b> , 1270, 133924	O
375	TD-DFT and optical properties of 9,9-dioctyl-9Hfluorene-based oligomer in a thin film and design of DFB laser using ellipsometry studies.	O
374	Density Functional Theory Study of the Regioselectivity in Copolymerization of bis-Styrenic Molecules with Propylene Using Zirconocene Catalyst. <b>2022</b> , 12, 1039	1
373	Insights into solvent effects on molecular properties, physicochemical parameters, and NLO behavior of brinzolamide, a bioactive sulfonamide: A computational study. <b>2022</b> , 99, 100738	0
372	Theoretical insight and molecular recognition of oxatub[4]arene-based organic macrocycle as a supramolecular host for antipsychotic drug risperidone. <b>2022</b> , 366, 120195	O
371	An experimental and theoretical investigation of cationic azine dye adsorption on natural sepiolite in single and multi-component systems. <b>2022</b> , 187, 507-515	1
370	Design, synthesis and evaluate of imidazole, triazine and metastable oxazolone derivatives as chemosensor for detecting metals. <b>2022</b> , 26, 101537	O
369	Structure, electronic and optical properties of chalcopyrite-type semiconducting materials XGaY2 (X´=´Cu, Ag, Au; Y´=´S, Se, Te) for solar cell applications: A DFT study. <b>2022</b> , 646, 414305	O
368	The synthesis and photoelectrical performances of perylenediimide-based devices as an interface layer in metal-organic-semiconductors. <b>2022</b> , 286, 116036	O
367	Mechanistic insights and steric interpretations through statistical physics modelling and density functional theory calculations for the adsorption of the pesticides atrazine and diuron by Hovenia dulcis biochar. <b>2022</b> , 367, 120418	0
366	X-ray diffraction, IR spectrum, optical properties, AIM, NBO, RDG, HS, Fukui function, biological and molecular docking analysis of a novel hybrid compound (C9H15N3)[CuCl4(H2O)]. <b>2023</b> , 1271, 134094	1

365	Investigation of the substitutedEitanium nanocages using computational chemistry. 2023, 118, 108317	O
364	Nitrobenzamido substitution on thiophene-3-carboxylate: Electrochemical investigation, antioxidant activity, molecular docking, DFT calculations. <b>2023</b> , 1271, 134030	O
363	An eco-friendly method for the synthesis of 1,2,4-triazole-Schiff base derivatives in aqueous medium and DFT calculations. <b>2023</b> , 1271, 134102	О
362	Design, synthesis, and in vitro anticancer activity of thiophene substituted pyridine derivatives. <b>2023</b> , 127-143	Ο
361	Investigation (IR, UV-visible, fluorescence, X-ray diffraction and thermogravimetric) studies of Mn(II), Fe(III) and Cr(III) complexes of thiosemicarbazone derived from 4- pyridyl thiosemicarbazide and monosodium 5-sulfonatosalicylaldehyde and evaluation of their biological applications. <b>2023</b> ,	0
360	The Crystal Structure, Hirshfeld Surface interactions, optical/Nonlinear Optical properties and evaluation of the antioxidant activity of 8-(3-chloropropanamido)quinolin-1-ium chloride: Experimental and theoretical studies. <b>2023</b> , 1271, 134014	O
359	Efficient one-pot synthesis, characterization and IDFT study of solvents polarity effects on the structural, energetic and thermodynamic proprieties of (a-methylamino-ethyl)-phosphonic acid dimethyl ester. <b>2023</b> , 1272, 134165	О
358	Mangosteen peel extract as a green corrosion inhibitor of mild steel in 1 m hydrochloric acid: Gravimetric, quantum chemical, and Monte Carlo simulation studies. <b>2022</b> ,	O
357	Unveiling the non-polar [3+2] cycloaddition reactions of cyclic nitrones with strained alkylidene cyclopropanes within a molecular electron density theory study. <b>2022</b> , 12, 25354-25363	0
356	Chemoselective and diastereodivergent synthesis of new spirooxindolo-pyrrolizidines and pyrrolidines stemming from unsymmetrical 1,3-bis(arylidene)tetral-2-ones: a combined experimental and theoretical study.	O
355	Experimental, NBO, NLO and docking analysis of a novel ligand derived from vanillin and N(4)-methyl-N(4)-phenylthiosemicarbazide and its transition metal complexes. <b>2022</b> , 4, 100453	0
354	Computational study of quinoline-based thiadiazole compounds as potential antileishmanial inhibitors. <b>2022</b> , 46, 17554-17576	Ο
353	Unveiling the [3+2] cycloaddition between difluoromethyl diazomethane and 3-ylideneoxindole from the perspective of molecular electron density theory.	2
352	Mixed-ligand complexes of copper(ii) with thienoyltrifluoroacetonate and nitrogen containing ligands: synthesis, structures, antimicrobial activity, cytotoxicity, Hirshfeld surface analysis and DFT studies. <b>2022</b> , 12, 23513-23526	O
351	Electronic properties of amino acids and nucleobases: similarity classes and pairing principles from chemical reactivity indices. <b>2022</b> , 24, 22477-22486	2
350	Impact of Doping on the Optoelectronic, Electronic and Nonlinear Optical Properties and on the Reactivity of Photochromic Polymers Containing Styrylquinoline Fragments.	O
349	DFT Exchange: Sharing Perspectives on the Workhorse of Quantum Chemistry and Materials Science.	9
348	Spectroscopic and quantum chemical investigations to explore the effect of intermolecular interactions in a diuretic drug: Hydrochlorothiazide. <b>2023</b> , 285, 121931	O

347	Supramolecular association of (1,4-phenylenedimethanaminium) bis(perchlorate) monohydrate: A combined experimental and theoretical study. <b>2023</b> , 1272, 134212	O
346	Experimental and Quantum Chemical Approaches for Hydrazide-based Crystalline Organic Chromophores: Synthesis, SC-XRD, Spectroscopic and Nonlinear Optical Properties. <b>2023</b> , 1272, 134208	O
345	Nitrogenized 2D Covalent Organic Framework Decorated Ni-Rich Single Crystal Cathode to Ameliorate the Electrochemical Performance of Lithium Batteries. <b>2022</b> , 9, 2200800	1
344	Effect of Hemp Fiber Addition on Mechanical Properties of Acrylic Resin: Coupled Experimental and Theoretical Study. <b>2022</b> , 23, 2271-2278	O
343	Investigation of Non-Covalent Interactions of Copper (II) Complexes with Small Biomolecules.	O
342	Crystal structure determination, Hirshfeld surface, crystal void, intermolecular interaction energy analyses, as well as DFT and energy framework calculations of 2-(4-oxo-4,5-dihydro-1H-pyrazolo[3,4-d]pyrimidin-1-yl)acetic acid. <b>2022</b> , 78, 953-960	O
341	Quantum chemical study on the mechanism and selectivity of $[3 + 2]$ cycloaddition reactions of aryl nitrile oxides with furanone. <b>2022</b> , 141,	O
340	Theoretical Study on the DielsAlder Reaction of Fullerenes: Analysis of Isomerism, Aromaticity, and Solvation. <b>2022</b> , 3, 364-379	O
339	Kinetic and Computational Study of Degradation of Two Azo Dyes, Metanil Yellow and Orange II, by Iron Oxide Nanoparticles Synthesized Using Hylocereus undatus. <b>2022</b> , 7, 31667-31681	1
338	Investigation of Corrosion Inhibition Potential of Triazolopyrimidinones via Density Functional Theory and Monte-Carlo Simulations. <b>2022</b> , 10, 95-105	O
337	A multiscale ONIOM study of the buckminsterfullerene (C60) DielsAlder reaction: from model design to reaction path analysis. <b>2022</b> , 28,	O
336	Density functional theory studies on molecular geometry, spectroscopy, HOMO LUMO and reactivity descriptors of titanium(IV) and oxidozirconium(IV) complexes of phenylacetohydroxamic acid.	O
335	New Methods for Preparation of the Monofluorosubstituted Derivative of the closo-Borate Anion [2-B10H9F]2[Ilts Properties, and Analysis of Its Reactivity. <b>2022</b> , 67, 1583-1590	O
334	Synthesis, crystal structure, Hirshfeld surface, nonlinear optical properties and computational studies of Schiff based (E)-N'-(2,4-dimethoxybenzylidene) benzohydrazide single crystals for optoelectronic applications. <b>2022</b> , 54,	O
333	An Experimental and Theoretical Study on Essential Oil of Aethionema sancakense: Characterization, Molecular Properties and RDG Analysis. <b>2022</b> , 27, 6129	5
332	Unveiling the Origin of the Selectivity and the Molecular Mechanism in the [3+2] Cycloaddition Reaction of N-aryl-C-carbamoylnitrone with N-arylitaconimide. <b>2022</b> , 3, 281-292	O
331	Experimental and Theoretical Assessments on Anticorrosion Performance of 2-(1H-benzimidazol-2-yl)-3-(4-hydroxyphenyl) Acrylonitrile for Copper in 1M HNO3. 17-45	O
330	Self-assembly of new cobalt complexes based on [Co (SCN)4], synthesis, empirical, antioxidant activity, and quantum theory investigations. <b>2022</b> , 12,	1

329	New insight into the substituent effects on the hydrolytic deamination of saturated and unsaturated cytosine.	O
328	Modelling of Aminothiophene-Carbonitrile Derivatives as Potential Drug Candidates for Hepatitis B and C.	6
327	Radical scavenging capacity, antibacterial activity, and quantum chemical aspects of the spectrophotometrically investigated iridium (III) complex with benzopyran derivative. 13,	0
326	Corrosion Inhibition Properties of Phenyl Phthalimide Derivatives against Carbon Steel in the Acidic Medium: DFT, MP2, and Monte Carlo Simulation Studies. <b>2022</b> , 7, 33054-33066	2
325	Electrophilicity of Hoveyda-Grubbs Olefin Metathesis Catalysts as the Driving Force that Controls Initiation Rates.	0
324	Computational study of the effects of static electric field on the interaction of 5-Fluorouracil anti-cancer drug with pristine and Sc- and Ti-doped B12P12 nanocage as drug delivery.	1
323	Application of catalysts in the synthesis of 4-(4-(dimethylamino)benzylidene)-3-methylisoxazol-5(4H)-one: experimental and theoretical studies. <b>2022</b> , 128,	O
322	Novel Multipotent AmantadineM30D Hybrids with Highly Selective Butyrylcholinesterase Inhibition and Neuroprotective Effects as Effective Anti-Alzheimer Agents. <b>2022</b> , 13, 2681-2698	Ο
321	Catalytic performance of pyridinium dihydrogen phosphate ionic liquid for butyl acetate production: theoretical insights and reaction kinetic studies.	0
320	An Eco-Friendly Quaternary Ammonium Salt as a Corrosion Inhibitor for Carbon Steel in 5 M HCl Solution: Theoretical and Experimental Investigation. <b>2022</b> , 27, 6414	1
319	Investigation of the influence of Z/E configuration on the antioxidant and antiradical activities of lapachol and its derivatives: DFT assessment.	O
318	Solvent Effects in the Regioselective N-Functionalization of Tautomerizable Heterocycles Catalyzed by Methyl Trifluoromethanesulfonate: A Density Functional Theory Study with Implicit Solvent Model. <b>2022</b> , 10, 172	O
317	Rationalizing the Substituent Effects in DielsAlder Reactions of Triazolinediones with Anthracene. <b>2022</b> , 126, 6657-6667	0
316	A computational study on acetaminophen drug complexed with Mn+, Fe2+, Co+, Ni2+, and Cu+ ions: structural analysis, electronic properties, and solvent effects. <b>2022</b> , 28,	O
315	Coupling of pseudoradical centers in the synthesis of oxazine fused-spiroindoline: a two-stage one-step double cyclization. <b>2022</b> , 134,	O
314	Reversible hydrogen storage capacity of vanadium decorated small boron clusters (BnV2, n=6-10): A dispersion corrected density functional study. <b>2022</b> , 113899	O
313	Exploration of the mechanism, chemospecificity, regiospecificity and stereoselectivity of the cycloaddition reaction between 9thydroxyparthenolide and nitrilimine: MEDT study. <b>2022</b> , 141,	О
312	ADMET study, spectroscopic characterization and effect of synthetic nitro chalcone in combination with norfloxacin, ciprofloxacin, and ethidium bromide against Staphylococcus aureus efflux pumps.	O

311	From Density Functional Theory to Conceptual Density Functional Theory and Biosystems. <b>2022</b> , 15, 1112	Ο
310	Development of reliable quantitative structurelloxicity relationship models for toxicity prediction of benzene derivatives using semiempirical descriptors. 1-11	Ο
309	Solvent effect, quantification and correlation analysis of the nucleophilicities of cyclic secondary amines.	0
308	Energy and Electronic Properties of Nanostructures Based on the CL-20 Framework with the Replacement of the Carbon Atoms by Silicon and Germanium: A Density Functional Theory Study. <b>2022</b> , 15, 6577	Ο
307	On the Periodicity of the Information Theory and Conceptual DFT-Based Reactivity Descriptors. <b>2022</b> , 126, 6801-6813	0
306	Synthesis and Spectroscopic Characterization of Nicotinaldehyde Based Derivatives: SC-XRD, Linear and Non-Linear Optical Studies. <b>2022</b> , 134236	O
305	DFT calculations, structural analysis, solvent effects, and non-covalent interaction study on the para-aminosalicylic acid complex as a tuberculosis drug: AIM, NBO, and NMR analyses. <b>2022</b> , 28,	0
304	Evodiamine and Rutaecarpine as Potential Anticancer Compounds: A Combined Computational Study. <b>2022</b> , 23, 11513	1
303	HYDROGEN ADSORPTION AND STORAGE ON PALLADIUM-FUNCTIONALIZED C20 BOWL AND C20H10 BOWL MOLECULE INCLUDING HYDROGEN SATURATION. <b>2022</b> , 63, 1399-1408	0
302	Computational design of rasagiline derivatives: Searching for enhanced antioxidant capability.	O
301	Investigating the third-order NLO properties of 4-[(Z)-(6-nitro-1,3-benzothiazol-2-yl)diazinyl]naphthalen-1-ol for nonlinear applications using the Z-scan technique and quantum chemical computations <b>2022</b> , 134288	Ο
300	A DFT study on adsorption of diazinon and fenitrothion on nanocages B12N12 and B12P12.	О
299	Unravelling the Effect of Donor-EAcceptor Architecture in Designing 1,3-Indanedione Based Sensitizers for DSSC Applications. <b>2022</b> , 114328	Ο
298	Fluorination of 2,5-diphenyl-1,3,4-oxadiazole enhances the electron transport properties for OLED devices: a DFT analysis. 1-13	Ο
297	Electrochemistry, DFT Calculations, and Antioxidant Capability of Cobalt Cefazolin Complex. 1083-1090	Ο
296	Bonding nature, nucleophilic reactivity and Electron excitation of NLO active 2,6 Dichloroindophenol Sodium Salt (Polar and Non Polar Solvents) with Topology analysis- Bacterial pathogens study. <b>2022</b> , 120533	Ο
295	Structure, bonding, and interaction with molecular hydrogen of the D-GlucopyranoseBilver+ (1:1) complex.	O
294	DFT study of regio- and stereo-selective 13DC reaction between diazopropane and substituted chalcone derivatives: Molecular docking of novel pyrazole derivatives as Anti-Alzheimer Agents.	O

293	Conformational Landscape and Properties of Psilocybin: A Computational Approach. 2022, 7,	1
292	Mapping out the reaction network of humin formation at the initial stage of fructose dehydration in water. <b>2022</b> ,	О
291	DFT-based computations on some structurally related N-substituted piperazines. 2022, 100766	1
290	Insight into the adsorption of dyes onto chitin in aqueous solution: An experimental and computational study. <b>2022</b> , 15, 104293	O
289	On the hydrolysis of iron ions: DFT-based molecular dynamics perspective. <b>2022</b> , 367, 120323	O
288	Application of pyrrolidinomethylcalix[4]arene coated silica adsorbent for the removal of Chicago sky blue 6B dye from water samples: Equilibrium and computational modelling studies. <b>2021</b> , 33, 586-597	О
287	Conceptual Density Functional Theory. 2022,	O
286	Corrosion mitigation for steel in acid environment using novel p-phenylenediamine and benzidine coumarin derivatives: synthesis, electrochemical, computational and SRB biological resistivity. <b>2022</b> , 12, 29350-29374	4
285	A computational study of the inclusion of tyclodextrin and nicotinic acid: DFT, DFT-D, NPA, NBO, QTAIM, and NCI-RDG studies. <b>2022</b> , 28,	2
284	A theoretical study on aza-Michael additions. <b>2022</b> , 141,	1
283	Silylium ion migration dominated hydroamidation of siloxy-alkynes. <b>2022</b> , 5,	O
282	[3 + 2] Cycloadditions in Asymmetric Synthesis of Spirooxindole Hybrids Linked to Triazole and Ferrocene Units: X-ray Crystal Structure and MEDT Study of the Reaction Mechanism. <b>2022</b> , 14, 2071	O
281	A safe alternative synthesis of primary carbamates from alcohols; in vitro and in silico assessments as an alternative acetylcholinesterase inhibitors. 1-10	0
280	The First Examples of [3+2] Cycloadditions with the Participation of (E)-3,3,3-tribromo-1-nitroprop-1-ene. <b>2022</b> , 15, 7584	1
279	Superstrong Chemical Bonding of Noble Gases with Oxidoboron (BO+) and Sulfidoboron (BS+). <b>2022</b> , 126, 7888-7900	0
278	Ranking the energy minima of the 20 natural amino acids using conceptual tools. <b>2022</b> , 141,	O
277	Computational Insights on Periodicity in Bonding and Lewis Acidity and Basicity of the p-Block Trispyrazolylborate Complexes.	0
276	A Molecular Electron Density Theory Study of the [3+2] Cycloaddition Reaction of an Azomethine Ylide with an Electrophilic Ethylene Linked to Triazole and Ferrocene Units. <b>2022</b> , 27, 6532	1

275	Synthesis of eugenol derivative by the ring opening of epoxide eugenol and its analysis through chemical reactivity: a DFT approach. 1-9	О
274	Decomposition of formic acid via carboxyl mechanism on the graphene nanosheet decorated by Cr, Mn, Fe, Co, Ni, Pd, Ag, and Cd metals: A DFT study. <b>2022</b> ,	O
273	Bromine Substitution Effect on Structure, Reactivity, and Linear and Third-Order Nonlinear Optical Properties of 2,3-Dimethoxybenzaldehyde. <b>2022</b> , 126, 7852-7863	О
272	Computational investigations on acceptor substituent influence of metal-free efficient chromophores for optoelectronic properties. <b>2022</b> , 28,	1
271	5,5,5-Trichloropent-3-en-one as a Precursor of 1,3-Bi-centered Electrophile in Reactions with Arenes in Brüsted Superacid CF3SO3H. Synthesis of 3-Methyl-1-trichloromethylindenes. <b>2022</b> , 27, 6675	0
270	Insight into designing of 2-pyridone derivatives for COVID-19 drug discovery - A computational study.	O
269	CHEMISORPTION OF C2H2 ON C20 BOWL: A COMPUTATIONAL INVESTIGATION. <b>2022</b> , 63, 1600-1609	О
268	Molecular structure and biological activities of 4-thiazolidinone derivatives: a combined theoretical and experimental study. 1-10	O
267	New Theoretical Insights about Anticorrosive Effects and Adsorption Mechanism of Some Amino Acids on Al Surface: DFT, MEP, FMO, NBO, QSAR, Fukui Functions and Monte Carlo Simulation.	О
266	Cheminformatics Study on Structural and Bactericidal Activity of Latest Generation 且actams on Widespread Pathogens. <b>2022</b> , 23, 12685	O
265	Theoretical Insight into BL Chemical Bonding in Closo-Borate [BnHnLCH3]2[ $(n = 6, 10, 12)$ and Monocarborane [BnHnCH3][ $(n = 5, 9, 11)$ Anions. <b>2022</b> , 10, 186	О
264	In silico designing of Si- and Ge-doped imidazolium: a new heterocyclic aromatic superacid. <b>2022</b> , 141,	O
263	Synthesis, characterization and computational studies for (2? S *,3 R *,3? S *,8a? R *)-2?,3?-bis(ethoxycarbonyl)-2-oxo-2?,3?-dihydro-8a?H-spiro[indoline-3,1?-indolizine]-6?-carboxylic acid and some derivatives.	1
262	Hydrogen storage in SiC, GeC, and SnC nanocones functionalized with nickel, Density Functional TheoryBtudy.	O
261	Electronic Spectra (Experimental and Simulated), and DFT Investigation of NLO, FMO, NBO, and MESP Characteristics of Some Biphenylcarboxaldehydes. 1-14	O
260	Theoretical Studies, Spectroscopic Investigation, Molecular Docking, Molecular Dynamics and MMGBSA Calculations with 2-Hydrazinoquinoline. <b>2022</b> , 134482	O
259	Glutathione as green corrosion inhibitor for 6061Al-SiC(p) composite in HCl medium: electrochemical and theoretical investigation.	1
258	Theoretical and photophysical investigation of biologically active fluorophore: 2-amino-6-chlorofluoren-9-one. <b>2022</b> , 99, 100767	О

257	Novel endohedrally and exohedrally metals (Li, Na, and K, Ag) doped (15-crown-5) with remarkable electronic, static and dynamic NLO response. <b>2022</b> , 170169	0
256	Synthesis, Spectral characterization, DFT and in silico ADME studies of the novel pyrido[1,2-a]benzimidazoles and pyrazolo[3,4-b]pyridines. <b>2022</b> , 134454	2
255	Modeling of pristine, Ir- and Au-decorated C60 fullerenes as sensors for detection of hydroxyurea and nitrosourea drugs. <b>2022</b> , 10, 108802	4
254	Structural insights into conformational stability and binding of thiazolo-[2,3-b] quinazolinone derivatives with EGFR-TKD and in-vitro study. <b>2022</b> , 29, 103478	Ο
253	Synthesis of new halogenated compounds based on 8-hydroxyquinoline derivatives for the inhibition of acid corrosion: Theoretical and experimental investigations. <b>2022</b> , 33, 104654	1
252	Experimental and theoretical studies of hexylmeythylimidazolium tetrafluoroborate ionic liquid as cathodic corrosion inhibitor for mild steel. <b>2022</b> , 146, 110110	Ο
251	Insights into the reactivity properties, docking, DFT and MD simulations of orphenadrinium dihydrogen citrate in different solvents. <b>2022</b> , 367, 120583	3
250	Diaminoalkanes functionalized graphene oxide as corrosion inhibitors against carbon steel corrosion in simulated oil/gas well acidizing environment. <b>2023</b> , 630, 591-610	1
249	Synthesis and spectral studies of Ni(II) complexes involving functionalized dithiocarbamates and triphenylphosphine: X-ray crystal structure, thermal stability, Hirshfeld surface analysis, DFT and biological evaluation. <b>2023</b> , 545, 121271	0
248	A density functional theory study of H3+ and Li3+ clusters: Similar structures with different bonding, aromaticity, and reactivity properties. <b>2023</b> , 237-245	Ο
247	Conceptual density functional theory and all metal aromaticity. 2023, 87-98	0
246	Combined experimental, computational studies (synthesis, crystal structural, DFT calculations, spectral analysis) and biological evaluation of the new homonuclear complex Di-´ µ-benzoato-bis [benzoatodipyridine-cobalt (II)]. <b>2023</b> , 1273, 134331	0
245	Investigation of embelin synthetic hybrids as potential COVID-19 and COX inhibitors: Synthesis, spectral analysis, DFT calculations and molecular docking studies. <b>2023</b> , 1273, 134356	2
244	Hydrogen trapping potential of a few novel molecular clusters and ions. <b>2023</b> , 297-312	0
243	Ultra High Reversible Hydrogen Storage Capacity of Li4B2 Cluster: A Quantum Chemical Study.	0
242	Effects of edge hydrogenation and applied electric field on the structure and electrical properties of zigzag silicene nanoribbons by SCC-DFTB calculations. <b>2023</b> , 649, 414445	Ο
241	Theoretical study of the adsorption mechanism of ioversol contrast agent on the single-walled carbon nanotube surface. <b>2023</b> , 1274, 134504	0
240	Spectroscopic, reactivity analysis and docking studies of 3-(adamantan-1-yl)-4-(4-fluorophenyl)-1-[(4-phenylpiperazin-1-yl)methyl]-4,5-dihdyro-1H-1,2,4-triazoleB-thione DFT and MD simulations. <b>2023</b> , 1274, 134418	D d

239	Quantum Chemical Benchmark Study on Valdecoxib, a Potent and Selective Inhibitor of COX-2, and its Hydroxylated Derivative. <b>2022</b> , 43, 221-231	O
238	Air Purification of the Carbon Monoxide Molecule CO using the Nanocatalytic Oxidation. Computational Study. <b>2022</b> , 56, 760-767	O
237	A Molecular Electron Density Theory Study of the Polar Diels-Alder Reaction of Naphtoquinone:Cr(CO)3 Complex with Cyclic Dienes. 1-17	О
236	Conversion of lignin oil and hemicellulose derivative into high-density jet fuel. 2022,	1
235	Chemical reactivity, molecular electrostatic potential and in-silico analysis on benzimidazole fungicide benomyl. <b>2022</b> , 8, e11417	О
234	Unveiling the zwitterionic and stepwise mechanism for the domino reactions of amidine with 1,2,4,5- and 1,2,3,5-tetrazines.	O
233	Quantitative Structure II oxicity Relationship in Bioactive Molecules from a Conceptual DFT Perspective. <b>2022</b> , 15, 1383	O
232	On the possibility of using the Ti@Si16 superatom as a novel drug delivery carrier for different drugs: A DFT study. <b>2022</b> , 108378	O
231	Choline amino acid ionic liquids as green corrosion inhibitors of mild steel in acidic medium. 2022, 130541	2
230	An account of noncovalent interactions in homoleptic palladium(II) and platinum(II) complexes within the DFT framework: A correlation between geometries, energy components of symmetry-adapted perturbation theory and NCI descriptors. <b>2022</b> , 8, e11408	O
229	Applications of the Vienna Ab initio simulation package, DFT and molecular interaction studies for investigating the electrochemical stability and solvation performance of non-aqueous NaMF6 electrolytes for sodium-ion batteries. <b>2022</b> , 1217, 113934	0
228	Radical scavenging capacity, UV activity, and molecular docking studies of 2?, 5?, 3, 4-Tetrahydroxychalcone: An insight into the photoprotection. <b>2022</b> , 100126	O
227	Structural, electronic, spectroscopic and molecular docking analysis of novel hetero oxetane ring compound. <b>2022</b> , 1217, 113919	1
226	Quantum Chemical Investigation on Hydrolysis of Orally Active Organometallic Ruthenium(II) and Osmium(II) Anticancer Drugs and Their Interaction with Histidine.	O
225	Impact of doping on the optoelectronic, electronic and nonlinear optical properties and on the reactivity of photochromic polymers containing styrylquinoline fragments: Hartree-Fock and DFT study. <b>2022</b> , 8, e11491	1
224	Effects of chelate ligands containing NN, PN, and PP on the performance of half-sandwich ruthenium metal complexes as sensitizers in dye sensitized solar cells (DSSCs): quantum chemical investigation. <b>2022</b> , 116190	O
223	Sustainable corrosion inhibitor for steel embedded in concrete by Guar Gum: Electrochemical and theoretical analyses. <b>2022</b> , 12, 100328	0
222	Theoretical Study of Cyano-Promoted Intramolecular Aza-DielsAlder Reaction.	O

221	In-silico and in-detail experimental interaction studies of new antitumor Zn(II) complex with CT-DNA and serum albumin. 1-18	0
220	DFT studies of the redox behavior of oligo(aza)pyridines and experimental CVs of 4'-substituted terpyridines. <b>2022</b> , 100667	Ο
219	Quantum chemical study on the structural mechanism, III interactions and hydrogen bonding network of 2, 6-diamine-7H-purine molecule: using molecular modeling.	0
218	Butadiyne-linked porphyrin nanoring as a highly selective O2 gas sensor: A fast response hybrid sensor. <b>2022</b> , 108371	Ο
217	What is the role of phytochemical compounds as capping agents for the inhibition of aggregation in the green synthesis of metal oxide nanoparticles? A DFT molecular level response. <b>2022</b> , 110243	0
216	Insights into the adsorption and corrosion inhibition properties of newly synthesized diazinyl derivatives for mild steel in hydrochloric acid: synthesis, electrochemical, SRB biological resistivity and quantum chemical calculations. <b>2022</b> , 13, 478-498	Ο
215	Bis-TTF-Ge derivatives: promising linear and nonlinear optical properties, a theoretical investigation.	Ο
214	Manipulation of N-heterocyclic carbene reactivity with practical oriented electric fields. <b>2022</b> , 25, 375-383	Ο
213	Impacts of External Fields on Aromaticity and Acidity for Benzoic Acid: A Density Functional Theory, Conceptual Density Functional Theory and Information-Theoretic Approach Study.	0
212	Competitive adsorption of anionic and cationic molecules on three activated carbons derived from agroindustrial waste. <b>2023</b> , 168, 106660	Ο
211	Adsorption and electronic properties of pristine and Al-doped C60 fullerenes using N2O molecule: A theoretical study. <b>2023</b> , 369, 120855	0
<b>21</b> 0	Unveiling the high reactivity of experimental pseudodiradical azomethine ylides within molecular electron density theory. <b>2022</b> , 25, 314-325	1
209	Heterocyclic chalcone derivatives with D-EA framing modulated electronic, linear and nonlinear optical properties as effective candidates for nonlinear optical applications. <b>2023</b> , 650, 414573	0
208	Density functional theory study of the sensing of ozone gas molecules by using fullerene-like Group-III nitride nanostructures. <b>2023</b> , 650, 414553	Ο
207	Novel coumarin-buta-1,3-diene conjugated donor ceptor systems as corrosion inhibitors for mild steel in 1.0′M HCl: Synthesis, electrochemical, computational and SRB biological resistivity. <b>2023</b> , 148, 110304	1
206	Substituted naphthoxy-phthalonitrile derivatives: Synthesis, substituent effects, DFT, TD-DFT Calculations, antimicrobial properties and DNA interaction studies. <b>2023</b> , 102, 107798	Ο
205	Molecular simulation investigations on interaction properties of the teriflunomide⊞hitosan complex in aqueous solution. <b>2023</b> , 174, 111171	1
204	Theoretical and experimental studies on electronic structure and photophysical properties of biological active substituted hydroxyquinolin-2(1H)-one fluorophore. <b>2023</b> , 6, 100136	Ο

203	Molecular and Semi-Empirical Mechanic Studies of Copper-Histamine Chloride Complex. 64, 34-44	O
202	A theoretical and practical inclusive study of the effect of some factors on the ionization constants of some aromatic imines by potentiometric titration. <b>2022</b> ,	O
201	Combining Experimental and Quantum Chemical Study of 2-(5-Nitro-1,3-Dihydro Benzimidazol-2-Ylidene)-3-Oxo-3-(2-Oxo-2H-Chromen-3-yl) Propanenitrile as Copper Corrosion Inhibitor in Nitric Acid Solution. <b>2022</b> , 12, 47-70	O
200	Unraveling the Reaction Mechanism of AlCl3-Lewis Acid Catalyzed Acylation Reaction of Pyrene from the Perspective of the Molecular Electron Density Theory.	O
199	Computational Exploration of Structural and Electroinc Peoperties of PhB 12N12 16F5 In Hn (n = 0B) Molecules. 2022, 16, 839-845	O
198	Theoretical designing of non-fullerene derived organic heterocyclic compounds with enhanced nonlinear optical amplitude: a DFT based prediction. <b>2022</b> , 12,	O
197	Development and Applications of the Density-Based Theory of Chemical Reactivity. <b>2022</b> , 13, 11191-11200	1
196	Surface-Enhanced Infrared Absorption Spectroscopy for Analyzing Nucleophilic Molecules Using Ethylene Glycol Decorated TiO2 Nanosheet. <b>2022</b> , 14, 54313-54319	O
195	Novel di and tripeptide side groups bearing acrylate polymers: synthesis, characterization, and their theoretical, and electrical properties. <b>2022</b> , 29,	О
194	An FSGO based Electronegativity Scale invoking the Electrophilicity Index. <b>2022</b> , 7,	O
193	A conceptual density functional theory approach to substituent effects in fluorescence processes: The case of naphthalimide derivatives.	O
192	Anthrone-Benzothiazole Based Heterocyclic Disperse Azo Dyes: Synthesis, Dyeing, UV Protection Property, Anti-Bacterial Activity, and Computational Study. <b>2022</b> , 7,	О
191	Effect of bridged spacers and auxiliary acceptors on Dye Sensitized Solar Cell sensitizers: A density functional theory-based investigation.	0
190	Chlorine counterion effect into the supramolecular arrangement of phenylephrine solid state. <b>2022</b> , 113992	O
189	Evaluation of experimental, computational, molecular docking and dynamic simulation of flucytosine. 1-20	0
188	On the Question of the Formation of Nitro-Functionalized 2,4-Pyrazole Analogs on the Basis of Nitrylimine Molecular Systems and 3,3,3-Trichloro-1-Nitroprop-1-Ene. <b>2022</b> , 27, 8409	O
187	Density Functional Theory Analysis of the Copolymerization of Cyclopropenone with Ethylene Using a Palladium Catalyst. <b>2022</b> , 14, 5273	1
186	Density Functional Theory Analysis Identifying the Mechanism for Ignition Sensitivity of Ammonium Perchlorate.	О

185	An efficient approach to 3,4-fused 🛭 lactone-🖺 actams bicyclic moieties as anti-Alzheimer agents.	0
184	New Au(III)- and Fe(III)-based complexes of bio-pharmacological interest: DFT and in silico studies. <b>2023</b> , 142,	O
183	A computational study of potent series of selective estrogen receptor degraders for breast cancer therapy. 1-23	O
182	Relationship between the Structure of Fluorine-Containing Phenoxy-Imine Complexes, Their Spectral Properties and Activity in Ethylene Polymerization.	O
181	Strychnos alkaloids: total synthesis, characterization, DFT investigations, and molecular docking with AChE, BuChE, and HSA. <b>2022</b> , 8, e11990	0
180	Unveiling novel reactivity of P/Al frustrated Lewis pair: ring size-dependent activation of cyclic ethers/thioethers and CO2 insertion therein. <b>2022</b> , 134,	O
179	In pursuit of novel pyriporphyrin porphyrin ring expansion congener containing a built-in pyridine moiety by CH radical: a DFT investigation.	0
178	The effect of alkali metals, carbocations, and metallocenes substitutes on two Earrabiose disaccharide derivatives: a density functional study.	O
177	Copper(II) chelates derived from an N,N,O-tridentate 2-pyridinecarboxaldehyde-N4-phenylsemicarbazone: Synthesis, spectral aspects, crystal structure, FMO and NBO analysis. <b>2022</b> , 134866	0
176	To cleave or not@isulfide bond of cystine on nanocopper: a computational approach. 2023, 25,	O
175	Experimental and Density Functional Theoretical Analyses on Degradation of Acid Orange 7 via UV Irradiation and Ultrasound enhanced by Fenton Process. <b>2022</b> , 134833	O
174	How a Chromium Tricarbonyl Complex Catalyzes the [3 + 2] Cycloaddition Reaction of N-Substituted Phenylnitrones with Styrene: A Molecular Electron Density Theory Analysis. <b>2022</b> , 41, 38	309-3822 <sup>O</sup>
173	Novel 1,2,3-Triazole-Based Benzothiazole Derivatives: Efficient Synthesis, DFT, Molecular Docking, and ADMET Studies. <b>2022</b> , 27, 8555	0
172	Structure and Electronic Properties of Metalloboranes with General Formula Cp* 3 (EH)M 3 B 8 H 8 (M=Cr, Mo and W): The Effect of the Size of the Metal. <b>2022</b> , 7,	O
171	Investigation and Comparison of Antioxidant Potential of Catechins Present in Green Tea: DFT Study. <b>2022</b> , 16, 591-599	O
170	Synthesis, Characterization, DFT Mechanistic Study, Antimicrobial Activity, Molecular Modeling, and ADMET Properties of Novel Pyrazole-isoxazoline Hybrids. <b>2022</b> , 7, 46731-46744	O
169	Anti-inflammatory biomolecular activity of chlorinated-phenyldiazenyl-naphthalene-2-sulfonic acid derivatives: perception from DFT, molecular docking, and molecular dynamic simulation. 1-25	1
168	Synthesis, antibacterial evaluation, and in silico investigations of novel 3-amino-1,2-dihydroisoquinoline derivatives.	O

167	Quantum chemical study of effect on adsorption properties of antituberculosis drug N-Cyclopentylidenepyridine-4-carbohydrazide interaction with CNT(C56H16). <b>2022</b> , 100851	O
166	Property and reactivity of polyselenides and polysulfides: a quantum chemistry study. 1-16	O
165	Computed ammonia affinity for evaluating Lewis acidity of organoboronates and organoboronamides. <b>2023</b> , 13, 2451-2457	0
164	ElectroPredictor: An Application to Predict Mayrl Electrophilicity E through Implementation of an Ensemble Model Based on Machine Learning Algorithms.	1
163	Pyridine derivatives complexes of Co (II) and Ni (II) 3-Bromobenzoates: Crystal Structure, in silico Anti-SARS-CoV-2 potential, Serum Albumin Binding Properties and Cytotoxicity.	0
162	Characterization, DFT calculations and dyeing performance on polyester fabrics of some azo disperse dyes containing pyrazole ring. <b>2023</b> , 27, 101594	O
161	Spectroscopic, structural, and intermolecular interactions of 4-(2-hydroxy-3-methoxybenzylideneamino)-N-(5-methylisoxazol-3-yl)benzenesulfonamide enol-imine and keto-amine isomers. <b>2023</b> , 134978	0
160	Theoretical study on the radical scavenging activity of gallic acid. <b>2023</b> , 9, e12806	O
159	Synthesis and Lewis Acidity of Fluorinated Triaryl Borates.	O
158	A theoretical approach towards designing of banana shaped non-fullerene chromophores using efficient acceptors moieties: exploration of their NLO response properties. <b>2023</b> , 55,	1
157	Synthesis, Molecular Modeling, and Antioxidant Activity of New Thiadiazole-Triazole Analogs Hybridized with Thiophene.	O
156	DFT study on molecular structure, spectroscopic properties, Hirshfeld surface and molecular docking reveals the potential of flavones based on experimental and theoretical investigations.	O
155	A novel analytical, bioanalytical and theoretical approach to the platinum(II)-3-hydroxy-2-(4-methoxyphenyl)-4H-chromen-4-one complex. <b>2023</b> , 5, 100767	O
154	Corrosion Inhibition Potential of Thiosemicarbazide Derivatives on ALuminium: Insight from Molecular Modelling and QSARs Approaches. 915	O
153	Novel Benzimidazole linked piperidine derivatives screened for antibacterial and antioxidant properties with Density Functional and Molecular Mechanic tools. <b>2023</b> , 5, 100765	O
152	1,3 Dipolar Cycloaddition of Māchnones: Factors behind the Regioselectivity.	O
151	Synthesis, Optical and Electrochemical Properties of Novel Formazan Analogs Incorporated Fluorene Moiety. <b>2023</b> , 8,	О
150	Blreactive: Expanding the Scope of Reactivity Predictions to Propynamides. <b>2023</b> , 16, 116	O

149	Structural, electronic and nonlinear optical properties, reactivity and solubility of the drug dihydroartemisinin functionalized on the carbon nanotube. <b>2023</b> , 9, e12663	1
148	New insight into pyrrolic-N site effect towards the first NIR window absorption of pyrrolic-N-rich carbon dots.	1
147	Pure and Cu, Fe, and Zn-doped CNTs as novel drug carriers for dacarbazine. 2023, 142,	0
146	Conformational Landscape and Hydrogen Bonding Pattern of Psilocin: Computational Insights. <b>2023</b> , 8,	Ο
145	Synthesis, characterisation and density functional theory (DFT) studies of a triazine ring with a mixed ligand Schiff base complexes. <b>2023</b> , 5, 100775	О
144	A biophysical approach of cytarabine anticancer drug insights into human serum albumin and checkpoint kinase 1. <b>2023</b> , 5, 100755	Ο
143	Retention and Determination of Polycyclic Aromatic Hydrocarbons from Urban Air Based on Recycled Polyurethane Foam Modified with Expanded Polystyrene. 1-13	О
142	Nickel curcumin complexes: Physico chemical studies and nonlinear optical activity. <b>2023</b> , 136, 113450	O
141	Investigating the regio-, stereo-, and enantio-selectivities of the $\begin{bmatrix} 3' + ' 2 \end{bmatrix}$ cycloaddition reaction of C, N-diarylnitrone derivatives with N-propadienylindole derivatives. A DFT study. <b>2023</b> , 1220, 114024	О
140	Investigation of the anionic polyacrylamide as a potential adsorbent of crystal violet dye from aqueous solution: Equilibrium, kinetic, thermodynamic, DFT, MC and MD approaches. <b>2023</b> , 372, 121220	O
139	Structural analysis and electronic properties of transition metal ions (Ni2+, Fe2+, Mn+ and Co+) with psoralen biomolecule as an anticancer drug. <b>2023</b> , 986, 122606	O
138	Hydrophobization of aerogels based on chitosan, nanocellulose and tannic acid: Improvements on the aerogel features and the adsorption of contaminants in water. <b>2023</b> , 220, 115197	Ο
137	A detailed electronic-scale DFT modeling/MD simulation, electrochemical and surface morphological explorations of imidazolium-based ionic liquids as sustainable and non-toxic corrosion inhibitors for mild steel in 1′M HCl. <b>2023</b> , 289, 116232	2
136	Spectral studies, crystal structures, DNA binding, and anticancer potentials of Pd(II) complexes with iminophosphine ligands: Experimental and computational methods. <b>2023</b> , 547, 121368	0
135	First-Principles Studies of Ethylene Oxide Adsorption on Pristine and Doped Graphenes. <b>2022</b> , 96, 2982-2991	0
134	Corrosion inhibition mechanism of imidazole ionic liquids with high temperature in 20% HCl solution. <b>2023</b> , 29,	1
133	Experimental and DFT Quantum Chemical Studies on Structural, Vibrational and Molecular Properties of Some Substituted 4-Phenylphenols. 1-36	О
132	Chemical Reactivity, Topological Analysis, and Second-Order Nonlinear Optical Responses of M3O@Al12N12: A Quantum Chemical Study. <b>2022</b> , 96, 2909-2920	Ο

131	Molecular Structure of 2-hydroxy-5-methyl-2-nitroazobenzene Isomer: DFT Insight.	О
130	The crystal magnification, characterization, X-ray single crystal structure, thermal behavior, and computational studies of the 2,4,6-trimethylpyridinium picrate. <b>2022</b> , 13, 468-477	o
129	BO2 substituted novel alkyl biphenyl liquid crystalline series: dependence of geometrical and electronic properties on the alkyl chain length. <b>2023</b> , 142,	0
128	New kind of electride sandwich complexes based on the cyclooctatetraene ligand M12(IB-C8H8)2M22 (M1 = Na, K and M2 = Ca, Mg): a theoretical study. <b>2023</b> , 25, 4710-4723	0
127	Identification of potent EGFR-TKD inhibitors from NPACT database through combined computational approaches. 1-14	0
126	First Principal Study of Interaction of Copper Doped Gold Nanoclusters with Glycine. <b>2023</b> , 110435	0
125	Molecular engineering on D-FA organic dyes with flavone-based different acceptors for highly efficient dye-sensitized solar cells using experimental and computational study. <b>2023</b> , 29,	1
124	Spectroscopic, crystal structure and DFT-assisted studies of some nickel(II) chelates of a heterocyclic-based NNO donor aroylhydrazone: in vitro DNA binding and docking studies.	o
123	Application of statistical learning and mechanistic modelling towards mapping the substrate electronic space in a Cu-catalyzed SuzukiMiyaura coupling.	0
122	Understanding the mechanism and regio- and stereo selectivity of [3 + 2] cycloaddition reactions between substituted azomethine ylide and 3,3,3- trifluoro -1-nitroprop-1-ene, within the molecular electron density theory.	0
121	Theoretical Investigation of para Amino-Dichloro Chalcone Isomers. Part II: A DFT StructureBtability Study of the FMO and NLO Properties. <b>2023</b> , 8, 4937-4953	0
120	Unveiling the Electrophilic Aromatic Substitution Reactions of Pyridine Derivatives with Nitronium Ion through Molecular Electron Density Theory.	O
119	Digging on the Mechanism of Some Diels-Alder Reactions. The Role of the Reaction Electronic Flux.	0
118	Recent advances on halogen bonds within the quantum theory of atoms-in-molecules. <b>2023</b> , 469-490	o
117	Development of quantitative structure Ectivity relationship models based on electrophilicity index: a conceptual DFT-based descriptor. <b>2023</b> , 219-229	О
116	On the study of dye sensitized solar cells with high light harvesting efficiency and correlation of its chemical reactivity parameters with overall performance.	O
115	Interaction of a novel inorganic nickel complex with tyrosinase as potential inhibitor: Synthesis, spectroscopic, DFT, NBO, docking and ADMET properties. <b>2023</b> , 1280, 134998	0
114	Quantum Mechanical Elucidation on [3+2] cycloaddition reaction of aryl nitrile oxide with cyclopentenones. <b>2023</b> , 120, 108421	O

113	Theoretical studies on the reaction mechanisms of the oxidation of tetramethylethylene using MO3Cl (M=Mn, Tc and Re). <b>2023</b> , 120, 108419	O
112	Self-assembly, physico-chemical characterization, biological, virtual screening, and computational approach of novel 2-amino pyridine derivatives. <b>2023</b> , 1281, 135049	O
111	Synthesis and structural characterization of a novel palbociclib-kaempferol cocrystal with improved tabletability and synergistic antitumor activity. <b>2023</b> , 1281, 135101	О
110	Density functional theory (DFT) computation of pristine and metal-doped MC59 (M = Au, Hf, Hg, Ir) fullerenes as nitrosourea drug delivery systems. <b>2023</b> , 158, 107362	1
109	A quantum mechanistic insight into the chemo- and regio-selective [3 + 2]-cycloaddition reaction of aryl hetaryl thioketones with diazoalkanes and nitrile oxide derivatives. <b>2023</b> , 120, 108418	0
108	Experimental and theoretical studies of a thiourea derivative: 1-(4-chloro-benzoyl)-3-(2-trifluoromethyl-phenyl)thiourea. <b>2023</b> , 1279, 134996	О
107	Structural, spectroscopic, molecular docking, ADME, molecular dynamics studies of Val-Trp dipeptide. 1-18	О
106	Carbon nanotubes and nanobelts as potential materials for biosensor. <b>2023</b> , 13,	O
105	Synthesis, DFT calculations, and anti-proliferative evaluation of pyrimidine and selenadiazolopyrimidine derivatives as dual Topoisomerase II and HSP90 inhibitors. <b>2023</b> , 38,	O
104	Synergistic corrosion inhibition effect of copolymer and an amphoteric surfactant on carbon steel in 3.5 NaCl solution: experimental and theoretical research.	O
103	A systematic DFT study of arsenic doped iron cluster AsFe n (n $^{\prime}$ = $^{\prime}$ 1 $^{\circ}$ ). <b>2023</b> ,	O
102	Electrophilicity-based charge transfer for developing aquatic-quantitative structure toxicity relationships (Aqua-QSTR). <b>2023</b> , 142,	О
101	Synthesis of pyridine and furan based arylated ketones through palladium catalyst with DFT study of their static and frequency dependent NLO response. <b>2023</b> , 151, 110566	О
100	Physicochemical properties, drug likeness, ADMET, DFT studies, and in vitro antioxidant activity of oxindole derivatives. <b>2023</b> , 104, 107861	О
99	Crystal structure, spectroscopic analysis, electronic properties and molecular docking study of costunolide for inhibitor capacity against Onchocerca volvulus main protease. <b>2023</b> , 1282, 135185	0
98	Combination of doped amorphous carbon based dispersive solid phase extraction with ionic liquid-based DLLME for the extraction of aromatic amines from leather industries wastewater; Theoretical and experimental insights. <b>2023</b> , 1281, 135172	O
97	Exploring the peri- and stereo- selectivities of the cycloaddition reaction of 2-(2-dimethylaminovinyl)-1-benzopyran-4-one with N-phenylmaleimide (NPM) and dimethylacetylenedicarboxylate (DMAD) - A DFT study. <b>2023</b> , 121, 108451	О
96	Thiazole-pyrazoline hybrids as potential antimicrobial agent: Synthesis, biological evaluation, molecular docking, DFT studies and POM analysis. <b>2023</b> , 1282, 135191	O

95	IR and UV-VIS spectroscopic characterization of norbadione A and study of the electronic properties of other pigments derived from pulvinic acid. <b>2023</b> , 1285, 135491	O
94	Quantum chemical investigation of choline chloride-based deep eutectic solvents. 2023, 571, 111936	O
93	Molecular modeling and solubility of olopatadine hydrochloride polymorphs. 2023, 1224, 114110	О
92	Corrosion inhibition of Schiff base and their metal complexes with [Mn (II), Co (II) and Zn (II)]: Experimental and quantum chemical studies. <b>2023</b> , 378, 121637	O
91	Corrosion inhibition of mild steel in acidic media using new oxo-pyrimidine derivatives: Experimental and theoretical insights. <b>2023</b> , 1284, 135361	1
90	Reduction potential of benzophenones, hydroxyphenones and bis(2-hydroxyphenone)copper molecules. <b>2023</b> , 443, 141931	О
89	Experimental and theoretical vibrational spectroscopic, quantum chemical analysis, and electronic properties investigations of novel ruthenium complexes (RuLCl2´ DH2O; L: 4,4´·-Dimethoxy-2,2´·-Bipyridine, 4,4´·-Dimethyl-2,2´·-Bipyridine). <b>2023</b> , 234, 116322	О
88	Efficient synthesis of chromeno[2,3-b]pyridine derivatives using Zn(OTf)2 as a catalyst: DFT computations, molecular docking and ADME studies. <b>2023</b> , 375, 121364	O
87	Modeling of tenofovir disoproxil fumarate decontamination using sodium alginate-encapsulated activated carbon: Molecular dynamics, monte carlo and density functional theory. <b>2023</b> , 663, 131057	0
86	Structural, Spectral, Molecular Docking, and Molecular Dynamics Simulations of Phenylthiophene-2-Carboxylate Compounds as Potential Anticancer Agents. 1-23	1
85	Synthesis, X-Ray Structure Analysis, Computational Investigations, and In´Vitro Biological Evaluation of New Thiazole-Based Heterocycles as Possible Antimicrobial Agents. 1-14	O
84	Optimization study of pharmaceuticals pollutants adsorption onto large surface area walnut shells activated carbon: Experimental design, Mechanism and DFT calculations.	O
83	(ZnO)42 nanocluster: a novel visibly active magic quantum dot under first principle investigation. <b>2023</b> , 142,	О
82	Use of an Ammonium Quaternary Salt Obtained from Avocado as Corrosion Inhibitor of a Duplex Stainless Steel in CO 2 Baturated NaCl Solution.	O
81	Quantum Chemical Analysis and Effect of Super Alkali/Super Halogen Doping on the Opto-Electronic Properties of L-Lysine p-Nitrophenolatemonohydrate (LLPNP) Using First Principle. 1-23	О
80	Incorporation of graphene oxide to metal-free phthalocyanine through hydrogen bonding for optoelectronic applications: An experimental and computational study.	O
79	Pyridinecarboxaldehydes: Structures, Vibrational Assignments and Molecular Characteristics Using Experimental and Theoretical Methods. <b>2023</b> , 53,	O
78	A conceptual DFT and information-theoretic approach towards QSPR modeling in polychlorobiphenyls. <b>2023</b> , 61, 1143-1164	O

77	Dodging the Conventional Reactivity of o-Alkynylanilines under Gold Catalysis for Distal 7-endo-dig Cyclization. <b>2023</b> , 88, 2260-2287	0
76	Experimental, Spectroscopic, and Computational Insights into the Reactivity of Methanal With 2-Naphthylamines. <b>2023</b> , 28, 1549	O
75	A novel azo-azomethine benzoxazole-based ligand and its transition metal (II), (III), (IV) complexes: Synthesis, characterization, theoretical studies, biological evaluation, and catalytic application. <b>2023</b> , 37,	0
74	Tuning transport properties of deformed carbon nanocages by electric field, electrode material, and type of coupling. <b>2023</b> , 28, 101383	O
73	Theoretical Study on the Origin of Abnormal Regioselectivity in Ring-Opening Reaction of Hexafluoropropylene Oxide. <b>2023</b> , 28, 1669	O
72	Design, Synthesis, and Optical and Electrochemical Properties of D <b>A</b> Type Organic Dyes with Carbazole-Based Donor Units for Efficient Dye-Sensitized Solar Cells: Experimental and Theoretical Studies. <b>2023</b> , 52, 2525-2543	Ο
71	Synthesis and Characterizations of Novel Isatin-s-Triazine Hydrazone Derivatives; X-ray Structure, Hirshfeld Analysis and DFT Calculations. <b>2023</b> , 13, 305	O
70	Thiol modifier effects of diphenyl diselenides: insight from experiment and DFT calculations. <b>2023</b> , 47, 5796-5803	Ο
69	1,3,4-Oxadiazole derivatives as potential antifungal agents: Synthesis, characterization, Ct-DNA binding, molecular docking, and TD-DFT studies.	0
68	New Xanthene Diones Compounds as a Corrosion Inhibitor of Mild Steel in Acid Medium: Electrochemical, Surface Characterization and Theoretical Insights.	O
67	Role of electron-withdrawing groups on nonlinear optical response of conjugated anthracenyl fused rings chalcone: Experimental and DFT study. <b>2023</b> , 655, 414744	0
66	A comprehensive DFT study on organosilicon-derived fungicide flusilazole and its germanium analogue: A computational approach to Si/Ge bioisosterism. <b>2023</b> , 100, 100939	O
65	Single Crystal Investigations, Hirshfeld Surface Analysis, DFT Studies, Molecular Docking, Physico-Chemical Characterization, and Biological Activity of a Novel Non-Centrosymmetric Compound with a Copper Transition Metal Precursor. <b>2023</b> , 8, 7738-7748	0
64	Molecular structures, chemical descriptors and pancreatic lipase (1LPB) inhibition by natural products: A DFT investigation and molecular docking prediction.	O
63	Photocatalytic degradation and pollutant-oriented structure-activity analysis of carbamazepine, ibuprofen and acetaminophen over faceted TiO2. <b>2023</b> , 11, 109553	O
62	Nucleophilicity Parameters for Nitroalkyl Anions in Methanol and Structure-Reactivity Analysis. <b>2023</b> , 8,	O
61	Generating Fischer-Type Rh-Carbenes with Rh-Carbynoids. <b>2023</b> , 145, 4975-4981	0
60	Effect of confinement on the structure, stability and aromaticity of Be32[ <b>2023</b> , 816, 140390	Ο

59	Synthesis of a Novel Hydrazone of Thieno[2,3-d]pyrimidine Clubbed with Ninhydrin: X-ray Crystal Structure and Computational Investigations. <b>2023</b> , 13, 384	O
58	Comparative Study of Molecular Docking, Structural, Electronic, and Fukui Function Studies on Favipiravir and its Newly Designed Derivatives (Potential Inhibitors) for COVID-19 Protease. <b>2023</b> , 407,	O
57	Time-Dependent Density Functional Theory, AIM Analysis, NLO, and Thermodynamic Properties of Propofol and Adsorption Effects of Propofol Drug over Carbon Nanotube (C56H16) as the Factor of Drug Delivery System. <b>2023</b> , 407,	O
56	Exploring the Interaction Between the Newly Designed Antitumor Zn(II) Complex and CT-DNA/BSA: Spectroscopic Methods, DFT Computational Analysis, and Docking Simulation.	Ο
55	Computational insights into the adsorption mechanisms of anionic dyes on the rutile TiO2 (1 1 0) surface: Combining SCC-DFT tight binding with quantum chemical and molecular dynamics simulations. <b>2023</b> , 377, 121554	O
54	Inhibition of corrosion of an aluminum alloy by Rosemary and Eucalyptus extracted oils in 1M hydrochloric acid medium: Experimental and theoretical study.	O
53	Theoretical descriptions of novel silicon analogs of cyclo[18]carbon.	0
52	Mono-/multiadsorption of chlorobenzene compounds on biochar: influence of the properties of the chlorobenzene molecules and biochar. <b>2023</b> , 23, 2120-2135	O
51	New Diacetic Acids Containing Quinazolin-4(3 H)-one: Synthesis, Characterization, Anticholinergic Properties, DFT Analysis and Molecular Docking Studies. <b>2023</b> , 8,	0
50	Anthrone-Based Carbocyclic Azo Dyes: Synthesis, Dyeing, UV Protection, Anti-microbial Activity and Computational Study. <b>2023</b> , 24, 1285-1296	O
49	A dispersion-corrected DFT calculations on encapsulation of Favipiravir drug used as antiviral against COVID-19 into carbon-, boron-, and aluminum-nitride nanotubes for optimal drug delivery systems combined with molecular docking simulations.	О
48	Kinetic and computational study of the oxidative degradation of an amebicide by acid bromate in perchlorate solutions and the effect of Ruthenium (III) catalyst in micro molar concentration: a mechanistic approach.	O
47	Crystal structure, Hirshfeld surface analysis and DFT study of (5E,5?E,6Z,6?Z)-6,6?-[ethane-1,2-diylbis(azanylylidene)]bis{5-[2-(4-fluorophenyl)hydrazono]-3,3-dimethylcyclc 2.5-hydrate. <b>2023</b> , 79, 297-301	hexanone}
46	Facile Synthesis, Crystal Structure, Hirshfeld Surface Analysis, DFT Calculation and in´vitro Antifungal Evaluation of 4-Arylidene-1H-pyrazol-5(4H)-ones. 1-15	O
45	Determination of the molecular structure and spectroscopic properties of capsaicin. 2023, 208, 110879	0
44	Synthesis, molecular structure, FMO, spectroscopic, antimicrobial and in-silico investigation of (E)-1-(benzo[d][1,3]dioxol-5-yl)-3-(4-aryl)prop-2-en-1-one derivative: Experimental and computational study. <b>2023</b> , 5, 100887	O
43	Electrophilicity and nucleophilicity scales at different DFT computational levels.	O
42	Investigation of the dual role of acyl phloroglucinols as a new hope for antibacterial and anti-SARS-CoV-2 agents employing integrated in vitro and multi-phase in silico approaches. 1-18	O

41	Enhancing the Photovoltaic Properties via Incorporation of Selenophene Units in Organic Chromophores with A2-12-A1-11-A2 Configuration: A DFT-Based Exploration. <b>2023</b> , 15, 1508	O
4O	Aromatic Clusters and Hydrogen Storage. <b>2023</b> , 16, 2833	O
39	A DFT study of structural-stability, Mulliken charges, MEP, FMO, and NLO properties of trans alkenyl substituted chalcones conformers: theoretical study.	О
38	Amazon raw clay as a precursor of a clay-based adsorbent: experimental study and DFT analysis for the adsorption of Basic Yellow 2 dye.	O
37	Insights into the crystal structure and computational studies of newly synthesized thiazolopyrimidine derivatives against adenosine receptor (Thermostabilised HUMAN A2a). <b>2023</b> , 1284, 135372	О
36	Molecular Assembly of Rhodanine with Torus-Shaped Cyclodextrins and Their Innovative Applications by Physicochemical Contrivance Simultaneously Optimized by Computational Study. <b>2023</b> , 8,	O
35	Synthetic, Structural and Supramolecular Features of a New Dithiocyanato-EN, ES-Copper(II) Complex: Insights Through Computational Studies.	О
34	Insights into the Three-Component Coupling Reactions of Aldehydes, Alkynes, and Amines Catalyzed by N-heterocyclic Carbene Silver: A DFT Study. <b>2023</b> , 13, 646	O
33	New azo-azomethine derivatives: Synthesis, characterization, computational, solvatochromic UV-Vis absorption and antibacterial studies. <b>2023</b> , 1284, 135451	О
32	Identification of Novel Tau-Tubulin Kinase 2 Inhibitors Using Computational Approaches. 2023, 8, 13026-1303	<b>37</b> 0
31	Quantum computational investigation into structural, spectroscopic, topological and electronic properties of L-histidinium-L-tartrate hemihydrate: Nonlinear optical organic single crystal. <b>2023</b> , 9, e14879	О
30	Local reactivity descriptors of the important atoms in chelotropic reactions provide insight into their global variants along the reaction path.	Ο
29	Computational investigation of dimethoate and tyclodextrin inclusion complex: molecular structures, intermolecular interactions, and electronic analysis.	О
28	Efficient green synthesis of a potential novel nosylation reagent and its DFT study. 1-5	Ο
27	Identifying novel therapeutic inhibitors to target FMS-like tyrosine kinase-3 (FLT3) against acute myeloid leukemia: a molecular docking, molecular dynamics, and DFT study. 1-19	О
26	Free radical scavenging activity of gallic acid toward various reactive oxygen, nitrogen, and sulfur species: a DFT approach. 1-10	O
25	Synthesis, characterization, and quantum chemistry local chemical reactivity description of new phosphorylated derivatives of piperazine. 1-11	0
24	Novel asymmetrical azines appending 1,3,4-thiadiazole sulfonamide: synthesis, molecular structure analyses, in silico ADME, and cytotoxic effect. <b>2023</b> , 13, 10353-10366	O

23	Computational evaluation on molecular stability and binding affinity of methyldopa against Lysine-specific demethylase 4D Enzyme through quantum chemical computations and molecular docking analysis. <b>2023</b> , 135518	O
22	Computational study and quantum Ethemical investigation on bambuterol hydrochloride compound drug: ADFT approach.	О
21	Design new organic material based on triphenylamine (TPA) with D-FA-ED structure used as an electron donor for organic solar cells: A DFT approach. <b>2023</b> , 108470	О
20	Design, Synthesis, and Density Functional Theory Studies of Indole Hydrazones as Colorimetric Naked Eyel Bensors for F Ions. <b>2023</b> , 8, 14131-14143	0
19	Two new Schiff bases of (E)-2,4-di-tert-butyl-6-((4-fluorophenylimino)methyl)phenol (I) and (E)-2,4-di-tert-butyl-6-((3-iodo-4-methylphenylimino)methyl)phenol (II): structural, spectroscopic and quantum chemical calculations. 1-18	0
18	Study of N -methyl-5-nitroindazolylacrylonitriles as a Function of Quantum Parameters Employing Density Function Theory Methods: Comparative Theoretical Study and Nonlinear Optical Properties. <b>2023</b> , 8,	O
17	Theoretical investigation of some transition metal sulfides nanomaterials: CDFT approach. <b>2023</b> , 142,	0
16	The role of ETFS amino acids on the stability and inhibition of p53-MDM2 complex of anticancer p53-derivatives peptides: Density functional theory and molecular docking studies. <b>2023</b> , 122, 108472	0
15	Synthesis, Crystal structure, Hirshfeld surface interactions, anti-corrosion analysis, DFT calculations, Docking studies and evaluation of the antioxidant activity of a new zwitterion Schiff base. <b>2023</b> , 1286, 135569	0
14	Benzethonium chloride as a tungsten corrosion inhibitor in neutral and alkaline media for the post-chemical mechanical planarization application. <b>2023</b> ,	O
13	Electronic effects of the substituted dopants on stability and reactivity of difuranosilapyridine-4-ylidenes: DFT approach.	0
12	Newly designed triazatruxene-based dye-sensitized solar cells containing different benzothiazine Elinkers: Geometric, optoelectronic, charge transfer properties, and cyanoacrylic acid versus benzoic acid. <b>2023</b> , 1224, 114127	O
11	Optoelectronic properties fine-tuning through chalcogenide-based Ebridge for dye molecules featuring hydantoin anchoring group: first-principle calculations.	О
10	Crystal Structure, Hirshfeld Surface Analysis, and Computational Study of Quinolin-8-yl 4-Chlorobenzoate: Insights from Spectroscopic, Thermal, and Antitumor Properties. <b>2023</b> , 13, 694	O
9	Spectroscopic (FT-IR, FT-Raman, UV-vis and NMR) Investigation, Molecular Structure, Docking and Chemical Reactivity Elucidation of Antifungal Drug Tioconazole. 1-25	O
8	Investigation of the solvent effect, regioselectivity, and the mechanism of the cycloaddition reaction between 2-chlorobenzimidazole and benzonitrile oxide.	O
7	Molecular Structure, Hydrogen Bonding Interactions and Docking Simulations of Nicotinamide (Monomeric and Trimeric Models) by Using Spectroscopy and Theoretical Approach. 1-19	0
6	Density functional theory-based molecular modeling. <b>2023</b> , 95-113	O

## CITATION REPORT

5	A molecular electron density theory study of mechanism and selectivity of the intramolecular [3+2] cycloaddition reaction of a nitronelinylphosphonate adduct.	Ο
4	[3´+´2] Cycloaddition reaction of disubstituted-3-benzylidene succinimide with C, N-disubstituted nitrile imines for synthesizing spiro-heterocycles: A computational study. <b>2023</b> , 1225, 114138	O
3	Adsorption mechanism of AsH3 pollutant on metal-functionalized coronene C24H12-X (X $^{'}$ = $^{'}$ Mg, Al, K) quantum dots. <b>2023</b> , 6, 100224	O
2	Direct sunlight photodegradation of congo red in aqueous solution by TiO2/rGO binary system: Experimental and DFT study. <b>2023</b> , 16, 104992	O
1	Synthesis, physico-chemical characterization and theoretical exploration of some 2,4,5-triaryl imidazole derivatives.	О