

ΔΗΜΟΣΙΕΥΣΕΙΣ ΤΜΗΜΑΤΟΣ ΕΠΙΣΤΗΜΗΣ ΤΩΝ ΥΛΙΚΩΝ 01/01/2021-30/06/2022

A/A	AUTHORS	TITLE	JOURNAL	VOL.	ISSUE	PAGES	ARTICLE NUMBER	YEAR
1	Mahat, R; Karki, U; Shambhu, KC; Law, JY; Franco, V; Galanakis, I; Gupta, A; LeClair, P	Effect of mixing the low-valence transition metal atoms Y= Co, Fe, Mn, Cr, V, Ti, or Sc on the properties of quaternary Heusler compounds $Co_{2-x}Y_xFeSi$ ($0 < x < 1$)	PHYSICAL REVIEW MATERIALS	6	6		064413	2022
2	Stefanatos, D; Paspalakis, E	On the optimality of optical pumping for a closed λ -system with large decay rates of the intermediate excited state	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	55	4		45302	2022
3	Fragkogiannis, C; Koutsioukis, A; Georgakilas, V	Highly Elastic Melamine Graphene/MWNT Hybrid Sponge for Sensor Applications	MOLECULES	27	11		3530	2022
4	Anastasiou, A; Zacharaki, EI; Tsakas, A; Moustakas, K; Alexandropoulos, D	Laser fabrication and evaluation of holographic intrinsic physical unclonable functions	SCIENTIFIC REPORTS	12	1		2891	2022
5	Tselios, C; Georgiou, P; Politi, C; Alexandropoulos, D	Polarization Control of Quantum-Dot Spin-VCSELs	PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS	259	4		2100532	2022
6	Stefanatos, D; Smpontas, A; Thanopoulos, I; Paspalakis, E	Efficient exciton generation in a semiconductor quantum-dot-metal-nanoparticle composite structure using conventional chirped pulses	PHYSICAL REVIEW A	105	5		52604	2022

7	Smponias, A; Stefanatos, D; Paspalakis, E	Efficient Biexciton State Preparation in a Semiconductor Quantum Dot-Metallic Nanoparticle Hybrid Structure Using Transitionless Quantum Driving	ANNALEN DER PHYSIK	534	1			2100316	2022
8	Kosionis, SG; Paspalakis, E	Coherent effects in energy absorption in double quantum dot molecule - Metal nanoparticle hybrids	PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES	135				114907	2022
9	Kanistras, N; Sgouros, AP; Kalosakas, G; Sigalas, MM	Delayed Thermal Relaxation in Lateral Heterostructures of Transition-Metal Dichalcogenides	JOURNAL OF PHYSICAL CHEMISTRY C	126	15	6815	6824		2022
10	Kalosakas, G; Lathiotakis, NN; Papagelis, K	Uniaxially Strained Graphene: Structural Characteristics and G-Mode Splitting	MATERIALS	15	1			67	2022
11	Chronis, AG; Sigalas, MM; Viro, F; Barrachin, M; Koukaras, EN; Zdetsis, AD	Properties of medium hydrogenated beryllium nanoparticles	JOURNAL OF NUCLEAR MATERIALS	566				153782	2022
12	Domenikou, N; Thanopoulos, I; Yannopapas, V; Paspalakis, E	Nonlinear Optical Rectification in an Inversion-Symmetry-Broken Molecule near a Metallic Nanoparticle	NANOMATERIALS	12	6			1020	2022
13	Garoufalidis, CS; Zeng, ZP; Bester, G; Galanakis, I; Hayrapetyan, D; Paspalakis, E; Baskoutas, S	Excitons in ZnO Quantum Dots: The Role of Dielectric Confinement	JOURNAL OF PHYSICAL CHEMISTRY C	126	5	2833	2838		2022
14	Samulski, ET; Reyes-Arango, D; Vanakaras, AG; Photinos, DJ	All Structures Great and Small: Nanoscale Modulations in Nematic Liquid Crystals	NANOMATERIALS	12	1			93	2022
15	Vakros, J; Avgouropoulos, G	Tuning the Physicochemical Properties of Nanostructured Materials through Advanced Preparation Methods	NANOMATERIALS	12	6			956	2022

16	Chauhan, P; Mundekkad, D; Mukherjee, A; Chaudhary, S; Umar, A; Baskoutas, S	Coconut Carbon Dots: Progressive Large-Scale Synthesis, Detailed Biological Activities and Smart Sensing Aptitudes towards Tyrosine	NANOMATERIALS	12	1			162	2022
17	Gioti, S; Sanida, A; Mathioudakis, GN; Patsidis, AC; Speliotis, T; Psarras, GC	Multitasking Performance of Fe ₃ O ₄ /BaTiO ₃ /Epoxy Resin Hybrid Nanocomposites	MATERIALS	15	5			1784	2022
18	Bhasin, AKK; Chauhan, P; Chaudhary, S; Umar, A; Baskoutas, S	Highly Sensitive and Selective Sulfite Ion Sensor Based on Biochemically Stable Iodo-Functionalized Coumarin Fluorophores	CHEMISTRYSELECT	7	17			e202104588	2022
19	Vijeeta, A; Chaudhary, S; Chaudhary, GR; Umar, A; Baskoutas, S	Sustainable agronomic response of carbon quantum dots on Allium sativum: Translocation, physiological responses and alternations in chromosomal aberrations	ENVIRONMENTAL RESEARCH	212				113559	2022
20	Aravantinos-Zafiris, N; Sigalas, MM; Katerelos, DTG	Phononic metamaterial for efficient sound attenuation applications	BUILDING ACOUSTICS	29	2	203	220		2022
21	Anyfantis, DI; Ballani, C; Kanistras, N; Barnasas, A; Kapaklis, V; Schmidt, G; Papaioannou, ET; Pouloupoulos, P	Growth, Magnetic Anisotropies and Exchange Bias of Thin Ni _{0.95} Fe _{0.05} /NiFeO Multilayers	COATINGS	12	5			627	2022
22	Drakopoulos, SX; Patsidis, AC; Psarras, GC	Epoxy-based/BaTiO ₃ nanodielectrics: Relaxation dynamics, charge transport and energy storage	MATERIALS RESEARCH BULLETIN	145				111537	2022
23	Badran, HM; Eid, KM; Baskoutas, S; Ammar, HY	Mg ₁₂ O ₁₂ and Be ₁₂ O ₁₂ Nanocages as Sorbents and Sensors for H ₂ S and SO ₂ Gases: A Theoretical Approach	NANOMATERIALS	12	10			1757	2022

24	Tsamis, V; Tsanaktsidou, E; Karavasili, C; Zacharis, CK; Bouropoulos, N; Fatouros, DG; Markopoulou, CK	Development and validation of HPLC-DAD and LC-(ESI)/MS methods for the determination of sulfasalazine, mesalazine and hydrocortisone 21-ace- tate in tablets and rectal suppositories: In vitro and ex vivo permeability studies	JOURNAL OF CHROMATOGRAPHY B-ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES	1198				123246	2022
25	Arnaoutakis, N; Vouros, AP; Milousi, M; Caouris, YG; Panaras, G; Turlidakis, A; Vafiadis, K; Mihalakakou, G; Garoufalis, CS; Frontistis, Z; Papaefthimiou, S; Souliotis, M	Design, Energy, Environmental and Cost Analysis of an Integrated Collector Storage Solar Water Heater Based on Multi-Criteria Methodology	ENERGIES	15	5			1673	2022
26	Georgitsopoulou, S; Angelopoulou, A; Papaioannou, L; Georgakilas, V; Avgoustakis, K	Self-assembled Janus graphene nanostructures with high camptothecin loading for increased cytotoxicity to cancer cells	JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY	67				102971	2022
27	Bleyan, YY; Mantashyan, PA; Kazaryan, EM; Sarkisyan, HA; Accorsi, G; Baskoutas, S; Hayrapetyan, DB	Non-Linear Optical Properties of Biexciton in Ellipsoidal Quantum Dot	NANOMATERIALS	12	9			1412	2022
28	Mahat, R; Shambhu, KC; Karki, U; Regmi, S; Law, JY; Franco, V; Galanakis, I; Gupta, A; LeClair, P	Structural, Electronic, Magnetic, and Mechanical Properties of Co ₂ -xVxFeSi Heusler Alloys	IEEE TRANSACTIONS ON MAGNETICS	58	2			2600105	2022
29	Asadpour, SH; Hamed, HR; Kirova, T; Paspalakis, E	Two-dimensional electromagnetically induced phase grating via composite vortex light	PHYSICAL REVIEW A	105	4			43709	2022
30	Verykios, A; Soultati, A; Turlouki, K; Katsogridakis, C; Alexandropoulos, D; Vidali, VP; Panagiotakis, S; Yannakopoulou, K; Dimotikali, D; Fakis, M; Palilis, LC; Stathopoulos, N; Pistolis, G; Skandamis, PN; Argitis, P; Vasilopoulou, M	Commercially available chromophores as low-cost efficient electron injection layers for organic light emitting diodes	JOURNAL OF PHYSICS D-APPLIED PHYSICS	55	21			215106	2022

31	Saharan, Y; Singh, J; Goyat, R; Umar, A; Algadi, H; Ibrahim, AA; Kumar, R; Baskoutas, S	Nanoporous and hydrophobic new Chitosan-Silica blend aerogels for enhanced oil adsorption capacity	JOURNAL OF CLEANER PRODUCTION	351				131247	2022
32	Chauhan, P; Kumari, M; Chaudhary, S; Chaudhary, GR; Umar, A; Baskoutas, S	Seed germination studies on Chickpeas, Barley, Mung beans and Wheat with natural biomass and plastic waste derived C-dots	SCIENCE OF THE TOTAL ENVIRONMENT	837				155593	2022
33	Andreadis, II; Karavasili, C; Thomas, A; Komnenou, A; Tzimtzimis, M; Tzetzis, D; Andreadis, D; Bouropoulos, N; Fatouros, DG	In Situ Gelling Electrospun Ocular Films Sustain the Intraocular Pressure-Lowering Effect of Timolol Maleate: In Vitro, Ex Vivo, and Pharmacodynamic Assessment	MOLECULAR PHARMACEUTICS	19	1	274	286		2022
34	Min, JJ; Zhang, Y; Zhou, YM; Xu, DD; Garoufalidis, CS; Zeng, ZP; Shen, HB; Baskoutas, S; Jia, Y; Du, ZL	Size Engineering of Trap Effects in Oxidized and Hydroxylated ZnSe Quantum Dots	NANO LETTERS	22	9	3604	3611		2022
35	Theodoroula, NF; Karavasili, C; Vlasiou, MC; Primikyri, A; Nicolaou, C; Chatzikonstantinou, AV; Chatzitaki, AT; Petrou, C; Bouropoulos, N; Zacharis, CK; Galatou, E; Sarigiannis, Y; Fatouros, DG; Vizirianakis, IS	NGIWY-Amide: A Bioinspired Ultrashort Self-Assembled Peptide Gelator for Local Drug Delivery Applications	PHARMACEUTICS	14	1			133	2022
36	Lada, ZG; Andrikopoulos, KS; Mathioudakis, GN; Piperigkou, Z; Karamanos, N; Perlepes, SP; Voyiatzis, GA	Tuning the Spin-Crossover Behaviour in Fe(II) Polymeric Composites for Food Packaging Applications	MAGNETOCHEMISTRY	8	2			16	2022
37	Chachlioutaki, K; Karavasili, C; Adamoudi, E; Tsitsos, A; Economou, V; Beltes, C; Bouropoulos, N; Katsamenis, OL; Doherty, R; Bakopoulou, A; Fatouros, DG	Electrospun Nanofiber Films Suppress Inflammation In Vitro and Eradicate Endodontic Bacterial Infection in an E. faecalis-Infected Ex Vivo Human Tooth Culture Model	ACS BIOMATERIALS SCIENCE & ENGINEERING	8	5	2096	2110		2022

38	Papadopoulos, C; Kolokithas-Ntoukas, A; Moreno, R; Fuentes, D; Loudos, G; Loukopoulos, VC; Kagadis, GC	Using kinetic Monte Carlo simulations to design efficient magnetic nanoparticles for clinical hyperthermia	MEDICAL PHYSICS	49	1	547	567		2022
39	Elsenety, MM; Kaltzoglou, A; Koutselas, I; Psycharis, V; Raptopoulou, CP; Kontos, AG; Papadokostaki, KG; Nasikas, NK; Falaras, P	Synthesis, Crystal Structure, and Broadband Emission of (CH ₃) ₃ SSnCl ₃	INORGANIC CHEMISTRY	61	11	4769	4777		2022
40	Voudouris, P; Repstock, A; Spry, PG; Frenzel, M; Mavrogonatos, C; Keith, M; Tarantola, A; Melfos, V; Tombros, S; Zhai, DG; Cook, NJ; Ciobanu, CL; Schaarschmidt, A; Rieck, B; Kolitsch, U; Falkenberg, JJ	Physicochemical constraints on indium-, tin-, germanium-, gallium-, gold-, and tellurium-bearing mineralizations in the Pefka and St Philippos polymetallic vein- and breccia-type deposits, Greece	ORE GEOLOGY REVIEWS	140				104348	2022
41	Stergiou, A; Sideri, IK; Kafetzi, M; Ioannou, A; Arenal, R; Mousdis, G; Pispas, S; Tagmatarchis, N	Methylammonium Lead Bromide Perovskite Nano-Crystals Grown in a Poly[styrene-co-(2-(dimethylamino)ethyl Methacrylate)] Matrix Immobilized on Exfoliated Graphene Nano-Sheets	NANOMATERIALS	12	8			1275	2022
42	Baskoutas, S	Theory and Simulation of Nanostructures	NANOMATERIALS	11	9			2202	2021
43	Psiachos, D; Sigalas, MM	Band-Gap Tuning in Two-Dimensional Spatiotemporal Phononic Crystals	PHYSICAL REVIEW APPLIED	15	1			14022	2021
44	Georgiou, K; Koutsioukis, A; Georgakilas, V	Transparent conductive film of polyvinyl alcohol: reduced graphene oxide composite	JOURNAL OF MATERIALS SCIENCE	56	30	17028	17039		2021
45	Chronis, AG; Michos, FI; Garoufalis, CS; Sigalas, MM	Structural and optical properties of Be, Mg and Ca nanorods and nanodisks	PHYSICAL CHEMISTRY CHEMICAL PHYSICS	23	3	1849	1858		2021
46	Chronis, AG; Karantagli, E; Michos, FI; Garoufalis, CS; Sigalas, MM	Exotic nanoparticles of group IV monochalcogenides as anode materials for Li-Ion batteries	SOLID STATE COMMUNICATIONS	332				114326	2021

47	Konstantinou, AC; Patsidis, AC; Psarras, GC	Boron nitride/epoxy resin nanocomposites: development, characterization and functionality	JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY	145	6	2925	2933		2021
48	Ntemogiannis, D; Tsarmpopoulou, M; Chronis, AG; Anyfantis, DI; Barnasas, A; Grammatikopoulos, S; Sigalas, M; Pouloupoulos, P	On the Localized Surface Plasmonic Resonances of AgPd Alloy Nanoparticles by Experiment and Theory	COATINGS	11	8			893	2021
49	Stamatelatos, A; Tsarmpopoulou, M; Chronis, AG; Kanistras, N; Anyfantis, DI; Violatzi, E; Geralis, D; Sigalas, MM; Pouloupoulos, P; Grammatikopoulos, S	Optical interpretation for plasmonic adjustment of nanostructured Ag-NiO thin films	INTERNATIONAL JOURNAL OF MODERN PHYSICS B	35	6			2150093	2021
50	Sgouros, AP; Karantagli, E; Sigalas, MM	Reflectivity reduction of nanopatterned c-Si solar cells with antireflective coatings exposed to a wide range of incidence angles	PHOTONICS AND NANOSTRUCTURES-FUNDAMENTALS AND APPLICATIONS	43				100893	2021
51	Batsouli, DI; Patsidis, AC; Psarras, GC	Epoxy-Based/BaMnO4 Nanodielectrics: Dielectric Response and Energy Storage Efficiency	ELECTRONICS	10	22			2803	2021
52	Georgiou, P; Tselios, C; Mourkioti, G; Skokos, C; Alexandropoulos, D	Effect of excited state lasing on the chaotic dynamics of spin QD-VCSELS	NONLINEAR DYNAMICS	106	4	3637	3646		2021
53	Ampeliotis, D; Anastasiou, A; Politi, C; Alexandropoulos, D	Proximal Algorithms for Discrete-Level Phase-Shifting Mask Design with Application to Optogenetics	PHOTONICS	8	11			477	2021
54	Smponias, A; Stefanatos, D; Paspalakis, E	Fast and robust exciton preparation in a coupled semiconductor quantum dot-metal nanoparticle system using shortcuts to adiabaticity	JOURNAL OF APPLIED PHYSICS	129	12			123107	2021

55	Thanopoulos, I; Karanikolas, V; Paspalakis, E	Non-Markovian Spontaneous Emission Dynamics of a Quantum Emitter Near a Transition-Metal Dichalcogenide Layer	IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS	27	1			6700108	2021
56	Stefanatos, D; Paspalakis, E	Optimal shape of STIRAP pulses for large dissipation at the intermediate level	QUANTUM INFORMATION PROCESSING	20	12			391	2021
57	Kosionis, SG; Paspalakis, E	Controlling the Pump-Probe Optical Response in Asymmetric Tunneling-Controlled Double Quantum Dot Molecule-Metal Nanoparticle Hybrids	APPLIED SCIENCES-BASEL	11	24			11714	2021
58	Stefanatos, D; Paspalakis, E	Optimized pulses for population transfer via laser-induced continuum structures	PHYSICAL REVIEW A	104	3			033101	2021
59	Barnasas, A; Garoufalos, CS; Anyfantis, DI; Bouropoulos, N; Pouloupoulos, P; Hayrapetyan, DB; Baskoutas, S	Quantum Confinement Effects of Thin Co ₃ O ₄ Films	ATOMS	9	4			70	2021
60	Thanopoulos, I; Blekos, K; Kalozoumis, P; Karanikolas, V; Paspalakis, E	Memory effects and quantum speedup for a quantum emitter near a molybdenum disulfide nanodisk	PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES	133				114780	2021
61	Paspalakis, E; Smponias, A; Stefanatos, D	Coherent preparation of the biexciton state in a semiconductor quantum dot coupled to a metallic nanoparticle	JOURNAL OF APPLIED PHYSICS	129	22			223104	2021
62	Smponias, A; Stefanatos, D; Paspalakis, E	Efficient Biexciton Preparation in a Quantum Dot-Metal Nanoparticle System Using On-Off Pulses	NANOMATERIALS	11	7			1859	2021
63	Hillebrand, M; Kalosakas, G; Bishop, AR; Skokos, C	Bubble lifetimes in DNA gene promoters and their mutations affecting transcription	JOURNAL OF CHEMICAL PHYSICS	155	9			95101	2021

64	Galanakis, I	An Ab Initio Study of All-Heusler Heterostructures: The case of Ultrathin Multilayers	PHYSICA STATUS SOLIDI-RAPID RESEARCH LETTERS	15	7			2100139	2021
65	Karoutsos, V; Pitsakis, JG; Pouloupoulos, P; Angelakeris, M; Politis, C	Study of FeNi-L10 ordering via quasi equilibrium cooling process	MRS COMMUNICATIONS	11	6	825	830		2021
66	Koutsioukis, A; Belessi, V; Georgakilas, V	Solid phase functionalization of MWNTs: an eco-friendly approach for carbon-based conductive inks	GREEN CHEMISTRY	23	15	5442	5448		2021
67	Kalosakas, G; Lathiotakis, NN; Papagelis, K	Width Dependent Elastic Properties of Graphene Nanoribbons	MATERIALS	14	17			5042	2021
68	Georgitsopoulou, S; Stola, ND; Bakandritsos, A; Georgakilas, V	Advancing the boundaries of the covalent functionalization of graphene oxide	SURFACES AND INTERFACES	26				101320	2021
69	Mystiridou, E; Patsidis, AC; Bouropoulos, N	Development and Characterization of 3D Printed Multifunctional Bioscaffolds Based on PLA/PCL/HAp/BaTiO3 Composites	APPLIED SCIENCES-BASEL	11	9			4253	2021
70	Stavropoulos, SG; Sanida, A; Psarras, GC	Carbon Allotropes/Epoxy Nanocomposites as Capacitive Energy Storage/Harvesting Systems	APPLIED SCIENCES-BASEL	11	15			7059	2021
71	Kappis, K; Papavasiliou, J; Avgouropoulos, G	Methanol Reforming Processes for Fuel Cell Applications	ENERGIES	14	24			8442	2021
72	Tombros, SF; Kokkalas, S; St Seymour, K; Voudouris, PC; Williams-Jones, AE; Zhai, DG; Liu, JJ; Fitros, MG	The Kallianos Au-Ag-Te mineralization, Evia Island, Greece: a detachment-related distal hydrothermal deposit of the Attico-Cycladic Metallogenic Massif	MINERALIUM DEPOSITA	56	4	665	684		2021
73	Xing, YJ; Li, HB; Avgouropoulos, G	Research Progress of Proton Exchange Membrane Failure and Mitigation Strategies	MATERIALS	14	10			2591	2021

74	Angelopoulou, P; Kassavetis, S; Papavasiliou, J; Karfaridis, D; Slowik, G; Patsalas, P; Avgouropoulos, G	Enhanced Performance of LiAlO.1Mn1.9O4 Cathode for Li-Ion Battery via TiN Coating	ENERGIES	14	4			825	2021
75	Bosch, J; Talbi, A; Baskoutas, S; Feddi, E	Magnetic properties of exciton trapped by an off-center ionized donor in single quantum dot	CURRENT APPLIED PHYSICS	23		1	7		2021
76	Sanida, A; Stavropoulos, SG; Speliotis, T; Psarras, GC	Evaluating the multifunctional performance of polymer matrix nanodielectrics incorporating magnetic nanoparticles: A comparative study	POLYMER	236				124311	2021
77	Ioannou, A; Vareli, I; Kaltzoglou, A; Koutselas, I	Synthesis, characterization and optoelectronic properties of 2D hybrid RPbX4 semiconductors based on an isomer mixture of hexanediamine-based dications	ZEITSCHRIFT FUR NATURFORSCHUNG SECTION B-A JOURNAL OF CHEMICAL SCIENCES	76	9	517	528		2021
78	Drakopoulos, SX; Psarras, GC; Ronca, S	Oriented ultra-high molecular weight polyethylene/gold nanocomposites: Electrical conductivity and chain entanglement dynamics	EXPRESS POLYMER LETTERS	15	6	492	502		2021
79	Vainos, NA; Bagiokis, E; Karoutsos, V; Hou, JS; Liu, YF; Zou, J; Fang, YZ; Papachristopoulou, K; Lorusso, A; Caricato, AP; Perrone, A	Nanolayer Growth on 3-Dimensional Micro-Objects by Pulsed Laser Deposition	NANOMATERIALS	11	1			35	2021
80	Kouzoudis, D; Samourgkanidis, G; Kolokithas-Ntoukas, A; Zoppellaro, G; Spiliotopoulos, K	Magnetic Hyperthermia in the 400-1,100 kHz Frequency Range Using MIONS of Condensed Colloidal Nanocrystal Clusters	FRONTIERS IN MATERIALS	8				638019	2021
81	Aravantinos-Zafiris, N; Sigalas, MM	Terraced slopes as large scale natural seismic metasurfaces	JOURNAL OF APPLIED PHYSICS	130	15			154901	2021
82	Aravantinos-Zafiris, N; Chronis, AG; Sigalas, MM	Structural and optical properties of exotic magnesium monochalcogenide nanoparticles	MATERIALS TODAY COMMUNICATIONS	28				102622	2021

83	Aravantinos-Zafirios, N; Kanistras, N; Sigalas, MM	Acoustoelastic phononic metamaterial for isolation of sound and vibrations	JOURNAL OF APPLIED PHYSICS	129	10			105108	2021
84	Aravantinos-Zafirios, N; Lucklum, F; Sigalas, MM	Complete phononic band gaps in the 3D Yablonovite structure with spheres	ULTRASONICS	110				106265	2021
85	Karaoulanis, D; Paspalakis, E; Yannopoulos, V	Quantum interference near bismuth-chalcogenide microstructures	JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS	38	11	3301	3308		2021
86	Aghoutane, N; Perez, LM; Tiutiunyk, A; Laroze, D; Baskoutas, S; Dujardin, F; El Fatimy, A; El-Yadri, M; Feddi, E	Adjustment of Terahertz Properties Assigned to the First Lowest Transition of (D+, X) Excitonic Complex in a Single Spherical Quantum Dot Using Temperature and Pressure	APPLIED SCIENCES-BASEL	11	13			5969	2021
87	Lada, ZG; Beobide, AS; Mathioudakis, GN; Voyiatzis, GA	Fe(II) Spin Crossover/Polymer Hybrid Materials: Investigation of the SCO Behavior via Temperature-Dependent Raman Spectroscopy, Physicochemical Characterization and Migration Release Study	MOLECULES	26	1			201	2021
88	Mantashian, GA; Zaqaryan, NA; Mantashyan, PA; Sarkisyan, HA; Baskoutas, S; Hayrapetyan, DB	Linear and Nonlinear Optical Absorption of CdSe/CdS Core/Shell Quantum Dots in the Presence of Donor Impurity	ATOMS	9	4			75	2021
89	Karanikolas, V; Thanopoulos, I; Paspalakis, E	Strong coupling regime and bound states in the continuum between a quantum emitter and phonon-polariton modes	OPTICS EXPRESS	29	15	23408	23420		2021
90	Umar, A; Akhtar, MS; Algadi, H; Ibrahim, AA; Alhamami, MAM; Baskoutas, S	Highly Sensitive and Selective Eco-Toxic 4-Nitrophenol Chemical Sensor Based on Ag-Doped ZnO Nanoflowers Decorated with Nanosheets	MOLECULES	26	15			4619	2021

91	Fermani, M; Platania, V; Kavasi, RM; Karavasili, C; Zgouro, P; Fatouros, D; Chatzinikolaidou, M; Bouropoulos, N	3D-Printed Scaffolds from Alginate/Methyl Cellulose/Trimethyl Chitosan/Silicate Glasses for Bone Tissue Engineering	APPLIED SCIENCES-BASEL	11	18			8677	2021
92	Asadpour, SH; Paspalakis, E; Hamed, HR	Exchange of optical vortices in symmetry-broken quantum systems	PHYSICAL REVIEW A	103	6			63705	2021
93	Kalantzi, S; Leonardi, S; Vachlioti, E; Kaliatsi, EG; Papachristopoulou, K; Stathopoulos, C; Vainos, N; Papaioannou, D	Studies towards the Synthesis of Novel 3-Aminopropoxy-Substituted Dioxins Suitable for the Development of Aptamers for Photonic Biosensor Applications	MATERIALS	14	16			4727	2021
94	Chatzitaki, AT; Tsongas, K; Tzimtzimis, EK; Tzetzis, D; Bouropoulos, N; Barmpalexis, P; Eleftheriadis, GK; Fatouros, DG	3D printing of patient-tailored SNEDDS-based suppositories of lidocaine	JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY	61				102292	2021
95	Mantashian, GA; Mantashyan, PA; Sarkisyan, HA; Kazaryan, EM; Bester, G; Baskoutas, S; Hayrapetyan, DB	Exciton-Related Raman Scattering, Interband Absorption and Photoluminescence in Colloidal CdSe/CdS Core/Shell Quantum Dots Ensemble	NANOMATERIALS	11	5			1274	2021
96	Hamed, HR; Yannopapas, V; Paspalakis, E	Spatially Structured Optical Effects in a Four-Level Quantum System Near a Plasmonic Nanostructure	ANNALEN DER PHYSIK	533	10			2100117	2021
97	Ozdogan, K; Galanakis, I	Stability of spin-gapless semiconducting behavior in Ti ₂ CoSi, Ti ₂ MnAl, and Ti-2 VAs Hensler compounds	PHYSICAL REVIEW MATERIALS	5	2			24409	2021

98	Dhakal, R; Nepal, S; Galanakis, I; Adhikari, RP; Kaphle, GC	Prediction of half-metallicity and spin-gapless semiconducting behavior in the new series of FeCr-based quaternary Heusler alloys: An Ab initio study	JOURNAL OF ALLOYS AND COMPOUNDS	882				160500	2021
99	Kalozoumis, PA; Petrosyan, D	Self-Organized PT-Symmetry of Exciton-Polariton Condensate in a Double-Well Potential	APPLIED SCIENCES-BASEL	11	16			7372	2021
100	Kamalam, MBR; Inbanathan, SSR; Sethuraman, K; Umar, A; Algadi, H; Ibrahim, AA; Rahman, QI; Garoufalos, CS; Baskoutas, S	Direct sunlight-driven enhanced photocatalytic performance of V2O5 nanorods/ graphene oxide nanocomposites for the degradation of Victoria blue dye	ENVIRONMENTAL RESEARCH	199				111369	2021
101	Triantafyllidis, S; Tombros, SF; Zhai, DG; Kokkalas, S	The upper Cretaceous Ermioni VMS deposit, Argolis Peninsula, Peloponnese, Greece: Type, genesis, and geotectonic setting	ORE GEOLOGY REVIEWS	138				104403	2021
102	Poonguzhali, RV; Kumar, ER; Pushpagiri, T; Steephen, A; Arunadevi, N; Baskoutas, S	Lemon juice (natural fuel) assisted synthesis of MgO nanorods for LPG gas sensor applications	SOLID STATE COMMUNICATIONS	325				114161	2021
103	Drakopoulos, SX; Manika, GC; Nogales, A; Kim, T; Robbins, AB; Claudio, G; Minnich, AJ; Ezquerro, TA; Psarras, GC; Martin-Fabiani, I; Ronca, S	Gold/ultra-high molecular weight polyethylene nanocomposites for electrical energy storage: Enhanced recovery efficiency upon uniaxial deformation	JOURNAL OF APPLIED POLYMER SCIENCE	138	42			e51232	2021
104	Ross, SA; Hurt, AP; Antonijevic, M; Bouropoulos, N; Ward, A; Basford, P; McAllister, M; Douroumis, D	Continuous Manufacture and Scale-Up of Theophylline-Nicotinamide Cocrystals	PHARMACEUTICS	13	3			419	2021

105	Umar, A; Ibrahim, AA; Kumar, R; Albargi, H; Zeng, W; Alhmami, MAM; Alsaieri, MA; Baskoutas, S	Gas sensor device for high-performance ethanol sensing using alpha-MnO ₂ nanoparticles	MATERIALS LETTERS	286				129232	2021
106	Hamed, HR; Yannopoulos, V; Mekys, A; Paspalakis, E	Control of Kerr nonlinearity in a four-level quantum system near a plasmonic nanostructure	PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES	130				114662	2021
107	Asadpour, SH; Faizabadi, E; Kudriasov, V; Paspalakis, E; Hamed, HR	Swapping of orbital angular momentum states of light in a quantum well waveguide	EUROPEAN PHYSICAL JOURNAL PLUS	136	4			457	2021
108	Eleftheriadis, GK; Kantarelis, E; Monou, PK; Andriotis, EG; Bouropoulos, N; Tzimtzimis, EK; Tzetzis, D; Rantanen, J; Fatouros, DG	Automated digital design for 3D-printed individualized therapies	INTERNATIONAL JOURNAL OF PHARMACEUTICS	599				120437	2021
109	Hamed, HR; Paspalakis, E; Yannopoulos, V	Effective Control of the Optical Bistability of a Three-Level Quantum Emitter near a Nanostructured Plasmonic Metasurface	PHOTONICS	8	7			285	2021
110	Christoforidou, T; Giasafaki, D; Andriotis, EG; Bouropoulos, N; Theodoroula, NF; Vizirianakis, IS; Steriotis, T; Charalambopoulou, G; Fatouros, DG	Oral Drug Delivery Systems Based on Ordered Mesoporous Silica Nanoparticles for Modulating the Release of Aprepitant	INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES	22	4			1896	2021
111	Jaswal, A; Kaur, M; Singh, S; Kansal, SK; Umar, A; Garoufalidis, CS; Baskoutas, S	Adsorptive removal of antibiotic ofloxacin in aqueous phase using rGO-MoS ₂ heterostructure	JOURNAL OF HAZARDOUS MATERIALS	417				125982	2021
112	Mahat, R; Shambhu, KC; Karki, U; Regmi, S; Law, JY; Franco, V; Galanakis, I; Gupta, A; LeClair, P	Structural, electronic, magnetic, transport and mechanical properties of the half-metal-type quaternary Heusler alloy Co ₂ Fe _{1-x} V _x Ge	JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS	539				168352	2021
113	Mahat, R; Kc, S; Karki, U; Law, JY; Franco, V; Galanakis, I; Gupta, A; LeClair, P	Possible half-metallic behavior of Co _{2-x} CrxFeGe Heusler alloys: Theory and experiment	PHYSICAL REVIEW B	104	1			14430	2021

114	Andriotis, EG; Chachlioutaki, K; Monou, PK; Bouropoulos, N; Tzetzis, D; Barmpalexis, P; Chang, MW; Ahmad, Z; Fatouros, DG	Development of Water-Soluble Electrospun Fibers for the Oral Delivery of Cannabinoids	AAPS PHARMSCITECH	22	1			23	2021
115	Monou, PK; Andriotis, EG; Bouropoulos, N; Panteris, E; Akrivou, M; Vizirianakis, IS; Ahmad, Z; Fatouros, DG	Engineered mucoadhesive microparticles of formoterol/budesonide for pulmonary administration	EUROPEAN JOURNAL OF PHARMACEUTICAL SCIENCES	165				105955	2021
116	Steinbauer, P; Rohatschek, A; Andriotis, O; Bouropoulos, N; Liska, R; Thurner, PJ; Baudis, S	Biomimetic adhesion motifs based on RAFT polymers with phosphonate groups	EUROPEAN POLYMER JOURNAL	143				110188	2021
117	Algadi, H; Umar, A; Albargi, H; Alsuwian, T; Baskoutas, S	Carbon Nanodots as a Potential Transport Layer for Boosting Performance of All-Inorganic Perovskite Nanocrystals-Based Photodetector	CRYSTALS	11	6			717	2021
118	Han, PP; Min, JJ; Zeng, ZP; Garoufalis, CS; Baskoutas, S; Jia, Y; Du, ZL	Excitonic characteristics of blue-emitting quantum dot materials in group II-VI using hybrid time-dependent density functional theory	PHYSICAL REVIEW B	104	4			45404	2021
119	Nikolaou, M; Avraam, K; Kolokithas-Ntoukas, A; Bakandritsos, A; Lizal, F; Misik, O; Maly, M; Jedelsky, J; Savva, I; Balanean, F; Krasia-Christoforou, T	Superparamagnetic electrospun microrods for magnetically-guided pulmonary drug delivery with magnetic heating	MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS	126				112117	2021
120	Kolokithas-Ntoukas, A; Bakandritsos, A; Belza, J; Kesa, P; Herynek, V; Pankrac, J; Angelopoulou, A; Malina, O; Avgoustakis, K; Georgakilas, V; Polakova, K; Zboril, R	Condensed Clustered Iron Oxides for Ultrahigh Photothermal Conversion and In Vivo Multimodal Imaging	ACS APPLIED MATERIALS & INTERFACES	13	25	29247	29256		2021
121	Matsoukas, J; Deraos, G; Kelaidonis, K; Hossain, MK; Feehan, J; Tzakos, AG; Matsoukas, E; Topoglidis, E; Apostolopoulos, V	Myelin Peptide-Mannan Conjugate Multiple Sclerosis Vaccines: Conjugation Efficacy and Stability of Vaccine Ingredient	VACCINES	9	12			1456	2021

122	Sgouros, AP; Androulidakis, C; Tsoukleri, G; Kalosakas, G; Delikoukos, N; Signetti, S; Pugno, NM; Parthenios, J; Galiotis, C; Papagelis, K	Efficient Mechanical Stress Transfer in Multilayer Graphene with a Ladder-like Architecture	ACS APPLIED MATERIALS & INTERFACES	13	3	4473	4484		2021
123	Umar, A; Ibrahim, AA; Kumar, R; Algadi, H; Albargi, H; Alhamami, MAM; Nakate, UT; Baskoutas, S	Star-Fruit-Shaped CuO Structures for High Performance Ethanol Gas Sensor Device	SCIENCE OF ADVANCED MATERIALS	13	4	724	733		2021
124	Kaur, R; Kaur, A; Kaur, R; Singh, S; Bhatti, MS; Umar, A; Baskoutas, S; Kansal, SK	Cu-BTC metal organic framework (MOF) derived Cu-doped TiO ₂ nanoparticles and their use as visible light active photocatalyst for the decomposition of ofloxacin (OFX) antibiotic and antibacterial activity	ADVANCED POWDER TECHNOLOGY	32	5	1350	1361		2021
125	Tremi, I; Havaki, S; Georgitsopoulou, S; Lagopati, N; Georgakilas, V; Gorgoulis, VG; Georgakilas, AG	A Guide for Using Transmission Electron Microscopy for Studying the Radiosensitizing Effects of Gold Nanoparticles In Vitro	NANOMATERIALS	11	4			859	2021
126	Karanikolas, V; Thanopoulos, I; Cox, JD; Kuroda, T; Inoue, J; Mortensen, NA; Paspalakis, E; Tserkezis, C	Quantum surface effects in strong coupling dynamics	PHYSICAL REVIEW B	104	20			L201405	2021
127	Umar, A; Raut, SD; Ibrahim, AA; Algadi, H; Albargi, H; Alsaiari, MA; Akhtar, MS; Qamar, M; Baskoutas, S	Perforated Co ₃ O ₄ nanosheets as high-performing supercapacitor material	ELECTROCHIMICA ACTA	389				138661	2021
128	Umar, A; Ibrahim, AA; Algadi, H; Nakate, UT; Choudhury, SP; Alsuwian, T; Albargi, H; Alsaiari, MA; Baskoutas, S	Selective ethanol gas sensing performance of flower-shaped CuO composed of thin nanoplates (Jun, 10.1007/s10854-021-06249-y, 2021)	JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS	32	14	18580	18580		2021

129	Giousis, T; Potsi, G; Kouloumpis, A; Spyrou, K; Georgantas, Y; Chalmpes, N; Dimos, K; Antoniou, MK; Papavassiliou, G; Bourlinos, AB; Kim, HJ; Wadi, VKS; Alhassan, S; Ahmadi, M; Kooi, BJ; Blake, G; Balazs, DM; Loi, MA; Gournis, D; Rudolf, P	Synthesis of 2D Germanane (GeH): a New, Fast, and Facile Approach	ANGEWANDTE CHEMIE-INTERNATIONAL EDITION	60	1	360	365		2021
130	Umar, A; Ibrahim, AA; Algadi, H; Nakate, UT; Choudhury, SP; Alsuwian, T; Albargi, H; Alsaieri, MA; Baskoutas, S	Selective ethanol gas sensing performance of flower-shaped CuO composed of thin nanoplates	JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS	32	14	18565	18579		2021
131	Asadpour, SH; Kirova, T; Qian, J; Hamed, HR; Juzeliunas, G; Paspalakis, E	Azimuthal modulation of electromagnetically induced grating using structured light	SCIENTIFIC REPORTS	11	1			20721	2021
132	Paulraj, P; Umar, A; Rajendran, K; Manikandan, A; Sathamraja, A; Kumar, R; Manikandan, E; Pandian, K; Baskoutas, S; Algadi, H; Ibrahim, AA; Alsaieri, MA	Methylene blue intercalated layered MnO ₂ nanosheets for high-sensitive non-enzymatic ascorbic acid sensor	JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS	32	7	8317	8329		2021
133	Papadopoulou, S; Kolokithas-Ntoukas, A; Salvanou, EA; Gaitanis, A; Xanthopoulos, S; Avgoustakis, K; Gazouli, M; Paravatou-Petsotas, M; Tsoukalas, C; Bakandritsos, A; Bouziotis, P	Chelator-Free/Chelator-Mediated Radiolabeling of Colloidally Stabilized Iron Oxide Nanoparticles for Biomedical Imaging	NANOMATERIALS	11	7			1677	2021