

Ahmed Fouzi Tarchoun

List of Publications by Year in descending order

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Version: 2024-02-01

53
papers

2,471
citations

218677

26
h-index

214800

47
g-index

53
all docs

53
docs citations

53
times ranked

1235
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanocellulose: From Fundamentals to Advanced Applications. <i>Frontiers in Chemistry</i> , 2020, 8, 392.	3.6	586
2	Microcrystalline cellulose from <i>Posidonia oceanica</i> brown algae: Extraction and characterization. <i>International Journal of Biological Macromolecules</i> , 2019, 138, 837-845.	7.5	156
3	Stabilizers for nitrate ester-based energetic materials and their mechanism of action: a state-of-the-art review. <i>Journal of Materials Science</i> , 2018, 53, 100-123.	3.7	124
4	Ecofriendly isolation and characterization of microcrystalline cellulose from giant reed using various acidic media. <i>Cellulose</i> , 2019, 26, 7635-7651.	4.9	117
5	A Promising Energetic Polymer from <i>Posidonia oceanica</i> Brown Algae: Synthesis, Characterization, and Kinetic Modeling. <i>Macromolecular Chemistry and Physics</i> , 2019, 220, 1900358.	2.2	88
6	Organic eutectic mixture as efficient stabilizer for nitrocellulose: Kinetic modeling and stability assessment. <i>Thermochimica Acta</i> , 2019, 673, 78-91.	2.7	87
7	Analytical Methods for Stability Assessment of Nitrate Esters-Based Propellants. <i>Critical Reviews in Analytical Chemistry</i> , 2019, 49, 415-438.	3.5	75
8	Comparison of the Physicochemical Properties and Thermal Stability of Organosolv and Kraft Lignins from Hardwood and Softwood Biomass for Their Potential Valorization. <i>Waste and Biomass Valorization</i> , 2020, 11, 6541-6553.	3.4	68
9	Tetrazole-functionalized microcrystalline cellulose: A promising biopolymer for advanced energetic materials. <i>Chemical Engineering Journal</i> , 2020, 400, 125960.	12.7	64
10	Synthesis and characterization of Fe_2O_3 nanoparticles from different precursors and their catalytic effect on the thermal decomposition of nitrocellulose. <i>Thermochimica Acta</i> , 2020, 686, 178570.	2.7	61
11	Physicochemical Properties and Thermal Stability of Microcrystalline Cellulose Isolated from Esparto Grass Using Different Delignification Approaches. <i>Journal of Polymers and the Environment</i> , 2021, 29, 130-142.	5.0	56
12	New Insights on the Compatibility of Nitrocellulose with Aniline-Based Compounds. <i>Propellants, Explosives, Pyrotechnics</i> , 2019, 44, 970-979.	1.6	52
13	Synthesis, Characterization, and Thermal Decomposition Kinetics of Nitrogen-Rich Energetic Biopolymers from Aminated Giant Reed Cellulosic Fibers. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 22677-22689.	3.7	52
14	Synthesis, characterization and thermal decomposition behavior of a novel HNTO/AN co-crystal as a promising rocket propellant oxidizer. <i>Chemical Engineering Journal</i> , 2021, 417, 128010.	12.7	50
15	Effect of the Delignification Process on the Physicochemical Properties and Thermal Stability of Microcrystalline Cellulose Extracted from Date Palm Fronds. <i>Waste and Biomass Valorization</i> , 2021, 12, 2779-2793.	3.4	49
16	Differentiation of stabilized nitrocellulose during artificial aging: Spectroscopy methods coupled with principal component analysis. <i>Journal of Chemometrics</i> , 2019, 33, e3163.	1.3	48
17	Effect of organic eutectic on nitrocellulose stability during artificial aging. <i>Journal of Energetic Materials</i> , 2019, 37, 387-406.	2.0	44
18	A promising energetic biopolymer based on azide-functionalized microcrystalline cellulose: Synthesis and characterization. <i>Carbohydrate Polymers</i> , 2020, 249, 116820.	10.2	41

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19	New insensitive nitrogen-rich energetic polymers based on amino-functionalized cellulose and microcrystalline cellulose: Synthesis and characterization. <i>Fuel</i> , 2020, 277, 118258.	6.4	41
20	Effect of silane modified microcrystalline cellulose on the curing kinetics, thermo-mechanical properties and thermal degradation of benzoxazine resin. <i>International Journal of Biological Macromolecules</i> , 2021, 180, 194-202.	7.5	41
21	Organosolv lignins as new stabilizers for cellulose nitrate: Thermal behavior and stability assessment. <i>International Journal of Biological Macromolecules</i> , 2020, 164, 794-807.	7.5	36
22	Design and characterization of new advanced energetic biopolymers based on surface functionalized cellulosic materials. <i>Cellulose</i> , 2021, 28, 6107-6123.	4.9	35
23	New insensitive high-energy dense biopolymers from giant reed cellulosic fibers: their synthesis, characterization, and non-isothermal decomposition kinetics. <i>New Journal of Chemistry</i> , 2021, 45, 5099-5113.	2.8	35
24	Characterization of raw and treated <i>Arundo donax</i> L. cellulosic fibers and their effect on the curing kinetics of bisphenol A-based benzoxazine. <i>International Journal of Biological Macromolecules</i> , 2020, 164, 2931-2943.	7.5	32
25	Compatibility assessment and decomposition kinetics of nitrocellulose with eutectic mixture of organic stabilizers. <i>Journal of Energetic Materials</i> , 2020, 38, 48-67.	2.0	29
26	Synthesis and characterization of new insensitive and high-energy dense cellulosic biopolymers. <i>Fuel</i> , 2021, 292, 120347.	6.4	29
27	Optimized energetic HNTO/AN co-crystal and its thermal decomposition kinetics in the presence of energetic coordination nanomaterials based on functionalized graphene oxide and cobalt. <i>RSC Advances</i> , 2021, 11, 35287-35299.	3.6	29
28	Chemical design and characterization of cellulosic derivatives containing high-nitrogen functional groups: Towards the next generation of energetic biopolymers. <i>Defence Technology</i> , 2022, 18, 537-546.	4.2	27
29	Towards investigating the characteristics and thermal kinetic behavior of emergent nanostructured nitrocellulose prepared using various sulfonitric media. <i>Journal of Nanostructure in Chemistry</i> , 2022, 12, 963-977.	9.1	27
30	Preparation of amino-functionalized microcrystalline cellulose from <i>Arundo Donax</i> L. and its effect on the curing behavior of bisphenol A-based benzoxazine. <i>Thermochimica Acta</i> , 2021, 698, 178882.	2.7	26
31	The effect of iron decorated MWCNTs and iron ionic liquid decorated MWCNTs onto thermal decomposition of ammonium perchlorate. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2021, 647, 1607-1619.	1.2	25
32	Non-isothermal Curing Kinetics of Alkali-treated Alfa Fibers/Polybenzoxazine Composites Using Differential Scanning Calorimetry. <i>ChemistrySelect</i> , 2020, 5, 5374-5386.	1.5	24
33	Valorization of Esparto Grass Cellulosic Derivatives for the Development of Promising Energetic Azidodeoxy Biopolymers: Synthesis, Characterization and Isoconversional Thermal Kinetic Analysis. <i>Propellants, Explosives, Pyrotechnics</i> , 2022, 47, .	1.6	23
34	Effect of Kraft lignins on the stability and thermal decomposition kinetics of nitrocellulose. <i>Thermochimica Acta</i> , 2020, 692, 178732.	2.7	21
35	Morphological, thermal and mechanical properties of benzoxazine resin reinforced with alkali treated alfa fibers. <i>Industrial Crops and Products</i> , 2021, 165, 113423.	5.2	21
36	A new experimental way for the monitoring of the real/equivalent in-service-time of double base rocket propellant by coupling VST and PCA. <i>Defence Technology</i> , 2021, 17, 440-449.	4.2	18

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37	Compatibility of nitrocellulose with aniline-based compounds and their eutectic mixtures. Journal of Thermal Analysis and Calorimetry, 2020, 141, 941-955.	3.6	16
38	Making progress towards promising energetic cellulosic microcrystals developed from alternative lignocellulosic biomasses. Journal of Energetic Materials, 2024, 42, 97-122.	2.0	14
39	A New Procedure for Stability Control of Homogeneous Solid Propellants by Combination of Vacuum Stability Test, FTIR and PCA. Propellants, Explosives, Pyrotechnics, 2020, 45, 1088-1102.	1.6	11
40	Chapter 5. Cellulose Nanoparticles: Extractions. , 2021, , 113-148.		11
41	On the preparation and properties investigations of highly performant MXene (Ti ₃ C ₂ (OH) ₂) nanosheets-reinforced phthalonitrile nanocomposites. Advanced Composites Letters, 2019, 28, 2633366X1989062.	1.3	10
42	Kevlar fabric reinforced polybenzoxazine composites filled with silane treated microcrystalline cellulose in the interlayers: The next generation of multi-layered armor panels. Defence Technology, 2022, 18, 2000-2007.	4.2	9
43	On the mechanical and morphological properties of highly performant composite laminates based on epoxy resin and oxidized ultrahigh-molecular-weight polyethylene fibers. High Performance Polymers, 2020, 32, 992-1000.	1.8	8
44	Mordenite zeolite for scavenging nitroxide radicals and its effect on the thermal decomposition of nitrocellulose. Journal of Energetic Materials, 2023, 41, 510-529.	2.0	8
45	Investigation of the Thermal Aging Behavior of Pyrotechnic Tracer Composition by Spectroscopic Techniques Coupled with Principal Component Analysis. Propellants, Explosives, Pyrotechnics, 2021, 46, 1155-1166.	1.6	7
46	Exploration of palm fronds as a prominent alternative resource for the production of energetic cellulose-rich biopolymers. Materials Today: Proceedings, 2022, 53, 31-35.	1.8	7
47	Advanced hybrid materials from epoxy, oxidized UHMWPE fibers and silane surface modified silicon nitride nanoparticles. High Performance Polymers, 2021, 33, 440-450.	1.8	6
48	Insight into the Effect of Moisture and Thermal Aging on the Degradation of a Pyrotechnic Igniter Composition through Thermogravimetric Kinetics Coupled with Deconvolution Approach. ChemistrySelect, 2021, 6, 14060-14070.	1.5	6
49	Stability Assessment for Double Base Rocket Propellant During Long Natural/Artificial Aging Using Various Methods and Kinetic Modeling. Materials Horizons, 2021, , 93-122.	0.6	5
50	Synthesis and Characterization of Microcrystalline Cellulose from Giant Reed Using Different Delignification Processes. Materials Horizons, 2021, , 173-187.	0.6	5
51	Preparation and characterization of a new high-performance polymer composite and its application as a lead-free polymer-based projectile. High Performance Polymers, 2020, 32, 550-558.	1.8	4
52	Cellulose Fibers and Nanocrystals: Preparation, Characterization, and Surface Modification. , 2020, , 171-190.		4
53	Towards understanding the effect of humidity on the degradation of pyrotechnic compositions through spectroscopic data combined with chemometric methods. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 1547-1559.	1.2	3